

VOTING BEHAVIOR RESPONSES TO WOM (WORD-OF-MOUTH) AND EWOM (ELECTRONIC WORD-OF-MOUTH) INFORMATION

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Abstract

Decision making is often influenced by external information, especially opinions of others. Though past studies revealed that both WOM (word-of-mouth) and EWOM (electronic word-of-mouth) information influences on decision making, little has been investigated and found out in the field of voting behavior, with the possible exception of the fact that several categories of WOM factors influence on voting. As voters face multiple WOM and EWOM information concerning various characteristics of political candidates in real life, it is important to know how they prioritize some information over others. On such backdrop, this study attempts to see how much weight voters would put on 640 types of information – positive and negative information on 16 types of candidate characteristics coming from 20 different WOM and EWOM sources. Two facts have come out. One is that voters prioritize positive information over negative information of the same candidate characteristic, with the exceptions of relationship with family members, campaign activity, and news/scandal of candidate. Another is that voters prioritize WOM information over EWOM information on the same candidate characteristic, regardless of whether the information is positive or negative, for all characteristics.

Keywords: political psychology, cyberpsychology, voting behavior, political marketing, word-of-mouth, decision making

Introduction

The concept of WOM (word-of-mouth) has been introduced as early as 1898, but it reemerged as a popular subject only in early 2000.¹ In modern times, many consumers in a variety of sectors receive WOM information from multiple sources, most commonly but not restricted to acquaintances who are also consumers. During processes of consumer decision-making, WOM is often an important factor. For example, Keaveney observed that positive WOM has been the main source of information when people find a new service supplier.² In consumer choice, WOM is often the dominant factor.³

The importance of WOM naturally applies to political marketing, where voters are consumers shopping for their best political candidates. Besides direct information from political candidates and parties, voters also rely on indirect information, e.g., WOM to get opinions from sources they consider credible. Meanwhile, political candidates utilize WOM to spread ones' positive images in order to shape voters' behavior; candidates' images are one of several inseparable parts of contemporary political elections,⁴ as positive images are effective in voters' decision-making process^{5,6,7,8} and augment candidates' popularity^{9,10}.

In addition to personality-oriented factors, such as positive images, non-personality factors are also known to affect voters' decision process. Party affiliations, demographics of candidates, age, gender, ethnicity, and social group affiliations all have message attributes¹¹; candidates' political parties and his or her history are prominent

¹Graham, J., & Havlena, W. (2007). Finding the "missing link": Advertising's impact on word of mouth, web searches, and site visits. *Journal of Advertising Research*, 47(4), 427-435.

²Keaveney, S. M. (1995). Customer switching behavior in service industries: An exploratory study. *The Journal of Marketing*, 71-82.

³East, R., Hammond, K., & Wright, M. (2007). The relative incidence of positive and negative word of mouth: A multi-category study. *International journal of research in marketing*, 24(2), 175-184.

⁴Nimmo, D. D., & Savage, R. L. (1976). *Candidates and their images: Concepts, methods, and findings*. Goodyear Publishing Company.

⁵Hacker, K. L. (Ed.). (2004). *Presidential candidate images*. Rowman & Littlefield.

⁶Hellweg, S. A., Dionisopoulos, G. N., & Kugler, D. B. (1989). Political candidate image: A state-of-the-art review. *Progress in communication sciences*, 9, 43-78.

⁷Miller, A. H., Wattenberg, M. P., & Malanchuk, O. (1986). Schematic assessments of presidential candidates. *American Political Science Review*, 80(2), 521-540.

⁸Sheafer, T. (2008). Charismatic communication skill, media legitimacy, and electoral success. *Journal of Political Marketing*, 7(1), 1-24.

⁹Shanks, J. M., & Miller, W. E. (1990). Policy direction and performance evaluation: Complementary explanations of the Reagan elections. *British Journal of Political Science*, 20(2), 143-235.

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Stokes, D. E. (1966). Some dynamic elements of contests for the presidency. *American Political Science Review*, 60(1), 19-28.

