



國立臺灣大學社會科學院經濟學系
碩士論文

Department of Economics
College of Social Sciences
National Taiwan University
Master Thesis

有政黨傾向的新聞文章是否能影響選民的決策？
一個以2016台灣中央選舉為背景的實驗研究
Can Partisan News Change Voter's Decision?
An Experiment on 2016 Taiwan General Election

林建勳

ChienHsun Lin

指導教授：林明仁 博士

Advisor: Ming-Jen Lin, Ph.D.

中華民國 105 年 6 月

June, 2016

國立臺灣大學碩士學位論文
口試委員會審定書

有政黨傾向的新聞文章是否能影響選民的決策？
一個以 2016 台灣中央選舉為背景的實驗研究
Can Partisan News Change Voter's Decision? An
Experiment on 2016 Taiwan General Election

本論文係林建勳君（學號 R03323026）在國立臺灣大學經濟學系
完成之碩士學位論文，於民國一百零五年六月二十九日承下列考試委
員審查通過及口試及格，特此證明

口試委員：

林明仁

（指導教授）

江滄芳

王道一

謝辭



We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time.
Through the unknown, remembered gate
When the last of the earth left to discover
Is that which was the beginning;

- T. S. Eliot, *Little Gidding*

在經研所的這兩年間，總感覺自己像是在爬一座高聳入雲的山。這是一座偉大的山，卻也令人望而生畏。山徑雖非荒漫，但仍須手腳並用才能夠艱苦前行。一邊攀著峭壁，一邊抬頭望去，山頂依舊隱於雲間，不知何時方能觸及。即便如此，還是一步一步，心中懷著一絲美好的想像，朝著遙遠的目標前進。

首先感謝曾經協助過實驗的同學們：張可濤、陳昱邵、鍾翔宇、傅韋銘、蕭鎮宇、李清國、李易、林宣文、邱錦洋、沈暉智、姚懷捷、游世群，沒有你們就不可能完成這個實驗。感謝我的家人們，願意忍受我開始這段無理的旅行，並且總是支持著我。感謝六四三以及白經濟的好友們，你們讓這段登山的旅程充滿了訕笑(?)與快樂。特別感謝煒林，你充滿熱情與努力地走在前面，連被動的我也不得不被感染而追隨著。感謝台大管的朋友們，大學五年加上研究所的兩年，美好的樂音永遠伴隨在身旁。感謝小營。感謝 TASSEL 實驗室的夥伴們，在 TASSEL 的訓練讓我終究能夠完成這份研究，各種實驗的腦力激盪也讓我十分享受。特別感謝王道一老師，老師對於研究以及學生投注的熱情與精力，總是令我非常尊敬。謝謝老師願意來擔任口試委員。謝謝江淳芳老師的各種救援，實驗過程中給老師添了許多煩擾。也是跟老師一起，才學到了一些做實證研究的方法。I also would like to thank Professor Suntak Kim and Professor Semin Kim. I have learned very much working with you. 最後，特別感謝我們的老大林明仁老師。每次咪挺，老大總是拖著疲憊的身軀，卻仍舊能夠用神妙的想像力，說出一個又一個動聽的故事。即使平時事務繁多，老大也還是費盡心神，帶領我走過這一段路。謝謝老師。

縱使道阻且長，在同伴與老師們的陪伴與引領中，不知不覺，穿過了蜿蜒的幽谷，眼前竟顯現了寬闊的風景：那是一個完全不同的世界景象。那麼，再繼續往上走的話，還會有什麼東西呢？雖然山頂依舊遙遠，卻不禁令人心生期待。

感謝這個崎嶇、困難，卻終究美好的世界。

- 2016.8.18，於經濟六四三

中文摘要

本研究以實驗方法檢驗有政黨傾向的新聞文章是否能影響選民的政治偏好與決策。在 2016 台灣總統選舉前一個半月，我們隨機分派受試者閱讀支持不同政黨的新聞文章，並以問卷詢問其投票選擇以及對政黨或候選人的偏好。我們發現，對於傳統政黨，實驗組的文章能夠增加受試者投票給對應政黨的機率以及對相應政黨的支持度。該效果僅出現於接受到與自身偏好相同的文章之受試者身上，換言之，對於傳統政黨，新聞文章產生的是確證效果而非勸說效果。最後，我們亦發現新興政黨與傳統政黨之間有競爭關係，並且透過新聞文章，新興政黨能夠吸引部分傳統政黨的支持者。

關鍵詞：隨機試驗；政治偏好；投票選擇；媒體效果；有政黨傾向的新聞

Abstract



This paper examines whether political news affects voters' political preference and decisions. Subjects were randomly assigned to read articles supporting different parties or candidates during the one and half month before the 2016 Taiwanese General election election, and they were surveyed about voting decisions and preference to candidates or parties. We found evidence that for the existing old parties, treatment articles directly increases the possibility of supporting and voting for the treated parties. The effect appears only on the group that receives the same treatment as their original preference, that is, the effect is confirmation but not persuasive. Finally, competition between new and traditional parties exists, and new party treatment indeed persuades subjects voters originally support the old parties to their camp.

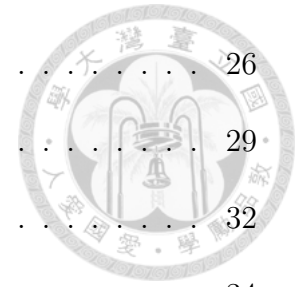
Keywords: Randomized controlled experiment; Political preference; Voting decision; Media effect; Bipartisan news

Contents



| | |
|---|-----------|
| 口試委員會審定書 | i |
| 謝辭 | ii |
| 中文摘要 | iii |
| 英文摘要 | iv |
| 1 Introduction | 2 |
| 1.1 Political Background in Taiwan | 4 |
| 1.2 Media and Politic Environment in Taiwan | 8 |
| 2 Experiment Procedure | 11 |
| 2.1 Experiment Schedule | 11 |
| 2.2 Treatment Articles | 14 |
| 3 Data Summary | 16 |
| 3.1 Subjects' Characteristics | 16 |
| 3.2 Session Outcome Summary | 17 |
| 4 Result | 21 |
| 4.1 Overview on Final Survey | 21 |
| 4.2 Voting Decisions and Political Preference | 21 |
| 4.3 Voting Change | 22 |
| 4.4 Dynamic Change | 26 |
| 5 Regression Analysis and Discussions | 26 |

| | | |
|----------|--|-----------|
| 5.1 | Treatment Effect | 26 |
| 5.2 | Voting Change on Confirmation or Persuasion Effect | 29 |
| 5.3 | Heterogeneous Effect on Initial Preference | 32 |
| 5.4 | The Third Party: New Emerging Party Effect | 34 |
| 5.5 | Other Discussions | 35 |
| 6 | Conclusion | 38 |
| | References | 41 |
| | Appendix A: Estimations with Other Specifications | 43 |
| | Appendix B: Documents, Surveys and Sample Questions | 47 |



List of Figures

| | | |
|---|---|----|
| 1 | Experiment Schedule | 10 |
| 2 | Voting Share in Each Session | 24 |
| 3 | Support Change for Candidates Parties and in Each Session (from Initial) | 28 |





List of Tables

| | | |
|----|--|----|
| 1 | The Parties and President Candidates in 2016 General Election | 8 |
| 2 | Number of Subjects in Each Treatment Group (by Block) | 12 |
| 3 | Treatment Articles | 13 |
| 4 | News Issues in Each Treatment | 16 |
| 5 | Number of subjects attended in each session. | 18 |
| 6 | Summary Statistic: Randomization | 19 |
| 7 | Sessions Summaries | 20 |
| 8 | Correct Answers | 20 |
| 9 | Summary Statistic: Final Survey | 21 |
| 10 | Initial and Final Voting Decision: President | 23 |
| 11 | Final Voting Decision: Party | 23 |
| 12 | Scaled Support (0-10 points) for Candidates and Parties | 25 |
| 13 | Vote Change | 27 |
| 14 | Treatment Effect: President Vote Share (OLS) | 30 |
| 15 | Treatment Effect: Party Vote Share (OLS) | 31 |
| 16 | Confirmation or Persuasion Effect | 32 |
| 17 | Confirmation or Persuasion Effect: Divided By Initial Decision | 33 |
| 18 | Third Party Effect | 36 |
| A1 | Treatment Effect: Scaled Support (OLS) | 43 |
| A2 | President Vote: Interaction with Initial Voting | 44 |
| A3 | Party Vote: Interaction with Initial Voting for DPP, GSD and NPP | 45 |
| A4 | Party Vote: Interaction with Initial Voting for KMT, GSD and NPP | 46 |



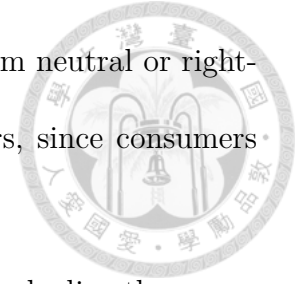
1 Introduction

Media has been playing an important role in political economy. For citizens in a democratic society, information provided by mass media makes the inside knowledge about policies and politicians more accessible, and, therefore, helps citizens make political decisions. It implies that media can be used as a tool to affect, or even formulate people's belief in public affairs.

The effect of news media can be generated from two sides. The news media companies, for various reasons such as ideology or profitability, would choose their own situation to stand in the political spectrum. The consumers would also choose the news sources by their preference in quality or ideology. The interaction between supply side and demand side of news media makes the effect of media consuming complicated. Gentzkow and Shapiro (2010) suggested a model measuring the effect of media slant. They found the media companies respond strongly to consumers, who are more likely to accept like-minded information, but seldom slant for the company owners.


Several empirical studies investigated the influence of media on people's political preference and behavior. DellaVigna and Kaplan (2007) investigated the effect of the entry of Fox news and find strong positive effect on the vote share in 1996 and 2000 President election. Under their estimation, 3 to 28 percent of the viewers of Fox news were persuaded to vote for Republicans. They also suggested the temporal effect on rational and irrational media consumers respectively. Chiang and Knight (2011) developed a model about endorsement and credibility, and they suggested that the consumers will rationally adjust the endorsement with credibility. They

found, therefore, the endorsement for Democratic candidates from neutral or right-wing newspapers are more influential than left-wing newspapers, since consumers have accounted the possible bias from left-wing newspapers.



The experiment from Gerber et al. (2009) is the first research directly examines the casual effect of media exposure. They conducted a field experiment with 2005 Virginia gubernatorial election. They randomly assigned subjects the free subscription of different news journals, and found that both pro-Democrats or pro-Republicans journals increased support for Democratic candidate, which implies the effect from media exposure could be more decisive than from media slant. This is also the first experiment about the effect on voting behavior from the random media assignment to our knowledge. In their design, they did not trace whether the households read treatment journals, therefore we can interpret the result as intention-to-treat (ITT). There are still several experimental research about media effect in political context (Epstein and Robertson (2015), Panagopoulos and Green (2008), Gerber et al. (2003)).

We conducted an experiment to carefully examine the effect of biased partisan news articles on the voters' political preference. During one months before the 2016 Taiwan General Election, we recruited 224 subjects and randomly assigned them to read several real news articles about different parties in Taiwan. After the election, we gathered the subjects again and surveyed their voting decision. To ensure the intensity of treatments, we asked subjects to complete reading comprehension tasks and paid subjects according to their performance. This gave the incentive for the subjects to read the articles carefully, which excludes the possible endogenous variation in the strength of treatments.



In our design, we includes not only the traditional parties, but also the new emerging parties in Taiwan. To our knowledge, it is the first experiment including new parties. We also includes treatment articles about several important issues comprehensively in this election, and the issues are well controlled in each treatment group.

With this experiment design, we can estimate directly the media effect. Moreover, by inquiring the subjects' original preference, we can further investigate whether the slanted information will be more effective on the subjects whose prior beliefs are consistent with the slanted information (referred as confirmation effects in this study), or on subjects whose prior beliefs are inconsistent with slanted information (referred as persuasion effects in this study). Finally, we have traced the change in voters' decision and preference during the experiment, so we can perform dynamic analysis about the treatment effect.

In Section 1.1, we will introduce the background in this election and the political environment in Taiwan. In Section 1.2, we will introduce the media market in Taiwan. In Section 2 we will introduce the experiment design. In Section 3 we will describe some feature about the subjects. In Section 4 we will show the outcome result of the experiment. In Section 5 we will show the regression result. Section 6 will be the conclusion.

1.1 Political Background in Taiwan

Parties in Taiwan

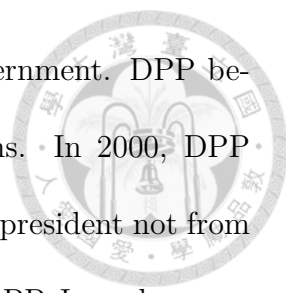
There are two traditional major political parties in Taiwan: KuoMingTang (KMT) and Democratic Progressing Party (DPP). KMT has been the most pow-

erful party in Taiwan during the past decades, after they retreated to Taiwan in 1949. The former presidents Chiang, senior and junior, limited people's right to freely organize political parties. Until the Martial Law was removed in 1987, KMT had been the only largest party in Taiwan.

After 1990s, more and more political parties emerged. KMT kept its incumbency until 2000, when Shui-Bian Chen from DPP was elected as the president of Taiwan. Nevertheless, KMT was still the majority party in congress during Chen and DPP's incumbency. In 2008, Ying-jeou Ma won the presidency election and replaced Chen as the new president. During his career, KMT made closer connection with China. For example, after Ma become president in 2008, several trade agreements were under negotiating aggressively with China. There were also more incentives given for investing or cooperating with China. Some of these policies were controversial.

Moreover, Ma was losing his support from 2009 because of the declination in economy and the inclination to China. In March of 2014, a protest against KMT government was prompted for the abrupt legalization of the service trade agreement with China. KMT government was accused, in the agreement, for benefiting China by yielding some advantages of Taiwan. Some students occupied the Legislative Yuan, the congress, for a month to stop the legislation process of the agreement. This social movement, sometimes called "318 Movement" or "Sunflower Movement", was seen as the response to the dissatisfaction to KMT government, and incorporated the power for opposite parties, not only DPP, but also new emerging parties. As a consequence, KMT lost in most districts in the mayoral election in November of 2014.

Staring up from 1980s, DPP began as an "outside-the-KMT" party against the

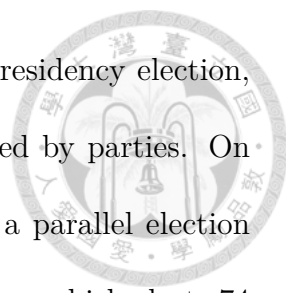


one-party authoritarian rule of president Chiang and KMT government. DPP became a formal party from 1986 and start to evolve in elections. In 2000, DPP won the presidency election and Chen Shui-bian became the first president not from KMT, until 2008 Ma won the election against Frank Hsieh from DPP. In early years, DPP was relatively (compared to KMT) away from China. In 318 Movement, DPP was more friendly to the participants of the movement; some DPP members even participated the movement. In the mayoral election after the Movement, DPP won in most of counties, and came to a leading position over KMT.

During 318 Movement, some of scholars evolving in the movement became new stars in Taiwan politics. They formed several new parties, and claimed to be aside from the two traditional parties, KMT and DPP. These new parties rose after 2014 are called the “third parties”. One of the most famous third parties is New Power Party (NPP). Some deputy leaders of NPP are people who occupied the Legislative Yuan in 318 Movement. NPP holds a clear situation against the pressure from China, and they also raised some discussions about congress reformation during the election. The another famous parties are Green Party and Social Democratic Party. The former is an older party focuses on environment issues, and Social Democratic Party is founded by a professor of NTU from the department of sociology. They formed a union (GSD) in the 2016 election. The two parties focus more on social fairness issues, and they are also welcomed among young students..

2016 Taiwan General Election

The Taiwan General Election in 2016 was held on January 16th. In this election, there were two sections: presidency and legislative elections. The two elections were independent to each other. The presidency election in Taiwan is a direct election,



and the election uses first-past-the-post voting system. In the presidency election, a running mate of president and vice president can be nominated by parties. On the other hand, the legislative election elects 113 legislators by a parallel election with three parts. The first part is from geographical constituencies, which elects 74 legislators. In each district, there is only one candidate will be elected by first-past-the-post system. The second part is 6 seats for aboriginal constituencies, via single non-transferable vote. The last part is closed list proportional representation system (PR), which elects 34 legislators. Voters vote for parties, and the parties passed the threshold of 5% of vote share can be attributed the seats from the list they proposed before the election by the party vote share. Each non-aboriginal voters can cast two votes for constituency vote and PR vote independently.

