Podcasting and Politics in Singapore:
An Experimental Study of Medium Effects[*]

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A ban on political podcasting during the General Elections 2006 in Singapore was justified by the Singaporean government on the grounds that the new medium had a greater power to influence voters than traditional modes of political discourse.

A between-subjects controlled experiment was conducted to test whether podcasts of political speeches had a greater power to influence voters' evaluations of political candidates and likelihood of voting for them than online text-based transcripts of the same speeches. The study also examined whether mere exposure to political speeches online, irrespective of the modality, had an effect on voters' more general political preferences, i.e. the likelihood of support and voting for the opposition. The findings suggest that political podcasts were no more persuasive than text-based websites and that the effects on political preferences, if any, were likely due the exposure to political content online, not because of the nature of the medium. The implications of the findings are discussed.

Introduction

The podcasting ban during the Singapore General Elections 2006 (GE 2006) was one of the first attempts in the world aimed specifically at outlawing Web streaming of political content. The impact of this decision was significant as it prompted a strong verbal rebuttal from the opposition parties in Singapore as well as from numerous critics who viewed podcasting as a new medium of democracy. The opposition parties in Singapore came out strongly against the ban, noting that it was an attempt to curb alternative views (Chia, Low, & Luo, 2006). Reporters Without Borders, an international press freedom watchdog, considered the ban a clear indication of Singapore "once again preventing democratic debate on the Internet" ("Media watchdog slams podcast ban", 2006).

The Singapore government tried to defend its decision, suggesting that the nature of the new medium justified these additional restrictions. Singapore's Senior Minister of State Balaji Sadasivan of the ruling People's Actions party in Singapore (PAP) stated that streaming of political content including podcasting and vodcasting was banned under the rules regulating electoral advertising. Furthermore, Dr Lee Boon Yang, Minister for Information, Communications and the Arts justified the need for such regulation by reiterating that podcasts are a different kettle of fish as "they have a greater impact because of the nature of the medium…they have the greater power to influence" (Chia, 2006).

In essence, the Singapore government was suggesting that new media platforms such as podcasting are more effective in influencing voters during the elections. As a similar ban was not exercised on text-based campaign websites, it seemed that the government felt that the persuasive potential of a digital audio medium such as podcasting would be greater than that of a text-based website. Thus, this study aims to experimentally examine the effects of political communication via different new media platforms and analyze whether political podcasts have a greater impact than text-based websites on influencing voters' evaluation of candidates and their electoral decisions.

Literature review

Political advertising and new media
In recent years, political advertising in new media has gained considerable scholarly attention. This trend coincided with a vast increase in the number of podcasts, vodcasts and blogs dealing with political issues (Adamic & Glance, 2005; Paolino & Shaw, 2003; Reese, Rutigliano, Hyun, & Jeong, 2007; Trammell, Tarkowski, Hofmokl, & Sapp, 2006a).

Before the arrival of broadband, the Internet was not extensively utilized as a medium of political advertising (Lewicki & Ziaukas, 2000). During the 1996 presidential elections in the United States, candidates used the Internet to display online versions of brochures used in elections. At that time, the size of the Internet audience was relatively small and there was little need to make sites that fully utilized the interactivity of the new medium (Bimber & Davis, 2003). However, the presidential candidates did realize that a different set of skills focused on "narrowcasting" was required, due to the nature of the Internet and its increasingly fragmented audience.

In recent years, Internet campaigning has created new ways for candidates and voters to interact with each other using podcasts, interactive websites and videos (Bimber & Davis, 2003; Trammell, Williams, Postelnicu, & Landreville, 2006b). One of the major watersheds for online political communications was the 2000 Presidential Elections in the United States. Both front runners in the campaign, George W. Bush and Al Gore adopted tactics that started a new trend of online advertising (Bimber & Davis, 2003). However, no other campaign has been as notable for its use of new media as much as Barack Obama's campaign during the 2008 U.S. presidential elections (Smith, 2009), with many pundits heralding the effective use of new media as a key reason for Obama's political success (Carr, 2008; Lewin, 2008; Stelter, 2008). In particular, new media technologies, including text-based websites, blogs, social networking sites, podcasts and videocasts have been instrumental in attracting a younger demographic to join the Obama campaign (Smith, 2009).

