The Effect of Political Efficacy on Web 2.0 Usage: The 2008 Primaries

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Abstract: This study surveyed 426 politically interested internet users during the November immediately preceding the 2008 U.S. presidential primary elections in order to determine the motivations guiding their use of Web 2.0 technology when following the primary elections. Web 2.0 usage among the politically interested is a fruitful area to apply the uses and gratifications approach, as the assumptions of an active audience who is cognizant of their media needs are especially likely to hold in this context. A factor analysis of 28 motivational items revealed four dimensions: convenience, social utility, entertainment, and guidance. Horserace surveillance loaded strongly (.745) to the entertainment factor. The findings support the following relationships: the entertainment motivation predicts party cue reliance; the social utility motivation, the entertainment motivation, and intention to vote in the primary date predict Web 2.0 production; the convenience factor predicts the date of the primary; and the convenience, entertainment, and guidance motivations predict political information efficacy.

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While the role of internet news sources had a noted effect on John McCain's candidacy in 2000 and Howard Dean's candidacy in 2004, the 2008 cycle is projected to be completely unlike the past. Gannaway (2006) found that two-thirds of likely voters "expected candidates to use the Internet for fundraising, to post video commercials on Websites, and to run online ad campaigns… The Internet can and will fundamentally change the nature of campaigning, the involvement of the electorate, even who campaigns for office" (p. 36). Mainstream media are reinforcing this trend; television and newspaper reports describing the increasingly important role the internet is playing in the 2008 campaign cycle are not uncommon (e.g., Mercer, 2007). The move to Web 2.0 (including social networking sites, blogs, wikis, and picture/video sharing sites) complicates this somewhat, as "the increasingly seamless integration of user and system that can now be observed… to populate and manipulate masses of user-generated content [culminates] in an evolving collective intelligence" (Thomas, 2006, p. 387). Neither the motivations undergirding this phenomenon, nor its practical political consequences, are well understood (Kessler, 2007).

Theoretical Rationale

This study examines the motivations guiding the use of non-traditional internet media with respect to the 2008 primary election process. As such, it comes at a critical time, given that the changes in this area have been so rapid that previous research may potentially be obsolete. Due to the relatively young age of the internet, research on its role in presidential elections is sparse (Polsby, Wildavsky, & Hopkins, 2007). Moreover, Stöckl, Rohrmeier, and Hess (2007) observe that empirical study of the motivations of people using user-generated internet content is severely lacking; MacNamara (2007) observes that "Web 2.0 applications... are rewriting the rules... One-way media such as traditional newspapers, brochures, non-interactive Web sites... are side roads and, in some cases, dead-ends in communication" (p. 10).

The uses and gratifications approach has been used in the past to explain how an active and differentiated audience uses mass media products (Herzog, 1944; Katz, 1959; Katz, Blumler, & Gurevitch,

1974; Williams, Phillips, & Lum, 1987; Rubin, 1993; Perse & Dunn, 1998). Scholars using this approach assume that users of a medium can reveal, as first-order explanations, the motivations guiding their use of media (Burton, 2005). These assumptions are very likely to hold for a population of politically interested internet users, as political motivations imply goal oriented behavior, and the interactivity of the internet implies users are active (Ruggerio, 2000; Kaye & Johnson, 2002). The present study's population is not merely politically interested, but sufficiently interested to follow the primary races several months before the elections begin. Moreover, the population is not of internet users in general, but rather those who make use of the user-generated content commonly understood to be Web 2.0. As a result, this study could offer new insights into the uses and gratifications approach as a theoretical framework.

Ruggerio (2000) argued that "any attempt to speculate on the future direction of mass communication theory must seriously include the uses and gratifications approach" (p. 3). This is because motivations have been found to vary across media type and genre (Sherry, Lucas, Greenberg, & Lachlan, 2006). Accordingly, researchers have utilized this approach to explain the use of the internet, and have successfully demonstrated that motivations guiding its use differ from those guiding other the use of other media (Eighmey & McCord, 1998; Lin & Jeffres, 1998, Nie & Ebring, 2002; Stafford, Stafford, & Schkade, 2004). Researchers are only beginning to catalogue the specific needs associated with different internet formats across different contexts; e.g., Papacharissi and Rubin (2000) discovered that e-mail satisfied entertainment needs and information needs, while web-browsing satisfied surveillance needs, and that the latter are more important in general to internet users. Researchers have also begun to catalogue motivations guiding internet use for political purposes (Kaye & Johnson, 2002; Kaye & Johnson, 2004), as well as motivations guiding Web 2.0 use in general (Nylund, Marvez, & Beck, 2007). No studies examining the intersection of the two, however, exist. While studies have shown that media uses and gratifications predict political efficacy, none of these studies have accounted for the changes brought by Web 2.0 (McLeod, Scheufele, & Moy, 1999; Newhagen, 1999; Kaye & Johnson, 2002; Scheufele, 2002; Kaye & Johnson, 2004; Wang, 2007). This study attempts to close this theoretical gap.