KMT and DPP nominated their own president candidates. Eric Chu was the candidate from KMT, who was the mayor of New Taipei City and the chairperson of KMT. Ing-wen Tsai was the candidate from DPP, who has competed with Chu in the mayoral election in 2010 and lost. Tsai has also run for the 2012 presidency election and then lost to Ma. She quit the position of chairperson of DPP after the election and came back again in 2014. She was then nominated as president candidate without backlash in DPP.

There was still a third president candidate, James Soong. Soong was the former governor of Taiwanese Province from KMT. In 2004, he founded People First Party and became the vice-president candidate in the election 2004 with Lien from KMT. He also ran for the president election in 2008 and 2012. However, in 2016 election, he was thought to be very difficult to win the election.

The new parties, NPP and GSD, also nominated candidates in the legislative



Table 1: The Parties and President Candidates in 2016 General Election

| Parties | President and Vice President Candidates |
|---------|---|
| KMT | Eric Chu and Jennifer Wang |
| DPP | Ing-wen Tsai and Chien-jen Chen |
| GSD | (No Candidates) |
| NPP | (No Candidates) |
| PFP | James Soong and Hsin-ying Hsu |

election, and took part in PR election. Trying to crowd out the candidates from KMT, the most famous stars in these two parties ran for geographical constituencies election, but were excluded from candidate lists in PR vote. Yet the third parties did not nominate any president candidates.

1.2 Media and Politic Environment in Taiwan

In Taiwan there are several mainstream media companies. Each of them has its own political ideology inclination, though not directly revealed. Instead, they can raise editorials and issue critiques to attract the consumers have closer ideology.

United Daily and China Times are traditionally pro-KMT media. They usually defend for KMT and the current government before the election. China News Agency is the media agency of government, which, especially during the incumbent of KMT, is believed to advertise for KMT government.

Liberty Times is the newspaper pro-DPP, which has the largest amount of subscriptions of paper-printed newspaper in Taiwan. Apple Daily is issued by a large media company from HongKong, which is famous for its vivid graphs and dramatic news. For the political news, Apple Daily usually chooses the most popular viewpoints, therefore it leans, in 2016 election, against KMT.

There are also several Internet media started out after 2012. They are mainly

spread via the Internet or SMS. Storm Media, Nownews and Initium Media are famous Internet news sources. Internet news articles are easy to spread among young people, hence the Internet media also played an important role in 318 Movement and political field in recent years. Since the new parties cannot afford the cost of advertising on the traditional newspaper, the new parties spread their information mainly via the Internet media. In addition, there are also some news media sources for new parties after this election, *e.g.* Third Media.

The political ideology of different media companies can also be revealed by the news articles released by each newspaper. During the last month before the election, there are fewer news issues against KMT on United Daily and China Times, and the editorials are clearly stand for KMT (or against DPP). Nevertheless, Liberty Times does not totally exclude positive articles for KMT, but the editorials on Liberty Times are still for DPP. Editorials on Apple Daily stand on vague situation. They seem more criticizing about specific news event, but not for some parties or candidates.

We provide an example here as a reference to this pattern of biased media ideology. On Dec. 20th in 2015, the news articles attacking KMT' s vice president candidate Jennifer Wang on house arbitraging issue were less in United Daily than in Liberty Times. On the other hand, United Daily put a full page on presidential debate next week, while Liberty Time mentioned nothing about the debate – it is believed that Tsai is not good at rhetoric speaking, and Chu wanted to impress the voters by the debate.

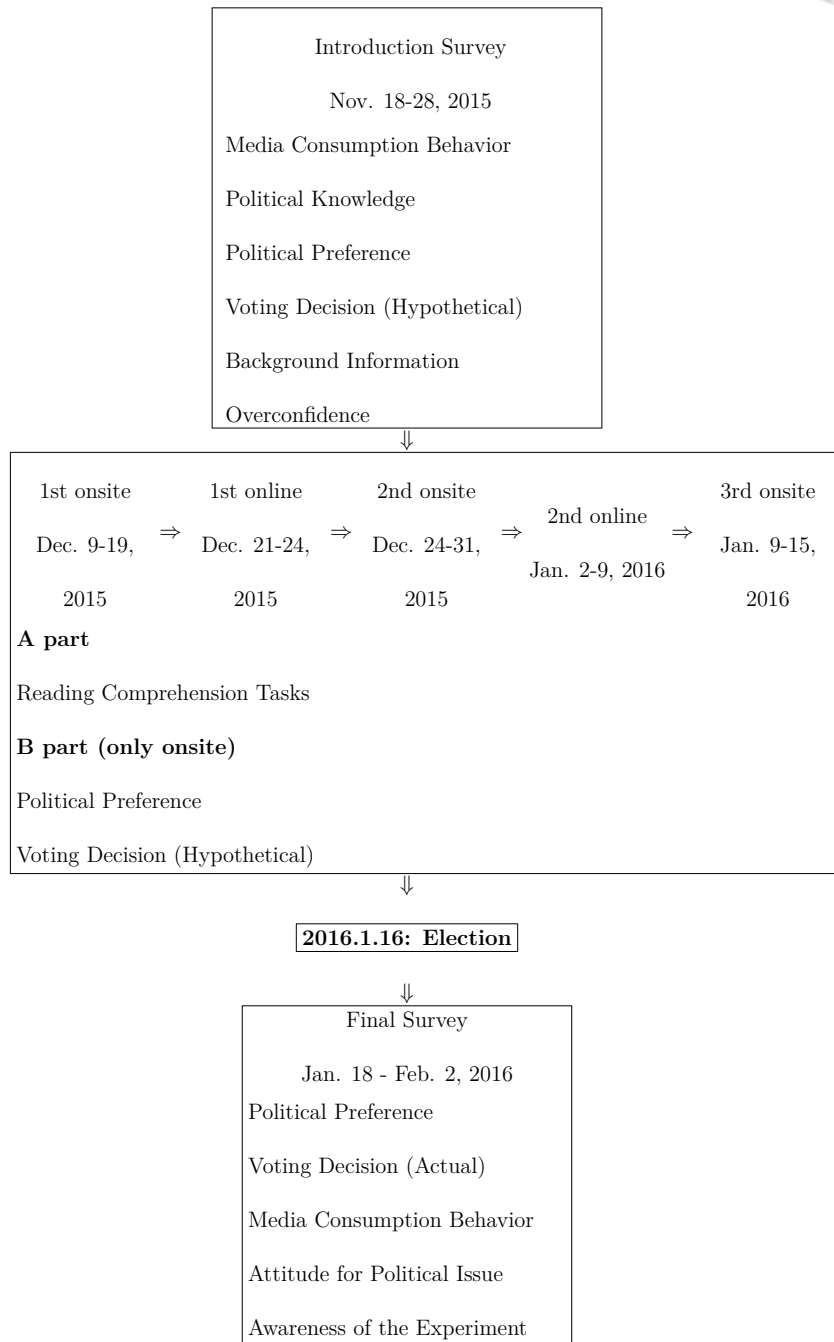


Figure 1: Experiment Schedule

2 Experiment Procedure



2.1 Experiment Schedule

We recruited subjects to National Taiwan University (NTU) from the Internet in the late November. The subjects were introduced the experiment in the introductory meeting from Nov. 18th to 28th in 2015, and we performed a survey to collect their basic information right after the introduction. The survey included questions about subjects' political preference, background information, media consumption behavior, and political knowledge. There were also questions measuring how strong the confidence the subjects held on their own belief.¹

There are three types of questions surveying political preference in the introductory survey. The first are the hypothetical voting decision questions. The hypothetical questions included two sections: president and party (PR) votes, both permitted the subjects to vote for only one pair of candidates or one party. The other two are support evaluation questions for candidates or parties. *Scaled support* questions asked the subjects to evaluate their degree of support for each party or candidate with scale 0-10. *Relative support* questions asked subjects to allocate 10 points to the candidate or party list we give. The points each subject gives to the candidates in each list should be added up to 10 points. By relative support questions, we can measure the subjects' relative preference among all candidates in the list since the sum of points is limited.

After the introductory survey, we randomly assigned the subjects who reported

¹For example, there is a question asking “How high is the Snow Mountain (the second highest mountain in Taiwan)?” and the second question asking “By how much percent do you believe your answer is correct?”.

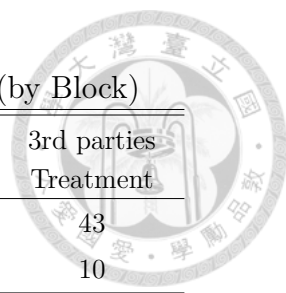


Table 2: Number of Subjects in Each Treatment Group (by Block)

| | Control Group | KMT Treatment | DPP Treatment | 3rd parties Treatment |
|------------------|------------------|------------------|------------------|--------------------------|
| # from KMT Block | 44 | 42 | 44 | 43 |
| # from DPP Block | 9 | 10 | 10 | 10 |
| # of subjects | 53 | 52 | 54 | 53 |

that they would participate the experiment into four groups. We further split the subjects into KMT or DPP blocks by their hypothetical voting decision in the introductory survey for balancing (there were not many people revealing that they supported KMT initially). If a subject voted for “pan-KMT parties”, which include KMT, PFP, and New Party, we classified the subject into KMT block. Otherwise, the subjects will be classified into DPP block. We randomized the subjects within each block. Table 2 shows the distribution of the subjects.

Each group would read a set of selected news articles. During the month before the election, subjects were asked to come to NTU and finish the article reading tasks. There were three on-site sessions and two online sessions between on-site sessions. The articles would be sent via e-mail two days before the subjects come to the on-site sessions, and we also gave them article copies when they came to the experiment room. After they read the articles, they would be given reading comprehension tasks about the articles they had just read. In each on-site session, there were 10 articles, and for every article there would be 4 questions. Three of them were multiple choice questions, and the subjects could complete the questions with their articles copies. After they finished the multiple choice questions, the subjects would be given 10 short answer questions. Each question was from one article they just read, and the subjects had to answer the questions without article copies. The questions were about some details or comprehension in the articles, so that the subjects cannot



Table 3: Treatment Articles

| | Control Group | KMT Treatment | DPP Treatment | 3rd parties Treatment |
|------------------|-------------------------------|--|------------------|--|
| Article contents | Sport, Science, Entertainment | Pro-KMT articles | Pro-DPP articles | Pro-third parties articles (GSD & NPP) |
| News Sources | Apple Daily Storm media | United Daily China Times Central News Agency | Liberty Times | Storm media Other Internet Sources |

answer correctly without reading the articles and answer with their own political knowledge. We also asked the subjects to evaluate how credible the article they are reading is with a scale 1-8. When they finished the comprehension task in each on-site session, they also had to complete a survey about their political preference similar to the questions in the introductory survey. There was no political preference survey in the online sessions. The payoff was given according to the fixed show-up fee (\$ 100 for the first and second on-site sessions, and \$150 for the third on-site sessions), and \$5 for each correct answer in the comprehension task.

After the election, we gathered the subjects again and performed a final survey. In the survey, we asked the subjects to report their real voting decision. If they did not turn out to vote, then we further asked them the same hypothetical question as asked before. We also asked the same preference questions in the survey. The fixed payment for the final survey is \$200. In addition, if they came to all sessions (3 on-site and 2 online), they would get \$200 of bonus; if they came to more than two on-site sessions, they would get \$100 of bonus. The subjects could finish the survey at NTU, or finish the survey online if they cannot come in person. More than 95% of the subjects finished the final survey within two weeks after the election. The last subject finished the survey on Feb. 2nd, which was 17 days after the election.



2.2 Treatment Articles

There are four sets of treatment articles: Pro-KMT (KMT Treatment), Pro-DPP (DPP Treatment), Pro-Third-Parties (3rd parties Treatment), and Control group. The four treatments are listed in the Table 3. We selected articles from different newspaper and internet media. Specifically, for pro-KMT treatment group, we selected news mainly from United Daily and China Times, and still some from China News Agency, which is believed to advertise for current KMT government. For pro-DPP treatment group, we selected news from Liberty Times. For pro-Third-Party treatment group, we selected news from various sources: online news media such as Storm Media, Nownews, and major newspapers excluding China Times and United Daily, since the information of third parties was mainly spread through the Internet or SMS. The articles in political treatment groups were articles either promoting its policy or candidates, or attacking the opponents. For Control group, we selected news articles mainly from Apple Daily, which is thought to be “neither for KMT nor DPP” . The articles in Control group contained articles about sports, science, or entertainment, but no political contents.

In each on-site session, we gave subjects ten articles. Nine of them were treatment articles. There was still one common article for all treatment groups in each on-site session. The common articles were chosen from BBC, and they were foreign political news without any content about election. From the common articles, we try to evaluate the fill over effect of the credibility on political articles. As for Internet sessions, we sent five articles to each subject, all of them are treatment articles. We had also one editorial picked from each paper in every session from the first Internet session.

We also controlled the strength of articles between treatment groups. We avoided the articles in which raised more than two main issues. Especially in KMT and DPP treatments, if there was an article criticizing their opponent in a treatment group, an opposite criticizing article would also be chosen in the other treatment group. The length of articles were also briefly balanced in each group.

We also controlled the time period collecting news articles. Specifically, in the first session, we selected only articles during the month before the first day of the session. For the following sessions the time period was shortened to simulate the real news consumption behavior and information updating situation. In each session, the time period for news-choosing would be less than two weeks, and most of articles were collected during the week just before the session.

During the campaign, politicians or parties raised some policy issues or made some negative attacks on the opposite candidates. In order to control unexpected effects from different issues, we picked articles symmetrically according to the most popular and important issues in this election. Table 4 lists the issues and the number of articles in each treatment group. The issues were chosen either from the political issues raised by more than two candidates or parties, or the huge news events that were mentioned by most of the key papers, or on the top page of some newspaper. The issues included policies (*e.g.* social welfare, public housing, labor, education) and candidates' personal issue (*e.g.* military house issue of Chu's vice president Wang, the president debates). For KMT and DPP treatment groups, articles were chosen symmetrically. We also chose attacking/promoting articles for both treatments.

In the 3rd Parties treatment, we included articles about only two parties: Green



Table 4: News Issues in Each Treatment

| News Issues | KMT | DPP | 3rd |
|----------------------------------|-----|-----|-----|
| China Related Economic Issue | 6 | 6 | 4 |
| Congress Reformation | 4 | 4 | 3 |
| Labor | 4 | 4 | 5 |
| Energy and Environment | 1 | 1 | 2 |
| Education | 1 | 1 | 1 |
| Social Welfare and Equity Issues | 3 | 3 | 1 |
| Presidential Debates | 6 | 6 | 0 |
| Positive News or Introduction | 3 | 3 | 14 |
| Negative News Issues | 5 | 5 | 3 |
| Editorial | 4 | 4 | 4 |

and Social Democratic Party (GSD) and New Power Party (NPP). The articles in 3rd Parties Treatment are also chosen with the symmetric rule on issue. However, some issues that KMT and DPP frequently debated against each other were not the issue that the third parties put much effort on (*e.g.* Cross-strait issues), so the articles about these issues would be substituted by other articles promoting third parties. In the each session, the articles were evenly allocated to the two parties except the second on-site session, in which 8 out of 9 articles are about GSD.

3 Data Summary

3.1 Subjects' Characteristics

We performed an introductory survey on 224 subjects, and 212 of them revealed that they would participate the experiment. The overall attrition rate is low. Tables 5A shows the number of subjects in each session, and Table 5B shows the average number of sessions subjects attended by each treatment group. Among the 212 subjects, 195 of them attended at least one on-site session, and the subjects that attended all sessions is more than 80% in each treatment group. Table ?? shows the

number of sessions subjects who finished the final survey comes. In each treatment group, more than 80% of subjects attended all sessions.

In Table 6, we show the subsample distribution by groups. 85.85% of the subjects are college students, and 63.68% of all subjects came from NTU. Since the legitimate voting age in Taiwan is 20, we excluded the subjects who were younger than 20 when recruiting subjects. The mean age of all subjects is 23.45 years old. 76.42% of them are less than 25 years old. Among all subjects, 53.77% of them had voted before. If we restrict to the subjects had voting right in the last election (*i.e.* more than 20 years old in Nov. 2014), the proportion of voted subjects will be 74.51%. We also survey the home town of the subjects because voters have to cast the vote in their home town. 53.30% of the subjects were from Taipei city and New Taipei city (former Taipei county). Although the sample was quite biased comparing to the population distribution in Taiwan, the sample characteristics are statistically indifferent among all treatment groups.

