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# INFORMATION AVAILABILITY AND CONGENIALITY, SELECTIVE EXPOSURE, AND REINFORCEMENT EFFECT

by

## **KUNTO WIBOWO**

## **DISSERTATION**

Submitted to Graduate School

of Wayne State University,

Detroit, Michigan

in partial fulfillment of requirements

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## **DOCTOR OF PHILOSOPHY**

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Advisor	Date

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#### CHAPTER 1 FROM INFORMATION AVAILABILITY TO REINFORCEMENT

Lazarsfeld, Berelson, and Gaudet (1968) suggested "Availability *plus* predispositions determines exposure" (Lazarsfeld et al., 1968, p. 89, emphasis in original). They coined this statement about the availability of partisan information in Erie County in 1940 presidential election. The print media and the airwaves were dominated by content supporting Republican's candidate than the Democrat's. The difference between partisan definition by Lazarsfeld et al. (1968) with today's definition is that in 1940 Presidential campaign, partisanship was simply to denote support of Republican's or Democrat's candidate in the articles, rubrics, or programs. As Lazarsfeld et al. (1968) noted that the media need to present themselves as fair and cover all sides of controversial issues. Failed to demonstrate fairness will result in public suspicion and create a lack common ground for public debates. Lazarsfeld et al. (1968) found the majority of voters exposed to the information from their own party. While the information of campaign from both candidates was accessible virtually to everyone, they argued, "But exposure was consistently partisan" (Lazarsfeld et al., 1968, p. 89).

The news media landscape had profoundly changed from 1940 until now. When Lazarsfeld et al. (1968) categorized partisan newscast content, they argued that the news media, specially, the 3 major networks (The Columbia Broadcasting System, Red Networks, and Blue Networks, both owned by the National Broadcasting Company) and were still providing a fair description of an issue. Iyengar and Hahn (2009) labelled the effort for fairness by news media as a generic point-counterpoint on news. Fast forward 70 years later, the development of make contents from cable news, news outlets on the internet, social media, and news portal are accessible easily at the tip of the finger, forced media outlets to win audience attention. As Lazarsfeld et al. (1968) suggested that exposure is consistently partisan, the trend 70 years later

echoed their theory. With abundance of information, people choose media content that more closely reflecting their partisan or ideological predisposition (Iyengar & Hahn, 2009; Sunstein, 2001; Stroud, 2008; 2011).

In the age of information explosion, the political information is still available virtually to everyone. However, people who read, listen, or watch partisan news media would have more news contents supporting partisanship ideas. It is not as 40 years ago, partisan limited to the endorsement to the one of the presidential candidate in the several programs or articles. Information availability within partisan media is not balanced in term of proportion of news that may be congenial with one's political predisposition and news that is uncongenial. The development of personalization technology on search engines, social media, and news portals also helps create another unbalanced information availability, a filter bubble (Pariser, 2011). A filtering technology will pick news that's in accordance with the users' preferences, including political preferences. Pariser (2011) argued that such technology may lead users to isolate themselves in their own preferences and as result citizens will lack of any common ground for public engagement (Lazarsfeld et al., 1968; Sunstein, 2001).

As Lazarsfeld et al. (1968) argued, information availability and users' predispositions are the key concepts to determine exposure, and personalization can increase selective exposure by filtering information. Selective exposure in the mass communication context refers to any bias of exposure of available information plus the bias that may reinforce people's predispositions (Knobloch-Westerwick, 2015). Scholars also link selective exposure to higher consumption of information that supports one's political beliefs or attitudes, congenial information, and lower consumption of information that is counter to one's political beliefs or attitudes, uncongenial information (Dylko, 2016; Hart et al., 2009; Knobloch-Westerwick, 2015; Taber & Lodge,

2006). This study uses selective exposure as the main theoretical framework to examine the effects of the differences in the proportion of information availability in the highly partisan and fragmented media environment.

This study employs differences in the proportion of congenial and uncongenial information in a news personalization portal to examine the selective exposure in political news consumption. The difference in proportion between congenial and uncongenial information, first, can be thought as a product of fragmented and partisan media environment. Second, the novelty of methodology, as previous experimental studies on selective exposure generally employ an equal number of congenial and uncongenial stories. Third, in some extend can be perceived as a product of personalization technologies dominating the news portals and social media. This dissertation also tries to provide an empirical evident on whether partisan media and filter bubbles will produce more selective exposure than a point-counterpoint style of news media reporting.

This study also examines the consequences of selective exposure for the political attitude change. Only tiny portions of the selective exposure studies scrutinize the effects of selective exposure on the political attitudes and behaviors. Furthermore, the number of research dedicated explaining the psychological mechanism of the effects of selective exposure is miniscule. This dissertation tries to examine the reinforcement effect, as Lazarsfeld et al. (1968) stated political predisposition lead to partisan selective exposure resulted in reinforcement effect. The very effect that may lead to the entrenched attitudes toward a political partisanship and producing a large gap of political polarization (Iyengar & Hahn, 2009; Stroud, 2008; 2011). Further, this dissertation tries to explain the relation of selective exposure and reinforcement effect, if any, through affective or emotional routes. More political psychologists and economists are agreeing

human mostly using gut feeling and emotion in the decision-making process (Marcus, Neuman, & Mackuen, 2000). Thus, it is possible, an uncongenial news will alter one's emotion and lead them to maintain, reinforce, activate, or convert their initial attitude toward a political issue.

This study intends to contribute, first, an explanation on whether the different numbers or proportion between congenial and uncongenial information influence selective exposure. The second contribution is to explain the relationship between selective exposure and political attitude reinforcement, with the help of the emotional mechanisms that enable the relationship.

### Selective exposure and confirmation bias

Beginning with Lazarsfeld et al. (1968), selective exposure emerged as the theory that explained the political leanings and candidate preferences of Erie County voters in the 1940s. They found a positive relationship between citizens' media consumption patterns and their opinions about the candidates, issues, and parties. Selective exposure predicted that people would tend to expose themselves to information that is in accordance with their beliefs or attitudes rather than information that is inconsistent.

Selective exposure in its initial development was more associated with cognitive dissonance theory. Festinger (1957) described the general tendency of individuals to avoid messages that trigger cognitive dissonance and to prefer information that conforms to preexisting attitudes. In this theory, people are motivated to maintain their prior beliefs and attitudes once they make decisions or establish specific attitudes. Exposure to uncongenial or information incongruent with their beliefs and attitudes will create a negative arousal. To reduce the negative arousal, or cognitive dissonance, people will try to avoid uncongenial information and seek out congenial information. The classic example of cognitive dissonance in selective exposure is in health communication. Information about the health risks of smoking will produce dissonance

for a smoker. The smoker will be more likely to avoid anti-smoking messages and seek information that highlights the benefits of smoking (Feather, 1962).

Additionally, Festinger (1957) argued that the magnitude of dissonance moderated the motivation to selectively attend or avoid information. There are three possibilities. First, when there is no or little dissonance, the motivation to seek new information will be low. Second, when the level of dissonance is moderate it will lead to an active search of new information that will reduce dissonance while avoiding information to increase dissonance. Third, when the dissonance level is close to the maximum limit, people will seek information to increase dissonance thus bringing about attitudes or behaviors change, therefore, eliminating dissonance.

Following this line of research, the expected effect from selective exposure is a reinforcement of individual predispositions. In the 1960s, Klapper introduced the concept of the reinforcement effect as part of the minimal effects approach to mass communication theory. Multiple studies confirm reinforcement motivation (Atkin, 1971; Freedman & Sears, 1963) also known as confirmation bias.

In communication, selective exposure in the cognitive dissonance paradigm does not consider how individuals choose messages. Cognitive dissonance theory emphasized selective avoidance to reduce dissonance that usually was aroused after a decision-making. For example, studies on selective exposure to car ads after the subjects purchased a new car (Ehrlich, Guttman, Schönbach, & Mills, 1957). New car owners will expose themselves more to advertisement of their own car compared to other cars ads. Another example is the way students choose information after the students selected their preferred type of test for future exams (Mills, Aronson, & Robinson, 1959). The study demonstrated after they made decision over types of exams, students ranked articles supporting their choice. Furthermore, the selective exposure was

higher when the students perceived their exam selection is the one they have to do at the end of semester. To reduce dissonance, the subjects in those studies selected information that supported their previous decision and avoided information that could arouse dissonance caused by a discrepancy between the cognition after decision-making and the cognition resulted from the new information.

However, media selection and choices in everyday practices have a tiny probability of involving a high decisional commitment that can arouse dissonance as elevated as post-decisional dissonance (Donsbach, 2009; Knobloch-Westerwick, 2015). As noted in the previous works, communication scholars do not regard dissonance as a normal condition of an audience members when s/he consumes news story. Selective exposure studies established that selectivity can also occur in state of consonance.

For example, Walster (1964) conducted a study to test selective exposure where students were free to select favorable and unfavorable information about the profession they want to pursue in the future. The results, and they are replicated over time, is if the information source is credible subjects tend to read supportive information. When the source of information is not credible, participants were more likely to read information was unfavorable. The explanation for the low credibility and unfavorable information selection is that a low credibility information source will be easily to refute. These results demonstrate that selective exposure, particularly in communication, is more related to a goal-oriented process to justifying behavior rather than seeking consistency between cognitions (Harmon-Jones & Harmon-Jones, 2008). Selective exposure from the perspective of cognitive dissonance theory essentially drives an individual to defend a predisposition (Fischer & Greitemeyer, 2010). In order to feel good through minimizing dissonance, to reinforce decisions, and to defend viewpoints to self and others, individuals are

more likely select and choose congenial information as opposed to simply avoiding uncongenial information. This assumes an active audience that can freely choose and select media contents based on their motivations.

Confirmation bias has emerged as the dominant theoretical framework to explain selective exposure. Confirmation bias refers to the individual tendency to seek congenial information and avoid uncongenial messages as a way to defend beliefs, attitudes, and behaviors (Hart et al., 2009). At the heart of this approach is a specific psychological mechanism labeled motivated reasoning. Kunda (1990) stated that people are not simply information containers who encounter new information and automatically incorporate it into their existing beliefs and attitudes in an indiscriminating way. Motivated reasoning assumes that people are goal-driven when they encounter information. Motivated reasoning operates with two basic goals or motivations: the first is the defense motivation, to maintain initial beliefs, attitudes or predispositions, and the second is the accuracy motivation, information consumption that guides individual to achieve most correct judgment (Hart et al., 2009), within a system of beliefs, predispositions, and ideology.

Hart et al. (2009) conducted a meta-analysis of selective exposure studies. They found that people are more likely to select congenial information than uncongenial information. Hart et al. (2009) also examined factors that help enhance or reduce the selective exposure based on confirmation bias and motivated reasoning. Those factors are:

1. When individuals receive challenging information prior to information selection, the defense motivation would be stronger (Festinger, 1964; Hart et al., 2009).

- 2. The defense motivation is also increased by the individual commitment to prior attitudes and beliefs or "attitude strength" (Brannon, Tagler, & Eagly, 2007; Hart et al., 2009; Taber & Lodge, 2006).
- 3. If individuals have a high level of confidence in their prior attitude, and they believe can easily fend off any attack to their predispositions, confirmation bias will be decreased (Albarracin & Mitchell, 2004; Brodbeck, 1956).
- 4. The higher the value relevance of an issue to an individual, the more defense motivation will become dominant, especially in the political context (Hart et al, 2009; Iyengar, Hahn, Krosnick, & Walker, 2008).
- 5. The last factor is the close-mindedness that positively related with confirmation bias (Garrett et al., 2014; Hart et al., 2009), which highly related with conservatism (Jost et al., 2007), dogmatism (Cappella, Kim, & Albarracin, 2014), and authoritarianism (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Hetherington & Suhay, 2011; Lavine, Lodge, & Freitas, 2005). The higher the level of the close-mindedness of an individual, the greater defense motivation of the individual.

In the accuracy motivation, Hart et al. (2009) identified perceived information quality, utility, and usefulness, both for congenial and uncongenial information, as factors that can influence confirmation bias. The higher perceived usefulness, quality, and utility of congenial information lead to greater confirmation bias (Cappella et al., 2014; Hart et al., 2009). Fischer and Gretemeyer (2010) suggest that the individual with an accuracy motivation is unable to evaluate information quality independently of her position, and thus the high level of perceived usefulness of congenial information is evaluated more positively than uncongenial information. Furthermore, Fischer and Gretemeyer (2010) underlined that congenial information is perceived

as more useful, to have higher quality and utility than uncongenial information. Consequently, those who search for high-quality information for accuracy purposes may prefer congenial information and thus increase the individual confirmation bias. For example, an individual who accepts the second amendment in the U.S. Bill of Rights as true and absolute will be more critical of information about a background check proposal than the information that is contrary to it. Hart et al. (2009) noted that high-level of perceived usefulness of uncongenial information would lead to a disconfirmation bias, or the inclination to counterargue uncongenial messages and uncritically accept congenial information (Taber & Lodge, 2006). Even if individuals are motivated by the accuracy motivation, a desire to achieve the most accurate judgment from the available information, individuals will tend to select congenial information because it is easier to process and perceived as more credible, useful, and have higher quality and utility. Thus, the accuracy motivation does not automatically reduce or erase the confirmation bias, it can foster the confirmation bias.

In their meta-analysis, Hart et al. (2009) argued that the defense motivation had a greater influence on confirmation bias than the accuracy motivation. They also noted that confirmation bias increased for political issues and beliefs on relevant topics compared with general issues. Several studies confirmed the existence of a confirmation bias in a political context, for example, Brannon et al. (2007) conducted experiments on several political issues, such as the death penalty, international conflicts, and abortion, and found that a tendency to hold a strong general attitude rather than issue-specific attitude intensified confirmation bias. Lavine et al. (2005) found that those who received threat-induced treatment and scored high in authoritarianism were more likely to select congenial messages. Albarracin and Mitchell (2004) found that individuals with chronic defensive confidence, or a belief that they can effectively defend their attitude from

external attack, are more likely to select uncongenial information and, in turn, more likely to change their attitudes as the result of exposure to uncongenial information. Taber and Lodge (2006) by using an unobtrusive measure of selection and time spent on stimulus messages, found confirmation bias when the participants were allowed to self-select information, and a disconfirmation bias -accept congenial information without reservation and counter argue the uncongenial messages—when participants were exposed to pro and con messages. Knobloch-Westerwick and Meng (2009) employed unobtrusive measures and found confirmation bias where the selection of congenial information surpassed the exposure to uncongenial messages. Moreover, they also found that participants with high news consumption habits and those with high attitude certainty were more likely to select and spend more time reading congenial information compared with uncongenial messages. Furthermore, individuals with greater confidence, as reflected by a relatively higher interest in politics and stronger party affiliation, have a greater tendency to select and read uncongenial information. Knobloch-Westerwick and Kleinman (2012) found persistent confirmation bias especially for those who seldom consuming online news and who believed their preferred party or candidate was likely to triumph in the election. However, Knobloch-Westerwick and Kleinman (2012) found that information utility as intervening variable could override confirmation bias.

In summary, the previous studies demonstrated that greater attitude strength and certainty (Albarracin & Mitchell, 2004; Brannon et al., 2007; Knobloch-Westerwick & Meng, 2009), feeling threatened (Lavine et al., 2005), high authoritarian personality (Lavine et al., 2005), freedom of choice compared to forced exposure (Taber and Lodge, 2006), high news consumption habits, and rarely consuming news from the internet (Knobloch-Westerwick & Kleinman, 2012; Knobloch-Westerwick & Meng, 2009) are the factors that increase

confirmation bias. In an election, those who believe their party or candidate will win the race (Knobloch-Westerwick & Kleinman, 2012) are more likely to choose information based on a confirmation bias. However, those who have high confidence in terms of higher ability to defend their opinion, stronger party affiliation, and higher interest in politics (Albarracin & Mitchell, 2004; Knobloch-Westerwick & Meng, 2009) are more likely to select uncongenial information. It is also worth noting that the pattern of ideology and partisanship-based selectivity was not present exclusively for political controversial issues but also for soft news such as travel and sport (Iyengar & Hahn, 2009).

The selective exposure paradigm has evolved from the cognitive dissonance framework in its initial development to the theory of confirmation bias that takes into account both the defense motivation and the accuracy motivation. The technological advancement that allows information providers to serve a niche market with relatively low cost and fewer channels offering a generic "point-counterpoint" perspective on news (Iyengar & Hahn, 2009) provides a fertile context to re-examine selective exposure, particularly in a political context. The previous studies on confirmation bias identified moderators and mediators of selective exposure, categorized under defense and accuracy motivations (Cappella et al., 2014; Fischer & Greitemeyer, 2010; Hart et al., 2009). Some confirmation bias studies also identified moderators, such as anxiety (Valentino, Banks, Hutchings, and Davis, 2009), anger (Arpan & Nabi, 2011), political views and activity (Feldman, Stroud, Bimber, & Wojcieszak, 2013), need for cognition (Tsfati & Cappella, 2005), sources cues (Iyengar & Hahn, 2009), social recommendation cues (Messing & Westwood, 2012), and partisanship and ideology (Iyengar et al, 2008; Garrett et al., 2014; Knobloch-Westerwick & Meng, 2009). Those factors further refine the understanding of conditions that promote selective-exposure-based confirmation bias.

However, all those previous studies on confirmation bias use an equal amount of congenial and uncongenial information. Individuals have limited time and cognitive resources (Fischer, Jonas, Frey, & Schulz-Hardt, 2005) to select and prioritize what information to attend to. The high partisanship and fragmented media environment produces unbalanced information availability and proportion. A citizen who leans Republican will select media that is in accordance with her political preference. In that content, she finds more information congenial to her predisposition and consequently will select the congenial information. The next section will discuss information availability in relation to the selective exposure research paradigm.

### Information availability and selective exposure

The research agenda on selective exposure in social psychology and communication was almost abandoned from the 1970s to 1990s, after Freedman and Sears (1965) concluded in their review of selective exposure literature that there was a little evidence for attitude-congruent effects. For example, Feather (1963) tested articles on the cancer risk of smoking on smokers and non-smokers and found no significant difference between those groups. Sears and Freedman suggested that the positive relationship between political predispositions and exposure to inconsistent news stories might result from *de facto* selective exposure. *De facto* selective exposure is produced from the "biases in the composition of voluntary audiences to mass communication" (Sears & Freedman, 1967, p. 197). These biases were related to the availability of information that audience members can select from. For example, a nonsmoker, now the majority of the U.S. population (Center for Disease Control and Prevention, 2016), is more likely to expose herself to anti-smoking messages or risks related to smoking behavior information compared to messages on the benefits of smoking. The exposure to anti-smoking messages by a nonsmoker in this context is not a selective exposure in term of cognitive dissonance, but a

product of biases in the composition of audiences and the messages in the mass communication environment.

The idea that information availability is closely related with selective exposure can be traced back to Lazarsfeld et al. (1968). They wrote that "actual exposure does not parallel availability. Availability *plus* predispositions determine exposure" (Lazarsfeld et al., 1968, p. 89, emphasis in original). In their classic study in Erie county, Lazarsfeld et al. (1968) found that about two third of citizens who already made up their mind about a particular candidate were exposed primarily to publications favoring their candidate. Furthermore, when the data was controlled by the party, those with Republican predispositions demonstrated higher selective exposure compared with their Democrat counterparts. About half (50.4%) Democrats primarily exposed to Democratic news outlets and the rest of them tuned into Republican publicity (Lazarsfeld et al., 1968). However, Lazarsfeld et al. (1968) did not make any association between the availability of information, the print and electronic media were dominated by endorsement to Republican presidential candidate, to the difference of selective exposure between Republican and Democrat voters.

Freedman and Sears (1965) further examined Lazarsfeld's et al. (1968) data and found that the availability of partisan news outlets was uneven between Republicans and Democrats. In the overall campaign, 68.8% of all available news programs or articles had a Republican slant and 69.7% of the voters who leaned toward Republican's candidate were exposed primarily to Republican news outlets. The total exposure of those who leaned Republican almost equaled the available information with a Republican slant. Freedman and Sears (1965) argued that the evidence demonstrated *de facto* selectivity by Republicans rather than selective exposure based on political predispositions. Furthermore, Freedman and Sears (1965) noted the evidence

confirmed selective exposure by those who leaned toward Democrats because of the deviation from information availability. From the findings, Freedman and Sears (1965) stated, "Selectivity of exposure must be defined in terms of deviations from a baseline determined by information availability" (Freedman & Sears, 1965, p. 80, emphasis in original).

Selective exposure scholars after Freedman and Sears were more concerned with psychological factors or predispositions to selective exposure processes. Almost all previous research on selective exposure was conducted in an experimental setting employed equal amount of congenial and uncongenial information (Albarracin & Mitchell, 2004; Frey, 1986; Hart et al., 2009; Knobloch-Westerwick & Kleinman, 2012; Knobloch-Westerwick & Meng, 2009; Knobloch-Westerwick & Meng, 2011; Taber & Lodge, 2006) to establish a causal relation between individuals' predisposition and selective exposure behavior. Freedman (1965) and Sears (1965) also employed an equal amount of congenial and uncongenial information in their experiments. However, only two different stories were available to choose in their experiments, one congenial and one uncongenial.

Frey (1986) conducted experiments to test information availability in the term of quantity with an equal proportion. He found that if there were only two items of information available, with an equal amount of congenial and uncongenial information, half of the participants chose uncongenial information. However, when the number of items increased to 10, with the same proportion between congenial and uncongenial information, 80%-95% of the participants chose the congenial information. Frey (1986) demonstrated that people tend to choose more congenial information in high-quantity information environments (10 items) as opposed to low-quantity information (2 items) environments. The amount of uncongenial information was the critical element to explain selective exposure. A person who encounters a single uncongenial item will

choose the uncongenial one because s/he had a better chance to refute or counter the single item and eliminate dissonance compared to when a person encounters multiple items. The larger number of uncongenial items also creates higher uncertainty about the accuracy of the person's opinion or attitude. Therefore, the person needs to decrease dissonance by consuming additional congenial information (Frey, 1986).