¹¹Bailenson, J. N., Iyengar, S., Yee, N., & Collins, N. A. (2008). Facial similarity between voters and candidates causes influence. *Public Opinion Quarterly*, 72(5), 935-961.

factors in elections; voters are drawn to political candidates with something similar or familiar, e.g., party, political issue, gender, and facial appearance¹².

Nonetheless, as to how WOM affects voting behavior, many factors are yet to be analyzed, inter alia in the aspect of how voters prioritize certain information over others. In such scope, this paper has examined two questions. The first question is whether or not voters would put same weight upon positive and negative information regarding same characteristics of a candidate. As mentioned above, Keaveney pointed out that behaviors are sometimes strictly related to positive information, but this has not been fully proved for the case of political marketing. The second question is whether or not voters would put same weight upon WOM and EWOM (electronic word-of-mouth) information regarding same characteristics of a candidate for both positive and negative content. In addition to the traditional face-to-face word-of-mouth (WOM), the word-of-mouth via electronic devices (EWOM) has become a hot topic in political marketing given the emergence of the internet.¹³¹⁴¹⁵¹⁶ However, no literature in political marketing has compared WOM with EWOM.

As such, we have come out with two hypotheses for examination:

H1: There is difference between impact of positive information and negative information of same candidate characteristics on voter behavior.

H2: There is difference between impact of WOM information and EWOM information of same candidate characteristics on voter behavior.

Methodology

The data used in this paper comes from a survey that we conducted in September 2018. 704 Japanese-speaking participants residing in Japan joined the experiment via the internet. 443 participants were male; 257 participants were female; 4 participants identified themselves as neither male nor female. The participants came from all age ranges, below-20s (13), 20s (58), 30s (152), 40s (169), 50s (171), 60s (109), and over-70s (32).

In the questionnaire were two questions that required participants to imagine a situation in the near future where they have to vote for an election without any prior preference of candidates due to lack of a priori information before gaining information

¹²Ibid.

¹³Williams, C., & Gulati, G. (2008). What is a social network worth? Facebook and vote share in the 2008 presidential primaries. American Political Science Association.

¹⁴Utz, S. (2009). The (potential) benefits of campaigning via social network sites. *Journal of Computer-Mediated Communication*, 14(2), 221-243.

¹⁵Tumasjan, A., Sprenger, T. O., Sandner, P. G., & Welpe, I. M. (2010). Predicting elections with twitter: What 140 characters reveal about political sentiment. *ICWSM*, 10(1), 178-185.

¹⁶Graham et al., loc. cit.

via WOM or EWOM. 1) “Imagine that there will be an election in the near future. If you gain positive information from the following information sources for each characteristic of a certain candidate, how much will you use it for reference? (on a scale of 1~10; 1=minimum; 10=maximum)¹⁷ Assume that all of these information sources exist.” 2) “Imagine that there will be an election in the near future. If you gain negative information from the following sources for each characteristic of a certain candidate, how much will you use it for reference? (on a scale of 1~10; 1=minimum; 10=maximum) Assume that all of these information sources exist.” For each question, a matrix of 16 characteristics (Table 1) and 20 information sources (Table 2) was shown. In other words, the participants assessed 320 situations for 2 information contents (positive and negative), thus yielding 640 assessments on a scale of 1 to 10. We avoided using specific party names, candidate names, or pictures so that participants’ political stance, ideology, and aesthetics had no impact on his/her decisions.

1. The candidate’s enthusiasm
2. The candidate’s honesty
3. The candidate’s amiability
4. How well-known the candidate is
5. Evaluation of candidate by his/her colleagues/acquaintances
6. The candidate’s relationship with family members
7. The candidate’s professional career
8. Public opinion on the candidate’s party
9. Reputation of the head of the candidate’s party
10. How influential the candidate’s party is
11. The candidate’s political career
12. The candidate’s election platform / political stance
13. The candidate’s policy pledges
14. The candidate’s campaign activity
15. The candidate’s social contributions
16. News/scandal of the candidate

Table 1: Candidate’s 16 characteristics

¹⁷This is a 10-level SD (semantic differential) scale from 1 to 10. Instead of running from 0 to 10, the middle point has been eliminated.