3.2 Session Outcome Summary

Table 7 shows some basic statistic about the experiment sessions. In the on-site sessions, there were around 180-190 subjects. Most of the subjects could answer more than 80% of the quiz questions correctly. In general, the subjects in control group could get slightly higher score than other groups, but the marginal difference is small. We can say that some unexpected effect from the difference in comprehension tasks is negligible in each group. Table 8 shows the mean of correct answers for every group in each session.



Table 5: Number of subjects attended in each session.

| | Control | KMT Treatment | DPP Treatment | 3rd Treatment | Total | <i>p</i> -value |
|--|---------|------------------|------------------|------------------|---------|-----------------|
| Penal A: Frequency and proportion of attendance | | | | | | |
| on-site 1 | 50 | 47 | 49 | 44 | 190 | 0.244 |
| | 100.00% | 97.92% | 98.00% | 93.62% | 97.44% | |
| Internet 1 | 49 | 45 | 48 | 44 | 186 | 0.695 |
| | 98.00% | 93.75% | 96.00% | 93.62% | 95.38% | |
| on-site 2 | 49 | 45 | 50 | 43 | 187 | 0.134 |
| | 98.00% | 93.75% | 100.00% | 91.49% | 95.90% | |
| Internet 2 | 47 | 46 | 46 | 40 | 179 | 0.245 |
| | 94.00% | 95.83% | 92.00% | 85.11% | 91.79% | |
| on-site 3 | 48 | 45 | 45 | 44 | 182 | 0.686 |
| | 96.00% | 93.75% | 90.00% | 93.62% | 93.33% | |
| Attended At Least Once | 50 | 48 | 50 | 47 | 195 | 0.752 |
| | 94.34% | 92.31% | 92.59% | 88.68% | 91.98% | |
| Attended All | 45 | 41 | 42 | 38 | 166 | 0.644 |
| | 90.00% | 85.42% | 84.00% | 80.85% | 85.13% | |
| Penal B: Average attendance | | | | | | |
| Average (All) | 4.86 | 4.75 | 4.76 | 4.65 | 4.76 | 0.538 |
| | (0.452) | (0.668) | (0.687) | (0.900) | (0.689) | |
| Average (on-site) | 2.94 | 2.85 | 2.88 | 2.85 | 2.88 | 0.625 |
| | (0.240) | (0.412) | (0.385) | (0.470) | (0.383) | |
| Average (Internet) | 1.92 | 1.90 | 1.88 | 1.80 | 2.88 | 0.625 |
| | (0.274) | (0.371) | (0.385) | (0.500) | (0.382) | |

Note: The proportion calculated in this table excluded the subjects who never came to any session. In panel A, the first row for each session is the frequency of the attendance, and the second row is the proportion in each group. In panel B, we show the average frequency that the subjects attended. The standard deviation of frequency in each cell is shown in the parenthesis. The *p*-values are evaluated by the *F*-test with the null hypothesis that the marginal effect of each treatment is equal.



Table 6: Summary Statistic: Randomization

| | Control | KMT Treatment | DPP Treatment | 3rd Treatment | Total | <i>p</i> -value |
|---------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-----------------|
| Male | 39.62% (0.93%) [49.38%] | 44.23% (0.96%) [50.15%] | 53.70% (0.93%) [50.33%] | 41.51% (0.94%) [49.75%] | 44.81% (0.24%) [49.85%] | 0.467 |
| Student | 88.68% (0.60%) [31.99%] | 90.38% (0.57%) [29.77%] | 81.48% (0.73%) [39.21%] | 83.02% (0.72%) [37.91%] | 85.85% (0.16%) [34.94%] | 0.489 |
| NTU | 58.49% (0.94%) [49.75%] | 63.46% (0.94%) [48.62%] | 68.52% (0.87%) [46.88%] | 64.15% (0.91%) [48.41%] | 63.68% (0.23%) [48.21%] | 0.760 |
| Age | 22.45 (0.06) [3.05] | 23.33 (0.11) [5.91] | 23.57 (0.10) [5.27] | 24.43 (0.10) [5.37] | 23.45 (0.02) [5.03] | 0.244 |
| >25 yo | 22.64% (0.80%) [42.25%] | 19.23% (0.77%) [39.80%] | 24.07% (0.80%) [43.15%] | 28.30% (0.86%) [45.48%] | 23.58% (0.20%) [42.55%] | 0.745 |
| <21 yo | 33.96% (0.90%) [47.81%] | 28.85% (0.88%) [45.75%] | 31.48% (0.87%) [46.88%] | 16.98% (0.72%) [37.91%] | 27.83% (0.21%) [44.92%] | 0.214 |
| From Taipei | 54.72% (0.95%) [50.25%] | 42.31% (0.96%) [49.89%] | 59.26% (0.92%) [49.60%] | 56.60% (0.94%) [50.04%] | 53.30% (0.24%) [50.01%] | 0.312 |
| Voted Before | 54.72% (0.95%) [50.25%] | 46.15% (0.97%) [50.34%] | 51.85% (0.93%) [50.43%] | 62.26% (0.92%) [48.94%] | 53.77% (0.24%) [49.98%] | 0.415 |
| # of Subjects | 53 | 52 | 54 | 53 | 212 | |

Notes: The sample pool in this table includes all 212 subjects stayed in the experiment after the introductory meeting. The numbers reported in parentheses are standard errors, while numbers reported in brackets are standard deviations. The *p*-values are evaluated with Pearson's Chi-squared test of independence between treatments, except for *p*-value of Age, which is evaluated by *F*-test under the joint null hypothesis that the mean among all groups are same.

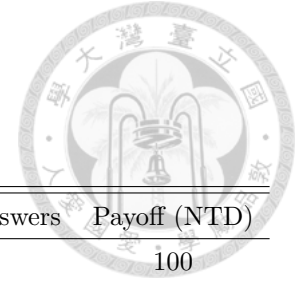


Table 7: Sessions Summaries

| | Articles | Questions | Subjects | Show up Fee | Correct Answers | Payoff (NTD) |
|------------|----------|-----------|-----------|-------------|-----------------|--------------|
| Intro | – | | 224 | 100 | | 100 |
| Session 1 | 10 | 40 | 191 | 100 | 33.84 | 269.20 |
| Internet 1 | 5 | 10 | 186 | – | 8.77 | 43.85 |
| Session 2 | 10 | 40 | 187 | 100 | 34.63 | 273.15 |
| Internet 2 | 5 | 10 | 179 | – | 8.74 | 43.70 |
| Session 3 | 10 | 40 | 182 | 150 | 34.71 | 323.55 |
| Final | – | | 191 | 200 | | 384.29 |
| Total | 40 | 140 | 164 (All) | | 115.13 | 1318.28 |

Note: The average number of correct answers and payoff in the last row is calculated within the subjects attended *all* sessions.

Table 8: Correct Answers

| | Control | KMT Treatment | DPP Treatment | 3rd Treatment | Total |
|--------------------|---------|------------------|------------------|------------------|--------|
| On-site Session 1 | 35.58 | 33.06 | 33.73 | 32.73 | 33.84 |
| | 88.95% | 82.66% | 84.34% | 81.82% | 84.55% |
| | (2.94) | (2.60) | (2.33) | (3.29) | (2.99) |
| Internet Session 1 | 8.98 | 8.57 | 9.08 | 8.42 | 8.77 |
| | 91.63% | 89.56% | 92.71% | 86.14% | 90.11% |
| | (1.49) | (2.14) | (1.81) | (1.82) | (1.83) |
| On-site Session 2 | 36.02 | 33.80 | 35.32 | 33.09 | 34.63 |
| | 90.05% | 84.50% | 88.30% | 82.73% | 86.56% |
| | (2.38) | (2.91) | (2.23) | (3.64) | (3.02) |
| Internet Session 2 | 9.54 | 9.09 | 8.08 | 8.20 | 8.74 |
| | 97.45% | 92.82% | 84.35% | 90.25% | 91.28% |
| | (1.52) | (1.63) | (2.14) | (2.87) | (2.16) |
| On-site Session 3 | 35.98 | 34.67 | 35.76 | 32.30 | 34.71 |
| | 89.94% | 86.67% | 89.39% | 80.74% | 86.77% |
| | (2.55) | (3.43) | (2.56) | (3.25) | (3.28) |

Note: The first row shows the average number of correct answers, and the second row shows the percentage of correct answers. The standard deviation of number of correct answers in each cell is shown in the parenthesis.

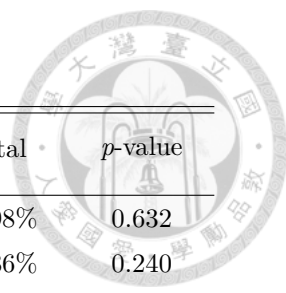


Table 9: Summary Statistic: Final Survey

| | Control | KMT Treatment | DPP Treatment | 3rd Treatment | Total | <i>p</i> -value |
|---------------|---------|------------------|------------------|------------------|--------|-----------------|
| Male | 38.00% | 43.75% | 51.02% | 43.18% | 43.98% | 0.632 |
| Student | 90.00% | 91.67% | 81.63% | 79.55% | 85.86% | 0.240 |
| NTU | 58.00% | 66.67% | 69.39% | 61.36% | 63.87% | 0.642 |
| Age | 22.44 | 23.46 | 23.06 | 23.59 | 23.12 | 0.620 |
| >25 yo | 24.00% | 20.83% | 20.41% | 25.00% | 22.51% | 0.936 |
| <21 yo | 36.00% | 29.17% | 32.65% | 20.45% | 29.84% | 0.399 |
| Taipei | 54.00% | 43.75% | 59.18% | 56.82% | 53.40% | 0.446 |
| Turn Out | 88.00% | 89.58% | 93.88% | 93.18% | 91.10% | 0.698 |
| # of Subjects | 50 | 48 | 49 | 44 | 191 | |

Notes: The sample in this table includes all 191 subjects finished the final survey. The *p*-values are evaluated with Pearson’s Chi-squared test of independence between treatments, except for *p*-value of Age, which is evaluated by *F*-test under the joint null hypothesis that the mean among all groups are the same.

4 Result

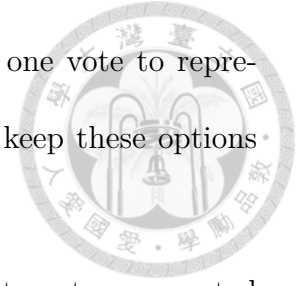
4.1 Overview on Final Survey

Table 9 shows several details in the final survey. There is no significant difference in the component of the subject pool from initial survey to final survey. In average, subjects in 3rd treatment group attending the final survey session is less than the other groups, but the difference is negligible. The overall turnout rate of our samples is 91.10%, which is much higher than the actual voting turnout rate 66.27% in Taiwanese Presidency election.

4.2 Voting Decisions and Political Preference

Table 10 and Table 11 shows the results of voting decision in the final survey. We included the subjects who did not actually turnout, but revealed their hypothetical

decision only.² Some few subjects cast invalid vote or skipped one vote to represent their dissatisfaction toward the candidates or parties. We keep these options explicitly in our survey.



For the president voting, there are more voters in KMT treatment group voted for KMT's candidate Chu and slightly more voters in DPP treatment voted for DPP's candidates Tsai. Comparing with control group, the vote share for Chu in KMT treatment is 12.83% higher, while the vote share for Tsai in DPP group is 9.67% higher. As for party vote, we see the similar treatment effect in KMT and DPP. Comparing with control group, the vote share for KMT in KMT treatment is 10.58% higher, while the vote share for Tsai in DPP group is 10.57% higher. The 3rd Parties treatment also attracted 32% more votes for GSD, compared to Control group. However, the vote share of NPP was 14.37% less than Control group in 3rd Parties treatment. Figure 2 shows the dynamic change throughout the experiment sessions.

The similar pattern shows in subjects' preferences for candidates and parties. Table 12 displays the support point evaluated independently with 0-10 scale. In general, the KMT treatment effect increased the support for Chu, and decreased the opponents, and so did the DPP treatment.

4.3 Voting Change

Table 13 shows the initial and final voting behavior of the voters. The rows are the subjects' choice in initial survey, and columns are the choice in the final survey.

There are two possible transitions of voters: stay or persuaded. In general,

²We surveyed the reason why subjects did not turnout. More than half reported they had some unavoidable reason for abstaining, such as work.

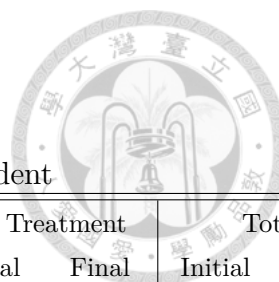


Table 10: Initial and Final Voting Decision: President

| | Control | | KMT Treatment | | DPP Treatment | | 3rd Treatment | | Total | |
|--------------------|---------|--------|---------------|--------|---------------|--------|---------------|--------|---------|--------|
| | Initial | Final | Initial | Final | Initial | Final | Initial | Final | Initial | Final |
| Li-luan Chu | 4 | 4 | 7 | 10 | 4 | 3 | 6 | 6 | 21 | 23 |
| | 7.55% | 8.00% | 13.46% | 20.83% | 7.41% | 6.12% | 11.32% | 13.95% | 9.91% | 12.11% |
| Ing-wen Tsai | 44 | 37 | 42 | 30 | 46 | 41 | 43 | 27 | 175 | 135 |
| | 83.02% | 74.00% | 80.77% | 62.50% | 85.19% | 83.67% | 81.13% | 62.79% | 82.55% | 71.05% |
| Chu-yu Soong | 4 | 7 | 3 | 7 | 4 | 3 | 3 | 6 | 14 | 23 |
| | 7.55% | 14.00% | 5.77% | 14.58% | 7.41% | 6.12% | 5.66% | 13.95% | 6.60% | 12.11% |
| Invalid or Skipped | 1 | 2 | 0 | 1 | 0 | 2 | 1 | 4 | 2 | 9 |
| | 1.89% | 4.00% | 0.00% | 0.00% | 0.00% | 2.04% | 1.89% | 9.30% | 0.94% | 4.74% |
| Total | 53 | 50 | 52 | 48 | 54 | 49 | 53 | 43 | 212 | 190 |

Notes: There is no significant difference in initial preference. Specifically, by Pearson's Chi-square test we did not find significant unbalanced sample distribution either in the president vote share or the binary choices whether the subjects voted for specific president candidates. The one subject that did not attend any experiment sessions is excluded. If a subject did not turnout, the subject's hypothetical decision will be counted in this table.

Table 11: Final Voting Decision: Party

| | Control | | KMT Treatment | | DPP Treatment | | 3rd Treatment | | Total | |
|--------|---------|--------|---------------|--------|---------------|--------|---------------|--------|---------|--------|
| | Initial | Final | Initial | Final | Initial | Final | Initial | Final | Initial | Final |
| KMT | 8 | 2 | 8 | 7 | 10 | 5 | 9 | 3 | 35 | 17 |
| | 15.09% | 4.00% | 15.38% | 14.58% | 18.52% | 10.20% | 16.98% | 6.98% | 16.51% | 8.95% |
| DPP | 19 | 9 | 11 | 7 | 18 | 14 | 13 | 5 | 61 | 35 |
| | 35.85% | 18.00% | 21.15% | 14.58% | 33.33% | 28.57% | 24.53% | 11.63% | 28.77% | 18.42% |
| NPP | 6 | 13 | 12 | 7 | 9 | 5 | 9 | 5 | 36 | 30 |
| | 11.32% | 26.00% | 23.08% | 14.58% | 16.67% | 10.20% | 16.98% | 11.63% | 16.98% | 15.79% |
| GSD | 14 | 14 | 11 | 20 | 10 | 17 | 11 | 26 | 46 | 77 |
| | 26.42% | 28.00% | 21.15% | 41.67% | 18.52% | 34.69% | 20.75% | 60.47% | 21.70% | 40.53% |
| others | 6 | 12 | 10 | 7 | 7 | 8 | 11 | 4 | 34 | 31 |
| | 11.32% | 24.00% | 19.23% | 14.58% | 12.96% | 16.33% | 20.75% | 9.30% | 16.04% | 16.32% |
| Total | 53 | 50 | 52 | 48 | 54 | 49 | 53 | 43 | 212 | 190 |

Notes: There is no significant difference in initial preference. Specifically, by Pearson's Chi-square test we did not find significant unbalanced sample distribution either in the party vote share or the binary choices whether the subjects voted for specific parties. The one subject that did not attend any experiment sessions is excluded. If a subject did not turnout, the subject's hypothetical decision will be counted in this table.