Practical Rationale

Howard Dean's failed run for the Democratic nomination was the first instance of a fringe candidate using the internet to rise to the top tier of competition, but Dean's campaign ultimately failed for traditional reasons; he used the internet to make money, but not to address questions of electability and extremism (Hindman, 2005). While many comparisons have been made between Howard Dean and candidates in the 2008 cycle (most notably Ron Paul), Vargas (2007) notes that political activists are using the internet for a variety of reasons besides raising money for their preferred candidate(s), including influencing polls, challenging notions of objectivity in the mainstream media, and attempting to join the campaign process themselves through the creation of viral advertisements. Yet, campaign organizers, along with other mass communications practitioners, have insufficiently studied the potential of Web 2.0. Along these lines, MacNamara (2007) argues:

> [Practitioners have] not yet engaged in any substantial way with new media and concepts such as Web 2.0. Of those that have, the primary focus is how to produce Web sites, produce blogs, produce podcasts. Yet more outputs; more focus on process and practice. It is comparatively rare to find practitioners monitoring and analyzing the use, impact and effects of blogs, for instance, and it is rare to find them at the forefront of policy making and planning, advising their organizations on the implications of new media. (p. 7).

The consequences of obtaining this knowledge implicate the way in which American democracy functions, and so should be useful to an interdisciplinary set of researchers, in both academic and political fields. This is all the more true given the overall public dissatisfaction with the way in which traditional media has handled election coverage; Lichter and Noyes (1996) demonstrated that focus on the horserace and on campaign strategy at the expense of issue-specific news content has alienated potential voters from the entire process. With more activists using the internet to get their election coverage, the mainstream media have increased their alienating horserace coverage in every election cycle since 1996 (Patterson, 2005). Coverage of elections on the internet might be, therefore, the last best hope for exciting a bored and disengaged public

about democracy (Bimber, 1998; Burton, 2005). On the other hand, Lax (2000) challenged the claims that the internet will reinvigorate democracy, as many groups of people either cannot access the web or do not choose to access the web. While this study does not seek to test this claim, it paves the way for future studies that can ask this kind of question empirically.

Literature Review

Web 2.0 Motivations

Kaye and Johnson (2002) examined the uses and gratifications associated with political information mediated by online sources during the 1996 election cycle. They sought to understand the relationship between political effects and the antecedent uses of the internet as a source of political information. They found through exploratory factor analysis of survey results that there are four primary motivations behind engaging the web for political information: 'guidance,' 'surveillance,' 'entertainment,' and 'social utility.' Two years later, in a similar study, they discovered an additional factor they called 'convenience,' which they defined as "seeking political information from online sources because it is convenient and easier to do so than turning to traditional sources" (Kaye & Johnson, 2004, p. 208). Given the close relationship between pursuing political information in general and pursuing (and providing) information related to political campaigns, the following hypothesis was tested:

> H1: Exploratory factor analysis will reveal that among people who use the internet for information about the 2008 U. S. presidential primary elections, the five factors convenience, entertainment, guidance/identity, information-seeking/surveillance, and social utility, will appear.

Kaye and Johnson (2002, 2004) further found statistically significant correlations between these four motivations and the total amount of internet use, general trust in government, and interest in political issues, while they found no significant correlation between the motivations and either voting likelihood or strength of party affiliation. In 2002, they found significant correlations between the four factors and political efficacy, i.e., the feeling that one has the ability to participate in and influence the political process. In 2004, however, political efficacy did not significantly correlate with any of the factors, which the

researchers attribute to the web having become "a venue for mainstream users, [rather than] as a place for those with a strong sense of self-efficacy" (Kaye & Johnson, 2004, p. 219). Kaye and Johnson (2002, 2004) offered sampling and instrument recommendations, which I discuss below in the method section.