New and emerging forms of political campaigning on the Internet have generated significant interest from candidates, political consultants and scholars who have been keen to understand how they could be used to influence voter attitudes and behavior. For instance, political blogs are seen as a means to personally connect a candidate to the masses (Coleman, 2005) and/or to the citizens who have an interest in politics and political issues such as the war in Iraq (Nah, Veenstra & Shah, 2006; Trammell et al., 2006a; Tremayne, Zheng, Lee, & Jeong, 2006). However, few studies have investigated and compared the impact of different forms of online campaigning on citizens' evaluations of candidates and their voting choices.

Political campaigning in Singapore
The Internet brought a fundamental change to the practice of political content regulation in Singapore (George, 2005). As early as 1996, then Senior Minister Lee Kuan Yew stated in a speech regarding the regulation of the flow of ideas and information on the Internet that "only the top 3 to 5 percent of a society can handle this free-for-all, this clash of ideas" (Rodan, 1998, p. 73). He also reiterated that the discussion of political ideas and policies could destabilize the society if such information was made available to everyone (Rodan, 1998). In contrast to liberal Western democracies, Singapore has put considerable restrictions on political content on the Internet, particularly in relation to political advertising (George, 2005).

In Singapore, few of the political parties have fully utilized the Internet in their election campaigns. Among the opposition parties, only the Singapore Democratic Party (SDP) extensively used podcasts as a medium of political campaigning before the 2006 Elections (Lee, 2006). After the podcast ban was announced, the SDP leader made a podcast on April 23th, 2006, accusing the government of "crushing the SDP's election campaign." However, the podcast was removed three days later when SDP was threatened with a lawsuit (Lee, 2006).

Nonetheless, the regulations regarding political advertising in Singapore are rather vague. The act that was put forth in defense of the podcasting ban was the Parliamentary Elections Act, Chapter 218, 78A, which states that "the Minister may make regulations regulating election advertising and the publication thereof during an election period on what is commonly known as the Internet by political parties, candidates or their election agents and relevant persons, including prescribing the features that must or must not appear or be used in any such election advertising" ("Singapore Statutes Online", n.d.).

This law gives the minister a significant degree of discretionary power to restrict or ban various kinds of contents and platforms during elections. Such regulatory vagueness is not unique to Singapore, and countries including Australia and the United States as well as some European Union member states also lack specific regulations regarding online political content and advertising (Miskin & Grant, 2004; OFCOM, 2005).

Most recently, the government relaxed some rules regulating new media which included lifting the ban on political podcast and vodcasts. This occurred following recommendations by the Advisory Council on the Impact of New Media on Society (AIMS) which was set up by the government in 2007 to study the impact of new media on society.

A brief history of podcasting
Although pioneer podcasters such as Tristan Louis and Adam Curry experimented with podcasting around the year 2000, podcasting did really not take off until 2004. Ben Hammersley, a journalist from The Guardian, was the first to note the fast growth of websites providing audio content that can be easily downloaded in an mp3 format (Hammersley, 2004). The rapid

proliferation of podcasts was partly due to the compression of audio files into the mp3 format which made podcasts much smaller in size than uncompressed audio (or video) files and further facilitated their creation and distribution via syndicated feeds.

The rise of podcasting in the last couple of years has been significant. In Singapore, a recent newspaper article reported that close to half of all teenagers and adults from 15-24 were either blogging or creating podcasts on the Internet with this number set to increase further in the near future (Cheong, 2006; Chua, 2006). Indeed, a recent survey by Singapore's Infocomm Development Authority estimated that there are 862,000 bloggers and 958,000 blog readers out of a population of less than 5 million (Feng, 2007).

In recent years, many researchers and policy makers have treated podcasting as a form of radio (Black, 2001; Cohen & Willis, 2004; OFCOM, 2005; Wall, 2004). Indeed, radio is very similar to podcasting in many aspects. Firstly, in its initial stages, radio was quite similar to podcasting as there were no gatekeepers who could dictate what could or could not be transmitted (Berry, 2006). Secondly, some of the essential qualities of radio can also be found in podcasting, as both are intimate media which allow the user to be more active in the process of consumption due to the lack of visuals (Berry, 2006). These similarities provided a foundation for examining the effects of podcasting by referring to research literature on radio.