Frey's (1986) findings rebutted the *de facto* selectivity finding of Freedman and Sears (1965). Selective exposure is not determined solely by the information availability, "Availability *plus* predispositions determine exposure" (Lazarsfeld et al., 1968, p. 89, emphasis in original). Furthermore, it is difficult or even futile to determine the baseline of information availability in the Internet era and thus calculate selective exposure, as suggested by Freedman and Sears (1965). For example, the result from Google search query on January 2017, with "gun control" as keywords returned with about 40 million of results while "open carry" produced about 46 million results. However, these results may not reflect a partisan bias; headlines with gun control as the keyword contain the open carry arguments and vice versa. It is hard to determine that the "open carry" with Republican slant on of a gun issue is dominating the information quantity and proportion based on the result of Google search. Therefore, Freedman and Sears's (1965) definition of selective exposure based on the deviation of the information availability in the universe of information based on the geographical boundary is no longer practical.

Fischer, Schulz-Hardt, and Frey (2008) replicated and extended Frey's (1986) study. They found the same result with Frey (1986) that in the 2-item condition with the equal number of congenial and uncongenial stories, subjects were more likely to choose uncongenial messages compared with ten-item condition with an equal proportion of congenial and uncongenial information. Furthermore, Fischer et al. (2008) tested the best theory to explain the effect of

selective exposure on the different information environment that contains different quantity of information. The first theory is cognitive dissonance. Frey (1986) argued that in the two-item condition, with only single uncongenial information, the easiest strategy to eliminating dissonance is refuting the inconsistent information. However, in the 10-item condition the availability of inconsistent information increases. The greater number of inconsistent stories the harder to refute them all. The second theory is quality and direction of information as selectioncriteria (Fischer et al., 2008). The quality and direction of information as selection-criteria works on the assumption that the decision makers will choose the information that consume the least processing effort. Information quality basically parallels to accuracy motivation where the congenial information is perceived of higher quality. Congenial information is systematically preferred in an information search when the information quality becomes main criteria for information search (Fischer et al., 2005). On the other hand, uncongenial information is more likely to be selected when the information direction is the prominent criteria because individuals try to be perceived as unbiased and objective decision makers (Fischer et al., 2008). Thus, when the information environment enables individual to easily identify the direction of information, participants tend to choose uncongenial information.

Fischer et al. (2008) conducted a 2 (information quantity; 2 and 10 items with equal number of congenial and uncongenial information) by 2 (information content; given and not given) to test cognitive dissonance and selection-criteria explanation on the information quantity effects of selective exposure. In the experiment, participants could select only one from the pool of available items. The study demonstrated that the quality and direction as selection-criteria theory is the best explanation for the information quantity effects on selective exposure. The participants in no content conditions were more likely to select uncongenial information in both

2 and 10 items conditions. This dissertation will follow Frey (1986) cognitive dissonance explanation and will test the different information proportion between congenial and uncongenial information on the selective exposure.

Information availability in this study refers to the differences of proportion between congenial and uncongenial information. One of the studies examined selective exposure by manipulating information availability with a personalization filter was conducted by Beam (2014). However, the study did not explicitly test information availability and its relation to selective exposure. Beam (2014) set up a mock gubernatorial election in Ohio where participants were instructed to read news articles about candidates and their issue positions in the belief that they would cast a vote at the end of the study. Furthermore, the study manipulated the information environment with system-driven or user-driven factors. Beam (2014) built his own algorithm to filter news stories based on participants' political affiliation, preferences, and political ideology. The results of the algorithm are the conditions of information availability in the experiment, consisted of showing all news stories with recommendation cues condition and showing only recommended news stories. For example, participants in the system-drivenrecommended-only condition only saw two news stories whereas participants in the systemdriven-all-news condition saw six news stories with two of them marked as recommended. Beam (2014) found that the system-driven filter enhanced selective exposure while the user-driven filter reduced selective exposure.

Beam (2014) made an important contribution to the study of selective exposure in a news personalization context. However, the descriptive data in the Beam's (2014) appendix demonstrated that participants in the system-driven filter, who were shown all stories with recommendation cues condition, viewed more uncongenial news stories compared with user-

driven filter that showed all stories within the recommendation cues. While none of the participants in the system-driven filter condition viewed uncongenial news stories because there were no uncongenial items available. Basically Beam (2014) did not fully cross analysis the 2 (system-driven and user driven) by 2 (recommendation only and all stories with recommendation cues) factorial design. Beam (2014) combined the data both from recommendation only and all stories with recommendation cues conditions. This discrepancy needs to be further tested by making uncongenial information available and then testing for selective exposure.

In summary, this section explicates the following concepts: the basic assumptions of selective exposure, information availability and predispositions that help to determine selective exposure. On the one hand, predispositions help explain confirmation bias, or the tendency to seek and consume congenial information more than uncongenial information. Information availability, on the other hand, cannot work in a vacuum. As previous research demonstrated, the availability of uncongenial information may increase the probability of participants in choosing uncongenial information (Beam, 2014; Fischer et al., 2008; Frey, 1986).

This dissertation aims to clarify the effects of information availability on selective exposure. The previous experimental studies employed an equal number of congenial and uncongenial information to be selected by participants. Frey (1986) documented the differences in information quantity, that the number of uncongenial items can reduce or strengthen the confirmation bias. Beam (2014) demonstrated that information availability can disrupt the confirmation bias.

This study further examines selective exposure in the conditions with an unequal number of congenial and uncongenial items. For example, a partisan media may serve congenial information twice as often as uncongenial items or vice versa. There are limited empirical studies

to date that examine the effect of information availability on selective exposure in an online news setting. It is important to provide objective evidence on whether the availability of information will lead to selective exposure and create a filter bubble.

From the literature review on selective exposure, particularly on confirmation bias and information availability, this study proposes the following research question:

RQ1: How do differences in the proportions of information availability, both for congenial and uncongenial information, effect selective exposure behavior?

Although studies on information availability and selective exposure are limited, Beam's (2014) study suggests that the probability a congenial item will be selected will be greater if there are more congenial items available. Therefore, this study proposes a hypothesis:

H1a: Those in the high congenial condition will select more congenial messages as compared to the high uncongenial condition and as compared to a control group.

A different direction from the same information proportion also can be predicted using Frey (1986) cognitive dissonance explanation on selective exposure and information availability. When uncongenial information is lower than uncongenial stories and perceived as easy to refute, participants are more likely to select uncongenial over congenial items. Therefore, this study proposes a competing hypothesis from H1a:

H1b: Those in the high congenial condition will select more uncongenial messages as compared to the high uncongenial condition and as compared to a control group.

Based on the same logic of information availability from Beam (2014), it can be inferred the more uncongenial items that are available, the greater probability those uncongenial stories will be selected. However, Frey (1986) argues that the increasing amount of uncongenial information made it more difficult for the individuals to refute the inconsistent message and

therefore, individuals are more likely to select congenial over uncongenial items. From this cognitive dissonance explanation, this study proposes two competing hypotheses:

H2a: Those in the high uncongenial condition will select more uncongenial messages compared to the high congenial condition and as compares to a control group.

H2b: Those in the high uncongenial condition will select more congenial messages compared to the high congenial condition and as compared to a control group.

The first research question and two sets of competing hypotheses in this study aim to provide empirical evidences of the unbalanced information proportion in the highly fragmented and partisan media environment and the personalization technology on selective exposure behavior. Although the idea of filter bubble and echo chamber or when the difference in the proportion of information volume were like a common sense and intuitive, there is limited empirical research demonstrated the causal relation between the unbalanced information proportion on selective exposure. This dissertation tries to fill gap of literature and empirical research on the issue of information availability and selective exposure.

## The consequences of selective exposure: reinforcement

One justification of the revival of selective exposure research is the implication of selective exposure for democracy. In a democratic society, individuals need to listen to crosscutting opinions that differ, sometimes substantially, from their own opinions (Mutz, 2006; Mutz & Martin 2001). A highly partisan and fragmented media environment enables people to live undisturbed in an information cocoon or echo chamber in which individuals are exposed to information that only pleases and comforts them (Sunstein, 2006). The danger of information cocoons, according to Sunstein (2002), is creating less shared social experience among citizens who live in a diverse democratic society. Social experience acts as the social glue that enables

consensus building in society. The polarization and the formation of extreme attitudes based on political predispositions is viewed as a consequence of selective exposure (Mutz, 2006; Pariser, 2011; Sunstein, 2001). Furthermore, partisan selective exposure may reduce the ability of democratic government to formulate policy that is responsive to public needs (Stroud, 2008).

Selective exposure resulted in reinforcement (Klapper, 1960; Lazarsfeld et al., 1968) and further widening gap of political polarization in a society (Stroud, 2011). Lazarsfeld et al. (1968) categorized three possible effects of mass communication in political context, particularly in election. The reinforcement effect, the most dominant effect of mass communication (Klapper, 1960), is an effect that strengthening individual predisposition. The predisposition could be individual's preference toward a candidate, issue position, or partisanship. The second effect is activation, when individual shifts slightly her attitude from the initial predisposition. For example, those who initially neutral toward a candidate or issue position and those who are change their preference from a candidate or issue position to neutral. The activation effect is harder to find compared to the reinforcement effect. The third effect is conversion, the rarest effect in political communication (Klapper, 1960). The conversion effect pushes an individual preference toward the opposite candidate or issue position.

From these three effects, reinforcement effect is clearly dominant (Klapper, 1960; Lazarsfeld et al., 1968). Festinger (1957) explained the cognitive process underlined the selective exposure and reinforcement effect. Individual motivated to seek or select information that reduce existing dissonance and to avoid messages that can create dissonance. This motivation governs our day-to-day behaviors, including those when we are exposed to the news media. Only those who have a critical dissonance level and are ready to change their preferences, will consume uncongenial information and became activated or converted.

The first explanation for the relation between selective exposure and reinforcement effect is group norms (Klapper, 1960; Knobloch-Westerwick, 2014). According to Klapper (1960), tendency toward group membership (family, workplace, and formal organization) homogeneity of opinion and anchored to the group norms and values mediate the selective exposure and reinforcement effect. The concept of group norms and membership would further had been utilized to explain the relation between selective exposure and reinforcement effect. One of them is the reinforcing spiral model that proposed there is a reciprocal relationship between media use and the effect it produces. In a simple, three-step process, Slater (2007) proposed that in a first step, a specific media use produces corresponding beliefs or behaviors. The second step, the beliefs or behaviors, in turn, increases that type of media use, and finally, the process becomes reinforcing over time. The spiral can start from media use or selective attitudes and beliefs, the model conceptualizes the relationship of the media use and media effects as two paired and complementary reinforcing over time.

Slater (2007) stated that the primary objective of reinforcing spiral model is to integrate a selective exposure process into the study of media effects. Particularly, the reinforcing spiral model underlines the maintenance of social identity through media use and selectivity (Slater, 2007). Therefore, a mechanism based on social identity framework of selective exposure is expected to be an important motivator in how audience members select and choose media content and channels. The reinforcing spiral model has two primary characteristics: (a) individual-level media use and effects over time and (b) the maintenance of social and group identities, such as political or religious predispositions, through the mutually reinforcing processes of media selectivity and their consequences on the macro-level.

Related to the high partisan and fragmented media environment, Dilliplane (2014) argued that the disproportional or imbalance in volume of information plus the congruity of news slant to individual predisposition will lead to heighten the salience of encouraging thought about a candidate or issue position. For example, a news outlet provides more Republican slant news stories will strengthen or reinforce those who had a Republican preference or will enable those who neutral to agree with Republican views or candidate. This proposition is compatible to the filter bubble or information cocoon argument. The more congenial information available in an information environment will lead to congenial information exposure that results in reinforcement or activation. Sunstein (2007) argued that disproportional pool of information biased in favor of congenial or initial predisposition will produce attitude polarization.

Dilliplane (2014) did not specify whether the disproportional information availability toward uncongenial information will make people more inclined to expose themselves to the uncongenial message and in result will produce conversion. There is no available theory that can support this proposition. Even when people are forced to expose themselves to the uncongenial messages, the most common reaction is disconfirmation bias (Taber and Lodge, 2006).

From the studies above, the following research question is advanced:

RQ2: Is there a direct relationship between selective exposure and attitude reinforcement?

#### The mechanism from selective exposure to reinforcement effect: emotions

Festinger (1957) conceptualized dissonance in two ways, the first is a bodily condition like arousal or drive state and the second is psychological discomfort. The state of arousal or drive state dominated the early studies on cognitive dissonance (Elliot & Devina, 1999). However, more recent research demonstrated that dissonance is also a motivated process and involves negative affect (Harmon-Jones & Harmon-Jones, 2008). In the selective exposure

paradigm, people are motivated to justify their beliefs and attitudes by selecting congenial information. Those who prevail in a cognitive dissonance reduction strategy such as selective exposure will also reduce their negative emotional state and therefore motivated to seek more information (Harmon-Jones & Harmon-Jones, 2008). Therefore, individuals select all of congenial and none of uncongenial information are more likely to feel positive compared those who select more uncongenial information.

People have a tendency to select congenial information more than uncongenial information, but there is growing evidence that citizens also select and read uncongenial items based on ideology, party identification, and issue position. Recent studies on selective exposure, nonetheless, demonstrate that people do not actually avoid all uncongenial information (Garrett, 2009; Graf & Aday, 2008; Stroud 2008; 2011). For example, those who have chronic defensive confidence (Albarracin & Mitchell, 2004), stronger party affiliation and higher interest in politics (Knobloch-Westerwick & Meng, 2009), and those who have greater information utility (Knobloch-Westerwick & Kleinman, 2012), are more likely to select uncongenial information. However, there is a lack of studies investigating whether selecting uncongenial messages will produce more negative than positive emotions.

Fischer et al. (2008) argued that even with the confirmation bias and motivated reasoning, people at the same time attempt to be perceived as objective when consuming information related to judgments because it is hard to justify a decision process to oneself or others when obvious bias or distortion in consuming information was exhibited. Moreover, as Frey (1986) demonstrated people will select uncongenial information when its availability is low because it is perceived as easily refuted and will not increase dissonance. However, there is no systematic research in the selective exposure paradigm to examine the consequences of people selecting

uncongenial information, sometimes with greater frequency than congenial information. Specifically, what are the possible emotional responses when someone voluntarily exposes oneself to uncongenial information, and what are the consequences of arousal of emotions on the attitude change or reinforcement effect? To answer this question, the affective intelligence theory (Marcus, Neuman, & MacKuen, 2000) postulate a framework to examine the impact of emotions and political attitude.

Marcus et al. (2000) suggested that ordinary citizens use their feelings to help govern their attention to the political realm. Furthermore, Marcus et al. (2000) formulated affective intelligence theory, inferred from neuroscience, that people have two different emotional systems. The first system is the dispositional system, and functions on the routine information level to manage habits and predispositions. This system generates two affective dimensions, namely enthusiasm, and aversion. The second system is a surveillance system, which functions to alert people to extraordinary and threatening circumstances. The surveillance system works mainly by relying on anxiety, to signal that there is something amiss from routine and therefore force people to be more attentive to the environment. According to Marcus, MacKuen, and Neuman (2011), each emotion has its own consequences for the political judgment. Specifically, enthusiasm motivates people to participate in politics (Marcus et al., 2011; Valentino et al., 2009), aversion drives information avoidance, disconfirmation bias, and tendency to act or solve the problem as quickly as possible (Arpan & Nabi, 2011; Taber & Lodge, 2006). Anxiety triggers the need for more attention and learning, and also opens up possibilities to change initial political judgments or predispositions (Brader, Valentino, & Suhay, 2008; Marcus et al., 2011; Valentino et al., 2009).

Marcus, Sullivan, Theiss-Morse, and Stevens (2005) further elaborated on affective intelligence theory by examining the relationship between emotions, particularly anxiety, and tolerance judgment. Their assumption is that greater anxiety will reduce individual dependence on predispositions allowing people to be more attentive to the contemporary information when the alternative solutions are available. When the surveillance system is activated, a contemporary argument will have more impact to provide feeling of safety and familiarity compared to habits. Marcus et al. (2005) demonstrated that for greater anxiety, anti-free speech messages make people less tolerant while the pro-free speech messages make them more tolerant. Marcus et al. (2005) argued that the result of the study also challenges the notions that cognition and emotion are separable and distinct, and that emotions will disrupt the cognitive deliberation on a political judgment.

Related to information availability, it can be argued that serving congenial information disproportionally bigger than uncongenial one will lead to encouragement of enthusiasm emotion or affect (Dilliplane, 2014). Enthusiasm will activate the habitual route that will produce selective exposure. In turn, selective exposure further decreases dissonance and creates more enthusiastic feeling that leads to attitude maintenance.

Selective exposure in the imbalanced information environment, both for congenial or uncongenial information, may produce exposure to the uncongenial information (Garrett, 2009; Graf & Aday, 2008; Stroud 2008; 2011). Those who expose themselves to the uncongenial information may feel fear and shut themselves to the counter attitudinal arguments, therefore creates attitude maintenance. There is also the possibility of those who expose themselves to uncongenial messages to feel anxious and more attentive to congenial and counter attitudinal arguments and more likely to shift their attitude.

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From the literature review above, this study proposes the following questions:

RQ3: In which condition do the participants have more:

a: enthusiasm emotion?

b: aversion emotion?

c: anxiety emotion?

RQ4: What are the specific emotions aroused in those who

a: select more congenial information?

b: select more uncongenial information?

RQ5: Do the emotions mediate the relationship between selective exposure and attitude

reinforcement?

**Summary** 

In summary, this chapter discuss studies in selective exposure from cognitive dissonance,

confirmation bias, and information availability that influence how people select news stories in

political context. Based on Lazarsfeld et al. (1968) proposition that, "Availability plus

predispositions determine exposure" (p. 89, emphasis in original) this study theorizes that

information availability, as a product of highly fragmented partisan media and filtering agents,

combined with congeniality of information may influence people in selecting political

information. Most of experiments in selective exposure employed an equal amount of congenial

and uncongenial information to establish causal relations between confirmation bias and

selective exposure. This study will utilize a novel approach by utilizing different proportions of

congenial and uncongenial information in an information environment to test the effects of

information availability on selective exposure.

The second part of this chapter discusses the consequences of selective exposure to reinforcement effect. The reinforcement effect that strengthen initial predisposition is the dominant effect in selective exposure. There are several mechanisms that can explain the relations between selective exposure and reinforcement effect. The most relevant mechanism with information availability is the one from Dilliplane (2014) who argued that the higher proportion of congenial information will influence salience for like-minded citizens and may reinforce the initial attitude. This proposition is the base for the second major research focus in this dissertation.

The next mechanism that can explain the relation between selective exposure and reinforcement effect is affective intelligence (Marcus et al., 2000). Because selective exposure to congenial information is a way of reducing dissonance, it can be argued that those who expose themselves to the congenial information may feel more enthusiastic, and as the theory of affective intelligence predicts, will lead to reinforcement or activation via habitual cognitive processing. For those who expose themselves to uncongenial information there are two possible emotions that can be aroused. First, anger or aversion that will lead to reinforcement because they will shut themselves to the counter attitudinal arguments. Second, anxiety that will open up possibilities for an attitude shift, for the subject will cognitively search for new information and solutions.

From the literature review above, this study proposes research questions and hypotheses:

RQ1: How do differences in the proportions of information availability, both for congenial and uncongenial information, effect selective exposure behavior?

Although studies on information availability and selective exposure are limited, Beam's (2014) study suggests that the probability a congenial item will be selected will be greater if there are more congenial items available. Therefore, this study proposes a hypothesis:

H1a: Those in the high congenial-low uncongenial condition will select more congenial messages as compared to the low congenial-high uncongenial condition and as compared to a control group.

A different direction from the same information proportion also can be predicted using Frey (1986) cognitive dissonance explanation on selective exposure and information availability. When uncongenial information is lesser and perceived as easy to refute, participants are more likely to select uncongenial over congenial items. Therefore, this study proposes a competing hypothesis from H1a: Those in the high congenial condition will select more congenial messages as compared to the high uncongenial condition and as compared to a control group

H1b: Those in the high congenial condition will select more uncongenial messages as compared to the high uncongenial condition and as compares to a control group.

Based on the same logic of information availability from Beam (2014), it can be inferred the more uncongenial items that are available, the greater probability those uncongenial stories will be selected. However, Frey (1986) argues that the increasing amount of uncongenial information made it more difficult for the individuals to refute the inconsistent message and therefore, individuals are more likely to select congenial over uncongenial items. From this cognitive dissonance explanation, this study proposes two competing hypotheses:

H2a: Those in the high uncongenial condition will select more uncongenial messages compared to the high congenial condition and as compares to a control group.

H2b: Those in the high uncongenial condition will select more congenial messages compared to the high congenial condition and as compared to a control group.

RQ2: Is there a direct relationship between selective exposure and attitude reinforcement?

RQ3: In which conditions do the participants:

a: have more enthusiasm emotion?

b: have more aversion emotion?

c: have more anxiety emotion?

RQ4: What are the specific emotions aroused in those who

a: those select less uncongenial information?

b: those select more uncongenial information?

RQ5: Do the emotions mediate the relationship between selective exposure and attitude reinforcement?

# CHAPTER 2 METHODS TO EXAMINE THE EFFECT OF INFORMATION AVAILABILITY AND SELECTIVE EXPOSURE

This dissertation is based on Lazarsfeld et al.'s (1968) thesis that information availability and predispositions determine exposure. Information availability is a key concept to understand the effects of highly fragmented and partisan media and the impact of filtering agents widely utilized in news media and news portals. Partisan media outlets and filtering agents produce varied proportions of congenial and uncongenial information based on users' preferences. The disproportion of congenial and uncongenial information availability has not been studied systematically in selective exposure research. To date, studies about selective exposure are dominated by experiments that employ equal amounts of congenial and uncongenial items in their stimuli. This dissertation tries to examine how the differences in the proportions of information availability, both for congenial and uncongenial information, effect selective exposure behavior (RQ1).

To test the effects of information availability on selective exposure, this study will utilize a novel approach by focusing on the proportions of congenial and uncongenial stories in an information environment. The common reasoning is in the imbalanced information environment, people tend to select information from those that have greater proportion (Beam, 2014; Dilliplane, 2014). For example, when the number of congenial stories overshadows uncongenial items, people are more likely to select and read congenial information. The same logic also can be applied to the conditions when uncongenial information dwarfs congenial items. However, from the cognitive dissonance perspective, the significant factor for selection is the number of uncongenial information (Fischer et al., 2008; Frey 1986). People tend to select uncongenial items when they perceive the items will be easy to refute because they lesser in number compared with congenial information. The cognitive dissonance theory also suggests that the

greater number of uncongenial items, the harder it will be for individuals to refute the incongruent items. Therefore, they will tend to select congenial items.