Role of Political Parties

The discovery that strength of party affiliation does not correlate with the four categories of motivation is not surprising given there is no theoretical reason to predict a correlation. Kaye and Johnson (2002) offered no reason why they categorized the variable the way they did. They explain:

> Respondents were asked to report whether they view themselves as "strong Democrat," "lean toward Democrat," "strong Republican," "lean toward Republican," "independent," or "other." Categories were then collapsed into "strong partisan" (strong Republican and strong Democrat combined), "weak partisan" (weak Republican and weak Democrat combined); "independent" and "other" were not collapsed. (pp. 60-61).

Without further elaboration about what the terms 'strong' and 'lean' mean, this grouping does not offer any insight into the differences between categories. For example, someone might only lean toward the Republican Party on the one hand because they have not made up their minds on a lot of issues, or on the other hand because they very strong opinions, some of which are advocated by Republicans and some of which are not. Further, Pomper (1977) observed that many people who are strongly loyal to a party's platform are reluctant to identify with the party itself because they want to "vote for the man [sic], not the party" (p. 35). Hence, it follows that strength of party affiliation is not a very useful variable. Snyder and Ting (2002) argue that the most significant function of political parties is that they provide information (in the form of a brand) to voters. Measuring the degree to which someone relies on party cues when making a decision is much more useful, therefore, than measuring the strength of someone's party affiliation. Hence, a greater degree of insight can be gained by analyzing the relationship between the degree to which someone relies on party cues and the motivations behind their internet use. Previous research indicates

that, in general, those motivated by the need for guidance tend to be more reliant on party cues (Synder and Ting, 2002).

The 2008 primary elections present an interesting context to test this relationship, primarily due to the candidacy of Ron Paul. Riley (2007) argues that Ron Paul's candidacy is unique for two main reasons. First, while all of the viable campaigns have made use of the internet in general and Web 2.0 technologies in particular, Paul's campaign radically differs from all the others because it relies entirely on Web 2.0:

> [U. S. campaigns have] evolved a long way over the years… The evolution has always been in the direction of more is good; every election cycle candidate pages have added more and more centralized features, to the point where the campaign site for Barak Obama even has it's [sic] own social network. Ron Paul throws all of that out the window; he preaches small government and empowering the individual, and his campaign site and strategy follows that exact lead. Aside from the usual biography page and policy documents, content is all driven by external Web 2.0 sites. To be fair, other candidates are using Web 2.0 sites, but it's usually in addition to their own content; Paul's content on the other hand is nearly all exclusive to Web 2.0. (¶ 4).

Additionally, the Paul campaign calls into question the informational power of party affiliation, as "Paul's platform is very, very different to most (if not all) of the other candidates, both from his own Republican Party and the Democrats" (¶ 2). While it is certainly the case that no one uses party affiliation as a cue to guide voting in the primary (since everyone in the primary has the same party affiliation), the degree to which party affiliation is useful in the general election to primary voters depends, in part, on the ideological homogeneity of the party (Snyder & Ting, 2002, p. 94). Finally, Hwang, et al. (2006) found that the feeling that one's political views are outside of the mainstream predicted the use of the internet for information from like-minded people and for discussion. The degree to which one is reliant on party cues seems to be a reasonable measure of the feeling that one's views are outside of the mainstream. This suggests the following hypotheses:

H2a: The guidance score will predict the party cue reliance score.

H2b: The social utility score will predict the party cue reliance score.

H2c: Among respondents indicating preference for a single candidate, those preferring Ron Paul will express less reliance on party cues for guidance in the general election than those not preferring Ron Paul.

H2d: Respondents indicating preference for a group of candidates will express more reliance on party cues than respondents indicating preference for a single candidate.

Motivations and Production

Birdsall (2007) noted that Web 2.0 is revolutionary because it focuses on user-generated content. Users of Web 2.0 technologies are free to participate in many ways: one may browse the content created by others, post comments and discuss the productions of others, or one may generate entirely new content. While commenting on a user-generated product (group, article, video, etc.) is conceptually distinct from creating a product, operational distinctions are difficult because comments are a form of user-generated content. Milne, Witten, and Nichols (2007) argued that categorization is almost anachronistic, as "under the Web 2.0 model, services eschew the traditional separation between consumer and producer" (¶ 5). Nevertheless, some differences in use seem identifiable. Kaye and Johnson (2004) noted that one's motivations, among other factors, predict internet use habits with respect to e-mail, bulletin boards, and chat forums. That the production of user generated content is necessarily social and probably entertaining suggests the following hypotheses:

H3a: The social utility motivation and the entertainment motivation will predict the production of social networking groups.