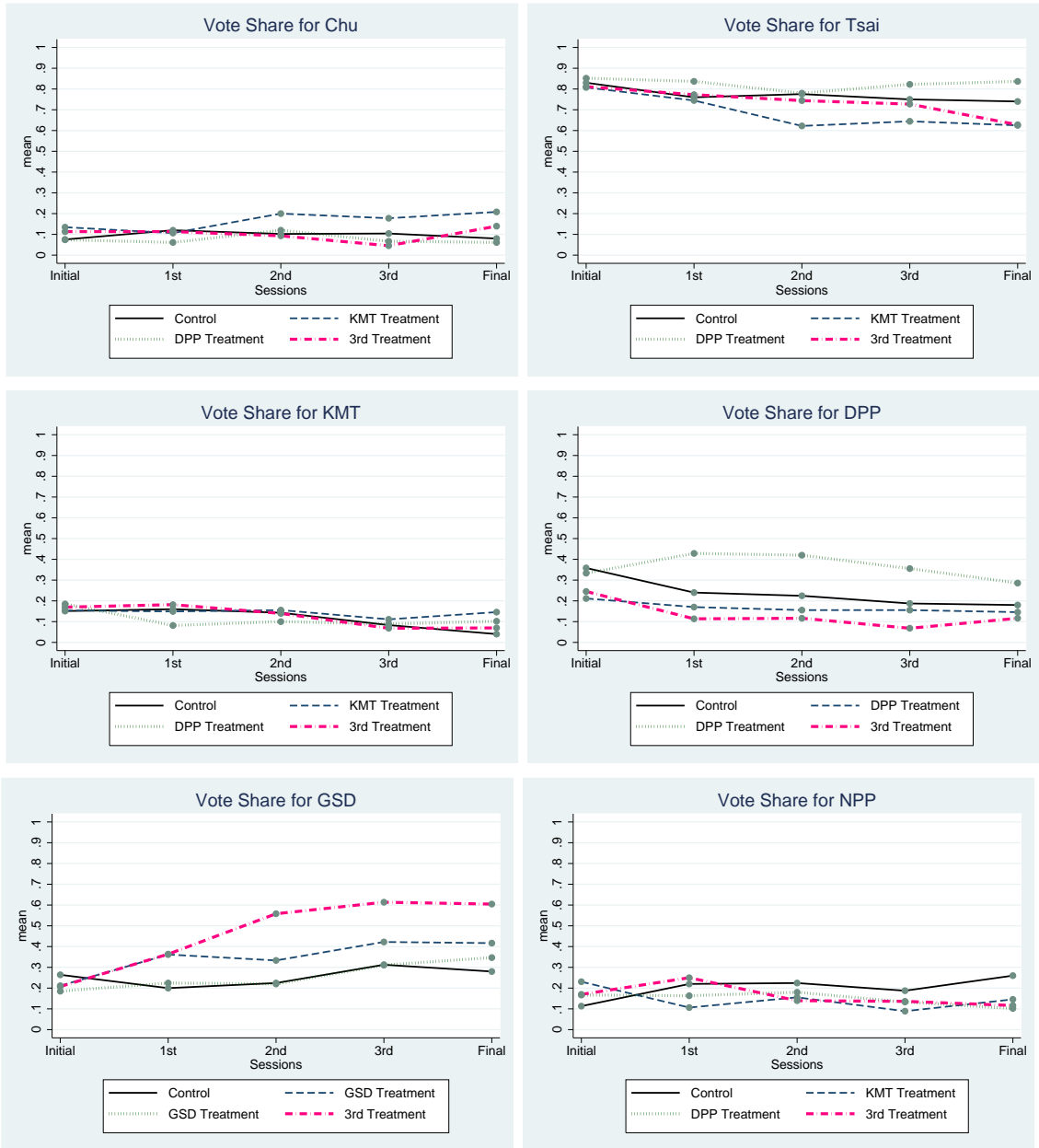


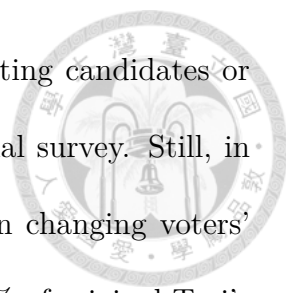
Figure 2: Voting Share in Each Session



Table 12: Scaled Support (0-10 points) for Candidates and Parties

| | | Control | KMT Treatment | DPP Treatment | 3rd Treatment | Total |
|------|---------|---------|------------------|------------------|------------------|--------|
| Chu | Initial | 2.42 | 2.33 | 2.39 | 2.57 | 2.42 |
| | | (2.49) | (2.67) | (2.55) | (2.49) | (2.53) |
| | Final | 2.28 | 2.56 | 1.47 | 2.18 | 2.12 |
| | | (2.22) | (2.43) | (1.92) | (2.16) | (2.21) |
| Tsai | Initial | 6.33 | 5.54 | 6.54 | 5.79 | 6.05 |
| | | (2.42) | (2.62) | (2.32) | (2.55) | (2.49) |
| | Final | 6.08 | 5.67 | 6.39 | 5.57 | 5.94 |
| | | (2.58) | (2.55) | (2.22) | (2.22) | (2.41) |
| KMT | Initial | 2.72 | 2.77 | 2.72 | 2.79 | 2.75 |
| | | (2.32) | (2.71) | (2.19) | (2.21) | (2.35) |
| | Final | 2.48 | 2.15 | 1.85 | 2.50 | 2.24 |
| | | (1.92) | (2.07) | (1.89) | (2.49) | (2.10) |
| DPP | Initial | 5.47 | 4.75 | 5.36 | 4.89 | 5.12 |
| | | (2.37) | (2.22) | (2.25) | (2.47) | (2.33) |
| | Final | 5.52 | 4.34 | 5.41 | 4.77 | 5.03 |
| | | (2.07) | (2.46) | (2.33) | (2.26) | (2.31) |
| GSD | Initial | 4.44 | 4.44 | 4.38 | 4.10 | 4.34 |
| | | (2.84) | (3.25) | (2.45) | (3.21) | (2.94) |
| | Final | 4.81 | 4.55 | 5.47 | 6.11 | 5.22 |
| | | (2.78) | (3.08) | (2.61) | (2.63) | (2.83) |
| NPP | Initial | 4.62 | 4.06 | 4.36 | 4.18 | 4.30 |
| | | (2.92) | (2.85) | (2.57) | (2.83) | (2.78) |
| | Final | 5.02 | 3.81 | 5.20 | 5.20 | 4.81 |
| | | (2.49) | (2.64) | (2.41) | (2.46) | (2.55) |

Note: The first row shows average points by group. The numbers with parenthesis in the second row are standard deviations.



if voters read the treatment articles near to their initial supporting candidates or parties, they would be more likely stay in their choice in the final survey. Still, in the president election, the treatment articles had some effect on changing voters' original voting behavior. Comparing to the control group, 10.53% of original Tsai's voters change to Chu after read KMT treatment articles. The most distinct effect is in the 3rd parties treatment on party vote. Near half of the subjects initially supporting other parties changed to GSD after treated by 3rd parties articles.

4.4 Dynamic Change

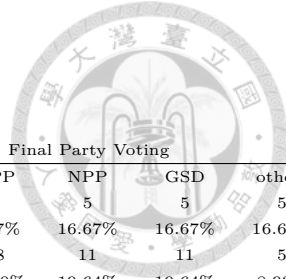
We traced the voting decisions and political preference in each on-site experiment session. From Figure 2 we can see the dynamic change in voters' decision. In general, the first two sessions contributed the most size of change among the experiment, then declined when the election was getting closer. Figure 3 depicts a more apparent trend of the difference of average support from the initial survey. There was the most intense change in the first two sessions.

5 Regression Analysis and Discussions

5.1 Treatment Effect

To analyse the treatment effect, we first directly estimate the effect on the probability voting for candidates or parties. Table 14 and Table 15 shows the OLS regression result. We estimate the binary choice whether a subject vote for a candidate or party on dummies of treatment groups, initial decision and demographic variables. For the vote share of KMT's president candidate Chu, KMT treatment increases votes while DPP treatment gives the opposite effect. The effect for Tsai

Table 13: Vote Change



| | | Final President Voting | | | | | Final Party Voting | | | | | | |
|-------------------------------|--------------------|------------------------|--------|---------|-----------------|-------|--------------------|--------|--------|---------|--------|--------|-----|
| | | Chu | Tsai | Soong | Invalid/Skipped | Total | KMT | DPP | NPP | GSD | others | Total | |
| All Subjects (Initial) | Chu | 15 | 3 | 1 | 1 | 20 | KMT | 13 | 2 | 5 | 5 | 5 | 30 |
| | | 75.00% | 15.00% | 5.00% | 5.00% | | | 43.33% | 6.67% | 16.67% | 16.67% | 16.67% | |
| | Tsai | 7 | 130 | 14 | 5 | 156 | DPP | 1 | 28 | 11 | 11 | 5 | 56 |
| | | 4.49% | 83.33% | 8.97% | 3.21% | | | 1.79% | 50.00% | 19.64% | 19.64% | 8.93% | |
| | Soong | 1 | 2 | 8 | 2 | 13 | NPP | 0 | 4 | 10 | 13 | 6 | 33 |
| | | 7.69% | 15.38% | 61.54% | 15.38% | | | 0.00% | 12.12% | 30.30% | 39.39% | 18.18% | |
| | Invalid or Skipped | 0 | 1 | 0 | 1 | 2 | GSD | 0 | 2 | 1 | 33 | 5 | 41 |
| | 0.00% | 50.00% | 0.00% | 50.00% | | | 0.00% | 4.88% | 2.44% | 80.49% | 12.20% | | |
| | Total | 23 | 136 | 23 | 9 | 191 | others | 3 | 0 | 3 | 15 | 10 | 31 |
| | | 12.04% | 71.20% | 12.04% | 4.71% | | | 9.68% | 0.00% | 9.68% | 48.39% | 32.26% | |
| | Total | | | | | | Total | 17 | 36 | 30 | 77 | 31 | 191 |
| | | | | | | | | 8.90% | 18.85% | 15.71% | 40.31% | 16.23% | |
| Control Group (Initial) | Chu | 1 | 1 | 1 | 0 | 3 | KMT | 0 | 0 | 2 | 2 | 3 | 7 |
| | | 33.33% | 33.33% | 33.33% | 0.00% | | | 0.00% | 0.00% | 28.57% | 28.57% | 42.86% | |
| | Tsai | 2 | 34 | 4 | 2 | 42 | DPP | 1 | 8 | 5 | 1 | 2 | 17 |
| | | 4.76% | 80.95% | 9.52% | 4.76% | | | 5.88% | 47.06% | 29.41% | 5.88% | 11.76% | |
| | Soong | 1 | 1 | 2 | 0 | 4 | NPP | 0 | 0 | 4 | 0 | 2 | 6 |
| | | 25.00% | 25.00% | 50.00% | 0.00% | | | 0.00% | 0.00% | 66.67% | 0.00% | 33.33% | |
| | Invalid or Skipped | 0 | 1 | 0 | 0 | 1 | GSD | 0 | 1 | 1 | 10 | 2 | 14 |
| | 0.00% | 100.00% | 0.00% | 0.00% | | | 0.00% | 7.14% | 7.14% | 71.43% | 14.29% | | |
| | Total | 4 | 37 | 7 | 2 | 50 | others | 1 | 0 | 1 | 1 | 3 | 6 |
| | | 8.00% | 74.00% | 14.00% | 4.00% | | | 16.67% | 0.00% | 16.67% | 16.67% | 50.00% | |
| | Total | | | | | | Total | 2 | 9 | 13 | 14 | 12 | 50 |
| | | | | | | | | 4.00% | 18.00% | 26.00% | 28.00% | 24.00% | |
| KMT Treatment (Initial) | Chu | 6 | 0 | 0 | 1 | 7 | KMT | 5 | 0 | 1 | 0 | 1 | 7 |
| | | 85.71% | 0.00% | 0.00% | 14.29% | | | 71.43% | 0.00% | 14.29% | 0.00% | 14.29% | |
| | Tsai | 4 | 30 | 4 | 0 | 38 | DPP | 0 | 5 | 3 | 1 | 1 | 10 |
| | | 10.53% | 78.95% | 10.53% | 0.00% | | | 0.00% | 50.00% | 30.00% | 10.00% | 10.00% | |
| | Soong | 0 | 0 | 3 | 0 | 3 | NPP | 0 | 2 | 2 | 5 | 2 | 11 |
| | | 0.00% | 0.00% | 100.00% | 0.00% | | | 0.00% | 18.18% | 18.18% | 45.45% | 18.18% | |
| | Invalid or Skipped | 0 | 0 | 0 | 0 | 0 | GSD | 0 | 0 | 0 | 10 | 0 | 10 |
| | 0.00% | 0.00% | 0.00% | 0.00% | | | 0.00% | 0.00% | 0.00% | 100.00% | 0.00% | | |
| | Total | 10 | 30 | 7 | 1 | 48 | others | 2 | 0 | 1 | 4 | 3 | 10 |
| | | 20.83% | 62.50% | 14.58% | 2.08% | | | 20.00% | 0.00% | 10.00% | 40.00% | 30.00% | |
| | Total | | | | | | Total | 7 | 7 | 7 | 20 | 7 | 48 |
| | | | | | | | | 14.58% | 14.58% | 14.58% | 41.67% | 14.58% | |
| DPP Treatment (Initial) | Chu | 3 | 1 | 0 | 0 | 4 | KMT | 5 | 1 | 1 | 1 | 0 | 8 |
| | | 75.00% | 25.00% | 0.00% | 0.00% | | | 62.50% | 12.50% | 12.50% | 12.50% | 0.00% | |
| | Tsai | 0 | 39 | 2 | 1 | 42 | DPP | 0 | 11 | 1 | 4 | 2 | 18 |
| | | 0.00% | 92.86% | 4.76% | 2.38% | | | 0.00% | 61.11% | 5.56% | 22.22% | 11.11% | |
| | Soong | 0 | 1 | 1 | 1 | 3 | NPP | 0 | 1 | 2 | 3 | 2 | 8 |
| | | 0.00% | 33.33% | 33.33% | 33.33% | | | 0.00% | 12.50% | 25.00% | 37.50% | 25.00% | |
| | Invalid or Skipped | 0 | 0 | 0 | 0 | 0 | GSD | 0 | 1 | 0 | 4 | 3 | 8 |
| | 0.00% | 0.00% | 0.00% | 0.00% | | | 0.00% | 12.50% | 0.00% | 50.00% | 37.50% | | |
| | Total | 3 | 41 | 3 | 2 | 49 | others | 0 | 0 | 1 | 5 | 1 | 7 |
| | | 6.12% | 83.67% | 6.12% | 4.08% | | | 0.00% | 0.00% | 14.29% | 71.43% | 14.29% | |
| | Total | | | | | | Total | 5 | 14 | 5 | 17 | 8 | 49 |
| | | | | | | | | 10.20% | 28.57% | 10.20% | 34.69% | 16.33% | |
| 3rd Treatment (Initial) | Chu | 5 | 1 | 0 | 0 | 6 | KMT | 3 | 1 | 1 | 2 | 1 | 8 |
| | | 83.33% | 16.67% | 0.00% | 0.00% | | | 37.50% | 12.50% | 12.50% | 25.00% | 12.50% | |
| | Tsai | 1 | 27 | 4 | 2 | 34 | DPP | 0 | 4 | 2 | 5 | 0 | 11 |
| | | 2.94% | 79.41% | 11.76% | 5.88% | | | 0.00% | 36.36% | 18.18% | 45.45% | 0.00% | |
| | Soong | 0 | 0 | 2 | 1 | 3 | NPP | 0 | 1 | 2 | 5 | 0 | 8 |
| | | 0.00% | 0.00% | 66.67% | 33.33% | | | 0.00% | 12.50% | 25.00% | 62.50% | 0.00% | |
| | Invalid or Skipped | 0 | 0 | 0 | 1 | 1 | GSD | 0 | 0 | 0 | 9 | 0 | 9 |
| | 0.00% | 0.00% | 0.00% | 100.00% | | | 0.00% | 0.00% | 0.00% | 100.00% | 0.00% | | |
| | Total | 6 | 28 | 6 | 4 | 44 | others | 0 | 0 | 0 | 5 | 3 | 8 |
| | | 13.64% | 63.64% | 13.64% | 9.09% | | | 0.00% | 0.00% | 0.00% | 62.50% | 37.50% | |
| | Total | | | | | | Total | 3 | 6 | 5 | 26 | 4 | 44 |
| | | | | | | | | 6.82% | 13.64% | 11.36% | 59.09% | 9.09% | |