Research on medium effects

Marshall McLuhan (1967) was the first scholar who popularized the theory that there was a difference in the effect of messages depending on the medium used to communicate them; according to McLuhan, the medium was the message. McLuhan suggested that any medium was constrained by its technical characteristics which also had an impact on the presentation and format (McLuhan, 1967). Hence, the medium "shapes and controls the scale and form of human association and action." (McLuhan, 1964; p. 9). However, McLuhan's theory was disputed by other scholars (Clark, 1983; Schramm, 1997; Tannebaum & Kerrick, 1954).While there has been a plethora of research studies on medium effects, they have generally yielded rather inconclusive findings. The existing literature largely suggests that the written medium is more effective in communicating messages compared to the audio medium.

There are inherent differences in the characteristics of print and audio which suggest that different cognitive resources are needed. In natural settings, the mere act of reading printed material demands attentional resources, while this may not be so for audio and audiovisual media (Chaffee & Schleuder, 1986). Furthermore, reading online allows for user control over the pace and order of the information presented (Shin, Schallert, & Savenye, 1994), making it superior for knowledge acquisition as compared to audio (Andreoli & Worchel, 1978), and traditional print (Eveland & Dunwoody, 2002). Based on the Elaboration Likelihood Model, these characteristic differences equip users of online textx and podcasts with different abilities for critical evaluation (Petty, Wells, & Brock, 1976) and likely affect the extent of central or peripheral processing.

Scholars studying modality effects in political communication have employed both survey and experimental methodologies, but their emphasis has mostly been on examining how the use of different media channels affects voters' political knowledge rather than their attitudes or evaluations. We discuss the strengths and weakness of these two methodological approaches in the next section.

Survey research

In their seminal study of media use and political information acquisition, Patterson and McClure (1976) used a panel design to examine the impact of television news, television advertising, and newspapers on citizen learning of political candidates' positions on electoral issues. The authors found that television advertising was the most important source of political information. Subsequent studies, however, found that the reliance on print sources, but not television sources, was a significant predictor of voters' political knowledge (Chaffee & Frank, 1996; Chaffee & Tims, 1982; Chaffee, Zhao & Leshner, 1994). Users of print sources also had higher levels of political knowledge than television users (Becker & Whitney, 1980; McLeod & McDonald, 1985; Miller, Singletary, & Chen, 1988).

A recent study of the impact of the Internet on elections by Dalrymple and Scheufele (2007) found that users of online news sources and print news had higher political knowledge, while the usage of television news was not related to political knowledge.

There is little doubt that survey research has been instrumental in revealing the relationship between media use and political knowledge among voters. However, the weakness of the survey methodology lies in its inability to establish causality because it lacks control over extraneous variables and cannot ensure the consistency of information presented via different media channels. Furthermore, cross-sectional survey designs do not allow researchers to establish temporal order among the variables examined, which is critical if any causal claims about the relationship between the variables are to be made.

In survey studies, the close relationship between a media channel and its typical audience is a major confounding variable as newspapers tend to be consumed by people who are better educated, have higher income, and have a higher motivation to learn (Chaffee & Frank, 1996; Tichenor, Donohue, & Olien, 1970). The information provided on different media channels also differs. Television sources provide more information about political candidates, while print sources provide more information about political parties (Chaffee & Frank, 1996; Eveland, Seo, & Marton, 2002; Furnham, Gunter, & Green, 1990).

Experimental research

The experimental approach seeks to overcome the shortcomings of the survey method. First, experiments are able to establish a temporal order with pre-post designs, and provide a framework to determine causal effects of exposure to messages (Norris & Sanders, 2003; Rubin, 2004). Second, the experimental approach allows for manipulation of variables to control for other confounding variables and provides better internal validity (Eveland, Seo, & Marton, 2002; Norris & Sanders, 2003).

Researchers interested in the topic of communication modalities have frequently focused on the differences in learning and information processing that take place in different media. Early experimental studies often held messages constant by transcribing audiovisual material into print, or reporting a newspaper article through audio or audiovisual content. The majority of such studies compared print and television, and found that print was superior compared to other media when it came to information processing measures (Brown, 1978; Furnham & Gunter, 1987; Wilson, 1974). Other studies also found that print was a better predictor of detailed political and current affairs knowledge (Chaffee & Frank, 1996; Culbertson & Stempel, 1986). Meanwhile, these claims of 'print superiority' were challenged by other scholars who reported no modality differences (Stauffer, Frost, & Rybolt, 1981) or that television was a more effective medium for information processing compared to print (Heim, Asting, & Schliemann 2002; Just & Crigler,

1989; Kozma, 1994). Norris and Sanders (2003) conducted a study on the effects of communication modalities on campaign issue knowledge and found no significant differences between different media, although there was a significant difference in knowledge of the experimental groups compared to the control group that was not exposed to any political content.