This logic leads to two sets of competing hypotheses. The first set consists of: those in the high congenial condition will select more congenial messages as compared to the high uncongenial condition and as compared to a control group (H1a), and its competing hypothesis, those in the high congenial condition will select more uncongenial messages as compared to the high uncongenial condition and as compares to a control group (H1b). The second set of hypotheses includes, those in the high uncongenial condition will select more uncongenial messages compared to the high congenial condition and as compares to a control group (H2a), while those in the high uncongenial condition will select more congenial messages compared to the high congenial condition and as compared to a control group (H2b), will be the competing hypothesis for H2a.

The second part of this study deals with the consequences of selective exposure on the reinforcement and emotions. Studies in selective exposure suggest that confirmation bias may lead to a reinforcement effect. A reinforcement effect that strengthens or maintain initial predisposition is the dominant effect of selective exposure. One of the most relevant mechanism with concept of the information availability is the one from Dilliplane (2014) who argued that the disproportion of congenial information higher to uncongenial information will influence salience of thought for the like-minded citizens which may in turn reinforce the initial attitude. This proposition is the basis for the second research question in this dissertation on whether there is a direct relationship between selective exposure and attitude reinforcement (RQ2).

Selective exposure and reinforcement may also include affective intelligence (Marcus et al., 2000). This dissertation also tries to examine the emotions that aroused from engaging within

an unbalance proportion of congenial and uncongenial items. The second set of research question is in which experimental conditions do the participants have more enthusiasm (RQ3a), have more aversion (RQ3b), and have more anxiety (RQ3c). Because selective exposure to congenial information basically reduces dissonance, it can be argued that those who expose themselves to the congenial information may feel more enthusiastic. However, there is no systematic research in the selective exposure paradigm to examine the consequences of people selecting uncongenial information, sometimes with greater frequency than congenial information. Specifically, what are the possible emotional responses when someone voluntarily exposes oneself to uncongenial information, and what are the consequences of emotional arousal on the following attitude change or reinforcement? Therefore, this dissertation proposes research questions, first, what are the specific emotions aroused in those who select more congenial information (RQ4a) and those who select more uncongenial items (RQ4b)?

The theory of affective intelligence predicts arousal of enthusiasm and aversion may lead to reinforcement or the activation through habitual cognitive processing. For those who expose themselves to uncongenial information there are two possible emotions that can be aroused. First, exposure may lead to aversion which produces reinforcement of initial attitude because subjects will disregard counter attitudinal arguments. Second, anxiety may prompt a possibility for a conversion effect. The subject will cognitively searching for new information and solutions and in turn may lead to the attitude change. Thus, the last research question in this dissertation is do the emotions mediate the relationship between selective exposure and attitude reinforcement (RQ5)?

## **Experimental method**

To determine the causal relationship between information availability and selective exposure and between selective exposure and reinforcement, this study employs experimental methods. Experiments can be conducted in laboratory, field setting, or online. The most important feature of experiments is that data are gathered under strict conditions where choices are limited and "by controlled manipulation of variables and measures selected by the researcher" (Crano & Brewer, 2002, p. 17). Experimental methods are suited for determining causal relationships among controlled variables.

However, the very control that makes experimental methods able to determine causal relationships creates an artificial situation, thus, limiting the representativeness or generalizability of any study (Crano & Brewer, 2002). In other words, experiments value internal validity and sometime must sacrifice external validity. Internal validity is the degree of certainty that the application of manipulation causes the research outcome under a rigid control of the researcher. External validity related with the issue of generalizability of the research finding. Experimental methods also provide a way to ensure that the research finding is a causation, A varies when B varies and A causes B, and not covariation, the possibility of third variable intervenes in the causal relationship between A and B.

Experiments basically provide a way to clarify the types of variables that can influence the relationship between independent and dependent variables. The first type is a moderator variable which can enhance or block causal relationships between variables of interest (Crano & Brewer, 2002). For instance, the relationship between information availability and selective exposure can be moderated by the information utility. The more an individual need to make an accurate judgment, may enhances or blocs the causal relationship between information

availability and selective exposure. The second type of influence is a mediator variable: its presence is necessary to complete the causal process that links independent and dependent variables (Crano & Brewer, 2002). In other words, the independent variable causes variation in a mediator variable, which in turn, causes variation in dependent variable.

#### **Experimental Design**

This dissertation employs two experimental conditions and a control condition. The experimental conditions reflect the imbalance of information proportion in an information environment. The control condition consists an information environment with an equal number of congenial and uncongenial items (see Table 1). In this dissertation a high congenial or uncongenial information condition is operationalized with four news stories while the low congenial or uncongenial condition is operationalized with only two items. Congenial information is operationalized by matching the content of the news stories and the subjects' attitude toward a political issue. Unfortunately, because this dissertation tries to hold the total quantity of information in each condition constant, these two variables are difficult to cross into a full 2x2 factorial conditions. The first experimental condition is the high congenial-low uncongenial condition. The second experimental condition is the high uncongenial-low congenial condition.

Table 1. Experimental design of availability and congeniality of information

Condition	Operationalization		
High congenial-low uncongenial	4 congenial – 2 uncongenial items		
Low congenial-high uncongenial	2 congenial – 4 uncongenial items		
Control (equal number)	3 congenial – 3 uncongenial items		

The political issue employed in this experiment is the Trump administration's immigration policies. The topic of immigration policy has been controversial beginning with Trump's candidacy announcement speech in June 2015 where he proposed building an southern border wall (CBS News, 2016). The controversy over immigration policies continued after Trump was elected as President and signed executive order on border security and immigration enforcement improvement. The same day, Trump also signed an executive order to enhancing public safety by crackdown on undocumented immigrants with criminal records and by eliminating sanctuary cities. Two days later, on January 27, 2017, Trump signed another executive order banning entry for citizens from Iraq, Iran, Syria, Libya, Sudan, Somalia, and Yemen. The executive order also halts refugees from Syria for security reasons. Those seven countries in the travel ban are majority Muslim population creating public outcries with mass protests at major airports across the United States.

Those policies from executive orders are the sub-issues for the immigration policies in this dissertation. Those four sub-issues will be the topics for the news stimuli for the experiment. The first topic is "the southern border wall", as the presidential campaign promise and the controversy behind it from who will pay and whether it will be effective to curb illegal immigrations. The second topic is "the crackdown of undocumented immigrant with criminal records." This topic reflects a tougher policy on the undocumented immigrants but still with its controversy around its effectiveness and the methods to enforce the crackdown. The third topic is "the travel ban," even after the Supreme Court allowed the second version of the executive order to be implemented with some restrictions, the topic is still become a subject of debate in public for its majority Muslim country as targets. The fourth and last topic is "the halt of refugees" not

only from Syria but all refugees. The controversy from the halt refugee topic is the humanitarian reasoning versus security arguments behind the policy.

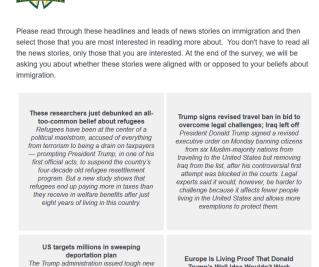
Selective exposure will be measured unobtrusively, using features in the Qualtrics software, by recording subjects' selection of the articles. Reinforcement will be measured by the questions on the pre- and post-stimuli about the attitude on immigration policies.

#### Stimuli and Pre-test

There are eight articles were employed as stimuli in this study. Two articles for each subtopic, namely, the southern border wall, the crackdown of illegal immigrants, the travel ban, and the refugee halt. For each sub-topic, one article was supporting and another was opposing the current administration immigration policies. The articles were selected from various online news outlets and were modified for the word length (*M*=487.38, *SD*=26.98). For example, an article from breitbart.com, "It's Official: Trump Orders Border Wall Between U.S. and Mexican Narcostates" is applied as a stimulus for southern border wall sub topics and pro current administration immigration policies. The article for anti-immigration policies in travel ban sub topic is "Trump's revised travel ban is still cruel and still unconstitutional" adopted from washingtonpost.com.

Headlines and the leads of each article were presented to the participants on the news menu in the Qualtrics survey software as a part of the questionnaire in the experiment (for an illustration, see Figure 1). Headlines and leads of news stories also edited for word length (M=68.13, SD=13.71). In each condition, only six news stories were presented in the news menu. The display order of each item in the news menu was randomized in order to avoid any position selection bias. Participants could select a news story in the news menu and a pop-up window

appeared with the content of the full article (see Figure 2 for an illustration). After participants finished reading, they could close the pop-up windows and back to the news menu.



orders for a sweeping crackdown on illegal immigrants, putting nearly all of the country's 11 million undocumented foreigners in its cross-hairs. John Kelly, the secretary of the Department of Homeland Security (DHS) who issued the new orders in two memos, said, "The surge of illegal immigration at the

# Europe Is Living Proof That Donald Trump's Wall Idea Wouldn't Work

Border walls have been around for thousands of years — think of the Great Wall of China, which was built to fend off invasions, or the Berlin Wall that divided East and West Germany until 1989. The irony is that much of the European Union has for years been defined by unrestricted

Figure 1. News menu in Qualtrics survey software.

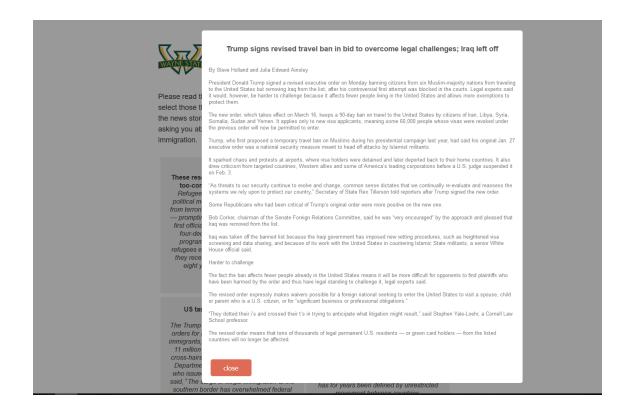


Figure 2. Pop-up windows for the full article content.

Pre-tests were conducted two times. The first tested the congeniality, readability, and the level of appeal of full articles. The second tested the congeniality, readability, and the level of appeal of the headlines and leads. In the first pretest, all full articles were tested by 50 workers from Amazon Mechanical Turks with political ideology leaned toward liberal (M=3.46, SD=1.69) and a majority were opposing the current administration immigration policies 64% (M=1.36, SD=.48). The participants were asked questions about whether the content of news article is in accordance with their beliefs in a 7-points scale, from 1 (strongly disagree) to 7 (strongly agree) to probe into news article congeniality. For the readability and level of appeal, the same 7-points Likert scale was employed.

The congeniality test demonstrated that the news stories are mostly different between subjects who support and oppose the current administration immigration policies. The article on pro-southern border wall were perceived as uncongenial by participants who oppose immigration policies (M=5.25, SD=1.48) and seen as congenial by those who support the policies (M=3.28, SD=1.64); t(8)=4.35, p<.001, d=1.26. The news story on anti-border wall also demonstrated significant difference t(8)=-2.53, p=.015, d=.75, between those who support immigration policies (M=4.89, SD=1.71) and those who oppose (M=3.59, SD=1.76) (for analysis of all articles see Table 2). There was no difference in congeniality for the article for the anti-refugee halt stimulus t(48)=-1.27, p=209, d=.37 between participants who oppose immigration policies (M=3.63, SD=1.68) and who support it (M=4.28, SD=1.84). The article was then changed with news stories from washingtonpost.com titled "These researchers just debunked an all-too-common belief about refugees". The substitute article was tested in the pretest 2 and demonstrated

significant difference t(52)=5.06, p<001, d=1.37 between those supporting (M=3.48, SD=1.41) and those opposing immigration policies (M=5.29, SD=1.22).

Subjects in the pretest 1 were asked questions on whether the news story was easy to read on a 7-point Likert scale (1=strongly disagree; 7=strongly agree). The average ratings of readability for the news stories were between M=5.20 and M=5.78. A repeated measure ANOVA demonstrated that the eight articles did not significantly differ on the readability dimension, F(4.79, 234.85)=1.96, p=.089,  $\eta^2=.033$ . For the level of appeal, participants were asked whether the article is appealing for them (1=strongly disagree; 7=strongly agree). The level of appeal did not significantly differ across 8 articles F(2.81, 137.617)=1.13, p=.337,  $\eta^2=.021$ .

Table 2. Full article stimuli pretest results

Article headlines	Support	Oppose	t value	df	Cohen
	policies	policies			d
It's Official: Trump Orders Border Wall	4.72	2.75	-4.35***	48	1.26
Between U.S. and Mexican Narco-states	(1.64)	(1.48)			
(Pro-southern border wall)					
Europe Is Living Proof That Donald Trump's	3.11	4.41	2.53*	48	.75
Wall Idea Wouldn't Work (Anti-southern	(1.71)	(1.76)			
border wall)					
US targets millions in sweeping deportation	4.72	2.88	-4.24***	48	1.20
plan (Pro-illegal immigration crackdown)	(1.74)	(1.31)			
Why Trump's immigration crackdown will	2.94	4.69	4.19***	48	1.23
increase undocumented immigration (Anti-	(1.47)	(1.38)			
illegal immigration crackdown)					
Trump signs revised travel ban in bid to	4.89	3.03	-4.49***	48	1.30
overcome legal challenges; Iraq left off (Pro-	(1.49)	(1.36)			
travel ban)					
Trump's revised travel ban is still cruel and	3.28	4.38	2.41*	48	.68
still unconstitutional (anti-travel ban)	(1.74)	(1.43)			
Poll: Majority Want Fewer Refugees, Support	4.83	2.75	-4.84***	48	1.41
Donald Trump's Migration Cuts (Pro-refugee	(1.54)	(1.41)			
halt)					
Trump's "Pause" On Refugees Would Put a	3.72	4.38	-1.27 <sup>n.s.</sup>	48	.37
Wrench in The Entire System Indefinitely	(1.84)	(1.68)			
(Anti-refugee halt-was changed)					
Substitute article for Anti-refugee halt					
These researchers just debunked an all-too-	3.48	5.29	5.06***	52	1.37

Article headlines	Support policies	Oppose policies	t value	df	Cohen d
common belief about refugees (Anti-refugee halt)	(1.41)	(1.22)			

Note: SD in parentheses, \* for p < .05; \*\* for p < .01, \*\*\* for p < .001, and n.s. for not significant.

The second part of the pilot study was testing the congeniality, readability, and level of appeal of the headlines and leads of all articles and testing the full article of the substitute for the anti-refugee halt stimulus. Because subjects in the main experiment read the headlines and lead of the articles before they select articles that they want to read, it is important to determine whether the headlines and leads of the articles reflect the congeniality, in the term of supporting or opposing the current administration immigration policies. Pretest 2 was conducted in Amazon Mturk with 54 subjects. A majority of participants self-identified as leaning toward Liberal ideology (M=3.26, SD=1.36) and only 42.6% of them were supporting and 67,4% were opposing (M=1.43, SD=.50) the current administration immigration policies.

All the articles' headlines and leads were perceived differently between participants who reported supporting and opposing immigration policies, see Table 3 and for each t-test result see the third column. The participants also did not perceive any difference of readability for all headline and lead of the news stories, F(5.87, 311.07)=1.48, p=.185,  $\eta^2=.023$ . The repeated measures ANOVA for the level of appeal also revealed no difference for all headline and lead of news stories, F(2.64, 140.02)=1.79, p=.158,  $\eta^2=.031$ . Therefore, all manipulation in the news menu and full news stories worked as intended.

Table 3. Article's headline and lead pretest results

Article headlines	Support policies (SD)	Oppose policies (SD)	t value (df) (Cohen d)	Easy to Read (SD)	Level of appeal (SD)
It's Official: Trump Orders Border Wall	4.74	2.39	-5.85***	5.44	3.54

Article headlines	Support	Oppose	t value	Easy	Level
Atticle headines	policies	policies	(df)	to	of
	(SD)	(SD)	(Cohen	Read	appeal
	(SD)	(SD)	d)	(SD)	(SD)
Between U.S. and Mexican Narco-states	(1.68)	(1.09)	(35.2)	(1.19)	(1.92)
(Pro-southern border wall)			(1.66)		
Europe Is Living Proof That Donald	3.13	5.23	4.99***	5.39	4.50
Trump's Wall Idea Wouldn't Work (Anti-	(1.71)	(1.23)	(37.97)	(1.35)	(1.60)
southern border wall)			(1.41)		
US targets millions in sweeping deportation	4.78	2.87	-5.02***	5.39	4.35
plan (Pro-illegal immigration crackdown)	(1.31)	(1.43)	(52)	(1.32)	(1.58)
,			(1.39)		
Why Trump's immigration crackdown will	3.04	4.48	3.38**	5.30	4.20
increase undocumented immigration (Anti-	(1.58)	(1.52)	(52)	(1.40)	(1.66)
illegal immigration crackdown)			(.93)		
Trump signs revised travel ban in bid to	4.57	2.94	-5.12***	5.06	4.20
overcome legal challenges; Iraq left off	(1.24)	(1.09)	(52)	(1.57)	(1.50)
(Pro-travel ban)			(1.40)		
Trump's revised travel ban is still cruel and	2.65	4.74	4.47***	5.46	4.26
still unconstitutional (anti-travel ban)	(1.40)	(2.03)	(51.78)	(1.42)	(1.77)
			(1.20)		
Poll: Majority Want Fewer Refugees,	5.26	2.39	-8.43***	5.59	4.26
Support Donald Trump's Migration Cuts	(1.42)	(1.09)	(52)	(1.21)	(1.83)
(Pro-refugee halt)			(2.27)		
These researchers just debunked an all-too-	2.78	4.97	5.21***	5.30	4.28
common belief about refugees (Anti-	(1.48)	(1.56)	(52)	(1.37)	(1.76)
refugee halt)	<u> </u>	· 	(1.44)		<u> </u>

Note: SD in parentheses, \* for p < .05; \*\* for p < .01, \*\*\* for p < .001, and <sup>n.s.</sup> for not significant.

# **Participants**

Data were collected from a convenience sample of 308 Mechanical Turk's "workers", a crowdsourcing service run by Amazon. Mechanical Turk's "workers" are compensated for the completion of short tasks, including experimental research. The data from Mechanical Turk is more representative of the national U.S. population than student samples (Buhrmester, Kwang, & Gosling, 2011), in replications of classical experiments (Sprouse, 2011), and as reliable as the data obtained from traditional survey methods (Berinsky, Huber, & Lenz, 2012). The online environment of Mechanical Turk's also may be appropriate for examining phenomena that take place online, in this case, online news personalization (Landers & Behrend, 2015).

To ensure that the sample size will powerful enough to detect a medium effect size (f=.25), a calculation from G\*power 3 was conducted. G\*Power 3 is a statistical power analysis program commonly used in social and behavioral research (Faul, Erdfelder, Lang, & Buchner, 2007). The result demonstrated that to do ANOVA analysis with an effect size f = .25,  $\alpha$  error probability = .05, power = .95, and number of groups = 3 will require a sample of at least 251. Therefore, the planned 308 sample for this study is adequate to detect a medium effect size.

The Institutional Review Board (IRB) approved the protocol on May 10, 2017, after reviewed the mandatory documents and materials. Data collection begun on September 20, 2017 and was completed on September 29, 2017. As approved by the IRB, participants from Amazon MTurk received \$0.75 compensation for their participation. From total 308 participants, nine participants took the study twice, so their second attempt were removed from the dataset. Ten participants did not select and read articles. There were 13 cases with incomplete data entries due to technical errors, and responses from four participants who did not pass the attention check screening question were removed as well. The final sample size is 272 participants.

#### **Procedures**

This study is an experiment with three conditions based on availability and congeniality of information (see Table 1). The availability and congeniality of items (high congenial-low uncongenial, low congenial-high uncongenial, and control, where the congenial and uncongenial items are in equal number) were the 3 conditions in the between-subject design.

The operationalization of availability and congeniality of information is based on the proportion of the number of articles. In the high congenial – low uncongenial condition there are four articles in accordance with the subjects' preferences and two articles which are on the opposite view from the subjects' preference. The low congenial – high uncongenial will have

ratio of articles of 2 items of congenial and 4 items of uncongenial. In the control condition, the equal number of 3 congenial articles and 3 uncongenial articles will be employed. Participants will be randomized into 3 conditions of information availability and congeniality.

Participants were recruited through Mechanical Turk and directed to a Qualtrics survey. After they indicated their consent, all participants were asked to answer a short questionnaire that measured political preferences, political ideology, political sophistication, news use, attitude to issues, attitude certainty, attitude importance, and support on immigration policy. The measures of attitudes and policies support were given for immigration policies and the sub issues within the immigration policies. The answers from the question on positions and strength toward immigration policies were used to determine the congeniality of information in experimental conditions. To create a balanced proportion between those who support and oppose current administration immigration policies, this study used quota for each condition. The quota was based on the subjects' answers from the question of position toward immigration policies. A balanced 50-50 quota was applied for each condition. The participants then were randomized into 3 conditions with almost equal number between those who supporting and opposing the immigration policies. The congeniality and uncongeniality of the articles in each condition was in accordance with the subjects' answer on the issue positions. For example, those who support current immigration policies received articles with pro-border wall, pro-immigration crackdown, and pro-refugee halt in their congenial items.

A short instructional page was presented before the selective exposure task. The instruction for all conditions was:

Next, we invite you to select and read news from the available news in the news menu. First, you can select any news from the menu. Once clicked, the pop-up windows will appear and make the full news story available for you to read.

You will have a minimum 1.5 minutes and a maximum 4 minutes to read the articles, so please, carefully choose the articles that you want and read them thoroughly. You cannot proceed to the next section of the survey before 1.5 minutes and you will forced to go to the next section of survey after 4 minutes.

We encourage you to choose more than one article and read as many as articles as you want. After you finish this section, we will ask about your experiences and opinions on the news that you read.

In each condition, participants saw a news menu with six news items that including a headline, a news lead, and link to access the full news article. The news leads to the personalized news page were randomized for each participant to prevent position effects. Participants were asked to select and click on the article they want to read, closing the full article pop-up window, back to the news menu, selecting another article, and reading as many as articles they want until they reach the time limit. After 4 minutes the Qualtrics system forced them to exit the news menu interface to the next section of the questionnaire.