H3b: The social utility motivation and the entertainment motivation will predict the production of user-generated videos.

H3c: The social utility motivation and the entertainment motivation will predict the production of blogs.

Political Efficacy

As noted above, political candidates for election have increased their presence on the internet by a great deal over the last view years. Xenos and Bennett (2007) performed a series of content and hyperlink analyses covering the 2002 and 2004 election cycles, and found that while the number of youth-oriented political information on the web increased, there was a "reluctance of many mainstream political actors to speak directly to young people through the web, and a surprising underdevelopment of linkages between youth politics websites and the wider web of political information" (p. 443). Some campaigns, they found, were better at this than others. Tewksbury (2006) discovered that people tend to use more interactive media to participate politically when they are highly motivated to participate in politics, but he noted that no adequate survey research has discovered what specific motivations drive election-related internet use, nor has any research accounted for variations in new media use among the electorate.

Riley's (2007) insight that ideological differences correspond to specific campaign strategies, as well as Kaye and Johnson's (2002) discovery that those who use the internet for political information differ to varying degrees from the general population in terms of suspicion of the government and the mainstream media, both suggest that different politically motivated groups of internet users, having different attitudes about the world, will fundamentally use the internet differently. This is predicted by expectancy-value theory, which holds that the attitudes of the users of a medium determine the gratifications sought from that medium (Palmgreen, 1985). Attitudes (consisting of a belief coupled with a subjective evaluation) about political efficacy (both internal efficacy, or the belief that one has the competency to understand and participate in the political process, and external efficacy, the belief that governmental authorities will be responsive to demands) have historically covaried with internet use patterns (Johnson & Kaye, 2004). Indeed, people who use the internet for political information tend to have higher levels of political efficacy than the general population (Kaye & Johnson, 2004). No studies of political efficacy and the internet, however, have considered Web 2.0 innovations.

Geographical barriers to political efficacy. Web 2.0 lowers barriers to interactivity in the 2008 primary campaigns, which is to say that people (regardless of where they live) should find it easier to send

messages to the candidates as well as to other potential voters than in the past (Feldmann, 2007). Internet interactivity should be able to ameliorate two substantial causes of low political efficacy. First, since the same internet is available regardless of the state in which one resides, primary frontloading should have less of a depressive effect on political efficacy for those living in late primary states; Carmen and Barker (2005) note that "voters in 25 states had virtually no say in the presidential nomination process. Why? Because these states held their nominating events after the respective nominees had been determined" (p. 666). To increase their political efficacy, people living in late primary states can use Web 2.0 to attempt to influence others to donate money and to vote, making it possible for political efficacy to be separated conceptually from voting. This suggests the following hypotheses:

H4a: The social utility score will predict the degree to which respondents feel their primary vote is likely to occur after a candidate has functionally won.

H4b: Respondents believing that their primary vote will occur after the candidate for general election has functionally won will be more likely to produce user-generated content (beyond commenting).

Political information efficacy. Second, internet facilitated interactivity is a strong predictor of political information efficacy, which is an important component of political efficacy (Tedesco, 2007). Kaid, McKinney, and Tedesco (2007) note that one of the most common justifications offered by non-voters for their political apathy was that "they lacked sufficient knowledge to participate as an informed voter" (p. 1095). Political information efficacy research has only been experimental—Tedesco (2007) notes that while interactivity increases political information efficacy, no data exists suggesting that those with low political efficacy will self-select forums where interactivity is possible. However, low political information efficacy may motivate media use. Kaid and Postelnicu (2005) argue that political information efficacy has two components – knowledge concerning how to participate technically (e.g., how to vote), and knowledge concerning in what way one should participate (e.g., for whom to vote). These components conceptually share some of the

features of the convenience, surveillance, and guidance dimensions of motivation which Kaye and Johnson (2004) describe.