Research on the differences between Web-based text and printed content are more scarce than studies examining the differences between traditional media. Several studies examined the differences between online text and printed content, and found that print was a better medium for information processing (Eveland & Dunwoody, 2002; Sundar, Narayan, Obregon, & Uppal, 1998; Tewksbury & Althaus, 2000). However, Eveland, Seo and Marton's analysis (2002, p. 372) of TV news, newspapers and online news found that the Web was more effective in "structuring election-related knowledge in memory."

Nevertheless, it is important to note some of the limitations of the experimental approach. Probably the biggest limitation of experimental laboratory-based studies is their unnatural setting, which seriously undermines their ecological validity (Eveland, Seo, & Marton, 2002). In our study, we attempted to deal with the above issue by designing a more ecologically valid experimental procedure while keeping all the necessary controls in place.

It is also important to note that the majority of studies examining the modality effects have focused on the impact of different media channels on information processing and recall of political information. Although some experimental studies on voting intentions and behavior have been conducted (Eldersveld, 1951, 1956; Gerber, Green, & Shachar 2003; Gonsell & Gill, 1935), the effects of different modalities have not been explored extensively (Bositis & Steinel, 1987). Furthermore, most experimental studies have focused on short-term effect of exposure to content in different modalities, and hence cannot tell much about the potential long-term impact on people's political attitudes and behavior.

Our study aims to test the assertion that political podcasts have a greater power to influence voters' evaluations of political candidates and likelihood of voting for them than text-only websites. We are also interested in whether exposure to political speeches online, particularly podcasts, could have an effect on voters' more general political preferences, i.e. the likelihood of support and voting for the opposition in general.

If podcasts indeed have a greater persuasive power, citizens exposed to podcasts of political speeches should evaluate the speakers more favorably when compared to the citizens who are exposed to the online transcripts of their speeches. So, what are the perceived characteristics of speakers that have been found to have an impact on persuasion?

Expertise has been considered to be the most prevalent source of credibility by many scholars and is defined as whether the source was capable to present and make right assertions (Petty & Wegener, 1998; Sternthal, Phillips, & Dholakia, 1978). Expert sources have led to more persuasion than non-expert sources particularly when a topic is not that relevant to a person's personal life (Petty & Wegener, 1998; Schulman & Worrall, 1970; Wood & Kallgren, 1988).

Another important characteristic affecting persuasion is *trustworthiness*. According to Eagly, Wood and Chaiken (1978), *trust* assesses how much the source is perceived to be telling the truth and it has been found to have a positive effect on persuasion. The effects of modality on the perceived trust and expertise, both of which are components of source credibility, has received little attention from scholars. Although few studies investigated differences in communication modality, most of the relevant work suggested that some methods of presenting a message receive greater scrutiny than others (Andreoli & Worchel, 1978, Petty & Wegener, 1998). Self-paced messages (written) generally receive more scrutiny compared to externally-

paced messages (audio). In their study of medium effects on persuasion, Andreoli and Worchel (1978) found that participants in their experiment rated higher source credibility in the audio format compared to the written format, provided that the message argument was strong. They explained that these effects could be due to the difficulty of processing complex material when externally paced, but could also be due in part to the salience of source cues across the different versions of the message.

Two other factors have been suggested as playing an important role in the process of speaker evaluation, *attractiveness* and *similarity to the speaker*. *Attractiveness* is explained by how likable the source is to the target and *similarity to the speaker* by how much they perceive to have in common with the speaker (Brock, 1967; Lowry, 1973; Petty & Wegener, 1998; Wood & Kallgren, 1988). Both of these factors have been found to be positively related with more favorable evaluations of the speaker (Lowry, 1973; Petty & Wegener, 1998). Perceived attractiveness and similarity to the speaker was found to be higher in audio format compared to written format (Eagly, Wood & Chaiken, 1978). They speculated that there might be some settings and features of the source speaker that can only truly affect the message recipient in the audio medium. Given the above, we posit the following research questions focusing on the potential effects of podcasting on the perceived characteristics of political speakers:

RQ1: Are political podcasts more effective than text-based websites with regards to the perceived attractiveness of the speaker?

RQ2: Are political podcasts more effective than text-based websites with regards to the perceived similarity of the speaker to the listener?