These characteristics outlined in Table 1 were based on question items used in Argan & Argan¹⁸, which addressed both personality and non-personality characteristics of candidates. The first seven characteristics (1~7) are what Argan & Argan considered to be personality factors; the next four (8~11) are what they considered to be party-situation factors; the last five (12~16) are what they considered to be social integration factors. We made some modifications to Argan & Argan’s original list, mainly in the form of wordings, to avoid ambiguity. The largest modification is the fact that we omitted the so-called demographic factors, comprised of “ethnic background of candidate” and “gender of candidate”. We deleted “ethnic background of candidate”, because there had been very few ethnically-non-Japanese candidates in Japanese election history; ethnicity is presently not a factor considered by Japanese voters in real life. We also deleted “gender of candidate” from this study simply for the sake of keeping the experiment free from consideration of complex factors, such as participants’ sexual orientation, gender identity, gender role, and gender bias.

A) WOM: your parent
B) WOM: your sibling
C) WOM: your relative
D) WOM: your friend
E) WOM: your acquaintance who is an expert in politics
F) WOM: your neighbor whom you know well
G) WOM: someone living in your neighborhood
H) EWOM: TV/video – your favorite celebrity/artist
I) EWOM: TV/video – other celebrity/artist
J) EWOM: TV/video – political scientist/commentator
K) EWOM: TV/video – news anchor
L) EWOM: blog/website – your favorite celebrity/artist
M) EWOM: blog/website – other celebrity/artist
N) EWOM: blog/website – political

¹⁸Argan, M., & Argan, M. T. (2012). Word-of-Mouth (WOM): Voters Originated Communications on Candidates during Local Elections. *International Journal of Business and Social Science*, 3(15).

scientist/commentator
O) EWOM: blog/website –owner of blog/site with publicly disclosed name/profile
P) EWOM: blog/website –anonymous blog/site owner
Q) EWOM: SNS – article/tweet by your friend
R) EWOM: SNS – article/tweet by your real-life acquaintance
S) EWOM: SNS – article/tweet by your virtual acquaintance (with no real-life contact)
T) EWOM: SNS – article/tweet by someone that has no direct contact with you

Table 2: 20 sources of information on the candidate’s characteristics

WOM and EWOM information sources were broken down into 20 specific sources, in order to avoid participants from having different notions of WOM and EWOM.

Subsequently, we used Wilcoxon sign-ranked tests to test our two hypotheses, H1 and H2. To test whether there is any significant difference between impact of positive information and negative information of same candidate characteristics on voting behavior, we compared 16 pairs of participants’ average score for positive information on a candidate’s characteristic with that for corresponding negative information. To test whether there is any significant difference between WOM information and EWOM information of same candidate characteristics on voting behavior, we compared 32 pairs of participants’ average score for WOM information on a candidate’s characteristic with that for corresponding EWOM information (in other words, 16 pairs of WOM/EWOM for the characteristics for both positive and negative cases).

Results

Positive-negative information pairs for each characteristic	Z	Sig. (two-tailed)
The candidate’s enthusiasm	-3.78884	.000
The candidate’s honesty	-3.67584	.000
The candidate’s amiability	-3.14592	.002
How well-known the candidate is	-3.19053	.001

Evaluation of candidate by his/her colleagues/acquaintances	-2.56521	.010
The candidate's relationship with family members	-1.64552	.100
The candidate's professional career	-3.50023	.000
Public opinion on the candidate's party	-3.23467	.001
Reputation of the head of the candidate's party	-2.91149	.004
How influential the candidate's party is	-2.21086	.027
The candidate's political career	-2.77663	.005
The candidate's election platform / political stance	-3.40681	.001
The candidate's policy pledges	-4.62436	.000
The candidate's campaign activity	-1.86003	.063
The candidate's social contributions	-4.17915	.000
News/scandal of the candidate	-0.58325	.560

Table 3: Wilcoxon sign-ranked tests for pairs of positive-negative information of the 16 characteristics

(*For all pairs, medians of average score for positive information were higher than those of the corresponding negative information)

Table 3 shows the results of tests for H1. With the exceptions of relationship with family members, campaign activity, and news/scandal of candidate, positive information has significantly more impact on voting behavior than negative information. Thus for 13 characteristics out of 16, H1 held true.