While there has been no research comparing political information efficacy and entertainment, Newhagen (1999) found that exposure to informational media predicted increases in political efficacy, while exposure to entertainment media predicted decreases in political efficacy. Finally, Hardy and Scheufele (2005) found that the acquisition of information over the internet, followed by online interactions, substantially increased political participatory behavior. This suggests the following hypotheses:

H5a: The convenience score will predict the political information efficacy score.

H5b: The surveillance score will predict the political information efficacy score.

H5c: The guidance score will predict the political information efficacy score.

H5d: The entertainment score will predict the political information efficacy score.

H5e: The social utility score will predict the political information efficacy score.

Method

Participants

Participants were invited to respond to an online survey. After clicking on a link, participants were shown an information sheet, which they had to read and electronically sign (by clicking in a box) in order to reach the survey. Only respondents who indicated that they had "actively sought out, over the internet, information about some aspect of the 2008 primary elections" were included. Respondents were treated in accordance with the "Ethical Principles of Psychologists and Code of Conduct" (American Psychological Association, 1992).

The survey ran for one month; 429 people responded. Of that group, 310 completed the first and second pages, and were included in the initial factor analysis to test H1. Only 274 people answered every question, and so only those surveys were included in the testing of subsequent hypotheses.

Considering those 274 responses, the reported age of respondents ranged from 18 to 89, with a mean age of 28.72 years (the mode was 22 years). Males made up 74.3% (202 total respondents) of the

respondents, while 24.3% (66 total respondents) were female. Political partisanship seemed fairly balanced: 77 respondents (representing 28.1% of the total) identified as Democrats; 76 respondents (representing 27.7% of the total) identified as Republicans; 37 respondents (representing 13.5% of the total) identified as Libertarians; 10 respondents (representing 3.6% of the total) identified as Greens; 22 respondents (representing 8% of the total) identified as belonging to some other party; finally, 50 respondents (representing 18.2% of the total) identified as Independents.

Measures

The survey included six demographic questions, covering gender, age, education, ethnicity, income, and political affiliation. These were followed by a question asking who, if anyone, the respondent currently supports in the election races, and how confident (on a five point Likert-like scale ranging from 'not at all confident' to 'very confident') the respondent is that they will continue to support that candidate. Respondents were also asked whether they intended on voting in their state's primary election and in the general election.

Motivations for using the internet for information about the 2008 primary elections were composed of 28 statements derived from previous uses and gratifications studies (Kaye, 1998; Kaye & Johnson, 2002; Kaye & Johnson, 2004; LaRose & Eastin, 2004; McLeod and Becker, 1974; McLeod and Becker, 1981). All items were included except for those which were not applicable to political content (Table 1). Respondents indicated the extent to which they agreed with the reasons offered for using the internet for information about the 2008 primary elections. The questionnaire restricted responses to these motivations on a five point Likert-like scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Seven political efficacy questions were taken the National Election Study. Niemi, Craig, and Mattei (1991) found these items to be of robust validity across sub-groups, immune to order effects, and reliable. Four political information efficacy items were identified by Tedesco (2007). Three of the latter items were redundant, so a total of 8 items were used. These questions were also scored on the same five point Likert-

like scale. Reliability analysis was conducted to ensure internal consistency. Responses were summed into scores; table 2 shows the coefficient alphas and item analysis.

Three statements were developed to determine the degree to which the respondent relies on party cues in the general election: "Regardless of who wins the nomination, I will vote for my party's candidate in the general election," "My political views are well represented by one of the two major political parties," and "I consider myself to be part of my party's base, or core of devoted voters." Responses were limited to a five point Likert-like scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Reliability analysis was conducted to ensure internal consistency. A score was created from the summed results.

Finally, respondents were questioned on the frequency with which they create, read, and comment on blogs, videos (hosted on video-sharing websites), and groups (hosted on social networking websites). Table 3 shows the percentages of respondents who reported using the various Web 2.0 technologies mentioned in the survey. The categories of 'production' and 'consumption' are self-explanatory. 'Heavy' and 'light' vary in meaning for the 'production' questions: for social networking websites, the creation of one group was considered light, while the creation of more than one was considered heavy; for video-sharing websites, one video was considered light, while more than one was considered heavy, and one through nine total comments was considered light, while more than ten total comments was considered heavy; for blogs, authoring one was considered light, while authoring more than one was considered heavy. Heavy and light also varied in meaning for the 'consumption' questions: for social networking websites, joining one group was considered light, while joining more than one group was considered heavy; for video-sharing sites, viewing videos less frequently than once a week was considered light, while viewing videos more frequently than once a week was considered heavy; for blogs, reading but not subscribing was considered light, while subscribing was considered heavy.