The Qualtrics system recorded articles selected by participants. However, a limiting feature of the software when the pop-up windows are employed for the full articles display hindered the ability to record the time spent by the subjects for each individual article. The Qualtrics system is still able to record the overall time spent in the news menu. The time limit was determined by consulting the average daily time on the site from the top news sites (CNN, New York Times, Breitbart, and FoxNews) (http://www.alexa.com/topsites/countries/US). The

time limit is a necessary feature in selective exposure experiments (Knobloch-Westerwick, 2014; Knobloch-Westerwick & Meng, 2009; Knobloch-Westerwick & Meng, 2011). After the time limit, all participants were asked to indicate their emotions they experienced after reading the articles.

#### Measures

# **Pre-news exposure**

The variables measured before the stimuli were used to determine the congeniality in each condition. These variables also were used as control variables in the analysis.

Party affiliation. Participants were asked to indicate, on a 7-point scale from 1 = "strong Democrat" to 7 = "strong Republican".

Political ideology. Participants were asked to indicate the political ideology, on a 7-point scale from 1 = "extremely Liberal" to 7 = "extremely Conservative" with a midpoint of "moderate".

Feeling thermometer for president. Participants were asked to indicate on scale 1 (extremely unfavorable/cold) to 100 (extremely favorable/warm) their feeling toward President Donald Trump.

Attitude on the issue. Participants were asked to rate how strongly they oppose or support the current administration's immigration policies on a 4-point scale from 1 = "strongly oppose" to 4 = "strongly support" with no midpoint to determine the congeniality in experimental conditions.

Attitude certainty. This construct was measured by asking how certain the participants are about their opinion toward the policies (1 = "not at all certain" to 7 = "extremely certain").

Attitude importance/personally relevance. Participants were asked how important the issues are to them personally on a 7 points scale from 1 = "not at all important" to 7 = "extremely important".

Attitude toward sub-issues in immigration policies (Pre-stimuli). Participants were asked their attitude toward four sub-issues, namely the southern border wall, immigration crackdown, the travel ban, and the refugee halt. The questions are taken and modified from the American National Election Studies 2016 (ANES, 2016) and the PEW research (PEW, 2017). There are two questions for each sub-topic. For example, questions in the southern border wall sub-topics were, "I am in favor building a wall on the U.S. border with Mexico" and "A border wall with Mexico would be ineffective at reducing illegal immigration to the U.S." Questions were a 7-point scale from 1="strongly agree" to 7="strongly disagree."

Political sophistication/expertise. The measures for this variable was derived from Golebiowska (1999) and Danckert, Dinesen, and Sønderskov (2016). The variable was an index from two constructs. The first is political interest and is comprised of three items. The first item is, "How interested are you in politics and national affairs?" on a 7 points scale from 1 = "not at all interested" to 7 = "very interested". The second item measured political discussion with question "How often would you say discuss politics and current affairs?" on a 7-point scale from 1 = "never" to 7 = "daily".

The second construct, on political knowledge used in open ended format of four factual questions (the party currently controlling the House of Representatives, the name of current Vice President, which party is most conservative, and the position held by Elena Kagan).

Stereotype toward Hispanics and Muslims. Participants were asked to indicate on scale of 1 (extremely unfavorable/cold) to 100 (extremely favorable/warm) their feeling toward

Hispanics and Muslims. Furthermore, the participants also were asked about their attitude toward Hispanics and Muslims on the dimensions of laziness, violence, and patriotism (modified from ANES, 2016). "I think Hispanics are:" and "I think Muslims are:" are the questions with a 7-point scale answer.

News use. Participants were asked how often in the previous week (1 = "never" to 7 = "every day/almost every day") they consume news on the internet, the daily newspaper, television, and radio. Participants also answered a set of questions on the frequency of accessing a. media outlets favoring the Democrat party or liberal ideology (Washington Post, MSNBC, Huffington Post, CNN), b. media outlets favoring Republican party or conservative ideology (Wall Street Journal, Fox News, Breitbart, Rush Limbaugh). and c. media outlets that is not frequently characterized as favoring a particular party or ideology (USA Today, CBS News, Yahoo! News).

Online news media habit. Participants were asked to report their online news habit for the previous week (1 = "never" to 7 = "every day/almost every day"), whether how often they a. go directly to the news media site (CNN.com, FoxNews.com, NYTimes.com), b. using news personalization sites or portal (Feedly, Google News, News360), c. social media (Facebook, Twitter, Snapchat), and d. others, please specify.

# **Dependent variables**

Selective exposure. Selective exposure was operationalized as article choice (the congeniality of article selected and read by the participants) (Knobloch-Westerwick, 2014; Knobloch-Westerwick & Meng, 2009; Knobloch-Westerwick & Meng, 2011). Participants' attitude on the immigration issues was compared with the positions of articles they selected and read. For example, if a participant indicated opposition to the current administration's

immigration policies then all articles favorable to the southern border wall, the crackdown of illegal immigrants, the travel ban, and refugee halt sub topics were coded as uncongenial while all items contrary to the sub-topics of immigration policies were coded as congenial. The number of congenial articles read was summed to create an index of congenial selection. The number of uncongenial articles read also was summed to create an index of uncongenial selection. There are two variables from this method, selective exposure on congenial information and exposure on uncongenial items. The separation the congenial and uncongenial exposure was taken because the hypotheses testing required both of analyses of congenial and uncongenial articles selection.

Selective exposure was also used as independent variable for the mediation analysis to predict emotional arousal and attitude reinforcement. For the independent variable measure of selective exposure, the sum of uncongenial articles selected subtracted from the sum of congenial items read by participants. The strategy to combined congenial and uncongenial exposure into a single variable was commonly used by the researchers in the cognitive dissonance paradigm (Fischer et al., 2008). The combined measure of selective exposure was utilized to add gain more complete insight about the exposure behavior, both from congenial and uncongenial exposure, and to add variance to the selective exposure as exogenous variable.

Attitude reinforcement toward sub-issues in immigration policies. Reinforcement in this study is defined as a strengthening individual attitude (Dilliplane, 2014; Knobloch-Westerwick, 2012). To obtain attitude reinforcement participants were asked two times, before and after they selected and read articles available in the news menu, about their attitudes toward 4 sub issues of immigration policies. Questions in this section were the same with the pre-stimuli attitude toward sub-issues in immigration policies. The answer of each sub-issue in time 2 was subtracted from time 1. The original difference value was multiplied by -1 for participants who selected 1

(extremely support) to 3 (moderately support) in each sub-issue time 1. The result was a positive score constitutes a strengthening attitudes or reinforcement. A negative score reflected weakened attitudes (Knobloch-Westerwick, 2012, Knobloch-Westerwick, Johnson, & Westerwick, 2015; Knobloch-Westerwick & Meng, 2009; Knobloch-Westerwick & Meng, 2011). For the final step, the index of change for all sub-issues were averaged into a final index of attitude reinforcement.

#### **Potential mediators**

Emotions/Affective response. Derived from Marcus, Neuman, and MacKuen (2015), 10 words "markers" were selected to measure affective response. Enthusiastic, hopeful, and proud are the word markers for enthusiasm. The concept anxiety was measured with scared, worried, and afraid. Hateful, angry, bitter, and resentful were used to measure the aversion. Participants were asked "how does what you just read make you feel?" For each word "markers' a 5-point scale from, for example, 1 = "not at all enthusiastic" to 5 = "extremely enthusiastic were employed.

#### **Manipulation check**

There were two parts of manipulation check in the questionnaire. The first is attention check to verify whether participants read instructions and items carefully. The attention check question was placed before the stimuli to filter participants that did not carefully read or had minimal attention toward questionnaire. The attention check question was, "In order to facilitate our research we are interested in knowing your preference and opinions about news. Specifically, we are interested in whether you are reading the information we present to you, if not, your responses will be invalid as they depend on your ability to read and respond accurately. So, in order to demonstrate that you have read the instructions, please enter "durian" in the text box

below." Participants who failed wrote "durian" in the available text box were discarded from the dataset.

The second part of the manipulation check was to verify that the manipulations were effective. Participants responded to three statements that reflected the conditions in the experiments with dichotomous answer (yes=1 or no=0). The first statement was "I found a greater number of articles that were in accordance with my preference." The second statement was "I found a lesser number of articles that were in accordance with my preference." And the third statement was "I found an equal number of articles from my preference and other view."

#### **Demographic control variables**

Studies on the Internet and digital divides demonstrate that several groups of people are more likely to have the access and skills necessary to utilize online information and communication technology. Thus, age, gender, education, race, and income will be used as control variables.

Age was measured by asking participants to give their age in years. Gender was asked whether the participants was 1 = male or 2 = female. Education was measured by asking participants, "what is the last grade or class that you completed in high school?" Response options included, "none or grade 1-8" (coded 1), "high school incomplete" (coded 2), "high school graduate" (coded 3), "technical, trade or vocational school after high school" (coded 4), "some college or associate degree" (coded 5), "college graduate (4-year degree)" (coded 6), and "post-graduate training" (coded 7). Race was measured by asking participants their race. Income was measured by asking participants, "last year, that is in 2016, what was your total family income from all sources, before taxes?" Response options were: 1. less than \$10,000, 2. \$10,000 to under \$20,000, 3. \$20,000 to under \$30,000, 4. \$30,000 to under \$40,000, 5. \$40,000 to under

\$50,000, 6. \$50,000 to under \$75,000, 7. \$75,000 to under \$100,000, 8. \$100,000 to under \$150,000, and 9. \$150,000 and more.

# Data analysis

This study utilizes a series of ANOVA and regression models in SPSS to answer research questions and to test hypotheses, specifically for the RQ1, H1a to H2b. For RQ2, RQ3, and RQ6 moderation/mediation analysis was employed using the "Process" macro for SPSS developed by Hayes (2013). The exogenous variable for answering RQ2, RQ3, and RQ6 is selective exposure or the dependent variable from the first part of this study. The mediator variables are cognitive and emotions mechanisms. And the dependent variable is the attitude change or reinforcement effect.

# **Summary**

This study intends to contribute, first, an explanation on whether different proportions of congenial and uncongenial information influence selective exposure. The second contribution is to explain the relationship between selective exposure and reinforcement through emotional mechanisms. This study employed different proportions of congenial and uncongenial information in a news menu to examine selective exposure in political news consumption. The differences of proportion between congenial and uncongenial information, first, could be thought as a product of highly partisan media outlets and also may result from filter agents. Second, the experimental studies on selective exposure generally employed the equal number of congenial and uncongenial information to examine the effects of different proportions between congenial and uncongenial information is a novel approach in the study of selective exposure.

Second, this study also examined the consequences of selective exposure for the political judgments and behaviors, emphasizing attitude change or reinforcement. Only tiny portions of selective exposure studies scrutinize the effects of selective exposure on the political attitudes and behaviors. That is why when scholars discuss selective exposure they refer to the reinforcement effect or minimal effect of mass communication. Moreover, there is even smaller amount of scholarly works on the emotional mechanisms undergird the relation between selective exposure and attitude reinforcement.

# CHAPTER 3 TESTING THE EFFECT OF INFORMATION AVAILABILITY AND SELECTIVE EXPOSURE

The procedure for this experiment was, first, participants indicated their consent then answered questions on their attitude toward current administration immigration policies. The answer to this question was used to determine the congeniality of information in experimental conditions. This study employed different proportions of congenial and uncongenial items in experimental conditions. There were three conditions: first the high congenial condition, second the high uncongenial condition, and the last control condition with equal congenial and uncongenial items. To create a balanced proportion between those who support and oppose current administration immigration policies, this study used a quota for each condition. The quota was based on the subjects' answers from the question of position toward immigration policies. A balanced 50-50 quota was applied for each condition.

Then, participants were prompted with a short questionnaire asked about political variables, detailed attitudes toward sub-issues of immigration policies, stereotype toward Hispanics and Muslims, and their use of news. Participants then were randomized into 3 conditions with almost equal numbers between those who supporting and opposing the immigration policies. After participants selected and read articles from the news menu, they were asked about emotions they felt when they read the stories and another measure of attitude toward sub-issues of immigration policies. The experiments concluded with a set of demographic questions. The detailed results of all measures in this experiment were presented in the following section.

## **Description of sample**

The final dataset Included 272 participants. The mean of age of participants was 37.22 years (*SD*=11.49). The youngest participant was 19 years old and the oldest was 72 years old. The mode for the age of participants was 32 years old. The distribution between male and female was almost equal, 48% was male and 51.7% was female with one participant chose "other' as sex and another participant failing to complete this question. The percentage of female participants in this sample was slightly beyond the U.S. population which has only 50.8% female (U.S. Census Bureau, n.d.).

The participants' ethnicity was self-identified as Caucasian 83.1%, African-American 6.3%, Asian-non-Middle Eastern 5.1%, American

Indian 3.3%, and Hispanic 1.1%, Only .7% or 2 participants identified themselves as Middle Eastern and one participant chose option "other". Compared with the U.S. population, Caucasians in this sample are higher than the general population (61.3%). Participants mostly were college graduates or had a 4-year degree (40.8%), followed by those who had some college or an associate degree (31.3%), then those self-identified as having post-graduate training (15.4%). About 7.4% were high school graduates and those who had a technical trade or vocational school after high school (4.4%). There were two participants who did not provide this information. With this education data, the sample is more closely aligned with a student sample in a college town in the U.S. Moreover, participants income data demonstrated that the median household income is in a range from \$50,000 to \$75,000. This sample was not representative of the U.S. adult population. Therefore, generalization cannot be made from the data.

Comparisons of this study's sample with demographics of Facebook users (Greenwood, Perrin, & Duggan, 2016) and U.S. adult population are presented in Table 4. From the Table,

participants' age in this study distributed unevenly and dominated by those in 30-49 years old age range. The mode of this sample and U.S. adult population are in the same category. Facebook users, on the other hand, had more even distribution, with the youngest generation slightly larger than other age range groups. The distribution of this study sample, U.S. adult population, and Facebook users based on gender are almost equal.

Table 4. Comparison between this study sample, U.S. adults, and Facebook users

	Sample	U.S. adults	Facebook users
Age			
18-29	25%	22%	28.7%
30-49	59.4%	34%	27.5%
50-64	11.8%	25%	23.5%
65+	3.7%	19%	20.3%
Sex			
Male	48%	49%	47.5%
Female	51.7%	51%	52.5%
<b>Education attainment</b>			
High school degree or less	7.4%	41%	32.3%
Some college	35.9%	31%	34.5%
College+	56.7%	28%	33.2%
Household income			
Less \$25k (<\$30k for others)	13.2%	21%	26.6%
\$25k-\$49.9k (\$30k-\$49.9k for others)	30.1%	250/	25.3%
\$50k-\$74.9k	29.8%	35%	23.7%
\$75k+	26.8%	44%	24.4%

Note: The range for Facebook users' and U.S. adults' household income categories in parentheses. The U.S. Adults only has 3 categories in household income, <\$30k, 30k-\$75.9k, and \$75+.

The comparison of this study sample to U.S. adult population is inverted in its distribution. This sample was dominated with higher education participants and demonstrates an inverted pyramid distribution, while the distribution of U.S. adult population in education show a pyramidal distribution with its base categories is the largest and higher education is the smallest. This sample mostly consisted of those who have a college degree and postgraduate degree compared to Facebook users which almost equal in its distribution of educational attainment. For

household income, there are also differences. The first two categories are different for all groups, this sample used the "less than \$25,000" as the first category while the U.S. adult population and the Facebook users employed the "less than \$30,000." The second category has more striking categories, with this sample utilized the "\$25,000 - \$49,999" while the Facebook users used "\$30,000 - \$49,999" and the U.S. adult population employed "\$30,000 - \$74,999" as its category. There are also differences in their distributions, as this sample was mostly consisted by the middle categories ("\$25,000 - \$49,999" and "\$50,000 - \$74,999"), the category of "more than \$75,000" was the mode for U.S. adult population, and Facebook users comprised mostly by the "less than \$30,000" category. From this comparison, this sample has equal distribution in the gender category but has striking differences in other categories to the U.S. adult population and Facebook users demographics. Therefore, this sample cannot be generalized to the U.S. adult population nor to Facebook users. The next sub-section is discussing the measures of participants' attitude toward Trump administration' immigration policies and political traits.

### Attitude and political measurements

Questions about participants' attitudes and political identities and traits were asked on the beginning of questionnaire. The item probing participants' attitudes toward current immigration policies was designed with a question on how strongly participants opposed or supported the current administration's immigration policies on a 4-point scale from 1 = "strongly oppose" to 4 = "strongly support" with no midpoint. From this measure, two variables were extracted: first, a binary attitude toward immigration: oppose or support and second, attitude strength. Participants were almost equally distributed between those who support and oppose the current administration's immigration policies (M=1.46, SD=.50) with 54.4% opposing and 45.6%

supporting. This was the result of the quota sample to balance the number of participants who supported and opposed immigration policies.

Participants were also almost equal in their attitude strength toward the immigration policy (M=1.45, SD=.50) with 54.8% stating they had weak attitude and 45.2% stating they had a strong one. Participants were also asked about the certainty of their answers on immigration policies on a 7-point scale (1=Extremely uncertain to 7=extremely certain). The result demonstrated that participants were more certain on their attitude toward the current administration's immigration policies (M=5.77, SD=1.37). The answer to the question of whether immigration policies is personally important to the participants demonstrated that larger portion of participants considered immigration as relatively important (M=5.00, SD=1.35). The correlations between supporting immigration policies with attitude strength (r=-.224, p<.001), attitude certainty (r=-.147, p=.015), and importance (r=.161, p=.008) were all significant. Thus, those who opposed immigration policies were more likely to have stronger and more certain attitudes compared to those who supported the policies. However, participants who supported immigration policies perceived that immigration policies were more personally important to them. The correlations of attitude strength, attitude certainty, and attitude importance were all also significant. Attitude strength had a moderate correlation (r=.504, p<.001) with attitude certainty and attitude importance (r=.331, p<.001). Attitude certainty and attitude importance also had a moderate correlation (r=.290, p<.001). These correlation values demonstrated that attitude strength, certainty, and importance are related concepts in this sample.

Participants indicated their political ideology on a 7-point scale from 1 = "extremely Liberal" to 7 = "extremely Conservative" with a midpoint of "moderate". The distribution of participants' self-identified political ideology was almost balanced between Conservatives and

Liberals (M=3.99, SD=1.81). Participants specified their political party affiliation on a 7-point scale from 1 = "strong Democrat" to 7 = "strong Republican". Participants were also almost balanced in the distribution of the self-identification party affiliation (M=3.99, SD=1.74). The balance of political ideology and political affiliation measures in this sample can be attributed to the quota sampling used to get a balanced in participants between those who support and those who oppose current immigration policies. Correlation values of support to immigration policies with political ideology was moderate (r=.698, p<.001) and was also moderate with party identification (r=.606, p<.001). The variable of political ideology and party identification had high correlation value (r=.793, p<.001). All these correlation values refer to this sample and cannot be generalized to U.S. adult population.

Participants indicated their feeling toward President Donald Trump on scale 1 (extremely unfavorable/cold) to 100 (extremely favorable/warm). The rating from participants from zero to one hundred was transformed into 1 to -1 with zero as middle value. Average rating of participants toward President Trump was -.25 (SD=.71) with the mode was -1 (26.5%), in other words, the number of participants who had an unfavorable feeling was larger than who had a favorable feeling toward President Trump. From all political variables, the feeling thermometer toward president Trump had high correlation value with supporting immigration policies (r=.736, p<.001). The more someone favor President Trump, the more s/he is likely to support current immigration policies. Once more, this result did not represent the general U.S. population. Therefore, any inferences toward generalization must be minimalized.

Participants were asked about their political interest in two questions, "How interested are you in politics and national affairs?" and "How often would you say discuss politics and current affairs?" These two items had high reliability (*Cronbach's*  $\alpha$ =.817), thus they were

averaged into an index measure of political interest. Participants demonstrated high political interest (M=5.22, SD=1.18) with a distribution curve skewed toward highest value. Participants have also indicated their political knowledge by answering four questions about general political insight. The right answer was coded as 1 and wrong answer and "I don't know" answer coded as 0. The answers were averaged and create an index of political knowledge. The average political knowledge of participants was .78 (SD=.21) or relatively high political knowledge. The political interest and political knowledge of respondents in this study are higher than average U.S. population (Motel, 2014). Participants were also asked how often in the previous week (1 = "never" to 7 = "every day/almost every day") they consume news on the internet, the daily newspaper, television, and radio. The result demonstrated that on average, participants consumed news on the internet, the daily newspaper, television, and radio at higher rates than the moderate value (M=5.64, SD=1.36).

Participants were asked to rate Hispanics and Muslims based on stereotypes in immigration issues. Hispanics and Muslims are the focus of the current administration immigration policies. The southern border wall and the crackdown on illegal immigration focused on Hispanics while the travel ban and refugee halt focus on Muslims. Participants were asked to rate Hispanics as lazy or hardworking and violent or peaceful. Muslims were rated for violent or peaceful and unpatriotic and patriotic. All measures of stereotype were in 7-point scale. The reliability analysis demonstrated the stereotype questions for both Hispanics (*Cronbach's*  $\alpha$ =.84) and Muslims (*Cronbach's*  $\alpha$ =.90) were high. The average rating for Hispanics stereotype was 5.55 (SD=1.27) or participants had a slightly positive of Hispanics. Muslims average rating was 4.36 (SD=1.81) or participants thought Muslims average on the stereotype scale.

There was a set of questions asked participants about their attitude toward sub-issues on immigration policies before the Qualtrics system randomized the participants into three conditions and interacted with experimental stimuli. The set of questions about attitude toward sub-issues on immigration policies will be discussed in the attitude change measures together with the same set of questions after the stimuli, or time 2. The next section will be discussing emotional aroused measures as mediator variables.