WOM-EWOM information pairs for each characteristic with positive information	Z	Sig. (two-tailed)
The candidate's enthusiasm	-11.4846	.000
The candidate's honesty	-12.0441	.000
The candidate's amiability	-12.2705	.000
How well-known the candidate is	-12.0737	.000
Evaluation of candidate by his/her colleagues/acquaintances	-11.9553	.000

The candidate's relationship with family members	-11.4145	.000
The candidate's professional career	-11.5786	.000
Public opinion on the candidate's party	-11.0045	.000
Reputation of the head of the candidate's party	-10.7189	.000
How influential the candidate's party is	-12.0771	.000
The candidate's political career	-11.9706	.000
The candidate's election platform / political stance	-11.4636	.000
The candidate's policy pledges	-12.174	.000
The candidate's campaign activity	-11.2	.000
The candidate's social contributions	-11.5703	.000
News/scandal of the candidate	-10.4446	.000

Table 4: Wilcoxon sign-ranked tests for pairs of WOM-EWOM information of the 16 characteristics for positive information

(*For all pairs, medians of average score for WOM information were higher than those of the corresponding EWOM information)

WOM-EWOM information pairs for each characteristic with negative information	Z	Sig. (two-tailed)
The candidate's enthusiasm	-10.3525	.000
The candidate's honesty	-10.3288	.000
The candidate's amiability	-10.5939	.000
How well-known the candidate is	-10.1085	.000
Evaluation of candidate by his/her colleagues/acquaintances	-10.3571	.000
The candidate's relationship with family members	-10.7264	.000
The candidate's professional career	-10.7298	.000
Public opinion on the candidate's party	-10.0582	.000
Reputation of the head of the candidate's party	-9.91323	.000
How influential the candidate's party is	-10.7453	.000

The candidate's political career	-10.2962	.000
The candidate's election platform / political stance	-11.0832	.000
The candidate's policy pledges	-10.5348	.000
The candidate's campaign activity	-10.8916	.000
The candidate's social contributions	-11.1863	.000
News/scandal of the candidate	-9.85806	.000

Table 5: Wilcoxon sign-ranked tests for pairs of WOM-EWOM information of the 16 characteristics for negative information

(*For all pairs, medians of average score for WOM information were higher than those of the corresponding EWOM information)

Table 4 and Table 5 show the results of tests for H2. For all cases, WOM information has significantly more impact on voting behavior than EWOM information. In fact, the level of significance was $p < .001$ for all cases. Thus H2 was verified.

Conclusion

H1 was rejected for 3 characteristics of candidates: relationship with family members, campaign activity, and news/scandal of candidate. For the other 13 characteristics, H1 was accepted, showing that positive information has significantly more impact on voting behavior than negative information. H2 was accepted for all 16 characteristics of candidates; WOM information has significantly greater impact on voting behavior than EWOM information for both positive and negative information.

These findings suggest how voters prioritize certain information over others as they receive indirect information concerning candidates via WOM and EWOM. This is especially important in Japan given its recent, gradual relaxation of bans on internet usage for election campaigns. The fact that positive information has significantly more impact than negative information for 13 of the 16 characteristics of political candidates directly suggests that political candidates ought to attach positiveness to any information that may be directly or indirectly (via WOM or EWOM) disseminated to voters. Also, the larger weight of WOM over EWOM points to the limitation of the internet; conventional means to win votes via WOM should be maintained.

In the future, it is our hope to use the survey results to investigate on how differences in information sources (not just the difference between WOM and EWOM, but also differences in social capital and information media concerning the 20 information sources) affect voting behavior. Also, we look forward to analyze how

personal background (age, gender, income, occupation, happiness, etc.) affects how much importance voters attach to different positive and negative WOM/EWOM information on candidate characteristics from various information sources.