Procedures

An online survey was posted on Survey Monkey, where it remained for the entire month of November. Links to the survey were posted to Facebook groups, YouTube videos, blogs, politically oriented websites, and politically oriented listservs and online discussion groups.

Data analysis

An alpha level was set at .05 for all statistical tests. The specific statistical tests used are outlined below, arranged by hypothesis group.

Web 2.0 motivations. In order to test H1, exploratory factor analysis was used. Each motivation score was factored by principal-components factor analysis with Varimax rotation, which Kerlinger and Lee (2000) argued is competent at approximating simple orthogonal structure. As in Kaye and Johnson (2004), motivations were assigned to a factor if the primary loadings exceeded .45. If a motivation loaded onto two factors, it was assigned to the factor for which it had the highest level of loading. Reliability analysis was conducted to ensure the value of Cronbach's alpha for each factor exceeded .75.

Role of political parties. Responses to the 'party cues' questions underwent factor analysis, and a factor score was computed for each respondent. Multiple regression analysis was used to test H2a and H2b. An independent sample *T*-test was used to test H2c and H2d.

Motivations and production. Each production item was kept separate, as an attempt to create a production index combining social networking groups, videos, and blogs was found to not be internally consistent (Cronbach's alpha = .427). Multiple regression analysis was calculated to test H3a, H3b, and H3c.

Political efficacy. A separate index was created for 'primary voting efficacy,' comprised of two items: the statement "I will vote in the primary election" and the statement "The candidates for the general election will already be chosen by the time my state primary occurs." The index was checked for reliability; Cronbach's alpha was calculated at .197, indicating low reliability, so the index was discarded, and the responses to the second item were used to test H4a, and H4b. Multiple regression analysis was used to test H4a. Somers' *d* was calculated to test H4b. Multiple Regression analysis was used to test H5a, H5b, H5c, H5d, and H5e.

Results

Measurement Results

Party cue score. Three items intending to measure the degree to which respondents rely on party cues to make decisions were examined. With the results for each item summed, into a score, Cronbach's alpha was calculated at .762, and item-total correlations ranged from .564 to .626.

Political efficacy. Cronbach's alpha was calculated for the eight political efficacy items to be .508. After removing the two external political efficacy items (which had inter-item correlations of .101 and .028), Cronbach's alpha was calculated at .803; the six component items were summed into a political efficacy scale. The four political information efficacy items were summed into a score; Cronbach's alpha was calculated at .850.

Production. Cronbach's alpha was calculated for the three production items to be .427. All inter-item correlations were below .3. The scale was not used. Instead, respondents were divided into two categories of production: 'no production,' for those indicating they had not created a social networking group, uploaded a user-generated video, or served as main contributor to a blog, and 'production,' for those reporting having produced at least one of the aforementioned items.

Web 2.0 Motivations

The first hypothesis states that 'exploratory factor analysis will reveal that among people who use the internet for information about the 2008 U. S. presidential primary elections, the five factors convenience, entertainment, guidance/identity, information-seeking/surveillance, and social utility, will appear.' While factor analysis did reveal five dimensions with eigenvalues greater than one which roughly corresponded to the five predicted dimensions, the researcher did not feel strongly about the explanatory power of those dimensions as such. Additionally, examination of the scree plot (Figure 1) suggested four dimensions, rather than five, were present in the data. Factor analysis (with varimax rotation) was repeated, and four factors were extracted: 'Convenience,' 'Social Utility,' 'Entertainment,' and 'Guidance' (Table 1).

Factor analysis. Each factor had an eigenvalue of at least 1.2 (convenience 9.072, social utility 2.653, entertainment 2.225, and guidance 1.301). Convenience accounted for 32.401% of the variability, while

social utility accounted for 9.476% of the variability, entertainment accounted for 7.947% of the variability, and guidance accounted for 4.647% of the variability; all the items together accounted for 54.47% of the total variance.