#### **Emotion measurements**

After participants select and read news as experimental stimuli, the questionnaire system prompted participants to emotion measures. The emotional aroused after participants read the selected articles was utilized as mediator variables that helps explain the effect of selective exposure on attitude reinforcement. Three emotions from affective intelligence theory were measured. The first was enthusiasm measured by three-word markers: enthusiastic, hopeful, and proud on a 5-point Likert's scale. The three-word markers measures were averaged to make an index for enthusiasm (M=2.06, SD=1.09,  $Cronbach's \alpha$ =.90). The second emotion, anxiety, was measured by scared, worried, and afraid as word markers. The word markers had high reliability ( $Cronbach's \alpha$ =.87) and averaged into an index for anxiety emotion (M=1.96, SD=.97). The last construct in affective response was the aversion, measured by four-word markers. The word markers used to build an index for aversion were hateful, angry, bitter, and resentful. The four words markers were averaged into an index of aversion (M=1.77, SD=.89) and checked for reliability ( $Cronbach's \alpha$ =.88). There were floor effects from all measures of emotions. Therefore, the variance of emotion variables was limited.

However, a repeated measure ANOVA analysis found a significant difference between emotions measure within-subjects, F(1.387, 364.698)=8.127, p=.002,  $\eta 2=.023$ . From the test of

within-subject contrast, it was found that enthusiasm did not significantly differ with anxiety but had a significant difference with aversion, while anxiety had a significant difference with aversion. These results demonstrated that even with a floor effect of emotion measures, there is still enough variance to detect differences. However, different statistical tests were conducted to answer research questions related with the emotion variables.

#### **Selective exposure measurement**

Selective exposure is the first dependent variable in this study. The measure for selective exposure was an unobtrusive observation of which article and number of articles were selected and read by the participants. The survey system automatically recorded participants selection of articles and the number of articles during the stimuli session. The articles were further coded into congenial or uncongenial based on participants' answer on attitude toward immigration policies. For example, if a participant indicated opposition to the current administration's immigration policies then all articles favorable to the southern border wall, the crackdown of illegal immigrants, the travel ban, and refugee halt sub topics were coded as uncongenial while all items contrary to the sub-topics of immigration policies were coded as congenial. Moreover, participants could read more than one article from the news menu. For hypotheses testing, the dependent measure was the selection of news stories from either pro-attitudinal or counterattitudinal perspective. For the congenial exposure, the selections of congenial articles were summed as also for the exposure to the uncongenial articles.

In total, participants read 2.38 articles (*SD*=1.19). This dissertation employed two variables for selective exposure, the first is the additive value of congenial exposure and the second variable is the additive value of uncongenial exposure. This strategy is in accordance with previous research in selective exposure paradigm (Knobloch-Westerwick, 2012; Knobloch-

Westerwick & Meng, 2009; Knobloch-Westerwick & Meng, 2011). For additional note, selective exposure research conducted by Knobloch-Westerwick (Knobloch-Westerwick, 2012; Knobloch-Westerwick & Meng, 2009; Knobloch-Westerwick & Meng, 2011) employed time measure for congenial and uncongenial exposure that cannot be combined mathematically to build a single selective exposure index.

From the additive congenial exposure, participants in average read 1.32 congenial articles (*SD*=.93). Participants on average read 1.06 uncongenial article (*SD*=.92) from the data of the additive uncongenial exposure. The correlation of the congenial and uncongenial exposure was - .167, p=.006. On average, participants tend to select congenial articles more than uncongenial stories. The relationship of congenial and uncongenial exposure was weak and in a negative direction, or in other words, if participants select more congenial articles, they were less likely to select uncongenial ones.

Selective exposure, in the first part of this study, was treated as the dependent variable to examine the effect of information availability on selective exposure. In the second part this study to examine direct and indirect effects of selective exposure on reinforcement; however, selective exposure was employed as the exogenous variable. To get a comprehensive picture of the effect of both congenial and uncongenial exposure and to add variance in the independent variable, the additive scale of uncongenial exposure was subtracted from the additive scale of congenial exposure. The result was a new combined selective exposure measure with the maximum value was 3 and the minimum value was -3 (M=.25, SD=1.407). The new variable of selective exposure was a more complete picture of selective exposure behavior, not only contains information about congenial exposure but also included uncongenial exposure by participants.

#### Attitude reinforcement measurements

Attitude reinforcement is the dependent variable for the second part of this dissertation is utilized to explore the direct and indirect effect of selective exposure on attitude reinforcement. This study measured participants' attitude toward sub-issues of immigration policies before the stimuli (time 1) and after the stimuli (time 2) in a single session of the experiment. Attitudes toward immigration sub-issues were measured for four sub-issues, namely, the southern border wall, immigration crackdown, the travel ban, and the refugee halt. There were two questions for each of sub-issue on a 7-point scale from 1 = Strongly agree to 7 = Strongly disagree. For the southern border wall sub-issue questions were, "I am in favor building wall on the U.S. border with Mexico" (ANES, 2016) and "A border wall with Mexico would be ineffective at reducing illegal immigration into the U.S" (Suls, 2017) (reversed coding). Questions about the immigration crackdown were, "I am in favor of sending illegal immigrants back to their home countries" (ANES, 2016) and "Deportation efforts of illegal immigrants with criminal records won't go far enough and dangerous criminals will remain in the United States" (Kopan & Agiesta, 2017) (reversed coding). Questions of, "I am in favor of suspending immigration from terror-prone regions" (Marist, 2017) and "The executive order of travel ban does not make much difference on the chance of a terrorist attack on the U.S." (Suls, 2017) (reversed coding) were employed to probe attitude toward the travel ban. The last set of questions for the refugee halt were, "Government should turn away refugees from terror-prone regions" (ANES, 2016) and "Temporarily banning any refugees from entering the U.S. is against the founding principles of this country" (CBS News, 2017) (reversed coding).

To obtain attitude reinforcement measurement, the measures of time 1 of each immigration sub-issue were averaged into indexes of pre-attitudes of sub-issues (see Table 5 for

mean and alpha values). The measures of time 2 were also averaged for each sub-issue. However, the alpha value of the immigration crackdown sub-issue was low and negative. Thus, only answers to the first question in both time 1 and time 2 were included. After averaged in preattitude and post-attitude, each index of pre-attitude was subtracted from post-attitude values to acquire the index of change of each sub-issue. For example, index of change of attitude toward the southern border wall was obtained by subtracting post-attitude index by pre-attitude toward the southern border wall index. The original difference value was multiplied by -1 for participants who selected 1 (extremely support) to 3 (moderately support) in each pre-sub-issue. The result was a positive score representing a strengthening attitude or reinforcement, while negative scores reflected weakened attitudes or the opposite of reinforcement (Dilliplane, 2014; Knobloch-Westerwick 2012, Knobloch-Westerwick et al., 2015; Knobloch-Westerwick & Meng, 2009; Knobloch-Westerwick & Meng, 2011). For the final step, the index of change for all sub-issues were averaged into a final index of attitude reinforcement (*M*=-.185, *SD*=.443).

Table 5. Attitude toward immigration policies sub-issues measures Time 1 and Time 2

		Time 1			Time 2	
	M(SD)	Cronbach'	Pre-	M (SD)	Cronbach'	Post-
		sα	attitude (SD)		sα	attitude (SD)
The southern border wall		.792	4.628 (2.034)		.739	4.535 (1.981)
I am in favor building wall	4.71			4.63		
on the U.S. border with Mexico.	(2.259)			(2.280)		
A border wall with Mexico	4.539			4.438		
would be ineffective at reducing illegal immigration into the U.S.	(2.206)			(2.169)		
The immigration		347	3.71		052	3.75
crackdown			(2.024)			(1.986)
I am in favor of sending	3.71			3.75		
illegal immigrants back to	(2.024)			(1.986)		
their home countries.						

					TT: 0	
	M (CD)	Time 1	ъ	M (CD)	Time 2	D (
	M(SD)	Cronbach'	Pre-	M (SD)	Cronbach'	Post-
		$s \alpha$	attitude		sα	attitude
			(SD)			(SD)
Deportation efforts of illegal				3.897		
immigrants with criminal	(1.644)			(1.667)		
records won't go far enough						
and dangerous criminals						
will remain in the United						
States.						
The travel ban		.749	4.141		.774	4.193
			(1.781)			(1.781)
I am in favor of suspending	3.72			3.86		
immigration from terror-	(2.067)			(2.125)		
prone regions.						
The executive order of				4.522		
travel ban does not make	(1.912)			(1.898)		
much difference on the						
chance of a terrorist attack						
on the U.S.						
The refugee halt		.834	4.314		.839	4.253
			(1.889)			(1.894)
Government should turn	4.26			4.14		
away refugees from terror-	(2.026)			(2.080)		
prone regions.						
Temporarily banning any	4.371			4.368		
refugees from entering the	(2.054)			(1.988)		
U.S. is against the founding						
principles of this country.			. 1 .			

Note: Pre-attitude is averaged time 1 answers. Post-attitude is averaged time 2 answers.

The means and standard deviations for each measure in time 1 and time 2 presented in Table 5. A repeated measures ANOVA with sub-issues as first factor and time as the second factor revealed that there were no significant differences between time1 and time 2 for all sub-issues, F(1, 268)=.891, p=.346. The measures of attitude towards immigration sub-issues in time 1 and time 2 were conducted in a single session experiment. The consequence of the single session measures of attitude change revealed no significant differences between two measures.

# **Hypotheses testing**

#### Congenial information availability and congenial exposure

The first pair of hypotheses are those in the high congenial-low uncongenial condition will select more congenial messages as compared to those in the low congenial-high uncongenial condition and as compared to those in a control group (H1a) and those in the high congenial-low uncongenial condition will select more uncongenial messages as compared to those in the low congenial-high uncongenial condition and as compares to those in a control group (H1b).

To test the first hypothesis (H1a), a one-way ANOVA was employed by using the additive congenial exposure measure as the dependent variable. The result demonstrated that there was a significant difference between conditions on selective exposure, F(2, 271)=14.42, p<.001,  $\eta^2=.097$ . In other words, information availability had effect on selective exposure to congenial information. The differences of information proportion in experimental conditions lead to differences on participants selection on congenial information.

Planned contrasts revealed there was a significant difference between high-congenial (M=1.7, SD=1.043) and high-uncongenial (M=1.01, SD=.76) conditions t(162.102)=5.12, p<.001, d=.805. The significant difference between high-congenial condition (M=1.7, SD=1.043) and control group (M=1.256, SD=.829) was also detected t(168.432)=3.13, p=.002, d=.483. The results reveal that participants in the high-congenial condition selected more congenial articles than those in high-uncongenial and control conditions. Therefore, the data suggested to support H1a.

Because the relation between H1a and H1b is a competing one, it can be assumed if the data support H1a, it will not support H1b. An analysis of one-way ANOVA by using uncongenial exposure as dependent variable supported the above reasoning. Significant difference between

conditions was detected  $F(2, 271)=11,88, p<.001, \eta^2=.081$ . However, planned contrasts between high-congenial (M=.744, SD=.787) and high-uncongenial (M=1.375, SD=.965) conditions showed significant differences but in the opposite direction, t(269)=-4.87, p<.001, d=-.594. The same trend is also happened for the difference between high-congenial condition (M=.744, SD=.787) and control condition (M=1.047, SD=.880), t(269)=-2.27, p=.024, d=-.277. In other words, there were differences among conditions for uncongenial exposure. Those in high congenial conditions select fewer uncongenial items compared to those in high uncongenial and control conditions. Therefore, the hypothesis 1b was not supported.

The analyses demonstrated that information availability had effects on selective exposure. Specifically, those in the high congenial information condition selected more congenial messages than those in the high uncongenial information condition and those in control condition. Furthermore, those in the high congenial information environment did not select more uncongenial items compared to those in high uncongenial and control conditions. The next subsection will discuss the hypotheses testing for hypothesis 2a and 2b, particularly on the effect of higher uncongenial information availability on selective exposure.

# Uncongenial information availability and uncongenial exposure

A one-way ANOVA using uncongenial exposure as dependent variable was employed to test H2a: those in the low congenial-high uncongenial condition will select more uncongenial messages compared to the high congenial-low uncongenial condition and as compared to the control group. The differences across conditions were significant F(2,271)=11.88, p<.001,  $\eta^2=.081$ . There was a significant effect of information availability on the selection of uncongenial articles. The analysis found significant differences among conditions toward uncongenial exposure.

Planned contrasts analysis revealed a significant difference between high-uncongenial (M=1.375, SD=.965) and high-congenial (M=.744, SD=.787) conditions in selecting uncongenial items, t(269)=4.87, p<.001, d=.594. The direction of the results was also in accordance with hypothesis 2a. Participants in the high-uncongenial condition selected more uncongenial items compared with those in the high-congenial condition. The difference and direction among participants in high-uncongenial (M=1.375, SD=.965) and control (M=1.047, SD=.880) conditions in selecting uncongenial news stories, as predicted by the hypothesis 2a, also was statistically significant, t(269)=2.51, p=.013, d=.306. Thus, H2a was supported.

For H2a's competing hypothesis H2b: those in the low congenial-high uncongenial condition will select more congenial messages compared to the high congenial-low uncongenial condition and as compared to a control group, a one-way ANOVA utilizing congenial exposure as dependent variable was performed. A difference between conditions was detected, F(2, 271)=14.42, p<.001,  $\eta^2=.097$ . There was an effect of information availability on selective exposure. However, planned contrasts revealed there was a significant difference between high-uncongenial (M=1.01, SD=.76) and high-congenial (M=1.7, SD=1.043) conditions t(162.102)=5.12, p<.001, d=.805, but in the opposite direction. This result suggested that participants in high-uncongenial condition selected fewer congenial articles compared to those in high-congenial items. The difference between high-uncongenial (M=1.01, SD=.76) and control (M=1.256, SD=.829) conditions was also significant, t(173.38)=-2.07, p=.040, d=.315). Once again, the difference was in opposite direction than predicted by the hypothesis 2b. Therefore, the hypothesis 2b was not supported. These results demonstrated that the effect of information availability also worked on the exposure to uncongenial articles. Further analysis also established

that those in high uncongenial condition were more likely to select uncongenial items compared to congenial and control conditions.

In general, this experiment demonstrated evidence that information availability has effect on selective exposure. Particularly, when the information environment was dominated with congenial stories, audiences were more likely to select congenial items Participants were also more likely to select uncongenial items in the information environment that consisted more uncongenial stories than congenial stories or the balance environment. These findings confirm Lazarsfeld's et al. (1968) proposition that availability and predispositions produce selective exposure. Furthermore, those in control condition were more likely to select congenial exposure than uncongenial exposure as demonstrated by previous studies in the selective exposure paradigm.

# **Research questions**

## Effect of information availability on selective exposure

To answer RQ1: how do differences in the proportions of information availability, both for congenial and uncongenial information, effect selective exposure behavior, a regression analysis was performed (see Table 6). The regression analyses employed congenial exposure as dependent variable in the model 1 and uncongenial exposure as dependent variable in model 2. Attitude directions, attitude strength, attitude certainty, attitude importance, political ideology, political knowledge, political interest, general news use, and the dummy variables of high-congenial vs. control and high-uncongenial vs. control were employed as predictors of selective exposure. The selection of the predictors was guided by confirmation bias theory and previous studies (Knobloch-Westerwick & Meng, 2009).

The overall results of the regression analysis revealed that the differences in the proportion of information or information availability have the strongest impact on selective exposure. In congenial exposure, more congenial items available led to a greater congenial exposure. Furthermore, more uncongenial articles and fewer congenial items available led to uncongenial exposure. Only two of attitude variables yielded significant results. The first was attitude certainty. The less certain participants were of their attitude toward immigration policies the more they selected congenial items. Second, support towards immigration policies positively predicted exposure to uncongenial items. When participants leaned toward supporting immigration policies, they tended to expose themselves to uncongenial stories.

Table 6: Impacts of attitude and information proportion differences on selective exposure

	Congenial exposure	Uncongenial exposure
Constant	1.866 (.385) ***	1.118 (.387) **
Supporting immigration policies	.107 (.151)	.319 (.152) *
Attitude certainty	103 (.048) *	039 (.048)
Attitude importance	.038 (.044)	054 (.044)
Attitude strength	.260 (.136) †	.069 (.136)
Political ideology	077 (.042) <sup>†</sup>	.004 (.043)
Political interest	001 (.059)	004 (.059)
Political knowledge	359 (.279)	211 (.277)
General news use	029 (.047)	.005 (.047)
High-congenial vs. control conditions	.466 (.133) **	320 (.133) *
High-uncongenial vs. control conditions	204 (.130)	.348 (.131) **
$\mathbb{R}^2$	.152 (.871) ***	.122 (.875) ***

Notes: all values are unstandardized beta with standard error in parentheses. †beta values differ at p < .00, \* beta values differ at p < .01, \*\*\* beta values differ at p < .001.

From this result, it can be argued that differences in the proportions of information availability strongly affected selective exposure. Furthermore, information availability was the strongest variable affecting selective exposure compared with attitudes, political, and news use measures. Combined with the results from hypotheses testing, it can be inferred that when more congenial information is available to be selected, participants were more likely to read congenial

information and less likely to select uncongenial items. Furthermore, the likelihood of selecting uncongenial stories was greater when the availability of uncongenial information was higher.

# Direct effect of selective exposure on attitude reinforcement

Another regression analysis was performed to answer Research question 2: is there a direct relationship between selective exposure and attitude reinforcement? (see Table 7). The dependent variable for the regression analysis was attitude reinforcement. The independent variable in the regression analysis was the selective exposure variable obtained by subtracted congenial exposure with uncongenial exposure or a combined selective exposure measure commonly utilized in cognitive dissonance studies (Fischer et al., 2008). Participants' gender, household income, party affiliation, and political knowledge were utilized as control variables. Moreover, attitude certainty, attitude importance, stereotypes toward Hispanics, and stereotypes toward Muslims also were employed as controls. The last group of control variables was the experimental condition, high congenial and high uncongenial conditions, as dummy variables. The regression was conducted by using Process macro in SPSS to analyze direct and indirect effect or mediation analysis. The result of direct effect of selective exposure on attitude reinforcement was presented in Table 7 without the mediation variables in the model (for more detailed results see Table 8 and Figure 3).

Table 7: Direct effect of selective exposure on attitude reinforcement

Attitude reinforcement			
Constant	480 (.248) <sup>†</sup>		
Selective exposure	.004 (.020)		
Sex	.107 (.050) *		
Household income	035 (.014) *		
Party affiliation	.041 (.020) *		
Feeling toward Trump	149 (.054) **		
Political knowledge	.360 (.122) **		
Hispanic stereotypes	.027 (.025)		
Muslims stereotypes	001 (.020)		

	Attitude reinforcement
Attitude certainty	001 (.020)
Attitude importance	.012 (.021)
High congenial condition	059 (.065)
High uncongenial condition	.003 (.062)
$R^2$	.190 (.157) ***

Notes: all values are unstandardized beta with standard error in parentheses. †beta values differ at p < .10, \* beta values differ at p < .01, \*\*\* beta values differ at p < .01.

The model in Table 7 explained 19% variance in positive attitude change or reinforcement. However, there was no direct-effect from selective exposure on reinforcement of attitude towards immigration policies (b=.019, p=.355). Variables of participants' gender (b=.107, p=.034), party affiliation (b=.041, p=.039), and political knowledge (b=.360, p=.004) significantly predicted attitude

reinforcement. Variables of feeling toward President Trump (b=-.149, p=.006) and household income (b=-.035, p=.013), on the other hand, negatively predict attitude reinforcement. In other words, although selective exposure did not predict reinforcement, female participants, participants leaned more leaned toward Republicans, and participants with higher political knowledge contributed to an increase in reinforcement, while a decrease in favorability toward Trump and household income predicted an increase in reinforcement. Therefore, the answer for research question 2 is there is no direct effect of selective exposure on attitude reinforcement.

### Information availability and emotional arousal

A series of one-way ANOVAs were performed to answer research question 3: In which conditions do the participants have (a) more enthusiasm, (b) have more aversion, and (c) have more anxiety? The first ANOVA was employed to analyze the experimental conditions and enthusiasm. The result was not significant, F(2, 267)=.303, p=.739. There is no effect of

experimental conditions on enthusiasm. The second analysis was conducted to analyze the effect of experimental conditions on anxiety. The result also demonstrated there is no significant difference in enthusiasm aroused based on experimental conditions, F(2, 265)=.788, p=.456. The analysis of aversion arousal and experimental conditions also produced a non-significant result, F(2, 266)=1.449, p=.237. It can be inferred that there was no effect of experimental conditions on emotional arousal.

From the descriptive data, enthusiasm was the highest emotion aroused in the control (M=2.128, SD=1.086) and high congenial conditions (M=2.045, SD=1.172). Anxiety was the foremost emotion aroused in high uncongenial condition (M=2.049, SD=1.045). Aversion, however, was eclipsed by enthusiasm and anxiety in all conditions. However, there was no effect of experimental and control conditions on emotional arousal. Therefore, the descriptive data of the highest emotion arousal in all experimental conditions must be interpreted as incidental and was not caused by the experimental stimuli.

## Selective exposure and emotional arousal

To answer research question 4: What are the specific emotions aroused in those who (a) select less uncongenial information and (b) select more uncongenial information, an analysis of MANOVA was performed. First, the data summarizing uncongenial exposure was subtracted from congenial exposure. Second, all negative values were labeled as more uncongenial exposure and were coded as 1, a positive value was coded as 3 and labeled as more congenial exposure, and all 0 values were coded as 2 as a neutral exposure. This new variable was used as the categorical factor, and three variables for emotions were employed as dependent variables in MANOVA analysis.

There was no significant effect of selective exposure on the emotions aroused L=.988, F(6, 518)=.505, p=.805. Based on the result, there is no significant difference of emotions aroused in the high uncongenial, high congenial, and neutral exposure. However, from the estimated marginal mean, the question about which type of emotions aroused mostly in selective exposure could be answered. Enthusiasm was highest for those who selected more congenial (M=2.128, SE=.101) and neutral (M=2.019, SE=.130) information. Anxiety was dominant for those who selected more uncongenial information (M=2.063, SE=.109). Aversion, however, was the least emotion aroused in all type of exposures. As stated before there was a floor effect in the measure of emotion, and the lowest was the aversion measure. Nevertheless, the differences of the emotions were not statistically significant.

## Indirect effect of selective exposure on attitude reinforcement

To answer research question 5: do the emotions mediate the relationship between selective exposure and attitude reinforcement, parallel mediation model was employed using Hayes' (2013) PROCESS macro for SPSS. The PROCESS macro was used by utilizing model 4 in the PROCESS program for analyzing single mediator and parallel mediators. To estimate confidence intervals for indirect effects, a 10,000 bootstrap sample was employed. The independent variable for the regression was the combined selective exposure measure, where the uncongenial exposure was subtracted from congenial exposure. The positive value in selective exposure variable can be interpreted as congenial exposure and the negative value means uncongenial exposure.