RQ3: Are political podcasts more effective than text-based websites with regards to the perceived trustworthiness of the speaker?

RQ4: Are political podcasts more effective than text-based websites with regards to the perceived expertise to the speaker?

RQ5: Are political podcasts more effective than text-based websites with regards to the likelihood of voting for the speaker?

We also propose more general research questions regarding the impact of exposure to political speeches online:

RQ6: Does the exposure to the political speeches online have an effect on the support for the opposition and their political views?

RQ7: Does the exposure to the political speeches online have an effect on citizens' desire to have the opposition candidates represent their own constituency?

RQ8: Does the exposure to the political speeches online have an effect on the likelihood of voting for the opposition in the general elections?

Method

Participants
The participants in this study were 153 students from Nanyang Technological University of Singapore (70 men and 83 women). The mean age of the participants was 22.1 (SD = 2.34) and most of them were ethnic Chinese (93%) with the remaining participants being of Indian, Malay or other ethnicity. All participants received a small incentive of five Singapore dollars to participate in the study.

Design, stimuli and apparatus
The study employed a between subjects experimental design to test for the potential medium effects on the participant's perceptions of the speaker, their voting intentions and general political preferences. The experiment took place in a computer laboratory. There were three groups in the study, namely the control, text-based and the podcast group. The podcast group was presented with two political speeches in podcast form and two travelogue podcast transcripts as distracter articles. The text-based group was presented with two online transcripts of the same political podcasts and two travelogue podcasts as distracter stimuli. The presentation orders of the podcast and transcript stimuli were randomized by a reduced Latin square (a total of 6 different sequences) to prevent any potential order effects.

The political podcasts used in the experiment were based on the transcripts of political speeches made during the Singapore General Elections 2006 (GE 2006) and were taken from the opposition party websites. Two voice actors, a male and a female, were hired to read the transcripts. The voice actors were not provided with any information regarding the identity of the speakers and/or their political affiliation. The first podcast was 128Kbps, 44,100 Hz stereo, and was 5 minutes and 40 seconds in length. The speech was by Steve Chia, an opposition party member from the Singapore Democratic Alliance (SDA) who made a speech to university students regarding the importance of the general elections. The second podcast was 128Kbps, 44,100 Hz Stereo, and was 7 minutes and 21 seconds in length. This speech was originally given by Sylvia Lim, the leader of the Worker's Party (WP) during a general election rally in 2006.

The text-based websites provided transcripts of the above speeches and were created using a mix of fonts, colors, logos and contents similar to those found on several opposition party websites in Singapore. The authors were careful not to include any identification such as party or politician names on the website to preserve the anonymity of the speaker in the speech.

Procedure
After being exposed to one political podcast and one travelogue transcript online, the participants in the podcast condition were presented with a questionnaire containing questions regarding that political podcast. Participants repeated this procedure for the second set of political podcasts and travelogue transcripts. When the second online questionnaire was completed, the participants were also asked to provide their personal demographic information as well as information on their general political preferences.

The text group was presented with the same content, except that they were provided with the political speech transcript and the travelogue podcast. The control group was presented with no political content and they just listened to two travelogue podcasts and were then given a questionnaire containing only demographic information and general political preferences.

Measures

The participants' perceptions of the political candidates were measured via a questionnaire with responses on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree). The five composite factors that were examined in the questionnaire were expertise, trust, attractiveness, similarity to the speaker and voting intentions (Cronbach's Alpha = .855, .857, .834, .837, .881 respectively). These variables were adapted from Sternthal, Phillips, & Dholakia (1978), Lowry (1973) as well as Petty & Wegener (1998).

Voting intentions measures were employed to examine the likelihood of participants supporting the speaker and his/her political agenda. Participants were asked how strongly they agreed or disagreed with statements pertaining to voting behavior: "I will vote for this candidate in the next elections", "I support this candidate and his political views" and "I want this candidate to represent my constituency".

In addition to the above, we asked the participants from all three groups (including the control group) questions regarding their general political preferences to assess the likelihood of their supporting opposition parties in Singapore. Their preferences were examined using three questions with responses on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree): "I support the opposition and their political views", "I would like the opposition candidate to represent my constituency", "I am likely to vote for the opposition in the next general elections".

In addition to the above questions in the posttest questionnaire, three questions pertaining to the content of the political speeches were included, to ensure that the participants had been attentive, i.e. that they had read or listened to the material carefully. A total of 12 participants did not provide a single correct response and their data was discarded from the analysis, leaving the total number of usable cases at 141.