Reliability. After extracting the four dimensions, internal consistency reliability was calculated for each dimension. The convenience dimension was composed of six items, and Cronbach's alpha was calculated at .816; item-total correlations ranged from .415 to .660. The social utility dimension was composed of eight items, and Cronbach's alpha was calculated at .840; item-total correlations ranged from .490 to .671. The entertainment dimension was composed of seven items, and Cronbach's alpha was calculated at .797; item-total correlations ranged from .329 to 663. The guidance dimension was composed of five items, and Cronbach's alpha was calculated at .802; item-total correlations ranged from .554 to .619. Given the high degree of internal consistency reliability for each factor, factor scores were calculated through regression analysis for each respondent.

Role of Political Parties

These three hypotheses are related in the sense that they all represent predictions concerning the relationship between party cues and motivations for Web 2.0 use. They are examined here in order.

H2a and H2b. These hypotheses posit predictive relationships between Web 2.0 motivations and the party cue reliance score. A linear regression revealed that the party cue reliance score were not significantly predicted by the guidance score, $\beta = -.036$, $t(240) = -.538$, $p > .05$, $\eta^2 = .001$, the convenience score, $\beta = -.106$, $t(240) = 1.734$, $p > .05$, $\eta^2 = .012$, or the social utility score, $\beta = -.088$, $t(240) = -1.440$, $p > .05$, $\eta^2 = .009$. The entertainment score did significantly predict the party cue score, $\beta = .300$, $t(240) = 4.929$, $p < .001$, $\eta^2 = .092$. Hypothesis H2a states: "The guidance score will predict the party cue reliance score;" this hypothesis was not supported. Hypothesis H2b states: "The social utility score will predict the party cue reliance score;" this hypothesis was also not supported. The entertainment score explained a significant portion of the variance in party cue scores, $R^2 = .089$, $F(1, 243) = 23.858$, $p < .001$.

H2c. The research hypothesis states: "Among respondents indicating preference for a single candidate, those preferring Ron Paul will express less reliance on party cues for guidance in the general election than those not preferring Ron Paul." An independent sample *T*-test compared the party cues scores among those who support Ron Paul and those who do not. The 102 respondents preferring Ron Paul had a mean party cues score of 6.245 (*SD* = 2.679), while the 120 respondents preferring some other single candidate had a mean party cues score of 9.533 (*SD* = .3.062). Levene's test indicates that the assumption of homogeneity should be accepted, $p > .05$. Respondents preferring Ron Paul had significantly lower party cue scores than respondents preferring other candidates, t (220) = 8.441, $p < .001$, $\eta^2 = .245$. The research hypothesis was supported.

H2d. The research hypothesis states: "Respondents indicating preference for a group of candidates will express more reliance on party cues than respondents indicating preference for a single candidate." Those who responded that they prefer one candidate and have no preference at all among the remaining candidates were combined into a group with those who said they have no preference at all. Those who responded that they prefer one candidate but have significant preferences among the remaining candidates were combined into a group with those who said they do not prefer a single candidate but do prefer a group of candidates over the remaining candidates. An independent sample *T*-test was used to compare these two groups. The 132 respondents not preferring a group of candidates had a mean party cues score of 8.614 (*SD* = 3.367), while the 136 respondents preferring a group of candidates had a mean party cues score of 7.235 (*SD* = 3.123). Levene's test indicates that the assumption of homogeneity should be accepted, $p > .05$. Respondents preferring a group of candidates had significantly higher party cue scores than respondents preferring a single candidate, t (267) = 3.476, $p < .001$, $\eta^2 = .043$. The research hypothesis was supported.

Motivations and Production

H3a. The research hypothesis states: "The social utility motivation and the entertainment motivation will predict the production of social networking groups." Linear regression indicates the production of social networking groups was significantly predicted by the social utility score, $\beta = .198$, t(246)

= 3.235, p <.001, η^2 = .041, and the entertainment score, β = .211, t(246) = 3.448, p < .001, η^2 = .047, but not by the convenience score, β = .114, t(246) = 1.873, p > .05, η^2 = .014, nor by the guidance score, β = -.016, t(246) = -.257, p > .05, η^2 < .001. The social utility and entertainment motivations explained a significant proportion of variance in group production scores, R^2 = .083, F(1, 244) = 10.399, p < .001. The research hypothesis was supported.