The dependent variable was the attitude reinforcement obtained from post-stimuli subtracted from the pre-stimuli attitude towards immigration sub-issues. The original difference value was multiplied by -1 for participants who supporting sub-issues in Trump's administration

immigration policies. The result was a positive score representing a strengthening attitude or attitude reinforcement, while negative scores reflected weakened attitudes. The positive value in attitude reinforcement does not represent the direction of attitude both for supporting and opposing immigration policies.

The mediator variables in this study are enthusiasm and anxiety. Aversion was not included because, first, it had floor effect or lowest variation among other emotion measures. Second, in affective intelligence theory, aversion has a function equal to enthusiasm. Both emotions have a function to manage habits even though they have different directions in emotional arousal. A result from explorative factor analysis would suggest that aversion is the same factor as anxiety after a varimax rotation (factor eigenvalue=1.687, percent of variance=56.231) and enthusiasm was dissimilar from aversion and enthusiasm (factor eigenvalue=1.009, percent of variance=33.628).

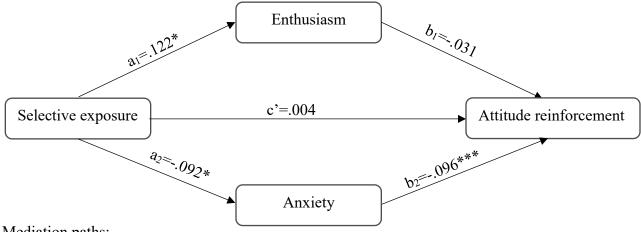
However, the result of the factor analysis categorized emotions grounded in the directions or emotional valence. Enthusiasm's word markers comprised of positive words while anxiety and aversion comprised of negative words. This study referred to affective intelligence theory that categorized emotions based on the function of human cognitive system, namely, disposition and surveillance systems. Disposition system is activated by enthusiasm and aversion while anxiety triggers surveillance system. Previous studies also only included enthusiasm and anxiety to represent the dual system in the human cognitive works on political judgment (Brader et al., 2008; Gadarian & Albertson, 2014). Therefore, this study selected enthusiasm and anxiety based on the affective intelligence theoretical framework.

Employing enthusiasm as the positive emotion may conflict to anxiety as a negative emotion in the parallel mediation analysis. However, the parallel mediators model was the best

method to estimate the total indirect effect from all emotions simultaneously compared to series of single mediator model even if the mediators are competing variables (Hayes, 2013). One of the consequences including competing variables in a parallel mediation analysis is that the total indirect effect value will be low or not significant (Hayes, 2013). In the parallel mediators model, the total indirect effect is not substantial compared with the value of individual indirect effect of each mediator variable.

Participants' demographic characteristics, such as gender and household income were employed as controls. Political variables, including party affiliation and political knowledge, were used as another group of control variables. Attitude variables, namely, attitude certainty and attitude importance, and the experimental conditions were also utilized as controls. Control variables in the indirect-effect regressions were identical with the direct effect analysis in the research question 2.

Figure 3: Parallel mediation for selective exposure on attitude reinforcement



Mediation paths:

SE Description Enthusiasm Attitude reinforcement = -.004, 95% Bootstrap CI (-.014, .002)

SE Anxiety Attitude reinforcement = .009, 95% Bootstrap CI (.001, .022)

Total indirect-effect = .005, 95% Bootstrap CI(-.007, .019)

Total effect = .009, t(260)=.472, p=.637

\* beta values differ at p < .05, \*\* beta values differ at p < .01, \*\*\* beta values differ at p < .001.

The conceptual relationship and the values of each relationship of selective exposure, attitude reinforcement, and emotions are represented in Figure 3. As shown in Figure 3, there was a positive indirect effect (a2b2=.009, SE=.005) of selective exposure on attitude reinforcement through anxiety, such that a bias-corrected bootstrap confident interval for the specific indirect effect did not contain a 'zero' (CI [.001, .022]). Anxiety was negatively predicted by selective exposure (a2=-.092, SE=.046). This can be interpreted as follows: every single point increase in selective exposure will decrease anxiety by .092 point. Furthermore, anxiety negatively predicted attitude reinforcement (b2=-.096, SE=.027), in other words, every one-point increase in anxiety will decrease attitude reinforcement or weakened attitude by .096 point. Both a2 and b2 contributed to a positive indirect effect of selective exposure on attitude reinforcement through anxiety, or in other words, a single point increase of selective exposure led to the increasing of .009 point in attitude reinforcement through anxiety.

To answer research question 5, a positive selective exposure or congenial exposure had an indirect effect toward attitude reinforcement. This indirect effect was mediated by anxiety, which was decreased by the escalation of congenial exposure and a decline in anxiety, in turn, increased attitude reinforcement.

Table 8: Indirect effect of selective exposure on attitude reinforcement through emotions

	Enthusiasm	Anxiety	Attitude reinforcement
Constant	3.183 (.561) ***	2.580 (.533) ***	480 (.248) <sup>†</sup>
Selective exposure	.122 (.048) *	092 (.046) *	.004 (.020)
Sex	365 (.123) **	.000 (.117)	.107 (.050) *
Household income	.019 (.035)	014 (.033)	035 (.014) *
Party affiliation	.031 (.048)	087 (.046) <sup>†</sup>	.041 (.020) *
Feeling toward Trump	.628 (.127) ***	108 (.121)	149 (.054) **
Political knowledge	253 (.304)	358 (.288)	.360 (.122) **
Hispanic stereotypes	.014 (.062)	026 (.057)	.027 (.025)
Muslims stereotypes	.005 (.049)	.073 (.046)	001 (.020)
Attitude certainty	024 (.050)	.106 (.048) *	001 (.020)

	Enthusiasm	Anxiety	Attitude reinforcement
Attitude importance	094 (.052) <sup>†</sup>	105 (.049) *	.012 (.021)
High congenial condition	069 (.163)	067 (.155)	059 (.065)
High uncongenial condition	.062 (.153)	.008 (.146)	.003 (.062)
Enthusiasm	-	-	031 (.026)
Anxiety	-	-	096 (.027) ***
$\mathbb{R}^2$	.222 (.973) ***	.112 (.878) **	.190 (.157) ***

Notes: all values are unstandardized beta with standard error in parentheses. †beta values differ at p<.01, \* beta values differ at p<.01, \*\* beta values differ at p<.01. Selective exposure as independent variable. The second column=enthusiasm as dependent variable,  $3^{rd}$  column=anxiety as dependent variable,  $4^{th}$  column=attitude change as dependent variable.

There were no significant indirect effects of selective exposure on attitude reinforcement by means of enthusiasm. There was also no significant total indirect effect because the competing nature of the two variables as mediator in the analysis. The direct effect was also not significant as found in research question 2. However, there was one path in the model that was significant apart from the anxiety paths. The path from selective exposure to enthusiasm was significant (a1=.122, SE=.048, p=.012) or selective exposure was significantly predicted enthusiasm. In other words, every point increase in selective exposure leads to a .122-point growth in enthusiasm. The complete results of indirect effect analysis can be seen in Table 8.

From the Table 8, enthusiasm was significantly predicted by selective exposure (b=.122, p=.012), participants' gender (b=-.365, p=.003) and feelings toward President Trump (b=.628, p<.001). Enthusiasm increased when participants selected more congenial articles, participants were men compared to women and had higher favorable feelings toward President Trump. The conventional measure of political identity, the party affiliation, did not significantly predicted enthusiasm.

Anxiety was negatively predicted by selective exposure (b=-.092, p=.047) and attitude importance (b=-.105, p=.034) and was positively predicted by the attitude certainty (b=.106,

p=.028). Anxiety was reduced when congenial exposure was heightened, and also when participants perceived immigration policies as important for them personally. Higher attitude certainty predicted an increase in anxiety. The stronger participants affiliation with Democratic party predicted higher anxiety (b=-.087, p=.061). However, the party affiliation prediction on anxiety was not significant.

Selective exposure did not predict attitude reinforcement in a direct way. However, from the regression model, participants' gender (b=.107, p=.034), household income (b=-.035, p=.013), party affiliation (b=.041, p=.039), feelings toward President Trump (b=-.149, p=.006), and political knowledge (b=.360, p=.004) significantly predicted reinforcement of attitude toward immigration policies. The reinforcement was heightened when participants were women than men, stronger toward Republican party affiliation, and had higher political knowledge. Lesser household income and less favorable feeling toward President Trump also predicted attitude reinforcement toward immigration policies.

There are several important take away from the analysis. First, the effect of information availability on selective exposure. The higher proportion of congenial information produced more congenial exposure compared to the balance condition that mostly employed in previous research. Higher uncongenial information availability was also heightened uncongenial exposure compared to the base line. These results open new research agendas on selective exposure in the age of partisan media and filtering agents.

Second, there was an indirect effect of selective exposure on attitude reinforcement through anxiety. However, there was no direct effect of selective exposure on attitude reinforcement. Anxiety not only triggered people to search more information, it produced a condition in human cognition for attitude change. Further, anxiety was produced from selective

exposure behavior could push human cognition to reinforce their attitude. These results suggest a thorough examination of effect selective exposure on emotional arousal and attitude reinforcement.

# CHAPTER 4 INFORMATION AVAILABILITY, SELECTIVE EXPOSURE, EMOTIONAL AROUSAL, AND REINFORCEMENT: A DISCUSSION

## **Summary of key findings**

The purpose of this study was to examine the consequence of information availability on selective exposure and the effect of selective exposure on attitude reinforcement. This study also examined how one's psychological mechanism, namely emotions, undergird the relationship between selective exposure and attitude reinforcement. The idea that differences in the proportion of certain kinds of information will affect selective exposure can be traced back from Lazarsfeld et al. (1968) followed by Freedman and Sears (1965). However, there was a lack of systematic examination of the effect of information proportion on selective exposure. The development of highly fragmented and partisan media environment and widely utilized filtering agents created a fertile ground for the examination of the relationship between information availability and selective exposure. Studies of selective exposure after Freedman and Sears (1965) focused on psychological factors that underlie the human tendency to choose congenial information. Equal amounts of congenial and uncongenial information were always employed in scientific endeavors to answer psychological factors produce selective exposure.

There was a small amount of previous research on the issue of information availability and selective exposure. Previous studies by Frey (1986) and Fischer et al. (2008) documented that differences in information quantity, particularly the number of uncongenial items, can reduce or strengthen confirmation bias. Another study by Beam (2014) also demonstrated that information availability as a product from a filtering agent could disrupt confirmation bias. However, previous research did not deliberately examine information availability in terms of a difference in the proportion of congenial compared to uncongenial information. This study,

however, focused on the effect of information availability. Thus, a novel approach by varying the proportion of congenial and uncongenial items in an information environment was conducted.

The second part of this study examined the effect of selective exposure on attitude reinforcement. There are several mechanisms that can explain the relationship between selective exposure and attitude reinforcement. The most relevant mechanism is from Dilliplane (2014) who argued that a higher proportion of congenial information will influence salience for likeminded citizens and may reinforce an initial attitude. The study by Dilliplane (2014) demonstrated a modest evidence for an effect of congenial exposure on reinforcement of feelings toward presidential candidates in an election cycle. This proposition was a basis for proposing the research question on the direct effect of selective exposure on attitude reinforcement.

Another mechanism that may explain the relationship between selective exposure and reinforcement is affective intelligence (Marcus et al., 2000). Because selective exposure to congenial information is a way of reducing dissonance, it can be argued that those who expose themselves to the congenial information may feel more enthusiastic. The theory of affective intelligence predicts this emotional arousal will lead to maintaining an initial attitude through habitual cognitive processing. For those who expose themselves to uncongenial information, there are two possible emotions that can be aroused. First, is anger or aversion (that has equal function as enthusiasm) to maintain predisposition because they will dismiss counter attitudinal arguments. Second, anxiety will open possibilities for an attitude change, for the subject will cognitively search for new information and solutions.

#### The effect of information availability on selective exposure

One of the important findings of this study is that the differences in the proportion of congenial and uncongenial information influence selective exposure. The higher number of congenial items available in an information environment leads to selective exposure when compared to the balanced information environment and when uncongenial items dominated congenial messages. The unbalanced information environment towards uncongenial items produced higher exposure to uncongenial stories compared to the high congenial information environment and balanced proportion between congenial and uncongenial items.

These findings support the hypothesis that information availability, working together with predispositions, can disrupt selective exposure. For example, in this study, participants selected more immigration stories aligned with their predisposition toward immigration policies when were served with more pro attitudinal stories. However, when participants were prompted greater counter attitudinal articles, they selected more immigration stories that uncongenial with their initial attitudes. These findings were also consistent with previous studies suggesting that congenial exposure increased when there were more pro-attitudinal stories in a relatively small information environment (Beam, 2014, Knobloch-Westerwick, Mothes, & Polavin, 2017). These findings also agree with Beam's (2014) descriptive data that in a high uncongenial information environment, uncongenial items were more likely to be selected.

Additionally, this study expands the literature on confirmation bias and selective exposure by demonstrating that information availability is the strongest predictor of selective exposure compared to attitude variables, such as attitude certainty, attitude importance, and attitude strength, as well as political variables, such as political ideology, feeling thermometer toward President Trump, political interest, political knowledge, and general news use. Theoretical implications from these results will be discussed in the theoretical implications section.

# Relations between selective exposure and emotions

This study found no significant differences on emotional arousal based on selective exposure. The emotions data from the participants had a floor effects, they were too low to have a meaningful variance. One of the possible cause is the nature of selective exposure as a strategy for mood management (Zillman, 1988). The explanation was supported by the descriptive data that demonstrated enthusiasm was the dominant responses for those who selected more congenial items and those who had balanced exposure. Those who selected more uncongenial stories reported higher anxiety. However, these descriptive data must be interpreted carefully because there was no significant statistical inference of the effect of selective exposure on emotions.

The second alternative explanation is this study measured emotion arousal only in a single session with a single time measurement. Measuring emotion arousal in term of change from before selective exposure to and after stimuli exposure may increase variances of emotional arousal indexes and further increase internal validity of the study. This is an important note for future studies in the effect of selective exposure on emotions.

The emotions variance was also too low for significant differences when compared based on experimental and control conditions. There were no significant differences in the participants' rating of their emotions in high congenial, high uncongenial, and control conditions. The descriptive data demonstrated that anxiety was the dominant emotion for those in the high uncongenial conditions, while enthusiasm was the highest responses for those in the high congenial and control conditions. However, the results from descriptive data, both for emotions in selective exposure and experimental conditions, should be interpreted carefully because there were no significant differences from the inferential statistics analyses.

Equal with the result from analysis of selective exposure on emotional arousal, the effect of experimental and control conditions on emotions was not significant and with equal results of descriptive data across all emotional arousal. Thus, the explanations based on mood management and single time measurements can also be applied for the lack of effect of experimental and control conditions on emotions.

# The effect of selective exposure on attitude reinforcement

This study found no statistically significant direct effect of selective exposure on attitude reinforcement. There was also no significant total indirect effect of selective exposure on reinforcement. Enthusiasm did not mediate the effect of selective exposure on attitude reinforcement. However, this study found a single significant mediation path from selective exposure to attitude reinforcement through anxiety. Selective exposure predicted negative anxiety, and, in turn, negative anxiety projected a strengthening attitude or reinforcement. As a negative value multiplied with another negative equal positive value, selective exposure predicted attitude reinforcement through anxiety. For example, if participants selected congenial stories on immigration issues, that selective exposure would reduce emotional anxiety about immigration policies. Participants reduced anxiety, in turn, would led reinforce an initial attitude. In other words, participants' selection of congenial information predicts reinforcement of initial attitude by lowering emotional anxiety.

These results were consistent with affective intelligence theory (Marcus et al., 2000). Anxiety will activate human cognitive surveillance systems and may lead to attitude change or reinforcement. Enthusiasm and aversion, on the other hand, activate habitual cognitive procedures and lead to mostly maintaining political judgments. Results of this study demonstrated that anxiety is a mediator of the effect of selective exposure on reinforcement.

Selective exposure did not predict attitude reinforcement in a direct way. However, from the regression model, reinforcement was heightened for women, when there was stronger Republican party affiliation, and among those with higher political knowledge. Lesser household income and less favorable feeling toward President Trump also predicted attitude reinforcement toward immigration policies.

# **Theoretical implications**

#### Information availability and selective exposure

This study demonstrated that information availability, the proportion of congenial compared to uncongenial information, has a strong effect on selective exposure. The direction of exposure to congenial or uncongenial information was in accordance with the directions of the proportion of information. This study confirmed and provides empirical evidence of Lazarsfeld's et al. (1968) proposition, "Availability *plus* predispositions determine exposure" (p. 89, emphasis in original). Moreover, this study demonstrated when an information environment had greater news stories in accordance with initial attitude on an issue, participants tended to select higher congenial articles. This result resonated with filter bubble from Pariser (2011), which suggested that personalization technologies omitted uncongenial contents and presented greater number congenial information to be selected from. Thus, audiences or users are more likely to select congenial information from news portals or social media platforms, and in turn, create a bubble of opinions, beliefs, and attitude.

Another proposition related to information availability and selective exposure was *de facto* selective exposure (Freedman & Sears, 1965; Sears and Freedman, 1967). According to Freedman and Sears (1965), *de facto* selective exposure is an incidental result of the information availability which limits exposure. Furthermore, they argued that there is no evidence of a

preference for congenial information within the *de facto* selective exposure. *De facto* selective exposure (Freedman & Sears, 1965) was partially supported, in that information availability was a stronger predictor than attitudes or political preferences measures. However, this study's design did not distinguish between information availability and predispositions as different experimental factors. It is impossible to define information availability without predispositions, or in other words, there is no congenial information if there are no predispositions. Therefore, this study reconciles Freedman and Sears's (1965) information availability argument with the cognitive dissonance and the confirmation bias arguments from psychologists. Both availability and predisposition produce selective exposure, and in this study, information availability trumps predisposition.

The assumption of *de facto* selective exposure assumed audience members can select from a large universe of information in a geographical boundary. For example, the universe of information about presidential candidates that audience members in Erie County or California can select. In the age of digital information with Google and social media, it is impossible to draw a boundary of geographical information availability, as Freedman and Sears (1965) proposed. The proliferation of information made the geographical boundaries are impossible and, most importantly, it is difficult for audiences to manually select information from the overwhelmed number of information. Information "users" today utilize various filtering technologies that enable them to easily surf the ocean of information. Filtering agents sort and omitted information based on users' preferences and present the curated information to the users in a manageable information environment (Dylko, 2015; Pariser, 2011). This study demonstrated that information availability matters in a manageable information environment, such as news

menu in news portal, the newsfeed in social media, or the first page of results from internet search engine.

Previous studies on the larger universe of information environment such as the big data of the uses of search engine (Yom-Tov & Fernandez-Luque, 2014; Yom-Tov, Dumais, & Guo, 2013) and using big data on social media (Bakshy, Messing, & Adamic, 2015; Barberá, Jost, Nagler, Tucker, & Bonneau, 2015; Colleoni, Rozza, Arvidsson, 2014) suggest conflicting results of selective exposure on diverse issues and, more importantly, with a large universe of information selected from. Regarding the use of search engines, some of the previous studies suggest that people were more likely to select congenial over uncongenial information on political and health issues (Gillespie, 2017; Yom-Tov & Fernandez-Luque, 2014; Yom-Tov et al., 2013). The data, however, support the conclusions that filtering technologies influenced people to select more diverse information on Facebook (Bakshy et al., 2015) and on Twitter (Barberá et al., 2015).

Findings on selective exposure by using big data and survey method indeed have differences with those produced from experimental research. One of the reasons is the big data studies often treat information as an aggregate, with no distinctions about whether a subject is selecting information based on a managed or curated information environment. For example, the aggregate data on social media does not differentiate among a user browsing information on her Facebook newsfeed or Twitter timeline, both dominated by congenial, likeminded content. The big data paradigm also does not take into account the possibilities that a user is selecting and reacting to a Facebook status or tweet from a hashtag list that may contain more uncongenial information. Furthermore, information availability was not counted as an important variable in the studies using big data. From results of the current study, information availability may answer

the debate on whether in a big universe of information people are more likely to select congenial or uncongenial information. The proportion of congenial and uncongenial information can tip the balance of selective exposure suggested by cognitive dissonance, confirmation bias, and selective exposure theories.

This study also tested the competing hypotheses about the effect of information availability on selective exposure. Hypotheses 1b and 2b, both based on Frey (1986) and Fischer et al. (2008) assumption of cognitive dissonance, where the least amount of uncongenial information will lead to a higher selection of uncongenial stories were not supported by the data. There are some explanations why the data did not support these hypotheses. First, the differences operational definition of availability. This study proposed that differences in the proportions of congenial and uncongenial items were operationalized of information availability which the quantity of information was held constant. Frey (1986) and Fischer et al. (2008) employed differences of information quantity by holding information proportion between congenial and uncongenial items as constant. This study employed a different proportion of information availability, therefore, the high congenial condition had 4 congenial items and 2 uncongenial stories. The high uncongenial condition had the same proportion: 4 uncongenial articles and 2 congenial messages. The total number of items was held constant across condition. In Frey's (1986) and Fischer's et al. (2008) studies, each of experimental conditions had a different number of items. For example, in the first condition, there were 1 congenial and 1 uncongenial item while on the second condition there were 5 congenial and 5 uncongenial information. The quantity of information was their focus of interest by holding information proportion as constant. The future study could combine proportion of information and quantity of information as factors

in the experimental design and tested the interaction between those factors. The results from such study will further answer the role of information availability on selective exposure.

Second, there were differences in experimental protocols. Frey (1986) and Fischer et al. (2008) only allowed their participants to choose a single item from the available information while this study, to boost its external validity, authorized participants to choose as many items as they want in a limited time frame. Previous studies were employing cognitive dissonance theory, thus, selecting a single message from the information pool could satisfy the internal and ecological validity. This study, however, was based on selective exposure paradigm in mass communication. In the mass communication context, selecting more than one article in a session of reading, watching, listening, and browsing news is a normal behavior. Therefore, to increase ecological validity, this study allowed participants to select more than one article in a limited time. The limitation of time also a part of selective exposure research paradigm (Knobloch-Westerwick, 2014; Knobloch-Westerwick & Meng, 2009; Knobloch-Westerwick & Meng, 2011).