Procedure

The experiment was conducted on six different dates within a time period of two weeks in the same computer lab. A software program developed for the purpose of this study was used to randomly assign participants to conditions (the control, podcast or the text-based group) as well as to different presentation orders. The same program also collected the data from the participants using an online questionnaire, which was displayed following the presentation of the stimuli.

Participants were instructed to sit at alternate computer stations in the computer lab, where the software and headphones had already been set up. All participants were instructed to put on the headphones whenever they were comfortable and to click on the link located on the website on their computer screen. They were informed that the purpose of the session was to find out their perception on new media usage.

After the participants had finished filling in the questionnaire, they were thanked and given five Singapore dollars for participating in the experiment. At the end of the last experiment session, an email informing participants of the identity of the speaker and an explanation of the true intentions of the research was sent to all participants. The email also encouraged those with further queries to discuss them with the authors of the study.

Power analysis

A priori power analysis based on Cohen's method (1992) was conducted using G*Power software (Faul, Erdfelder, Lang, & Buchner, 2007). The analysis suggested that our study needed

130 participants to find a significant effect of medium size with a power of .8, with an alpha level set at .05. Our study would thus have difficulty detecting statistically significant small effects.

Results

Table 1 contains means and standard deviations for all dependent variables by experimental condition.

Table 1. Means and Standard Deviations of Dependent Variables (N=141)

| | Medium of speech | | | | | |
| | Text-based | | Podcast | | Control | |
	Mean	SD	Mean	SD	Mean	SD
Perceived likeability	4.41	.91	4.13	.99		
Perceived similarity	4.79	1.00	4.53	1.05		
Perceived trustworthiness	4.16	.90	3.92	.88		
Perceived expertise	4.40	.90	4.13	.78		
Likelihood of voting for the speaker	4.21	1.10	3.88	1.14		
Support for the opposition and their political views	4.36	1.29	4.47	1.28	3.93	1.08
Opposition candidate to represent my constituency	4.34	1.42	4.19	1.44	4.07	1.66
Likelihood of voting for the opposition in the next general elections	4.45	1.46	4.25	1.44	4.03	1.59

With regards the variables assessing the evaluations of the speakers and the likelihood of voting for them, all of the mean scores for the text-based group were somewhat higher than those for the podcast group. The podcast group was higher than the text-based group only on a single question pertaining participants' general political preferences; in addition, the control group scores for these variables were lower than those of both experimental groups.

Research Questions 1-5

A series of *t*-tests were run to test for the significance of medium difference between the podcast and text-based group in terms of their evaluation of the speakers and the likelihood of voting for them. The results for perceived likeability of the speakers suggest that there were no significant differences between the groups, $t(109) = 1.54$, ns. No significant differences between the podcast and text-based group were found for perceived similarity to the speakers, $t(109) = 1.28$, ns. With regards to how trustworthy the speakers were perceived to be, the analysis showed no evidence of any medium difference, $t(109) = 1.41$ ns.

The results also indicate that the participants in the podcast and text-based condition did not differ significantly in terms of the perceived expertise of the speakers, $t(109) = 1.70$ ns.

Finally, the results give no support to the claim that podcasts have a greater power to influence voting decisions than text-based websites, as the differences between the groups in terms of likelihood of voting for the speakers were not significant, $t(109) = 1.53$ ns.

Research Questions 6-8
A one-way analysis of variance (ANOVA) was conducted to test for the potential differences between three groups in the likelihood of supporting and voting for the opposition. In this case, data from the control group was used as a baseline measure and compared to both experimental groups using planned contrasts.

The results for RQ6 showed that omnibus ANOVA was not significant, $F(2, 138) = 1.92$, ns, suggesting that there were no overall significant differences between three groups in terms of their support for the opposition and their political views. Still, planned contrasts indicated that there were marginally significant differences between the control group and two experimental groups, $t(138) = 1.94$, p < .054, as well as between the control group and the podcast group only, $t(138) = 1.87$, p < .063.

The findings for RQ7 indicated the participants from three groups did not differ significantly from each other in terms of their preference for the opposition candidate to represent their constituency, $F(2, 138) = .73$, ns. Furthermore, no planned contrasts were found to be significant.