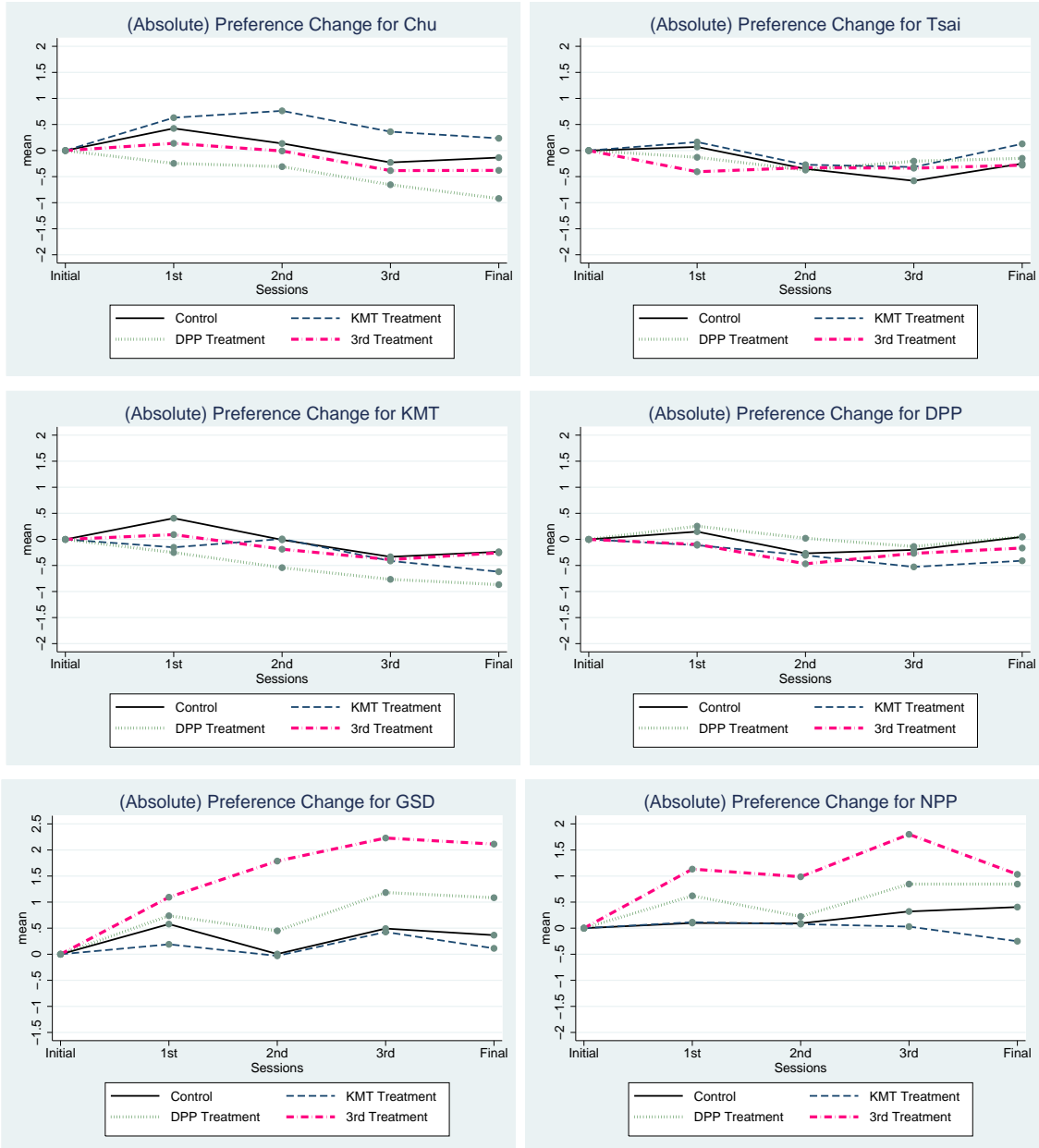


Figure 3: Support Change for Candidates Parties and in Each Session (from Initial)

is similar. DPP treatment increases the probability voting for Tsai and lowers the probability voting for Chu. Party vote for KMT also significantly increased after the voters read KMT treatment articles. Although the effect is not significant in party vote for DPP, there is still a positive marginal effect from DPP treatments. It is also worthy to note that for KMT and DPP, the opposite treatment articles do not cause a negative effect on their voting share, though the initial preferences are controlled.

The 3rd treatment contributes the effect of 31.8% on the vote share of GSD. However, the 3rd treatment does not have the same effect on the other new party NPP. Comparing to the control group, all treatments reduce the possibility voting for NPP.

We also analysed with the preference evaluation in Appendix.

5.2 Voting Change on Confirmation or Persuasion Effect

The partisan articles can have two different effects according to the voters' initial preference: confirmation effect or persuasion effect. If our treatment articles let people vote more on its own original supporting party, then we can say the articles confirm the voters' belief. If our treatment articles positively effect more on the voters originally opposite to the treatment, we can say the treatment articles persuade the voters to the other side.

Table 16 shows the estimations of the two effects. We classified the subjects into three groups: received the same treatment as their initial voting decisions, eg. KMT treatment for Chu's or KMT's (initial) voters and DPP treatment for Tsai's or DPP's voter, and received the different political treatment, and Control group (non-political content). In the president voting, evidence shows strong confirmation



Table 14: Treatment Effect: President Vote Share (OLS)

| VARIABLES | (1) Vote for Chu | (2) Vote for Tsai | (3) Vote for Soong |
|---------------|------------------------|-------------------------|--------------------------|
| KMT Treatment | 0.068 (0.064) | -0.070 (0.075) | -0.002 (0.064) |
| DPP Treatment | -0.034 (0.047) | 0.075 (0.069) | -0.059 (0.060) |
| 3rd Treatment | 0.014 (0.053) | -0.098 (0.086) | 0.014 (0.070) |
| Constant | -0.137 (0.241) | 0.652 (0.664) | 0.431 (0.421) |
| Observations | 190 | 190 | 190 |
| R-squared | 0.477 | 0.407 | 0.253 |
| KMT-DPP | 0.101 | -0.146 | 0.056 |
| DPP-3rd | -0.048 | 0.173 | -0.073 |
| KMT-3rd | 0.054 | 0.028 | -0.016 |

Note: The dependent variable is the binary variable indicating whether they vote for specific candidate or party. The regressions include all subjects attended final survey and at least one onsite session.

All specifications include the following control variables: gender, whether they are students or students from NTU, whether they are older than 25 years old, whether the income is higher than 40,000 NTD per month, whether they have voted before, the attendance in each experiment session, the date and the access (online or on-site) finishing final survey, and dummy indicators of subjects initial president voting decisions. Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1



Table 15: Treatment Effect: Party Vote Share (OLS)

| VARIABLES | (1) Vote for KMT | (2) Vote for DPP | (3) Vote for GSD or NPP | (4) Vote for GSD | (5) Vote for NPP |
|---------------|------------------------|------------------------|-------------------------------|------------------------|------------------------|
| KMT Treatment | 0.113* (0.061) | 0.041 (0.066) | -0.023 (0.099) | 0.099 (0.082) | -0.122 (0.080) |
| DPP Treatment | 0.056 (0.051) | 0.076 (0.074) | -0.055 (0.104) | 0.113 (0.092) | -0.168** (0.079) |
| 3rd Treatment | 0.007 (0.049) | -0.032 (0.073) | 0.155 (0.100) | 0.313*** (0.087) | -0.157* (0.081) |
| Constant | -0.104 (0.198) | -0.168 (0.421) | 0.336 (0.590) | 0.108 (0.561) | 0.229 (0.414) |
| Observations | 190 | 190 | 190 | 190 | 190 |
| R-squared | 0.351 | 0.321 | 0.234 | 0.376 | 0.199 |
| KMT-DPP | 0.057 | -0.035 | 0.031 | -0.015 | 0.046 |
| DPP-3rd | 0.049 | 0.108 | -0.210 | -0.199 | -0.010 |
| KMT-3rd | 0.106 | 0.073 | -0.178 | -0.214 | 0.035 |

Note: The dependent variable is the binary variable indicating whether they vote for specific candidate or party. The regressions include all subjects attended final survey and at least one onsite session.

All specifications include the following control variables: gender, whether they are students or students from NTU, whether they are older than 25 years old, whether the income is higher than 40,000 NTD per month, whether they have voted before, the attendance in each experiment session, the date and the access (online or on-site) finishing final survey, and dummy indicators of subjects initial party voting decisions. Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$



Table 16: Confirmation or Persuasion Effect

| VARIABLES | (1) Vote for Same President | (2a) Vote for Same Party | (2b) Vote for Same Party (3rd treatment excluded) |
|-------------------|--------------------------------|-----------------------------|---|
| Treated Same | 0.174** (0.076) | 0.183* (0.107) | 0.207* (0.124) |
| Treated Different | 0.008 (0.073) | 0.000 (0.086) | -0.008 (0.094) |
| Constant | 0.752 (0.474) | -0.253 (0.595) | 0.419 (0.570) |
| Observations | 188 | 190 | 147 |
| R-squared | 0.119 | 0.140 | 0.150 |

Note: The dependent variable is the binary variable indicating whether they vote for the same candidate or party in the initial survey. The independent variables are binary variable indicating whether the subject were treated the same or the different articles as their initial voting decision. The subjects in Control group will be classified as comparison group in the listed models. The regressions include all subjects attended final survey and at least one onsite session. All specifications include the following control variables: gender, whether they are students or students from NTU, whether they are older than 25 years old, whether the income is higher than 40,000 NTD per month, whether they have voted before, the attendance in each experiment session, and the date and the access (online or on-site) finishing final survey. Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

effect, but very little persuasion effect. In the party vote, we can see the similar pattern. Additionally, when we exclude 3rd Treatment group, the pattern will be more distinctive.

5.3 Heterogeneous Effect on Initial Preference

We further analyse the heterogeneous effect in terms of different supporting party. In Table 17, we can see the confirmation effect comes mainly from DPP treatment. On the other side, just as we have seen previously, both Chu's and Tsai's initial voters were not persuaded by opposite treatment articles. For party votes, we can see only strong confirmation effect in GSD's initial supporter.

We can also see the treatment effect on supporters of different candidates or



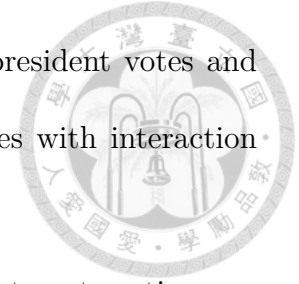
Table 17: Confirmation or Persuasion Effect: Divided By Initial Decision

| VARIABLES | (1) Vote for Same President | (2) Vote for Same President | (3) Vote for Same Party |
|---------------------------------------|-----------------------------------|-----------------------------------|-------------------------------|
| KMT Treatment*Vote for Chu (Initial) | 0.134 (0.204) | 0.149 (0.214) | |
| DPP Treatment*Vote for Tsai (Initial) | 0.166** (0.073) | 0.164** (0.074) | |
| KMT Treatment*Vote for Tsai (Initial) | | 0.013 (0.087) | |
| DPP Treatment*Vote for Chu (Initial) | | 0.060 (0.327) | |
| KMT*Vote for KMT (Initial) | | | 0.369 (0.233) |
| DPP*Vote for DPP (Initial) | | | 0.180 (0.153) |
| 3rd*Vote for GSD (Initial) | | | 0.213* (0.109) |
| 3rd*Vote for NPP (Initial) | | | -0.040 (0.216) |
| Other Political Treatments | 0.016 (0.074) | 0.016 (0.092) | 0.025 (0.089) |
| Constant | 0.087 (0.493) | 0.099 (0.512) | 0.082 (0.619) |
| Observations | 190 | 190 | 190 |
| R-squared | 0.178 | 0.178 | 0.246 |

Note: The dependent variable is the binary variable indicating whether they vote for the same candidate or party in the initial survey. As for independent variables, the dummy *KMT Treatment*Vote for Chu (Initial)*= 1 when the subject was assigned to KMT treatment and vote for Chu in the initial survey, and the dummy *Other Political Treatments*= 1 when the subject was assigned to different treatment group to the subject's initial voting decision. The subjects in Control group will be classified as comparison group in the listed models. The regressions include all subjects attended final survey and at least one onsite session.

All specifications include the following control variables: gender, whether they are students or students from NTU, whether they are older than 25 years old, whether the income is higher than 40,000 NTD per month, whether they have voted before, the attendance in each experiment session, the date and the access (online or on-site) finishing final survey, and initial voting decisions. Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

parties in final votes. Table A2 shows the OLS regression in president votes and Table A3 and Table A4 show the OLS regression in party votes with interaction terms. The tables are in the Appendix A.



If the voters initially voted for Chu, then no matter which treatment partisan articles they read, the treatments increase the probability voting for Chu and decrease the probability voting for Tsai. There is the similar pattern in Tsai's supporters. The treatment articles in this case have a priming effect on the supporters for Chu and Tsai. Articles with political contents can give information to the supporters in each camp. After receiving the information, they can always use them to strengthen their original belief.

The difference in the voting changes between president and party votes may reflect the alternatives in the election. For president election, the candidates were from well known traditional parties, and it is more difficult for the voters to make change on their initial belief from new information (of familiar parties) offered by treatment articles. Hence the confirmation effect is stronger. For party vote, however, since the third parties were new for the voters, it is more likely for voters change to new parties (instead of staying) when new information about third parties popping out, expect for the initial GSD voters. The GSD voters had already held knowledge about GSD *and* chose to vote for it. The additional information about third parties would only more likely to strengthen the belief.

5.4 The Third Party: New Emerging Party Effect

From the main result we can notice the tremendous increase in GSD's vote share. We will then analyse from where the new emerging parties can collect support. Table 18 shows the effect from the same set of treatment articles. For 3rd Treatment, it

attracted votes from DPP initial voters. On the other hand, DPP Treatment also had a negative effect on GSD's voting share for GSD's initial voters. This provides an evidence that there is competition between the emerging new parties and traditional parties. From the voting decision, we can see NPP also suffers from this competition, but the effect is relatively ambiguous.

However, GSD can relatively harder to attract KMT's supporters. There are two possible explanation for it. First, GSD and DPP are closer in terms of political preference. There is positive correlation between the Scale Support for GSD and DPP but negative for GSD and KMT. For the parties, it would be easier to compete with parties with closer opponents. Second, although both KMT and DPP were traditional parties, DPP was clearly winning then, and those who still supported KMT even when it is losing must hold strong belief toward KMT. Consequently, emerging parties would try to attract more from DPP but KMT, thus DPP would also try to defend.

5.5 Other Discussions

The Competition Between Third Parties

3rd Parties treatment has an asymmetric effect on the party vote of GSD and NPP. However, when we analyse the effect on preference, 3rd parties treatment still has weak positive effect on the support for NPP.³ It is because the new parties stand on close situation on political spectrum. Therefore, the 3rd parties treatment does not directly decrease NPP's support. The voters in 3rd parties treatment are actually choosing between the new raising parties.

³See Table A1 in Appendix A.

Table 18: Third Party Effect



| VARIABLES | (1a) Vote for GSD | (2a) Vote for NPP | (3a) Vote for DPP |
|--------------------------------------|-------------------------|-------------------------|-------------------------|
| 3rd Treatment*Vote for KMT (Initial) | 0.060 (0.163) | -0.038 (0.173) | 0.063 (0.153) |
| 3rd Treatment*Vote for DPP (Initial) | 0.435*** (0.162) | -0.027 (0.139) | -0.264 (0.187) |
| 3rd Treatment*Vote for GSD (Initial) | 0.241*** (0.092) | 0.007 (0.052) | -0.048 (0.051) |
| 3rd Treatment*Vote for NPP (Initial) | 0.248 (0.204) | -0.058 (0.185) | -0.055 (0.138) |
| Constant | 0.176 (0.529) | 0.004 (0.411) | 0.002 (0.390) |
| Observations | 190 | 190 | 190 |
| R-squared | 0.375 | 0.168 | 0.330 |

| VARIABLES | (1b) Vote for GSD | (2b) Vote for NPP | (3b) Vote for DPP |
|--------------------------------------|-------------------------|-------------------------|-------------------------|
| DPP Treatment*Vote for KMT (Initial) | -0.040 (0.156) | -0.042 (0.149) | 0.049 (0.151) |
| DPP Treatment*Vote for DPP (Initial) | 0.081 (0.120) | -0.201* (0.102) | 0.188 (0.139) |
| DPP Treatment*Vote for GSD (Initial) | -0.432** (0.193) | -0.038 (0.070) | 0.075 (0.134) |
| DPP Treatment*Vote for NPP (Initial) | -0.031 (0.223) | -0.083 (0.178) | 0.001 (0.149) |
| Constant | 0.541 (0.616) | -0.017 (0.405) | -0.184 (0.407) |
| Observations | 190 | 190 | 190 |
| R-squared | 0.356 | 0.187 | 0.326 |

Note: The dependent variable is the binary variable indicating whether they vote for specific candidate or party. As for independent variables, the dummy *3rd Treatment*Vote for KMT (Initial)*= 1 when the subject was assigned to 3rd treatment and vote for KMT in the initial survey, and the dummy *Other Political Treatments*= 1 when the subject was assigned to different treatment group to the subject's initial voting decision. The subjects in Control group will be classified as comparison group in the listed models. The regressions include all subjects attended final survey and at least one onsite session.