However, this study and Fischer's et al. (2008) found that cognitive dissonance could be trumped by another factor. Fischer et al. (2008) found that the quality of information and the salience of direction of the information overcame the effect of cognitive dissonance. This study found that information availability dominated psychological factors such as initial attitude toward immigration policies and attitude certainty. The differences in the proportion of information also overwhelmed attitude strength and political knowledge.

This study demonstrated that participants situated in higher uncongenial information availability led to a higher selection of uncongenial items. This result basically resonated with Beam's (2014) descriptive data. However, since Beam (2014) did not systematically examine the differences in information availability and did not statistically analyze the differences in each

condition, he did not have any theoretical explanation for the result. This study proposed that information availability was the factor that caused higher uncongenial selection in the high uncongenial information availability. The data supported the hypothesis, and further demonstrated that information availability was a stronger factor in explaining the uncongenial exposure.

The increasing uncongenial information selection in the information environment dominated by uncongenial stories was counter-intuitive from the confirmation bias and cognitive dissonance theoretical frameworks. Cognitive dissonance theory suggested that people select pro-attitudinal information if they deliberately choose their position and committed to the position (Festinger, 1964). Furthermore, people will select uncongenial information if perceived as useful or had high information utility. Previous studies found that people select uncongenial information when they have high confidence on their position (Albarracin & Mitchell, 2004, Stroud, 2010), those who have stronger party affiliation and higher interest in politics (Knobloch-Westerwick & Meng, 2009), and presented with less uncongenial messages (Frey, 1986; Fischer et al., 2008). Even though people did not tend to avoid uncongenial information (Garrett, 2009; Graf & Aday, 2008; Stroud 2008; 2011), the control to select congenial information are stronger (Frey, 1986). This study further demonstrated that information proportion can tip the balance of selective exposure. The possible explanation is that information disproportion toward uncongenial information makes the direction of information become salient in the participants' mind. In the high uncongenial information environment, people will aware of the direction of information. As Fischer et al. (2008) suggest, people want to be perceived as critical information consumer and more likely to select uncongenial information. However, the information disproportion slanted to the congenial information did not produce the same effect,

even an inverted effect from the high uncongenial information environment. Future research may address this issue to confirm this study result and explanation.

Another explanation is this study found that aside from information availability, the support of current administration's immigration policies also contributed to greater uncongenial exposure. In this case, some of the immigration policies of President Trump's administration, such as the travel ban and the refugee halt, were allowed to be enforced by the Supreme Court with several restrictions. The feeling of "victory" among the supporters of current administration's immigration policies might have created a greater feeling of confidence, allowing the supporters of those immigration policies to briefly expose themselves to uncongenial items. Higher confidence to defend an initial attitude will decrease selective exposure or, in this study, a heightened uncongenial exposure (Albarracin & Mitchell, 2004).

However, this finding was different with the result from a study by Knobloch-Westerwick and Meng (2009) which found people tend to select congenial information about the candidate they support when the candidate will surely win. The authors argued that in an election context, concentrating on the winning candidate's plans was perceived more important than looking at the losing candidate's messages. This study, therefore, contributes to the selective exposure literature by adding a non-electoral context, namely the controversy over immigration policies. The unusual executive order on travel and the refugee ban that linked with the anti-Muslims rhetoric of Trump which, at the end, were allowed to be enforced by the Supreme Court with several restrictions created a unique feeling of victory in a polarized issue, like immigration policies. The winning stance of immigration policies created confidence for supporters. The difference between immigration policies and election contexts is candidates for election must have plans while immigration policy itself is the embodiment of the winner's plan. There is not much to

study or new information about immigration policies compared with the winning candidate's plans. Thus, the supporter of immigration policies as the winning party, peeking the argument of the losing side because they knew the uncongenial information would not change their attitude toward the winning immigration policies.

Attitude certainty also had a negative significant relationship to congenial exposure. In other words, the less certain participants about their attitude toward immigration policies, those participants were more likely select more uncongenial items. This result is contradictory with the previous studies (Albarracin & Mitchell, 2004; Brannon et al., 2007; Knobloch-Westerwick & Meng, 2009). The explanation for the mismatch finding on attitude certainty on this study compared with previous research was rested on the argument that attitude certainty and attitude confidence are highly related, have a great similarity, and have been combined into an index in previous studies (Berger & Mitchell, 1989; Stroud, 2010). With the high similarity between attitude certainty and attitude confidence, the explanation for why supporters of immigration policies were more likely to select uncongenial stories can be applied to explain the negative relation between attitude certainty and congenial exposure. Participants who had less attitude certainty and confidence would more likely to select more congenial messages compared to those who had great attitude certainty and confidence in their attitude toward immigration policies.

Another alternative explanation for the greater uncongenial information selection in the high uncongenial information environment is cognitive misers (Fiske & Taylor, 1991), participants tried to conserve their cognitive energy and attention, therefore, used shortcuts to arrive on their information selection. One possible heuristic utilized by participant in the high uncongenial condition was choosing by defaults (Frederick, 2002). Defaults, in this case, could

be established from the perceptual salience on the information direction. Once a default option was established, the default was perceived as informative or a hint of best option available (Gilovich & Griffin, 2010). Cognitive miser factor may explain the inconsistent findings on selective avoidance, a tendency to avoid selecting uncongenial information (Bennet & Iyengar, 2008; Garrett, Carnahan, & Lynch, 2013). People simply choose the most available information direction in a manageable information environment.

Greater uncongenial exposure of participants situated in high uncongenial information environment can be explained by: first, the salient of information direction creates a stance for participants to deliberately select uncongenial information to be perceived as critical information consumers. Second, the feeling of winning from the supporters' side produces high confidence to voluntarily select the counter-attitudinal arguments. This feeling of winning is different with the equal feeling in an election context. In issues related winning, there is no candidate plan to be followed so knowing uncongenial arguments can be beneficial for the future endeavor to defend initial predispositions. Third, the lack of attitude certainty or confidence also contributes to the increasing congenial exposure. Thus, support the second possible explanation for greater uncongenial exposure. The last explanation is cognitive miser, to conserve cognitive energy and attention, participants create default option and guide their choice based on the option. Because the only discernable feature is the direction of information, participants used the direction cues as default feature to select information.

#### Effect of selective exposure on attitude reinforcement through emotions

This study did not find a significant direct effect of selective exposure on attitude reinforcement. However, this dissertation found a path of a significant indirect effect of selective exposure on attitude reinforcement through anxiety. Furthermore, enthusiasm did not mediate the

effect of selective exposure on attitude reinforcement. More congenial exposure predicted heightened reinforcement through less anxiety. Or in other words, selective exposure predicts less anxiety and less anxiety, in turn, predicts reinforcement. On the other hand, more congenial exposure predicts higher enthusiasm, however, higher enthusiasm does not predict attitude reinforcement. As affective intelligence theory (Marcus et al., 2000) suggests, anxiety activated participants' surveillance system and made strengthening attitude or reinforcement possible. Enthusiasm was a sign when the participants' dispositional system activated and leads to maintain initial attitude. Anxiety is a critical emotion to predict attitude reinforcement. This study confirms that even with lesser anxiety, the reinforcement was possible.

The result of indirect effect analysis contributes to a new insight into affective intelligence theory. This study confirmed the dual functions of anxiety on attitude change. Anxiety is not only working to change the attitude in term of pushing it from supporting to neutral or opposing issues. Furthermore, less anxiety also a critical factor to change attitudes in term of reinforcement. An increase in anxiety leads to weakened attitude and a lessen anxiety predicts attitude reinforcement. This new insight open possibilities to further test media effect based on emotional arousal. It becomes more important in political communication with the widely use jargon of "angry voters" or "anxious citizens" in the election cycles.

Selective exposure as a cognitive dissonance reduction strategy will decrease negative emotional arousal (Harmon-Jones & Harmon-Jones, 2008; Zillmann, 1988). This theoretical proposition is confirmed by this study. Anxiety as a negative emotion was reduced when participants selected congenial information. Selective exposure predicts less anxiety. Furthermore, enthusiasm as a positive emotion was also significantly predicted by selective exposure. Greater exposure to congenial information heightened enthusiasm. However,

enthusiasm did not predict attitude reinforcement. In this study, selective exposure as mood management produces enthusiasm. Enthusiasm, in turn, activates habitual dispositional system leads to maintenance of initial attitude. A strengthening attitude requires a movement from initial attitude to a stronger attitude in the same direction. The dispositional system was triggered by enthusiasm does not produce motivation to move the attitude in either direction. Thus, in this study, enthusiasm did not influence attitude reinforcement.

The measures of attitude reinforcement in this study did not find significant differences between time 1 and time 2 attitude toward sub-issues in immigration policies. A possible explanation is because this study measured attitude reinforcement in a single session experiment. The floor effect also found in emotional arousal measures, particularly the aversion measures. The culprit was also a single session measurement that did not take into account participants' emotional state before reading selected articles in stimuli. It is necessary to fix these measurement issues in the future study to increase internal validity and further testing the relation of emotional arousal and attitude reinforcement.

This study also found that in addition to anxiety and selective exposure, participants' gender, household income, party affiliation, feeling toward President Trump, and political knowledge also contributed to the prediction of attitude reinforcement. Marcus et al. (2000) suggested that people have a long-held disposition on party affiliations and hot political issues like immigration. Therefore, the effect of emotional states will be contingent on political identity as well. The findings from this study are in accordance with Marcus et al. (2000) suggestion on the contribution of political trait variables on the effect of emotions.

One of political trait variable contributed to attitude reinforcement was political knowledge. Those who possessed higher political knowledge tended to reinforce their attitude.

This result resonated with previous literature that suggests political knowledge is important factor for citizens to defend their initial attitude and opinions (Delli Carpini, 2001, Zaller, 1992), strengthen their attitude (Taber & Lodge, 2006), and contributes to more polarization attitude (Stroud, 2010).

However, an important note must be made for the differences between a positive prediction of party affiliation and negative prediction of feeling toward Trump on attitude reinforcement. Participants leaned toward the Republican party were more likely to demonstrated attitude reinforcement on immigration. On the other hand, those who feel more favorably toward President Trump were more likely to weaken their attitude. The result also demonstrated that women and those with less household income were more likely to reinforce their attitude. From the perspective of partisanship and individual differences of support to Trump the result seems inconsistent. The result of selective exposure on attitude reinforcement was about reinforcement, the strengthening attitude to both direction of political spectrums. It was not only reinforcing support to Trump's immigration policies but also reinforcing those who oppose the policies. Those who leaned toward Republican party and less household income as the generic identification of Trump's voters and supporters were reinforce their attitude if they select congenial information and reduce their anxiety. The same effect was also shown for women and those who less favorable toward Trump. In this light, attitude reinforcement that lead to polarization is not exclusive for those in the left nor right sides of political continuum. Citizens from both political camps can equally select congenial information and reinforce their attitudes.

#### CHAPTER 5 INFORMATION AVAILABILITY RESEARCH AGENDA

# Limitation of the study

There were several limitations in this study. First, the sample of this study did not represent U.S. general population. Therefore, this study cannot be generalized to a larger population, different political contexts, and different issues. However, with online experiment method to improve ecological validity in the study of online news selection, this study also benefitted from Amazon Mturk's workers as regular online news users.

Second, the measures of selective exposure in this study relied on the number of congenial or uncongenial articles. Previous studies which employed experimental studies in selective exposure research paradigm utilized the measure of time spent by the participants when reading the articles (Knobloch-Westerwick & Meng, 2009; Knobloch-Westerwick & Meng, 2011; Knobloch-Westerwick, 2014). Because of technical difficulties with the Qualtrics survey platform, this study failed to measure an unobstructed time spent to read articles. Future studies can address this limitation by including the unobstructed measure of time used for reading.

Third, while addressing studies by Frey (1986) and Fischer et al. (2008), this study did not follow their operationalization in the experiment design. The most important is the operationalization of information availability. This study defined it as differences in proportion and the previous studies defined it as the total quantity of information. It is necessary to examine the effect of information availability, both from proportion and quantities perspectives, on selective exposure.

The fourth limitation is the issues and context of the studies. Immigration policies in Trump administration is a controversial and unique condition. Trump's rhetoric on anti-Muslims and anti-Mexican or Hispanics fueled controversies on the immigration policies. Trump himself

is a populist president that suffers a backlash from inside his party in Senate primaries. The immigration policies in this study also had a unique state of winning in front of the Supreme Court, while the experiment was conducted. The timing made those who support Trump's administration immigration policies more likely to expose themselves toward uncongenial stories. This unique circumstance made the result of this study limited in its generalization. Future studies must scrutinize the effect of information availability on selective exposure and reinforcement on the presidential election context or long-polarized issues that do not have a winning state in the recent period.

Finally, the nature of cross-sectional data collection conducted in this dissertation limits the ability to answer the continuity or consistency of the effect of information availability on selective exposure. The single session measures of attitude reinforcement produced no significant differences of the time 1 and time 2 attitude measures. This study also only measured emotions after stimuli, thus, the measure did not reflect a change in emotions, while Marcus et al. (2000) discuss extensively the changes in enthusiasm and anxiety. It is necessary to address this limitation by a longitudinal experimental design, measuring attitude and emotion changes in different sessions in a reasonable period.

#### **Future research**

This study suggests several routes for future research on information availability research agenda. The first important issue is to examine the limit of the effect of information availability on selective exposure. Examination of a complete operationalization of information availability is the first route that can be taken. Combining information proportion and information quantity as factors in experimental design could strengthen or give an alternative explanation about greater uncongenial exposure in the high uncongenial information environment. This study was

conducted on highly contested immigration policies by Trump administration that may limit the generalization of the results. It is necessary to further examine the effect of information availability on selective exposure in an election context or in polarizing issues that do not have a point of reference for a winning attitude.

Second, another issue that must be answered by the future research is the indirect effect of information availability on reinforcement or other political behaviors and judgments. This study was designed in two parts, the first part examined the effect of information availability on selective exposure and the second part scrutinized the effect of selective exposure on attitude reinforcement. Future studies should examine the effect of information availability, an important feature in today mass communication and a critical factor for selective exposure, on reinforcement or other political judgments.

Third, this study confirmed and demonstrated empirical evidence for filter bubble and at the same time demonstrated that participants burst the bubble of predisposition in a high uncongenial information environment. The future studies ought to further examine the effect of information availability, as the outcome of filtering agents, on selective exposure in a longitudinal research. Algorithms function by refining themselves, thus create more extreme unbalance proportion of information every time the user uses the application. This route can confirm or reject the finding of this study on the strong effect of information availability, particularly, for the uncongenial exposure.

#### Final remarks

This study offers new insights into selective exposure literature and affective intelligence theory. On selective exposure, this study demonstrated that in a manageable information environment, information availability can disrupt confirmation bias based on initial

predispositions. This proposition suggests that there is a way to circumvent echo chamber or filter bubbles by adding uncongenial content. Bursting filter bubble and information cocoons becomes more important in the high fragmented and polarized society. A bleak picture of the future with high polarizing society as an outcome of selective exposure caused by highly partisan media outlets and the ubiquitous use of filtering agents may be repainted with a glimmer expectation that by tipping the information proportion toward uncongenial information can reduce selective exposure. Adding uncongenial information in a manageable information environment is a promising debiasing technique that can be implemented in the news portals, social media, and search engines that employ algorithms. Another practical application is adding control to the online news portal and social media users to choose what kind of news or newsfeed algorithms for them. Users should be able to choose more congenial, more uncongenial, or balanced information presented to them.

Further, this study also demonstrated that decreasing selective exposure predicts weakened attitude reinforcement. Amplifying uncongenial message in the manageable information environment, therefore, decreasing reinforcement that causes high fragmentation and polarization in the society. This technique may not available in the broadcasting model of mass communication. However, the debiasing method is possible within a personalized mass distribution of information as utilized by social media, search engines, and internet news portals. The daily me as proposed by Negroponte (1995) can be utilized to treat selective exposure, even reinforcement as the cause of polarization, by tipping the balance of information availability toward uncongenial stories that will push audiences to read counter-attitudinal arguments. Nevertheless, important note must be made to the increasing anxiety if citizens select more

uncongenial information. Whether anxious citizens are the appropriate price to pay for reducing polarization?

### APPENDIX A – QUESTIONNAIRE

# **Pre-news exposure**

Please consider questions carefully and finish all questions at once.

- Q1 Please indicate your party affiliation.
  - 1. Strong Democrat
  - 2. Moderately Democrat
  - 3. Independent Leaned Democrat
  - 4. Independent
  - 5. Independent Leaned Republican
  - 6. Moderately Republican
  - 7. Strong Republican
- Q2 Generally speaking, how do you describe your political views?
  - 1. Extremely liberal
  - 2. Moderately liberal
  - 3. Somewhat liberal
  - 4. Moderate
  - 5. Somewhat conservative
  - 6. Moderately conservative
  - 7. Extremely conservative
- Q3 Please indicate your feeling toward the President of United States of America using something we call the feeling thermometer. Ratings between 50 100 degrees mean you feel favorable and warm toward the subject, Ratings between 0 50 degrees mean that you don't feel favorable or cold and you don't care too much for the subject. You would rate the subject at the

50-degree mark if you don't feel particularly warm or cold toward the subject. Please rate your
feeling toward President Donald Trump from 0 to 100
Issues preferences
How strongly do you oppose or support these current administration's immigration
policies?
Q19 Immigration: 1 2 4
Strongly oppose Strongly support
How certain are you about the opinions you just expressed about the current
administration's immigration policies?
Q24 Immigration: 1 3 5 6 7
Not at all certain Extremely certain
How important are immigration policies to you personally?
Q29 Immigration: 1 3 5 6 7
Not at all important Extremely importan
Attitude toward sub-issues in immigration policies (PRE)
(all in a 7-points scale from Strongly agree to Strongly disagree)
I am in favor building a wall on the U.S. border with Mexico.
A border wall with Mexico would be ineffective at reducing illegal immigration into the U.S.
I am in favor of sending illegal immigrants back to their home countries.
Deportation efforts of illegal immigrants with criminal records won't go far enough and
dangerous criminals will remain in the United States.
I am in favor of suspending immigration from terror-prone regions.

The executive order of travel ban does not make much difference on the chance of a terrorist attack on the U.S.

Government should turn away refugees from terror-prone regions.

Temporarily banning any refugees from entering the U.S. is against the founding principles of this country.

### **Political Sophistication**

#### Political interest

Q4 How interested are you in politics and national affairs?

Q6 How often would you say discuss politics and current affairs?

#### Political knowledge

Please answer these questions by writing your answer on the available space..

Q7 What is the party currently controlling the House of representative? \_\_\_\_\_

Q8 What is the name of the current Vice President of the USA?

Q9 Which party is most conservative?	
Q10 What is the position held by Elena Kagan?	

# Stereotype

Please indicate your feeling toward the President of United States of America using something we call the feeling thermometer. Ratings between 50 - 100 degrees mean you feel favorable and warm toward the subject, Ratings between 0 - 50 degrees mean that you don't feel favorable or cold and you don't care too much for the subject. You would rate the subject at the 50-degree mark if you don't feel particularly warm or cold toward the subject. Please rate your feeling toward:

Hispanic from 0 to 100.	
Muslim from 0 to 100	
I think Hispanics are:	
1	- 7
"Lazy" "H	ardworking"
I think Hispanics are:	
1	- 7
"Violent"	"Peaceful"
I think Muslims are:	
1	- 7
"Violent"	"Peaceful"
I think Muslims are:	
1	- 7
"Unpatriotic"	"Patriotic"

#### News use

Q11 How often in the previous week did you consume news on the internet, daily newspaper, television, and radio?

Q12 How often in the previous week did you consume news from media that favoring Democrat party or liberal ideology (Washington Post, MSNBC, Huffington Post, NPR)?

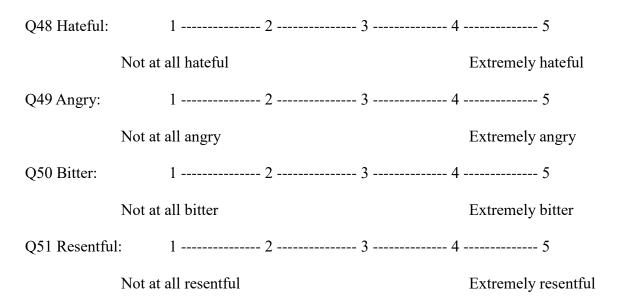
Q13 How often in the previous week did you consume news from media that favoring Republican party or conservative ideology (New York Post, Fox News, Breitbart, Rush Limbaugh)?

Q14 How often in the previous week did you consume news from media that is not characterized as favoring a particular party or ideology (USA Today, CBS News, Yahoo! News)

#### Online news media habit

Q15 How often did you directly access the news media site in the previous week?

Q16 now one	n ala you	use news pe	rsonanzanon si	tes or portais (F	eedly, Google News,
News360) in the	he previou	ıs week?			
	1	2 3	4	5 6	7
	"Never"				"Almost every day"
Q17 How ofter	n did you	consume nev	ws through soc	ial media (Faceb	ook, Twitter, Snapchat) in
the previous w	eek?				
	1	2 3	4	5 6 -	7
	"Never"				"Almost every day"
Potential med	liators				
Emotions					
After you spen	nd time rea	nding some a	articles, how do	you feel about a	articles that you read?
Q42 Enthusias	stic: 1		2	3 4	5
	Not at all	enthusiastic	;		Extremely enthusiastic
Q43 Hopeful:	1		2	3 4	5
	Not at all	hopeful			Extremely hopeful
Q44 Proud:	1		2	3 4	5
	Not at all	proud			Extremely proud
Q45 Scared:	1		2	3 4	5
	Not at all	scared			Extremely scared
Q46 Worried:	1		2	3 4	5
	Not at all	worried			Extremely worried
Q47 Afraid:	1		2	3 4	5
	Not at all	afraid			Extremely afraid



### **Dependent variables**

### **Attitude toward sub-issues in immigration policies (POST)**

(all in a 7-points scale from Strongly agree to Strongly disagree)

I am in favor building a wall on the U.S. border with Mexico.

A border wall with Mexico would be ineffective at reducing illegal immigration into the U.S.

I am in favor of sending illegal immigrants back to their home countries.