Similarly, the results for RQ8 showed no significant differences among three groups in terms of likelihood of voting for the opposition in the general elections, $F(2, 138) = .33$, ns. None of the planned contrasts were found to be significant either.

Discussion

The findings indicate that podcasts of political speeches were no more persuasive than online text-based transcripts when it came to the evaluations of candidates' likeability, perceived similarity, trustworthiness and expertise. Moreover, no differences were observed between the podcast and text-based group regarding the likelihood of voting for the candidate. The only marginally significant findings emerged when both experimental groups, as well as the podcast group alone, were compared to the control group, and only on the question regarding the likelihood of supporting the opposition and their political views.

The lack of significant medium effects is not very surprising, however. The literature does not lend support to the claim of audio superiority over text when it comes to the effectiveness of political communication. Our study shows that delivering speeches of political leaders via podcasts has no inherent advantage over simply providing the transcripts of their speeches to the electorate online. Listening to the speech of a politician is unlikely to make citizens form more favorable opinions of him/her, compared to reading the same speech from a website. Hence, the incumbents have no reason be concerned about the opposition parties communicating with the electorate via podcasts any more than they should be concerned about the opposition's use of text-based websites.

The pattern of our findings resembles that of Norris and Sanders (2003), who found no medium effects, but demonstrated a difference in political knowledge between the groups exposed to political content and the control group that was not. In this study, there is only weak evidence that citizens exposed to political speeches online (particularly podcasts) would be more supportive of the opposition and their views immediately following the exposure, than the

citizens who were not exposed to the speeches at all. We suggest that that could possibly be due to the process of short-term priming of pro-opposition sentiments and attitudes that was taking place in both groups of participants exposed to political speeches. Furthermore, the speeches critical of the government might resonate more strongly with university students as they are arguably more likely to oppose authority and be more cynical about ruling elites. Still, given the only marginal significance of these findings, it is hard to make any more definite conclusions regarding this finding.

In light of our findings, there seems to be no empirical evidence in favor of differential regulatory treatment of podcasting during elections. Indeed, more recent events in Singapore suggest that platform-specific regulation of new media during the elections is being abandoned. In April 2007, the Singapore government set up the Advisory Council on the Impact of New Media on Society (AIMS) to study the implications of new media on society. Following an extensive 18 month long study in which AIMS consulted various stakeholders, researchers (including the authors of this study) and members of the public, a report was released with recommendations to the government on how new media should be regulated (AIMS, 2008). In light of these recommendations, the Government recently relaxed some rules regulating new media which included lifting the ban on political podcast and vodcasts ("Government's response to AIMS report, 2009).

Limitations and suggestions for future research
Our study was able to test only for short-term effects of exposure to political speeches online and hence we do not feel qualified to make strong inferences about the potential long-term effects of such exposure. While it is possible that over time the cumulative effect of political podcasts may be different from those of text-based websites, we find that scenario unlikely. Indeed, a field study by Norris and Sanders (2003), investigating longer-term (three weeks) effects of exposure to political content through different media also suggests that what matters is the message, not the medium.

Still, it is important to note that, given our sample size, we were in a position to detect only effects of moderate or large size. With a larger sample, it is possible that small effects may emerge, but it seems more likely that they would be in favor of text-based websites, rather than podcasts, as the mean scores in our study indicates.

It can also be suggested that our findings are not easily generalizable to the real world, as our study was laboratory-based which is not representative of a typical setting in which citizens are exposed to political content online. Still, given that our sample consisted of undergraduate students, who spend a significant ammount of their time in lecture halls and computer labs, we argue that this setting is not atypical of the settings in which they read or listen to political information on the Internet every day. Furthermore, by using authentic political speeches made by the opposition leaders and by exposing the participants in the experimental groups to the mix of podcast and text-based contents (political and non-political) we hope to have achieved more ecologically valid experimental stimuli and procedures than have been the case in the past. It is important to acknowledge, however, that certain idiosyncratic characteristics of Singaporean politics (e.g. low levels of civic and political activism) could have an impact on the findings and hence replications of this study in different countries and contexts are warranted.

In addition, future studies should try to expand the range of online stimuli tested beyond campaign speeches to include political advertisements, campaign manifestos, and political commentary, etc. Furthermore, it would be interesting to explore any potential differences in

content that is typically found in political podcasts vs. content on text-based websites. It is more likely that any potential medium differences will be due to the different types of content that are communicated via different channels online rather than because of the intrinsically more persuasive nature of a given medium.

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