All specifications include the following control variables: gender, whether they are students or students from NTU, whether they are older than 25 years old, whether the income is higher than 40,000 NTD per month, whether they have voted before, the attendance in each experiment session, the date and the access (online or on-site) finishing final survey, and initial voting decisions. Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1



Treatment Intensity

The effect of treatment articles can vary with how much the information the subjects acquired from articles. We measure the intensity of treatment by the rate of correct answer in the reading comprehension tasks and find there is no correlation between the voters' preference and the reading score within each treatment group. The possible reason is the lack of variety in reading score. Since most of the subject can comprehend the treatment articles, the differences in score do not make additional effect on preference in terms of treatment intensity.

Experimenter Demanding Effect

In survey studies, the estimation may suffer from the experimenter demanding effect. Some subjects may try to predict what experimenters would like to observe, and react according to (what they expect) what the experimenters expect, positively or negatively. As Zizzo (2010) suggested, there are several possible solutions to lower or detect the existence of the bias.

In our introductory survey, we asked not only the voting and political preference questions, but also asked the questions about confidence, credibility to news media, and political knowledge. The obfuscation made the subjects more difficult to detect the experimenter's intention.

Also, as we have found before, treatment articles have heterogeneous effects on different subgroups. If there is experimenter demanding effect, heterogeneity should not be detected. This provides an evidence that there is still variance cannot be explained simply by experimenter demanding effect. Even though, in the worst case, the subjects changed their voting decision along with our expectation, there were

some “stubborn” subjects very hard to be persuaded by demanding effect, which is coincident with our main conclusion about confirmation.



6 Conclusion

We conducted an experiment directly examining the effect of partisan news articles. By giving monetary incentives for subjects to read treatment articles carefully, we found that the treatment can influence voters’ political decision and preference. We found that in average the treatment articles have direct effect on voting behavior and support for candidates or parties. We also found the treatment is stronger for conformation, which is consistent with the recent research in politics studies.

In addition, we investigated the effects on third parties. The articles for new emerging parties can have very strong advertising effects, and may lead to the competition between new parties and tradition large parties. In general, the treatment articles increase the support for both third parties GSD and NPP, and the voters in 3rd parties treatment were choosing between the two parties.

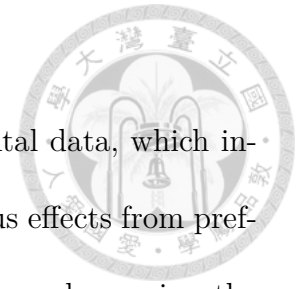
Some emerging studies suggest that people’s political preference form around 20 years old, which is the age that people first participate in public issues such as voting and election. Our study about the new parties gives a further insight on this result. People are tend to believe how the new information first be presented. Although there are some information update, it is still hard to adjust the previous belief. This explains our result in KMT and DPP. However, if people are unfamiliar with a new type of information, which is different from the original domain, the new information can have a strong effect. To our voters, GSD is a relatively new party different from KMT and DPP, hence the new choice attracts some voters near to

vote for GSD.

This research provides a first investigation on the experimental data, which includes the direct effect from treatment articles, and heterogeneous effects from preference. The research can be put further by exploring some channels causing the change in political behavior. Media consumption will be an important aspect. The frequency and tendency of media consumption can affect the intensity of treatment. For instance, will the subjects read newspaper more regularly be easier or more difficult to be influenced by our treatments? This will remain as the next topic. Moreover, some important characteristics of subjects may also play crucial rules. In our survey, we had some questions for detecting subjects' inclination of overconfidence. Ortoleva and Snowberg (2015) suggested a model claiming people who are tend to hold stronger confidence on their own belief may be harder to change. This problem could potentially be answered by our experimental research.

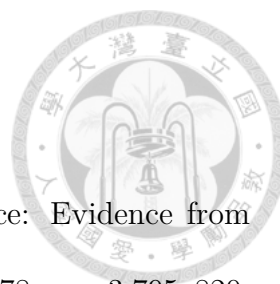
The credibility formulation of the media source is also an important issue. Both the initial preference and the media consumption behavior will effect the credibility formulation process toward a media. With the randomized experiment, we can see whether the additional articles take place in the credibility updating process. In addition, we can also investigate other channels of credibility formulation, such as fill-over effect. With the mediation of credibility, it may enable us to understand further about information updating.

This paper provides a direct framework for experimental research on media bias. We believe it cannot be only used in political context, but can also be applied to more general theories about information consuming. We also expect there could be combined research with models on information updating. With the text analysis



tools developed in recent years, there could be more quantitative research on media effect. The process of rationalize the information is one of the center topics in economics. We hope, from this series of research, there can be a broader understanding about how people deal with new things, appearing more and more rapidly, in their daily life.





References

- Chun-Fang Chiang and Brian Knight. Media bias and influence: Evidence from newspaper endorsements. *The Review of Economic Studies*, 78, no. 3:795–820, 2011.
- Stefano DellaVigna and Ethan Kaplan. The fox news effect: Media bias and voting. *The Quarterly Journal of Economics*, 122(3):1187–1234, 2007.
- Robert Epstein and Ronald E. Robertson. The search engine manipulation effect (seme) and its possible impact on the outcomes of elections. *Proceedings of the National Academy of Sciences*, 112:E4512–E4521, 2015.
- Matthew Gentzkow and Jesse M. Shapiro. What drive media slant? evidence from u.s. daily newspapers. *Econometrica*, Vol. 78, No.1:35–71, 2010.
- Alan S. Gerber, Donald P. Green, and Matthew Green. Partisan mail and voter turnout: Results from randomized field experiments. *Electoral Studies*, 22: 563–379, 2003.
- Alan S. Gerber, Dean Karlan, and Daniel Bergan. Does the media matter? a field experiment measuring the effect of newspapers on voting behavior and political opinions. *American Economic Journal: Applied Economics*, 1:2:35–52, 2009.
- Pietro Ortoleva and Erik Snowberg. Overconfidence in political behavior. *American Economic Review*, 105(2):504–535, 2015.
- Costas Panagopoulos and Donald P. Green. Field experiments testing the impact of radio advertisements on electoral competition. *American Journal of Political Science*, 52, vol. 1:156–168, 2008.

Daniel John Zizzo. Experimenter demand effects in economic experiments. *Experimental economics*, 13:75–98, 2010.



Appendix A: Estimations with Other Specifications



Table A1: Treatment Effect: Scaled Support (OLS)

| VARIABLES | (1) Support for KMT | (2) Support for DPP | (3) Support for GSD | (4) Support for NPP |
|---------------|---------------------------|---------------------------|---------------------------|---------------------------|
| KMT Treatment | -0.296 (0.372) | -1.019** (0.431) | -0.335 (0.462) | -1.228*** (0.461) |
| DPP Treatment | -0.730** (0.369) | -0.343 (0.385) | 0.973* (0.527) | 0.239 (0.460) |
| 3rd Treatment | -0.029 (0.436) | -0.775* (0.425) | 1.405*** (0.472) | 0.116 (0.440) |
| Constant | 3.282* (1.686) | 5.574*** (1.662) | 3.341 (2.663) | 0.326 (2.219) |
| Observations | 186 | 189 | 186 | 188 |
| R-squared | 0.303 | 0.347 | 0.440 | 0.434 |
| KMT-DPP | 0.434 | -0.675 | -1.308 | -1.467 |
| DPP-3rd | -0.700 | 0.431 | -0.432 | 0.123 |
| KMT-3rd | -0.266 | -0.244 | -1.741 | -1.345 |

Note: The dependent variable is the support for specific candidate or party, which is measured in the scale (0-10). The regressions include all subjects attended final survey and at least one onsite session.

All specifications include the following control variables: gender, whether they are students or students from NTU, whether they are older than 25 years old, whether the income is higher than 40,000 NTD per month, whether they have voted before, the attendance in each experiment session, the date and the access (online or on-site) finishing final survey, and dummy indicators of subjects initial party voting decisions. Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$



Table A2: President Vote: Interaction with Initial Voting

| VARIABLES | (1) Vote for Chu | (2) Vote for Chu | (3) Vote for Tsai | (4) Vote for Tsai |
|---------------------------------------|------------------------|------------------------|-------------------------|-------------------------|
| KMT Treatment | 0.024 (0.057) | 0.345 (0.224) | -0.031 (0.096) | -0.366** (0.183) |
| DPP Treatment | -0.071* (0.040) | 0.187 (0.262) | 0.110 (0.084) | -0.075 (0.245) |
| 3rd Treatment | -0.035 (0.046) | 0.289 (0.220) | -0.075 (0.103) | -0.322 (0.204) |
| KMT Treatment*Vote for Chu (Initial) | 0.492 (0.322) | | -0.270 (0.328) | |
| DPP Treatment*Vote for Chu (Initial) | 0.504 (0.401) | | -0.227 (0.394) | |
| 3rd Treatment*Vote for Chu (Initial) | 0.577* (0.325) | | -0.112 (0.362) | |
| KMT Treatment*Vote for Tsai (Initial) | | -0.285 (0.228) | | 0.359* (0.209) |
| DPP Treatment*Vote for Tsai (Initial) | | -0.243 (0.263) | | 0.178 (0.266) |
| 3rd Treatment*Vote for Tsai (Initial) | | -0.299 (0.222) | | 0.277 (0.226) |
| Constant | -0.030 (0.195) | 0.147 (0.298) | 0.647 (0.523) | 0.443 (0.504) |
| Observations | 190 | 190 | 190 | 190 |
| R-squared | 0.504 | 0.326 | 0.240 | 0.410 |

Note: The dependent variable is the binary variable indicating whether they vote for specific candidate or party. The regressions include all subjects attended final survey and at least one onsite session. All specifications include demographic variables. Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

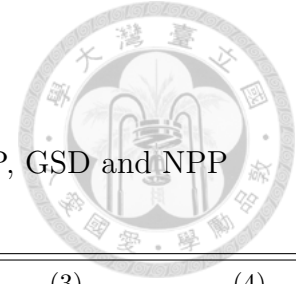


Table A3: Party Vote: Interaction with Initial Voting for DPP, GSD and NPP

| VARIABLES | (1) Vote for KMT | (2) Vote for DPP | (3) Vote for GSD | (4) Vote for NPP |
|---------------------------|------------------------|------------------------|------------------------|------------------------|
| KMT Treatment | 0.351** (0.163) | 0.013 (0.058) | -0.039 (0.178) | -0.134 (0.137) |
| DPP Treatment | 0.230 (0.160) | 0.005 (0.098) | 0.152 (0.189) | -0.082 (0.138) |
| 3rd Treatment | 0.106 (0.148) | 0.037 (0.094) | 0.148 (0.180) | -0.205 (0.157) |
| KMT Treatment*Initial DPP | -0.354** (0.170) | 0.067 (0.211) | 0.003 (0.227) | 0.159 (0.246) |
| DPP Treatment*Initial DPP | -0.275 (0.176) | 0.152 (0.198) | 0.045 (0.227) | -0.124 (0.195) |
| 3rd Treatment*Initial DPP | -0.151 (0.173) | -0.222 (0.234) | 0.352 (0.240) | 0.089 (0.235) |
| KMT Treatment*Initial GSD | -0.293* (0.161) | -0.105 (0.100) | 0.184 (0.232) | 0.179 (0.171) |
| DPP Treatment*Initial GSD | -0.177 (0.154) | 0.023 (0.184) | -0.479 (0.296) | 0.066 (0.175) |
| 3rd Treatment*Initial GSD | -0.069 (0.150) | -0.108 (0.113) | 0.046 (0.231) | 0.229 (0.185) |
| KMT Treatment*Initial NPP | -0.331** (0.165) | 0.233 (0.147) | 0.450* (0.248) | -0.418* (0.248) |
| DPP Treatment*Initial NPP | -0.192 (0.164) | 0.148 (0.165) | 0.175 (0.293) | -0.413 (0.290) |
| 3rd Treatment*Initial NPP | -0.037 (0.154) | 0.070 (0.156) | 0.355 (0.260) | -0.246 (0.290) |
| Constant | -0.420 (0.275) | -0.061 (0.400) | 0.198 (0.546) | 0.218 (0.446) |
| Observations | 190 | 190 | 190 | 190 |
| R-squared | 0.308 | 0.345 | 0.414 | 0.245 |

Note: The dependent variable is the binary variable indicating whether they vote for specific candidate or party. The regressions include all subjects attended final survey and at least one onsite session. All specifications include demographic variables. Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1



Table A4: Party Vote: Interaction with Initial Voting for KMT, GSD and NPP

| VARIABLES | (1) Vote for KMT | (2) Vote for DPP | (3) Vote for GSD | (4) Vote for NPP |
|---------------------------|------------------------|------------------------|------------------------|------------------------|
| KMT Treatment | 0.034 (0.108) | -0.027 (0.149) | 0.124 (0.122) | -0.055 (0.138) |
| DPP Treatment | -0.095 (0.067) | 0.097 (0.148) | 0.300** (0.118) | -0.159 (0.119) |
| 3rd Treatment | -0.094 (0.066) | -0.178 (0.153) | 0.488*** (0.133) | -0.198 (0.132) |
| KMT Treatment*Initial KMT | 0.644*** (0.214) | 0.009 (0.167) | -0.456** (0.219) | -0.102 (0.246) |
| DPP Treatment*Initial KMT | 0.696*** (0.199) | -0.026 (0.218) | -0.510** (0.246) | 0.038 (0.214) |
| 3rd Treatment*Initial KMT | 0.448** (0.186) | 0.269 (0.215) | -0.612** (0.253) | 0.057 (0.256) |
| KMT Treatment*Initial GSD | -0.016 (0.106) | -0.039 (0.172) | 0.037 (0.194) | 0.100 (0.164) |
| DPP Treatment*Initial GSD | 0.116 (0.076) | -0.048 (0.211) | -0.617** (0.251) | 0.142 (0.154) |
| 3rd Treatment*Initial GSD | 0.101 (0.074) | 0.133 (0.172) | -0.296 (0.200) | 0.227 (0.168) |
| KMT Treatment*Initial NPP | -0.020 (0.111) | 0.260 (0.196) | 0.304 (0.204) | -0.501** (0.245) |
| DPP Treatment*Initial NPP | 0.131 (0.087) | 0.035 (0.209) | 0.046 (0.245) | -0.344 (0.273) |
| 3rd Treatment*Initial NPP | 0.122 (0.090) | 0.308 (0.200) | 0.030 (0.228) | -0.260 (0.275) |
| Constant | 0.120 (0.192) | 0.057 (0.433) | -0.124 (0.520) | 0.215 (0.427) |
| Observations | 190 | 190 | 190 | 190 |
| R-squared | 0.455 | 0.201 | 0.424 | 0.232 |

Note: The dependent variable is the binary variable indicating whether they vote for specific candidate or party. The regressions include all subjects attended final survey and at least one onsite session. All specifications include demographic variables. Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Appendix B: Documents, Surveys and Sample Questions



B.1 Recruiting Flyers

2015/11/07 Ver. 2

台大經濟系 經濟學實驗 參與者招募

我們誠摯地邀請您參與一個關於資訊與決策的經濟學實驗。在這個實驗中，您將閱讀一些主要摘自新聞媒體的文章，並根據文章內容回答問題。您也有可能需要執行一些簡單的任務，例如完成幾道簡單的數學題目。

我們將會有一次實驗簡介、三次測驗，及實驗結束的問卷填寫。請參閱以下的時間表：

| 實驗內容 | 時間 | 地點 | 時間長度 | 報酬 |
|---------|------|---------|----------|---------------|
| 實驗簡介 | 十一月底 | 台大社會科學院 | 一小時 | 新台幣 100 元 |
| 第一次測驗 | 十二月初 | 台大社會科學院 | 1-1.5 小時 | 新台幣 100-300 元 |
| 網路問卷(1) | 十二月中 | 線上填答 | 0.5 小時 | 新台幣 0-50 元 |
| 第二次測驗 | 十二月底 | 台大社會科學院 | 1-1.5 小時 | 新台幣 100-300 元 |
| 網路問卷(2) | 一月初 | 線上填答 | 0.5 小時 | 新台幣 0-50 元 |
| 第三次測驗 | 一月中 | 台大社會科學院 | 1-1.5 小時 | 新台幣 150-350 元 |
| 實驗後問卷 | 一月底 | 線上填寫 | 1 小時 | 新台幣 200 元 |

請注意，在第三次測驗與實驗後問卷的中間，將會舉行總統大選。在實驗的各個階段中，我們可能會詢問一些與您有關的政治問題，其中包含您的投票行為。請放心，您的個人身分將完全保密，不會在研究報告或任何地方公開。實驗中收集的資訊只會運用在研究中，同時您的個人身分在實驗中將會由一個受試者編號代表，藉以保護您的身分。

由於本次研究之需要，我們希望您能從頭至尾參與（包含實驗簡介，三次實驗以及實驗後問卷）。因此在報名前，請審慎考慮您的決定。若是您有意願，我們將非常歡迎您的加入！您可以登記參加以下任何一場的實驗介紹：

- (1) 11/21 (六)，14:30-15:30，台大社會科學院 102 教室 (1 樓)
- (2) 11/21 (六)，16:00-17:00，台大社會科學院 102 教室 (1 樓)
- (3) 11/23 (一)，12:30-13:30，台大社會科學院 402 教室 (4 樓)
- (4) 11/24 (二)，12:30-13:30，台大社會科學院 401 教室 (4 樓)
- (5) 11/26 (四)，12:30-13:30，台大社會科學院 402 教室 (4 樓)
- (6) 11/28 (六)，14:30-15:30，台大社會科學院 102 教室 (1 樓)

請點選 <https://sites.google.com/site/mediaexperiment2015/> 或以手機掃描右側 QR code 填寫報名相關資料。若您有成功報名，在正式說明的前一天，您都會收到提醒通知。

之後每一次實驗，我們也將提供許多場次，以符合您的行程安排！若是需要更多實驗相關資訊，歡迎來信聯絡：林建勳 r03323026@ntu.edu.tw！



B.2 Introductory Survey



Please complete the survey and answer all the questions.