Deportation efforts of illegal immigrants with criminal records won't go far enough and dangerous criminals will remain in the United States.

I am in favor of suspending immigration from terror-prone regions.

The executive order of travel ban does not make much difference on the chance of a terrorist attack on the U.S.

Government should turn away refugees from terror-prone regions.

Temporarily banning any refugees from entering the U.S. is against the founding principles of this country.

"Strongly agree"	"Strongly disagree"
Manipulation Check	
Q58 I found a greater number of articles th	nat in accordance with my preference. 1. No 2. Ye
Q59 I found a lesser number of articles that	t in accordance with my preference. 1. No 2. Yes
Q60 I found an equal number of articles from	om my preference and other view. 1. No 2. Yes
Demographic	
Q33 What is your age?	
Q34 I think myself as: 1. Male 2. Fe	male 3. Other,
Q35 What is your race?	
1. Caucasian	
2. African American or Black	
3. Asian (non-Middle Eastern)	
4. Middle Eastern	
5. American Indian	
6. Hispanic	
7. Mixed race	
8. Other,	
Q36 What is the highest education that you	ı completed?
1. None or grade 1-8	
2. High school incomplete	
3. High school graduate	

4. Technical trade or vocational school after high school

5. Some college or associate degree

- 6. College graduate (4-years degree)
- 7. Post graduate training

Q37 Last year, what was the total income before taxes of all the people living in your house or apartment?

- 1. Less than \$10,000
- 2. \$10,000 to less than \$15,000
- 3. \$15,000 to less than \$25,000
- 4. \$25,000 to less than \$35,000
- 5. \$35,000 to less than \$50,000
- 6. \$50,000 to less than \$75,000
- 7. \$75,000 to less than \$100,000
- 8. \$100,000 to less than \$150,000
- 9. \$150,000 or more.

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#### APPENDIX B – STIMULI

#### **Pro-border** wall

It's Official: Trump Orders Border Wall Between U.S. and Mexican Narco-states

By: Brandon Darby

President Donald J. Trump signed an executive order to build the promised "border wall," a controversial effort that will actually be segments of wall in needed areas along the U.S.-Mexico border. Many of the Mexican states bordering the U.S. are controlled by transnational criminal organizations (cartels) and the order specifically mentioned the problems the groups pose to U.S. security.

The executive order asserts, "Transnational criminal organizations operate sophisticated drug- and human-trafficking networks and smuggling operations on both sides of the southern border, contributing to a significant increase in violent crime and United States deaths from dangerous drugs. Among those who illegally enter are those who seek to harm Americans through acts of terror or criminal conduct. Continued illegal immigration presents a clear and present danger to the interests of the United States."

Yes, many Mexican border states are failed narco-states.

Though many politicians, journalists, and pundits have criticized the concept of a physical border barrier while others claimed the border to be safe, the aforementioned groups and individuals are simply ignorant on the topic or engaging in intentional deception. Our investigative journalist has reported ad nauseum on Mexican cartels that have operational control over entire Mexican border states — including the governors' offices and newsrooms. Our reporting has shown that U.S. law enforcement encounters with known or suspected terrorists has occurred frequently in remote areas along the U.S.-Mexico border. We've shown that there

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are humanitarian consequences associated with an unsecured border — not just for U.S. citizens,

but for foreigners as well.

Our reporting has shown that one of the Mexican cartels, Los Zetas, is currently

stockpiling Russian rocket-propelled grenades and their launchers at the Texas border, that they

recently forced down a U.S. helicopter by open firing on the aircraft and striking it. Los Zetas are

headquartered in Nuevo Laredo, a city that sits immediately across the shallow and narrow Rio

Grande from Laredo, Texas. There are no fences or walls in the region and the local police do not

have a presence in many of the gang-infested narco-neighborhoods that sit in Texas along the

open border.

This particular cartel also committed mass murders in communities near the Texas border

in Mexico. They "disappeared" hundreds of civilians and burned them in a network of ovens that

were operated in government facilities.

Along with Los Zetas, the Gulf Cartel is also headquartered immediately south of the

Texas border. The Mexican state of Tamaulipas is largely controlled by the two paramilitary

groups. All of the news outlets in the region have a "link" who works for the cartel and tells

journalists what they can and can't write about. Journalists and editors who ignore the control of

the local cartel faction are brutally murdered. Many concerned citizens in Mexico have taken to

anonymous social media accounts to report on the cartels. When the now-citizen-journalists are

discovered, they are brutally murdered. (490 words).

Anti-border wall

Europe Is Living Proof That Donald Trump's Wall Idea Wouldn't Work

By: Willa Frej

Border walls have been around for thousands of years — think of the Great Wall of China, which was built to fend off invasions, or the Berlin Wall that divided East and West Germany until 1989. The irony is that much of the European Union has for years been defined by unrestricted movement between countries.

"In 2015, borders and walls seemed to burst onto the global agenda in the context of migration and halting spontaneous movement," Reece Jones, associate professor of geography at the University of Hawaii at Manoa, wrote earlier this month for the Migration Policy Institute.

Some European countries within the free-movement Schengen zone are "reverting back to their enforcement of national borders," Susan Fratzke, policy analyst at the MPI, explained the trend.

Other countries are introducing border checks where they previously did not exist. And some countries, like Hungary, have decided to build physical walls. "Those barriers have been the most dramatic," Fratzke added.

This is happening for several reasons.

It's important to keep track of the high number of refugees and migrants arriving to some countries, Fratzke said. This became evident in many countries last year, when so many refugees applied for asylum that systems were completely backlogged.

On the other hand, she said, there are the countries where "border control has been a populist measure to try to respond to inflamed public reaction to people who are arriving."

Hungary, for instance, recently held a referendum in which 90 percent of voters chose to reject EU-mandated refugee resettlement quotas (that decision is moot, however, because less than half of the total population voted).

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Experts agree that physically blocking people from entering the country is not an effective way to prevent migration.

"People still try to cross the border," Jones said. "They just do in a different place or through a different method."

Border walls might slightly deter refugees in places like Greece, Fratzke added, "but if you look at the central Mediterranean [between Libya and Italy], there's been an increase in flows and we actually saw more deaths." Any and all routes leading out of Greece have been cut off, pushing people toward the most dangerous voyage of them all: southern Italy via Libya.

The danger doesn't seem to be deterring people. Search and rescue crews are busier than ever. More than 10,000 people were rescued in a 36-hour period recently.

Although arrivals across all of Europe are down compared to last year — 316,331 migrants and refugees entered Europe by sea in 2016 through Oct. 9 compared to 520,000 in all of 2016 — more have died, according to the IOM. And arrivals to Italy are up by 6 percent compared to last year.

"Rather than endangering migrant lives and filling the coffers of the smugglers, the EU should focus on increasing resettlement quotas and creating corridors that allow safe passage," Jones said. "If they don't, we will continue to see more and more migrant deaths in the years to come." (510 words).

### **Pro-immigration crackdown**

US targets millions in sweeping deportation plan

By: AFP

John Kelly, the secretary of the Department of Homeland Security (DHS) who issued the new orders in two memos, said, "The surge of illegal immigration at the southern border has overwhelmed federal agencies and resources and has created a significant national security vulnerability to the United States."

The Trump administration issued tough new orders for a sweeping crackdown on illegal immigrants, putting nearly all of the country's 11 million undocumented foreigners in its cross-hairs. Rights groups labelled the move a "witch hunt", warning that a threatened "mass deportation" would damage families with deep roots in the United States and hurt the economy. But the new rules make it easier for border patrol and immigration officers to quickly deport any illegal immigrants they find, with only a few exceptions, principally children.

The priority will remain undocumented immigrants convicted of crimes, as well as anyone who has been charged or potentially faces criminal charges.

However, people deemed as low priority for deportation by the previous Barack Obama administration — generally anyone not tied to a crime — are no longer protected.

"With extremely limited exceptions, DHS will not exempt classes or categories of removal aliens from potential enforcement," the memos said.

"All of those in violation of the immigration laws may be subject to enforcement proceedings, up to and including removal from the United States."

The memos followed up on President Donald Trump's order, made just after his January 20 inauguration, for authorities to crack down on illegal immigration by tightening enforcement and building a wall along the nearly 2,000 mile (3,145 kilometer) US-Mexico frontier.

In the memos Kelly ordered immediate action to begin planning the wall. He also ordered the hiring of 15,000 more officers for the Customs and Border Protection and Immigration and Customs Enforcement agencies.

The turn in policy follows years in which the Obama administration, and the George W. Bush administration before it, sought to find a way with Congress to allow most of the long-term illegal immigrants to stay in the country.

But Trump campaigned for the White House on a promise to crack down on what he characterized as a source of widespread crime and a drag on the economy. White House spokesman Sean Spicer said Tuesday that Trump "wanted to take the shackles off" of officials enforcing the laws.

DHS said there are more than 534,000 pending immigration cases in the courts nationwide, and that department agents have apprehended more than 93,000 people trying to sneak into the country in October and November alone.

That work "has significantly strained DHS resources," it said.

While Spicer said Trump "has a big heart" and that policy could evolve in future beyond the DHS memos, there was no indication of what form those changes could take. (465 words)

# Anti-immigration crackdown

Why Trump's immigration crackdown will increase undocumented immigration

By: Elizabeth Cohen

For all the deserved criticism of Trump's proposal, one big thing has been taken for granted: that it would actually succeed in reducing the undocumented population. In fact, walling off the southern border and throwing out residents who have been working in U.S. for

extended periods of time could yield the exact opposite result. Turning ourselves into an antiimmigrant police state could actually increase the population of long-term undocumented people in the U.S.

Why? The answer lies in the economy. The U.S. economy, for better or for worse, is dependent on immigrant labor, including the labor of undocumented residents. Overall, approximately 5 percent of the U.S. workforce is undocumented, around 8 million immigrants in total. In the absence of these workers, who are often willing to work for low wages without contracts or benefits, a number of important industries will suffer, including agriculture, construction and hospitality.

If Trump's anti-immigrant policies deport large numbers of people and discourage others from coming to the U.S., Congress will come under even more pressure to boost the number of temporary workers by expanding the H-2A visa program (for temporary agricultural workers) and the H-2B visa program (for temporary non-agricultural workers). Such policies would help reduce the economic consequences of Trump's immigration crackdown. But, if history is any guide, they would also likely increase the number of undocumented immigrants in the U.S.

Sociologist Douglas Massey first noted the immobilize effect after a series of border strengthening efforts went into place starting in the late 1980s. As the risks and costs of coming to the U.S. went up, more and more people were reluctant to move back between the U.S. and their home country. As return rates fell, the overall undocumented population rose.

Sociologists like Bryan Turner call this an "immobility regime." Following attempts to turn an open society into an enclave, people who previously would have returned home suddenly find that they cannot do so, and consequently they are stuck in the country that sought to exclude

them. If they entered in order to work on a temporary work visa, and they overstay that visa, leaving becomes risky.

Furthermore, cultivating an atmosphere of fear ensures that anyone without documentation will make themselves as invisible as possible to any and all authorities. Even people who do manage to cross the border without papers — perhaps through tunnels or via smuggling networks that rely on water and Canadian crossings — will be more likely to do so with the intent to stay permanently. And if Trump also takes actions that imperil the Mexican or other Latin American economies, there will be more reason for people to come to the U.S. and to stay. Indeed, one of the best things to happen to immigration restrictionists in the past 10 years is the Great Recession in the U.S. and the establishment of economic stability in Mexico. (486 words).

#### Pro-travel ban

Trump signs revised travel ban in bid to overcome legal challenges; Iraq left off

By Steve Holland and Julia Edward Ainsley

President Donald Trump signed a revised executive order on Monday banning citizens from six Muslim-majority nations from traveling to the United States but removing Iraq from the list, after his controversial first attempt was blocked in the courts. Legal experts said it would, however, be harder to challenge because it affects fewer people living in the United States and allows more exemptions to protect them.

The new order, which takes effect on March 16, keeps a 90-day ban on travel to the United States by citizens of Iran, Libya, Syria, Somalia, Sudan and Yemen. It applies only to new

visa applicants, meaning some 60,000 people whose visas were revoked under the previous order will now be permitted to enter.

Trump, who first proposed a temporary travel ban on Muslims during his presidential campaign last year, had said his original Jan. 27 executive order was a national security measure meant to head off attacks by Islamist militants.

It sparked chaos and protests at airports, where visa holders were detained and later deported back to their home countries. It also drew criticism from targeted countries, Western allies and some of America's leading corporations before a U.S. judge suspended it on Feb. 3. "As threats to our security continue to evolve and change, common sense dictates that we continually re-evaluate and reassess the systems we rely upon to protect our country," Secretary of State Rex Tillerson told reporters after Trump signed the new order.

Some Republicans who had been critical of Trump's original order were more positive on the new one.

Bob Corker, chairman of the Senate Foreign Relations Committee, said he was "very encouraged" by the approach and pleased that Iraq was removed from the list. Iraq was taken off the banned list because the Iraqi government has imposed new vetting procedures, such as heightened visa screening and data sharing, and because of its work with the United States in countering Islamic State militants, a senior White House official said.

#### Harder to challenge

The fact the ban affects fewer people already in the United States means it will be more difficult for opponents to find plaintiffs who have been harmed by the order and thus have legal standing to challenge it, legal experts said.

The revised order expressly makes waivers possible for a foreign national seeking to enter the United States to visit a spouse, child or parent who is a U.S. citizen, or for "significant business or professional obligations.

"They dotted their i's and crossed their t's in trying to anticipate what litigation might result," said Stephen Yale-Loehr, a Cornell Law School professor.

The revised order means that tens of thousands of legal permanent U.S. residents — or green card holders — from the listed countries will no longer be affected. (479 words).

#### Anti-travel ban

### Trump's revised travel ban is still cruel and still unconstitutional

By Ilya Somin

President Donald Trump issued a revised executive order temporarily barring entry into the US by citizens of six Muslim-majority nations. The new order replaces an old one that was repeatedly rejected by the courts. The new order is less bad than the old one in some crucial respects. But it is still indefensibly cruel, and still unconstitutional for many of the same reasons as the original.

With regard to the legal issues, the revised order's exemptions for legal permanent residents and visa holders make it less vulnerable to challenge on the Due Process Clause grounds at issue in the Ninth Circuit Court of Appeals ruling against the initial order. That decision emphasized the rights of these two groups.

But the revised order remains vulnerable on the ground that its real purpose is religious discrimination against Muslims, which was the basis for the most recent trial court ruling against the initial order. Like the original order, the new one is still clearly an outgrowth of Trump's

advocacy of a "Muslim ban," as admitted by Trump adviser Rudy Giuliani, who played a key role in drafting the first order. Courts have repeatedly – and correctly – ruled that Trump and Giuliani's anti-Muslim statements are relevant to assessing the constitutionality of the original order.

The same should be true of the new order, as well. The new order is clearly an outgrowth of its predecessor, and still targets all the same Muslim-majority nations, with the exception of Iraq. The security rationale for the order remains laughably weak. Indeed, the risk that any given American will be killed by an immigrant terrorist of any kind is much lower than the risk that he will be killed in a lightning strike. The total number of Americans killed by immigrant terrorists from the nations covered by the travel order is zero, though a very small number have made unsuccessful attempts.

By singling out citizens from these countries for exclusion, Trump's order may well actually increase the risk of terrorism, because it disincentivizes citizens of those nations from cooperating with US forces. That danger is reduced by the decision to drop Iraq from the new order and to make the exclusion of Syrians temporary rather than indefinite. But Syrians and citizens of other nations who cooperate with US forces still have reason to worry. The administration might try to extend the 90 day period after it ends. And even 90 days might be a long time for those in fear for their lives. More generally, even a temporary categorical ban on entry by citizens of those nations likely alienates public opinion there, and makes cooperation with American forces less likely.

The weakness of the security rationale for both the original order and the new one makes it more likely that discrimination against Muslims is the true motive behind it. Under the standard legal framework for analyzing such cases, once evidence of discriminatory intent is

proven, the government has the burden of showing that it would have adopted the same policy even in the absence of improper motivation. That burden will be extremely difficult to meet in this case. (532 words).

### **Pro-refugee halt**

Poll: Majority Want Fewer Refugees, Support Donald Trump's Migration Cuts

By Katie McHugh

Another poll shows a majority of voters support President Donald Trump's executive order curbing travelers from seven terror-exporting countries, and shows that a majority want fewer refugees imported into American communities overall.

Pollsters found that 51 percent of respondents want the U.S. to accept fewer refugees than the 100,000 per year President Barack Obama wanted to import. Trump's new White House plan trims that number to 50,000 per year.

Fifty-three percent of respondents also support the Trump's Executive Order banning all refugee resettlement from Syria and freezing refugee resettlement for 120 days, according to the poll, which was conducted for the Harvard Center for American Political Studies by the Harris Poll company. The company is co-managed by Democratic pollster Mark Penn. Forty-seven percent of respondents oppose the new curbs, according to Harris, which did not release details showing the percentage of people who strong support or oppose the curbs. In many polls, the percentage of people who strongly support large-scale immigration is below 20 percent.

A regional judge's order halting President Trump's refugee resettlement freeze on Feb. 3 did not affect Trump's halving of total refugee resettlement numbers. It did, however, lead to a rush of refugees from five of the seven unsTable, terror-exporting countries into the U.S. Thanks

in part to one regional judge, 60.1 percent of refugees arriving since the ruling are from Iran, Iraq, Somalia, Syria, and Sudan. Over half, or 55 percent, of the 2,576 refugee arrivals are Muslims, including 99.6 percent of Syrian refugees.

The half-million refugees imported since 2009 will cost taxpayers \$4.1 billion in FY2017 alone. As we previously reported: "\$4.1 billion can buy 10,677 new homes for \$384,000 each, which is the average price of a new home sold in the United States in December 2016. Or it could buy 170,124 new autos for \$24,100 each, which is the manufacturer's suggested retail price for a 2017 Chevrolet Malibu."

A total and complete shutdown of all refugee resettlement would save billions, but most of the refugees already living in the U.S. are an economic weight because they are only capable of low-skilled work. They will continue to cost more in welfare and aid than they generate in taxes, so costing American taxpayers at least \$3 billion every year. These costs do not include any costs racked up in the U.S. criminal justice system when refugees commit crimes and plot terrorism.

Trump's popular refugee resettlement freeze has broad support. A Feb. 8 Morning Consult poll found 55 percent of voters supported Trump's executive order, including 82 percent of Republicans.

Another McLaughlin & Associates poll release Feb. 8 found 57 percent support for a halt of refugee settlement to implement better screening procedures.

A Rasmussen Reports poll released on Feb. 2 found 52 percent of voters favored a freeze on all refugee resettlement until the government could better screen out terrorists, including 57 percent of young voters. (494 words).

### **Anti-refugee halt**

# These researchers just debunked an all-too-common belief about refugees

By: Tracy Jan

Refugees have been at the center of a political maelstrom, accused of everything from terrorism to being a drain on taxpayers — prompting President Trump, in one of his first official acts, to suspend the country's four-decade old refugee resettlement program. But a new study shows that refugees end up paying more in taxes than they receive in welfare benefits after just eight years of living in this country.

By the time refugees who entered the U.S. as adults have been here for 20 years, they will have paid, on average, \$21,000 more in taxes to all levels of government than they received in benefits over that time span, according to a working paper released Monday by the National Bureau of Economic Research that examined the economic and social outcomes of refugees in the U.S.

"There was a lot of rhetoric saying these people cost too much, but we didn't actually know what that number was," said William N. Evans, an economist at the University of Notre Dame who co-authored the paper.

Evans and his colleague Daniel Fitzgerald responded, estimating that it costs the U.S. an average of \$15,000 to resettle each refugee, including the cost of background checks, housing, English lessons and job training.

In addition, refugees, unlike other immigrants, are eligible for welfare cash assistance, food stamps and Medicaid. Those social safety net costs amount to roughly \$92,000 in benefits over a refugee's first 20 years in the U.S. — while the refugee pays a total of \$129,000 in taxes over the same time period, researchers found.

Since the refugee admissions program started in 1975, the U.S. has resettled more than 3 million refugees. Researchers examined data pertaining to refugees from two dozen countries in Africa, Asia, Eastern Europe and the Middle East.

Despite arriving in this country with significant language and educational deficits, refugees experience a rapid increase in employment rates and earnings over time, the study shows.

Those who arrive before the age of 14 graduate from high school and enter college at the same rate as their U.S.-born counterparts, researchers found — a finding that Evans characterized as the most surprising to him.

Refugees who arrive between the ages of 18 and 45, meanwhile, start out in the country with low employment and earnings and rely heavily on welfare programs. But after six years in the U.S., they work at higher rates than their U.S.-born counterparts — though their wages never catch up. After 10 years, their use of welfare and food stamps are comparable to native-born Americans.

The longer refugees live in this country, the better their economic outcomes. (443 words).

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**ABSTRACT** 

INFORMATION AVAILABILITY AND CONGENIALITY, SELECTIVE EXPOSURE,

AND REINFORCEMENT EFFECT

by

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**Degree**: Doctor of Philosophy

This study examined the effect of information availability on selective exposure and the

effect of selective exposure on attitude reinforcement through emotional arousal. Cognitive

dissonance and confirmation bias theories were utilized as framework to answer the effect of

information availability. For the attitude reinforcement through emotional arousal, cognitive

dissonance, selective exposure, and affective intelligence theories were employed. This study

employed a novel approach by utilizing different proportions of congenial and uncongenial

information as experimental conditions, high congenial, high uncongenial, and control

conditions, to test the effects of information availability on selective exposure.

Results demonstrated that information availability affects selective exposure that

information availability dominated attitude and political variables. Those in high congenial

condition select greater congenial items and those in the high uncongenial condition read more

uncongenial stories. Furthermore, selective exposure predicted attitude reinforcement through

anxiety. Selective exposure reduced anxiety and reduced anxiety, in turn, strengthen attitude.

Theoretical implication and suggestion for future research are discussed.

# **AUTOBIOGRAPHICAL STATEMENT**

Kunto Adi Wibowo received his Bachelor Degree in Communication at Universitas Padjadjaran, Indonesia. His Master Degree was obtained from The Hague University, Netherlands. He granted Fulbright scholarship, in 2014 until December 2017, to take his doctorate degree at Wayne State University. His research interests include the intersection of media effects in the personalized mass communication and political communication and consequences of algorithms or personalization technologies on political attitudes and behaviors.