Хураангуй:

Шийдвэр гаргахад гадна орчны мэдээлэл, ялангуяа бусдын санаа бодол ихээхэн нөлөө үзүүлдэг. Хэдийгээр өнгөрсөн судалгаанаас үзэхэд А-М (Аман-Мэдээлэл) болон Ц-А-М (Цахим-Аман-Мэдээлэл) нь шийдвэр гаргахад нөлөөлж байгааг харуулж байгаа боловч санал өгөлтөнд нөлөөлж буй мэдээлэлтэй холбогдуулан сонгогчдын үйл байдлыг судалсан нь бага байна. Сонгогчид бодит байдалд улс төрийн нэр дэвшигчдийн янз бүрийн зан чанар, үйл байдлын талаарх олон талт А-М болон Ц-А-М-тэй нүүр тулгарахын хэрээр тэдгээр мэдээллийг хооронд нь харьцуулж сонголт хийх, гол мэдээллээ гол бусаас нь хэрхэн ялгаж байгааг судлан мэдэх явдал чухал болж байна. Энэхүү судалгаагаар 20 төрлийн А-М ба Ц-А-М-ийн эх сурвалжаас авсан 16 төрлийн нэр дэвшигчдийн талаарх нийт 640 эерэг ба сөрөг мэдээллийн талаар сонгогчдын хандлага, үйл байдлыг харуулахыг зорьсны үр дүнд хоёр зүйл тодорхой илэрсэн нь нэгдүгээрт, сонгогчид нэг ижил нэр дэвшигчийн гэр бүлийн гишүүдийн харилцаа, кампанит ажил, сенсаци мэдээ зэргээс бусад шинж чанарын талаарх сөрөг мэдээллээс илүү эерэг мэдээллийг эрхэмлэж байна. Хоёрдугаарт, сонгогчид нэр дэвшигчийн бүхий л шинж чанарын хувьд тухайн мэдээлэл эерэг, сөрөг байхаас үл хамааран Ц-А-М-ээс А-М-ийг илүүд үзэж байна.

Түлхүүр үг: Улс төрийн сэтгэл зүй, кибер сэтгэл зүй, сонгох үйл байдал, улс төрийн маркетинг, аман-мэдээлэл, шийдвэр гаргалт

References:

- Graham, J., & Havlena, W. (2007). Finding the “missing link”: Advertising's impact on word of mouth, web searches, and site visits. *Journal of Advertising Research*, 47(4).
- Keaveney, S. M. (1995). Customer switching behavior in service industries: An exploratory study. *The Journal of Marketing*.
- East, R., Hammond, K., & Wright, M. (2007). The relative incidence of positive and negative word of mouth: A multi-category study. *International journal of research in marketing*, 24(2).
- Nimmo, D. D., & Savage, R. L. (1976). *Candidates and their images: Concepts, methods, and findings*. Goodyear Publishing Company.
- Hacker, K. L. (Ed.). (2004). *Presidential candidate images*. Rowman & Littlefield.

- Hellweg, S. A., Dionisopoulos, G. N., & Kugler, D. B. (1989). Political candidate image: A state-of-the-art review. *Progress in communication sciences*, 9.
- Miller, A. H., Wattenberg, M. P., & Malanchuk, O. (1986). Schematic assessments of presidential candidates. *American Political Science Review*, 80(2).
- Sheafer, T. (2008). Charismatic communication skill, media legitimacy, and electoral success. *Journal of Political Marketing*, 7(1).
- Shanks, J. M., & Miller, W. E. (1990). Policy direction and performance evaluation: Complementary explanations of the Reagan elections. *British Journal of Political Science*, 20(2).
- Stokes, D. E. (1966). Some dynamic elements of contests for the presidency. *American Political Science Review*, 60(1).
- Bailenson, J. N., Iyengar, S., Yee, N., & Collins, N. A. (2008). Facial similarity between voters and candidates causes influence. *Public Opinion Quarterly*, 72(5).
- Williams, C., & Gulati, G. (2008). What is a social network worth? Facebook and vote share in the 2008 presidential primaries. *American Political Science Association*.
- Utz, S. (2009). The (potential) benefits of campaigning via social network sites. *Journal of Computer-Mediated Communication*, 14(2).
- Tumasjan, A., Sprenger, T. O., Sandner, P. G., & Welpe, I. M. (2010). Predicting elections with twitter: What 140 characters reveal about political sentiment. *Icwsn*, 10(1).
- Argan, M., & Argan, M. T. (2012). Word-of-Mouth (WOM): Voters Originated Communications on Candidates during Local Elections. *International Journal of Business and Social Science*, 3(15).