1. Your assigned ID?
2. When were you born? YY/MM/DD

We want to know more about your news consumption behavior:

3. Which of the following is your major news source?
 - (1) News from the Internet (Yahoo news,...)
 - (2) Social media (Facebook, Twitter,...)
 - (3) Newspapers (Paper version)
 - (4) TV news
4. A. Do you get information online regularly?
 - (1) Yes (2) No (Please skip B.)

B. If yes, please indicate the news website you most often visit.

 - (1) Yahoo News (2) Apple Daily (3) United Daily News
 - (4) Economic Daily News (5) Liberty Times (6) China Times
 - (7) Storm Media Group (8) Hinet News (9) PChome News
 - (10) MSN News (11) NOWnews (12) ETtoday (13) Newtalk News
 - (14) The News Lens (15) CNA News (16) Google News
 - (17) Other News websites (Please specify)
5. A. Do you read newspaper regularly?
 - (1) Yes (2) No (Please skip B.)

B. If yes, please indicate the newspaper you most often read.



- (1) Apple Daily (2) United Daily News (3) Economic Daily News
(4) Liberty Times (5) China Times (6) Other Newspaper (Please specify)
6. A. Do you watch TV news regularly?
(1) Yes (2) No (Please skip B.)
B. If yes, which TV news do you watch most often?
(1) TTV (2) CTV (3) CTS (4) FTV (5) TVBS (6) SET (7) ETTV (8) CtiTV
(9) ERA NEWS (10) GTV (11) USTV (12) DaAi TV (13) PTS (14) Hakka TV
TV
(15) Taiwan Indigenous TV (16) Others (Please specify)
7. A. Have you used Twitter or Facebook or blogs to share news in the past month? Please choose all that apply.
(1) Yes. Tweeter (2) Yes. Facebook (3) Yes. Blogs (4) No
B. If yes, what type of news have you shared?
(1) Politics News (2) Sports News (3) International News
(4) Entertainment News (5) Business/Economy News
(6) Others (Please specify)
8. We would like to know how much you can believe the news reporting from each of the following media organization. Please rank the degree of trust on a 1 to 8 scale. 1 means that you believe almost nothing of what they say. 8 means that you believe all or most of the organization says.
(1) Apple Daily (2) United Daily News (3) Liberty Times (4) China Times
(5) CNA News (6) TVBS (7) Formosa TV News (8) PNN News
(9) SET News (10) ETTV News (11) TTV News (12) CTV News
(13) CTS News (14) BBC (15) CNN (16) New York Times



9. Did you follow the news of Ma-Xi meeting?
- (1) Yes – watched the live news during their meeting
 - (2) Yes – watched or read the news after they met
 - (3) Not so much – didn't pay much attention
 - (4) No at all – did not follow at all
10. In the past week, how many days did you hear or read news information about 2016 presidential election?
11. How many news articles related to the presidential election did you read yesterday?
- (1) 0-3 articles (2) 4-6 articles (3) 7-9 articles
 - (4) 10-12 articles (5) Above 12 articles (6) Don't remember
12. If you are given a free subscription of a newspaper, so you will have free Liberty Times to read every day, how many political news articles do you think you will read from it per day?
- (1) 0-3 articles (2) 4-6 articles (3) 7-9 articles
 - (4) 10-12 articles (5) Above 12 articles
13. If you are given a free subscription of a newspaper, so you will have free United Daily to read every day, how many political news articles do you think you will read from it per day?
- (1) 0-3 articles (2) 4-6 articles (3) 7-9 articles
 - (4) 10-12 articles (5) Above 12 articles
14. In the past week, did you visit a website/facebook of a presidential candidate?
- (1) No (2) Yes, Tsai Ing-wen (3) Yes, Li-luan Chu (4) Yes, James Soong

15. When did Xi-ging Ping become the leader of China?

16. Who is the current President of the Executive Yuan?

17. Who is the current Minister of Finance Ministry?



We want to know your life experiences and perspectives on several things :

18. The inflation rate is the annual percentage change in prices for basic goods like food, clothing, housing, and energy. Since 1960 it has ranged from a high of 47.45 percent (a 47.45 % increase in prices over the previous year) to a low of -0.86 percent (a 0.86% decline in prices over the previous year). What is your best guess about the inflation rate in the Taiwan today? Even if you are uncertain, please provide us with your best estimate of about what percent do you think prices went up or down in the last 12 months.

Do you think prices went up or down?

By what percent do you think prices went up or down?[only allow a positive number]

19. How confident are you of your answer to this question?

(1) No confidence at all (2) Not very confident (3) Somewhat unconfident

(4) Somewhat confident (5) Very confident (6) Certain

20. In what year was the writer 曹雪芹 born? Even if you are not sure, please give us your best guess.

21. How confident are you of your answer to this question?

(1) No confidence at all (2) Not very confident (3) Somewhat unconfident



- (4) Somewhat confident (5) Very confident (6) Certain
22. As a different way of answering the previous question, what do you think the percent chance is that your best guess, entered above, is within 50 years of the actual answer?
23. In your mind, how high is Snow Mt.? Even if you are not sure, please give me your best guess.
24. How confident you are of your guess?
- (1) No confidence at all (2) Not very confident (3) Somewhat unconfident
(4) Somewhat confident (5) Very confident (6) Certain
25. Now, please answer the previous question in another way. What's the probability that the difference between the real height of Snow Mt. and your guess is less than 200 meters?
26. On a scale from 1-10, please rate the degree of your support for the following politicians. (1 means extremely not support, and 10 means extremely support.)
- (1) Li-luan Chu (2) Ing-wen Tsai (3) James Soong
27. We would like you to express your support for each candidate in another way: We would like to ask you to divide 10 points to the following candidates (so the total numbers you give should be 10):
- (1) Li-luan Chu (2) Ing-wen Tsai (3) James Soong
28. On a scale from 1-10, please rate the degree of your support for the following parties.
- (1) KMT (2) DPP (3) Taiwan Solidarity Union (4) People First Party
(5) Non-Partisan Solidarity Union (6) Minkuotang (7) GSD (8) New Party
(9) National Health Service Alliance (10) Taiwan's National Conference



- (11) Taiwan Union of Human Right (12) Trees Party (13) China uniform party
(14) People's Democratic Front (15) The Motorists' Party of R.O.C
(16) 軍公教聯盟黨 (17) New Power Party (18) Free Taiwan Party
(19) Taiwan Independence Party (20) Social Welfare Party
(21) Faith And Hope League
29. We would like you to express your support for each party in another way: We would like to ask you to divide 10 points to the following candidates (so the total numbers you give should be 10)
- (1)KMT (2) Democratic Progressive Party (3) Taiwan Solidarity Union
(4) People First Party (5) Other Parties
30. In terms of Taiwanese political spectrum ranging from “deep blue” to “deep green”. Which place are you on?
- (1) Deep blue (2) Light blue (3) Center
(4) Light green (5) Deep green (6) Don't know/ Refuse to answer
31. A. Have you ever heard of any 2016 Presidential election polls released by media?
B. If yes, please state the polling organization of the survey you hear of, and the corresponding vote share of each candidate is:
Ing-wen Tsai ?%, Li-luan Chu ?%, Chu-yu Soong ?% undecided/not going to vote ?%
32. What do you think about the percentage of votes will be obtained by the three candidates:
Ing-wen Tsai ?%, Li-luan Chu ?%, Chu-yu Soong ?%
33. Have you decided which candidate you are going to vote for in the 2016 pres-



idential election?

- (1) Yes, I am going to vote for Ing-wen Tsai
- (2) Yes, I am going to vote for Li-luan Chu
- (3) Yes, I am going to vote for Chu-yu Soong
- (4) No, I haven't decided yet.

34. A. Have you voted in any election?

B. If, yes, when was the last time you voted?

- (1) January 14, 2012 : Presidential election
- (2) November 29, 2014 : Municipal elections

C. If voted in presidential election, which candidate did you vote for?

- (1) Ing-wen Tsai (2) Ying-jeou Ma(3) Chu-yu Soong

D. If voted in Municipal elections, which party did you vote for?

- (1) KMT (2) DPP (3) Taiwan Solidarity Party (4) People First Party
- (5) other parties(6) no party affiliation

35. If the 2016 presidential election were held today, who would you vote for?

- (1) Ing-wen Tsai (2) Li-luan Chu (3) Chu-yu Soong

36. If the legislative election was held today, which party would you vote for? (1)

- KMT (2) DPP (3) Taiwan Solidarity Union (4) People First Party
- (5) Non-Partisan Solidarity Union (6) Minkuotang (7) GSD (8) New Party
- (9) National Health Service Alliance (10) Taiwan's National Conference
- (11) Taiwan Union of Human Right (12) Trees Party (13) China uniform party
- (14) People's Democratic Front (15) The Motorists' Party of R.O.C
- (16) 軍公教聯盟黨 (17) New Power Party (18) Free Taiwan Party
- (19) Taiwan Independence Party (20) Social Welfare Party

(21) Faith And Hope League



Personal Information:

37. Your gender?
38. Which county/city is your household is registered in?
39. Are you currently enrolled as a student?
40. If you are currently a student, please select the school you attend. If you are a graduate, please select the school you graduated from.
41. What is your major of your highest degree?
42. What is your employment status?
43. What is your own currently average monthly income ?(including salary, bonus, overtime, execute business income, self-employed income, pension)
44. Are yo willing to participate our subsequent experiments?

B.3 Instruction of the Reading Sessions



National Taiwan University Economics Experiment

Experiment Introduction

In this experiment, you are asked to read the news articles sent to you previously, and then answer some comprehension questions based on news contents. Please sign your name and experiment number on the answer sheet.

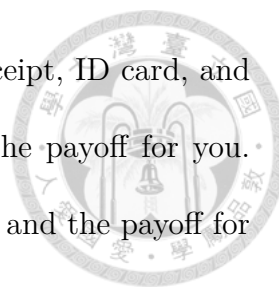
This experiment has two sections of comprehension test and a questionnaire after the tests.

The first section contains multiple choice question and short answer questions. You would have 10 articles followed by 40 questions. Each article is followed by 1 question (Questions begin with “A”) asking your valuation toward the credibility of this article, and 3 questions (Questions begin with “B”) asking some information in the article. For each question begins with “B”, there is only one correct answer. In this section, you can read the essay when answer the question. You can be paid 5NTD per question for each correct answer in “B” questions.

After you finish the first section, please raise your hand. The staff will then give you the questions and instruction for the second section, and collect the article copies distributed earlier.

The second section contains short answer questions. For each article, you have to answer 1 question (questions begin with “C”). There are in total 10 questions. In this section, you have to answer questions without text. You will be paid 5NTD for each correct answer.

After you finished this section, please raise your hand again. The staff will give you a questionnaire of the experiment and receipt, and collect the answer sheet.



After you finish the survey, please take the questionnaire, receipt, ID card, and the pen writing receipt to the front. The staff will calculate the payoff for you. The payoff of this session depends on: the show-up fee 100NTD, and the payoff for correctly answer the “B” questions and “C” questions.

If you have any problems, you can ask staff for help at any time.

If there is no problem about the instruction, please turn to the next page and start the test.

First Section

For this section, you will answer some comprehension questions about the articles. You can look at our copies or use your own copies. You will be paid for each correct answer in “B” part.

(Questions)

Here is the end for the first section. Please raise your hand to call the stuffs.

Second Section

For this section, you will additionally answer some comprehension questions about the articles. Please give us the copies, or take away your own copies. You will be paid for each correct answer in this section.

(Questions)

B.4 Treatment Article and Reading Comprehension task (Sample)

(DPP Treatment, Session 2, Article 4)



2015/12/23

賣黨產籌選舉經費？綠估國民黨砸七億 - 政治 - 自由時報電子報

自由時報
Liberty Times Net

政治

賣黨產籌選舉經費？綠估國民黨砸七億

2015-12-22 12:10

〔記者蕭婷方／台北報導〕選戰進入倒數，民進黨緊咬國民黨黨產爭議，今日上午民進黨再公佈國民黨總統候選人朱立倫文宣費用，光網路宣傳費用就高達二．五億元，加上電視、廣播與平面報紙廣告，保守估計超過三億一百一十萬元；加上國民黨挹注立委候選人經費，合計超過七億元，為國民黨有史以來投入大選最高金額。



今日上午民進黨再公佈國民黨總統候選人朱立倫文宣費用，光網路宣傳費用就高達二．五億元（記者蕭婷方攝）

民進黨發言人阮昭雄指出，朱立倫競選文宣費用，目前保守推估逾三億一百一十萬元，包含各入口網站、官網維護、臉書粉絲專頁等網媒，依照網路的露出量推估，再加上網管人事費，朱陣營光網路媒體就砸二．五億元以上，電視廣告約三千五百萬元，廣播電台約砸九百一十萬元，而平面報紙約占七百萬。

民進黨發言人楊家俚也指出，以歷次國民黨選舉黨產支出金額換算，國民黨的立委候選人每人從黨中央得到補助經費平均超過三百八十萬元，此次選舉國民黨每位立委候選人至少可得黨挹注六百萬元，甚至加碼補助瀕臨落選的候選人，合理懷疑國民黨此次黨產挹注大選經費超過四億四千萬元。

國民黨此次黨產挹注大選經費超過四億四千萬元。

楊家俚也補充，黨產挹注大選經費，加上三億餘元宣傳費用，總計逾七億元，已超越歷來大選水準，遑論組織行政、大型活動支出，認為國民黨已傾注所有黨產要來打這場選舉。

阮昭雄表示，民進黨先前已經公佈兩次競選經費明細，並經過會計師查核，朱立倫若要取得人民信任，應在總統大選辯論前將選舉支出清楚公佈，是否使用黨產也要說清楚、講明白。

自由時報 版權所有 不得轉載 © 2015 The Liberty Times. All Rights Reserved.

<http://news.ltn.com.tw/news/politics/breakingnews/1547647/print>

1/1



請依據〈賣黨產籌選舉經費？綠估國民黨砸七億〉一文回答下列問題：

According to the article above, please answer the following questions:

A4. 仔細閱讀這篇文章以後，請問您認為這篇文章是否可信？

A4. After you carefully read this article, how credible do you think this article is?

請以介於 1-8 的數字表示。其中 1 代表完全不能相信，8 代表完全可信

Please answer with scale 1-8, where “1” means the article is not credible at all, and

“8” means it is totally credible.

B10. 根據此篇報導，請問民進黨公布朱立倫網路宣傳費用高達多少錢？

- (A) 三億一百萬
- (B) 兩億五千萬
- (C) 一億八千萬
- (D) 兩億兩千萬

B11. 請問民進黨發言人楊家俤指出此次選舉國民黨立委候選人每人可得國民黨挹

注多少錢的競選經費？

- (A) 一千兩百萬
- (B) 一千萬
- (C) 八百萬
- (D) 六百萬

B12. 根據此篇報導，請問下列敘述何者錯誤？

- (A) 阮昭雄認為朱立倫應於大選辯論前公布選舉支出
- (B) 民進黨已經兩次公布選舉經費明細並經會計師查核
- (C) 朱立倫在電視廣告上花了約三千五百萬元經費
- (D) 前次總統大選國民黨傾注了更多黨產在選舉上

C4. 關於〈賣黨產籌選舉經費？綠估國民黨砸七億〉一文：

請問民進黨發言人阮昭雄表示民進黨已經幾次公布選舉經費明細？



B.5 Repeated Survey in Treatment Sessions

1. Your assigned ID.
2. We would like to know how much you can believe the news reporting from each of the following media organization. Please rank the degree of trust on a 1 to 8 scale. 8 means that you believe all or most of the organization says. 1 means that you believe almost nothing of what they say.

(1) Apple Daily (2) United Daily News (3) Liberty Times (4) China Times

(5) CNA News (6) Storm Media Group

(7) Now News (8) BBC
3. On a scale from 1-10, please rate the degree of your support for the following politicians. (1 means extremely not support, and 10 means extremely support.)

(1) Eric Chu (2) Ing-wen Tsai (3) James Soong

(4) Jennifer Wang (5) Chien-jen Chen (6) Hsin-ying Hsu
4. We would like you to express your support for each candidate in another way:

We would like to ask you to divide 10 points to the following candidates (so the total numbers you give should be 10):

(1) Eric Chu (2) Ing-wen Tsai (3) James Soong
5. We would like you to express your support for each presidential and vice-presidential candidate pair: We would like to ask you to divide 10 points to the following presidential and vice-presidential candidate pairs (so the total numbers you give should be 10):

(1) Eric Chu and Jennifer Wang

(2) Ing-wen Tsai and Chien-jen Chen



- (3) James Soong and Hsin-ying Hsu
6. On a scale from 1-10, please rate the degree of your support for the following parties.
- (01) KMT (02) DPP (03) Taiwan Solidarity Union
- (04) People First Party (05) Non-Partisan Solidarity Union
- (06) Minkuotang (07) GSD (08) New Party
- (09) National Health Service Alliance (10) New Power Party
- (11) 和平鴿聯盟黨 (12) Free Taiwan Party (13) China uniform party
- (14) Constitutional Conventions of Taiwan (15) Trees Party
- (16) MCFAP (17) Faith And Hope League (18) Taiwan Independence Party
7. We would like you to express your support for each party in another way: We would like to ask you to divide 10 points to the following parties (so the total points you give should be 10)
- (1) KMT (2) DPP (3) PFP (4) Taiwan Solidarity Union
- (5) NPP (6) GSD (7) Other Party
8. A. Have you ever heard of any 2016 Presidential election polls released by media?
- B. If yes, please state your source of the polling information, and the corresponding vote share of each candidate.
- C. What is your prediction regarding the percentage of votes will be obtained by the three candidates.
9. Have you decided which candidate you are going to vote for in the 2016 presidential election?
- (1) Yes, I am going to vote for Ing-wen Tsai



- (2) Yes, I am going to vote for Li-luan Chu
- (3) Yes, I am going to vote for Chu-yu Soong
- (4) No, I haven't decided yet.
10. If the 2016 presidential election were held today, who would you vote for?
- (1) Eric Chu (2) Ing-wen Tsai (3) James Soong
11. If the legislative election was held today, which party would you vote for?
- (01) KMT (02) DPP (03) Taiwan Solidarity Union
- (04) People First Party (05) Non-Partisan Solidarity Union
- (06) Minkuotang (07) GSD (08) New Party
- (09) National Health Service Alliance (10) New Power Party
- (11) 和平鴿聯盟黨 (12) Free Taiwan Party (13) China uniform party
- (14) Constitutional Conventions of Taiwan (15) Trees Party
- (16) MCFAP (17) Faith And Hope League (18) Taiwan Independence Party
12. **(Only in the third session.)** A. Have you ever watched the debate of the candidates of president or vice president (live or edited clips)? Please check all debates you have watched.
- (1) Yes, I have watched the vice president candidates' debate on 12/26.
- (2) Yes, I have watched the president candidates' debate on 12/27.
- (3) Yes, I have watched the president candidates' debate on 1/2.
- (4) No, I have never watched any of the debates. (Please skip this question.)
- B. How did you watch the debate?
- (1) On Internet (2) On TV
- C. How long did you spend on watching the debate? (1) Less than 5 minutes.
- (2) 5 – 15 minutes



(3) 15 – 30 minutes (4) 30 minutes – 1 hour

(5) 1 – 3 hours (6) more than 3 hours

D.

(a) Does the debate influence evaluation toward Eng-wen Tsai?

(1) Increase much (2) Increase (3) No change

(4) Decrease (5) Decrease Much

(b) Does the debate influence evaluation toward Chien-Ren Chen?

(1) Increase much (2) Increase (3) No change

(4) Decrease (5) Decrease Much

(c) Does the debate influence your voting decision toward Tsai/Chen?

(1) Increase much (2) Increase (3) No change

(4) Decrease (5) Decrease Much

E. (Same Question For Chu)

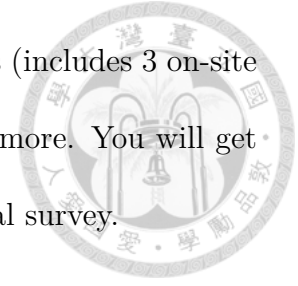
F. (Same Question For Soong)

13. Do you know who are running for legislative office in the legislative district you live in? Please list these legislative candidates you know in the following table. You can leave blank for information you do not know. If the legislative election was held today, who would you vote for? Please mark for the candidate you would vote for.

(Instructions after the survey in the third session)

It is the end of our on-site experiment. Thank you for your attendance in our experiments. There is a final survey after the whole project. We will open some time slots from Jan. 18th for several days. You can come and finish the final survey and then take the payoff immediately. The payoff for finish the final survey is

NTD 200. Additionally, if you attend our all experiment sessions (includes 3 on-site experiments and 2 Internet quizzes), we will pay you NTD 200 more. You will get them simultaneously when you come for the payoff from the final survey.



B.6 Final Survey

1. Your subject number.
2. Did you go to the voting booth to vote on 1/16?
 - (01) Yes. (Please answer Question 3 to Question 5.)
 - (02) No. (Please turn to the next sheet, and answer Question 6 to Question 9.)

If you have gone to the voting booth to vote, please answer Q3-Q5.

3. Who did you vote for the president and the vice president?
 - (1) Li-luan Chu & Ru-hsuan Wang
 - (2) Ing-wen Tsai & Chien-ren Chen
 - (3) Chuyu Soong & Hsin-ying Hsu
 - (4) I casted invalid vote
 - (5) I skipped this vote
4. Which party did you vote for in legislative election?
 - (01) KMT (02) DPP (03) Taiwan Solidarity Union
 - (04) People First Party (05) Non-Partisan Solidarity Union
 - (06) Minkuotang (07) GSD (08) New Party
 - (09) National Health Service Alliance (10) New Power Party
 - (11) 和平鴿聯盟黨 (12) Free Taiwan Party (13) China uniform party
 - (14) Constitutional Conventions of Taiwan (15) Trees Party

- (16) MCFAP (17) Faith And Hope League (18) Taiwan Independence Party
(19) I casted invalid vote. (20) I skipped this vote.



5. Do you know who are running for legislative office in the legislative district you live in? Please list these legislative candidates you know in the following table. If you casted the invalid vote or skipped the vote, you can check the box below the table. You can leave blank for information you do not know.

Who you did vote for? Please mark for the candidate you voted for.

Or (a) Invalid vote (b) Skipped this vote

If you did not go to vote, please answer from this page.

6. Why did you not go to vote? (You can choose all possible reasons.)

(1) It costs too much time or money to go home and cast the vote.

(2) I have to work on the election day.

(3) There is no proper candidate to vote for.

(4) I am not interested in politics.

(5) Others

Although you did not go to vote, we still would like to know your voting decision if you had gone to vote. Please answer Question 7 to 9 with this hypothetical scenario.

7. If you had casted the vote, which group of presidential candidates would you have voted for?



- (1) Li-luan Chu & Ru-hsuan Wang
- (2) Ing-wen Tsai & Chien-ren Chen
- (3) Chuyu Soong & Hsin-ying Hsu
- (4) I would have casted an invalid vote.
- (5) I would have skipped this part of voting.

8. If you had casted the vote, which party would you have voted in the legislative vote? (01) KMT (02) DPP (03) Taiwan Solidarity Union
- (04) People First Party (05) Non-Partisan Solidarity Union
- (06) Minkuotang (07) GSD (08) New Party
- (09) National Health Service Alliance (10) New Power Party
- (11) 和平鴿聯盟黨 (12) Free Taiwan Party (13) China uniform party
- (14) Constitutional Conventions of Taiwan (15) Trees Party
- (16) MCFAP (17) Faith And Hope League (18) Taiwan Independence Party
- (19) I would have casted an invalid vote.
- (20) I would have skipped this part of voting.

9. Do you know who are running for legislative office in the legislative district you live in? Please list these legislative candidates you know in the following table. You can leave blank for information you do not know. If you would have liked to cast invalid vote or skip this part, you can check the box below the table. If you had casted the vote, who would you have voted for? Please mark for the candidate you would like to vote for. Or (a) I would have casted an invalid vote.
- (b) I would have skipped this part of voting.

Please continue answering the following questions:



10. On a scale from 1-10, please rate the degree of your support for the following politicians. (0 means extremely not support, and 10 means extremely support.)

(1) Eric Chu (2) Ing-wen Tsai (3) James Soong

(4) Jennifer Wang (5) Chien-jen Chen (6) Hsin-ying Hsu

11. We would like you to express your support for each candidate in another way:

We would like to ask you to divide 10 points to the following candidates (so the total numbers you give should be 10):

(1) Eric Chu (2) Ing-wen Tsai (3) James Soong

12. We would like you to express your support for each group of president and vice president candidates: We would like to ask you to divide 10 points to the following groups (so the total numbers you give should be 10):

13. On a scale from 1-10, please rate the degree of your support for the following parties.

(01) KMT (02) DPP (03) Taiwan Solidarity Union

(04) People First Party (05) Non-Partisan Solidarity Union

(06) Minkuotang (07) GSD (08) New Party

(09) National Health Service Alliance (10) New Power Party

(11) 和平鴿聯盟黨 (12) Free Taiwan Party (13) China uniform party

(14) Constitutional Conventions of Taiwan (15) Trees Party

(16) MCFAP (17) Faith And Hope League (18) Taiwan Independence Party

14. We would like you to express your support for each party in another way: We would like to ask you to divide 10 points to the following candidates (so the total numbers you give should be 10)

- (1) KMT (2) DPP (3) PFP (4) Taiwan Solidarity Union
- (5) NPP (6) GSD (7) Other Party

We would like to know your media consumption behavior:

15. During the month before the election day (Dec. 2015 to Jan. 2016), which of the following is your major news source before the election on Jan. 16th?

- (1) News from the Internet (Yahoo news,...)
- (2) Social media (Facebook, Twitter, ...)
- (3) Newspapers (Paper version)
- (4) TV news

From this question, we would like to know the change in your media consumption behavior. Please answer the following question for every media in the table. Each column with different background color is a sub-question. The first one is similar to the initial survey, which asks you about the most frequently attached media. The second one asks whether you media consumption behavior changed after you participated this experiment until the election. The third and fourth one ask how it changes. If you answered “No effect” in the second question, then you don’t have to answer the third and the fourth question.

16. A. Do you get information online regularly after you participated the experi-





ment until the election day?

(1) Yes. (2) No. (Please skip B)

B. If yes, please pick the most frequently visited website from the list below.

If there are more than one most frequently visited websites, please fill “1” for the most frequently visited, “2” for the second, and you can fill up to “6” .

Please also answer how the frequency changes with the table below after you participated the experiment.

17. A. Do you get information from newspaper regularly after you participated the experiment until the election day? (1) Yes. (2) No. (Please skip B)

B. If yes, please pick the most read newspaper from the list below. If there are more than one most frequently read newspaper, please fill “1” for the most frequently read, “2” for the second, and you can fill up to “6”. Please also answer how the frequency changes with the table below after you participated the experiment.

18. A. Do you get information from watching TV news regularly after you participated the experiment until the election day?

(1) Yes. (2) No. (Please skip B)

B. If yes, please pick the most watched TV news channel from the list below.

If there are more than one most frequently watched channel, please fill “1” for the most frequently watched, “2” for the second, and you can fill up to “6”.

Please also answer how the frequency changes with the table below after you participated the experiment.

19. A. Do you share news articles on SNS like Twitter, Facebook or blog after you

participated the experiment until the election day? Please check all proper one.



- (1) Yes, on Twitter
- (2) Yes, on Facebook
- (3) Yes, on blog
- (4) No. (Please skip B.)

B. If yes, please answer how the frequency changes with the table below after you participated the experiment.

20. We would like to know how much you can believe the news reporting from each of the following media organization. Please rank the degree of trust on a 1 to 8 scale. "1" means that you believe almost nothing of what they say. "8" means that you believe all or most of the organization says. For each news organization, please circle one of the numbers below. (1) Apple Daily (2) United Daily News (3) Liberty Times (4) China Times (5) CNA News (6) Storm Media Group (7) Now News (8) BBC

We would like to know about the attitude toward some issues: (1)


Open free trade

- (2) Enhance the economic connection with China
- (3) Protect domestic industry
- (4) Stop using nuclear power
- (5) Long term caring steered by the government.
- (6) Open the long term caring system to enterprise.
- (7) Lower age limit for election



- (8) Party negotiation
- (9) Neutralize the chair of Legislative Yuan
- (10) Right of congress testimony
- (11) Right of congress police
- (12) Cancel the high school entrance exam
- (13) Raise the minimum wage
- (14) Legalize the labor union
- (15) Building the social apartment by government
- (16) Taiwan Independence
- (17) Unite with China
- (18) Gay Marriage

21. Among the issues above, what are your most interested issues? You can choose any number of issues you care about from the table above. Please order the degree of interest of the issues and fill in the blanks below by the order.
22. Among the issues above, what are the most important issues you think? You can choose any number of issues you think the most important from the table above. Please order the degree of importance of the issues and fill in the blanks below by the order.
23. Among the issues above, what are the most critical issues affecting your voting decision? You can choose any number of issues you think the most critical from the table above. Please order the degree of how critical are the issues and fill in the blanks below by the order.

- 
24. Which of the following factors influences your voting decision most?
(Including: Vote/abstention, who or which party to vote, etc.)
- (1) Family or friend
 - (2) Traditional media. (Eg. TV news, newspapers, web news, etc.)
 - (3) SNS (Eg. Forwarded pictures or video clips about the election)
 - (4) Participate in the political activities (Attending Campaigns, being the volunteer of some candidates or parties, contact with candidates directly, etc.)
 - (5) Others (please indicate)
25. What are the reasons affecting your voting decision in this election? Please list them as many as you can.
26. What are the most critical reasons affect your involving in politics? Please list them as many as possible.

We would like to ask some question about this experiment:

27. Do you think the articles we gave lean to some specific situation? Please indicate with the number scale 1-8. “1” means they do not lean to some specific situation, and “8” means they totally lean to some specific situation.
28. In general, do you think the articles we gave credible? Please indicate with the number scale 1-8. “1” means they are not credible at all, and “8” means they are totally or almost credible.
29. Do you think the articles we gave in the experiment help you understand more about the candidates or the parties? Please indicate with the number scale 1-8. “1” means they do not help at all, and “8” means they help very lot.

30. How does the experiment affect your media consumption behavior?

(1) Decreased significantly (2) Decrease (3) No influence

(4) Increase (5) Increase Significantly



31. How does the experiment affect your political interests?

(1) Decreased significantly (2) Decrease (3) No influence

(4) Increase (5) Increase Significantly

This is the end of the survey. Thank you for the participation!