H3b. The research hypothesis states: "The social utility motivation and the entertainment motivation will predict the production of user-generated videos." Linear regression indicates the production of user-generated videos was not significantly predicted by the social utility score, β = .078, t(245) = 1.212, p >.05, η^2 = .006, the entertainment score, β = .028, t(245) = 3.448, p >.05, η^2 = .001, the convenience score, β = .027, t(245) = 1.873, p > .05, η^2 = .001, or the guidance score, β = -.030, t(245) = -.257, p > .05, η^2 = .001. The four motivations failed to explain a significant proportion of variance in user-generate video scores, R^2 = .008, F(4, 241) = .516, p > .05. The research hypothesis was not supported.

H3c. The research hypothesis states: "The social utility motivation and the entertainment motivation will predict the production of blogs." Linear regression indicates the production of social networking groups was significantly predicted by the social utility score, β = .146, t(245) = 3.235, p < .02, η^2 = .022, and the entertainment score, β = .199, t(245) = 3.448, p < .002, η^2 = .041, but not by the convenience score, β = .112, t(245) = 1.873, p > .05, η^2 = .013, nor by the guidance score, β = -.026, t(245) = -.257, p > .05, η^2 = .001. The social utility and entertainment motivations explained a significant proportion of variance in blog production scores, R^2 = .053, F(1, 243) = 5.473, p < .001. The research hypothesis was supported.

External Political Efficacy

This set of hypotheses examines the relationship between external political efficacy, self-reported beliefs in the efficacy of one's primary vote, and the uses and motivations of Web 2.0.

H4a. The research hypothesis states: "The social utility score will predict the degree to which respondents feel their primary vote is likely to occur after a candidate has functionally won." Linear regression indicates the belief that one's primary vote will occur after a candidate has functionally won was

significantly predicted by the convenience score, β = -.170, $t(232) = -2.629$, $p < .01$, $\eta^2 = .029$, but not by the social utility score, β = -.083, $t(232) = -1.301$, $p > .05$, $\eta^2 = .007$, the entertainment score, $\beta = .105$, $t(232) = 1.581$, $p > .05$, $\eta^2 = .011$, the guidance score, β = -.065, $t(232) = -1.002$, $p > .05$, $\eta^2 = .004$, or the political efficacy score, $\beta = .019$, $t(232) = .283$, $p > .05$, $\eta^2 < .001$. Together, these five factors explained a significant proportion of the variance in the dependent variable, $R^2 = .052$, $F(5, 232) = 2.546$, $p < .05$. The convenience score explained a significant proportion of the variance in the dependent variable, $R^2 = .028$, $F(1, 236) = 6.881$, $p < .01$. The research hypothesis was not supported.

H4b. The research hypothesis states: "Respondents believing that their primary vote will occur after the candidate for general election has already been picked will be more likely to produce user-generated content (beyond commenting)." Respondents were divided into two groups, based on whether they had produced any non-comment Web 2.0 content: 'no production' and 'production.' Somers' *d* was calculated, and an approximate *T* was calculated using the asymptotic standard error assuming the null hypothesis, to determine if responses to the late primary item were significantly greater for the production group. No significant difference was found, $d = .009$, $t(267) = .157$, $p > .05$ (Table 4). The research hypothesis was not supported.

Post-hoc tests. A Spearman correlation was carried out, and an approximate *T* was calculated using the asymptotic standard error assuming the null hypothesis, to determine if responses to the late primary item significantly correlated with responses to the individual production items. The late primary item significantly correlated with social networking group production, ρ = -.128, $t(267) = -2.098$, $p < .05$, (Table 5), as well as blog production, ρ = -.133, $t(265) = -2.187$, $p < .03$, (Table 6). The late primary item did not significantly correlate with user-generated video production, $\rho = .029$, $t(266) = .478$, $p > .05$, (Table 7).

Additionally, the process to test H4b was repeated, replacing the late primary item with the 'I will vote in my state's primary election' item. Somers' *d* was calculated, and an approximate *T* was calculated using the asymptotic standard error assuming the null hypothesis, to determine if responses to the primary voting intention item were significantly different for the production group. Respondents who had produced

Web 2.0 content were significantly more likely to intend to vote in their primary, d = .194, $t(269) = 3.662$, $p <$ .001 (Table 8).

Finally, the relationship between intention to vote in the primary on the one hand and the four motivations and intention to vote in the general election on the other was examined with regression analysis. Linear regression revealed intention to vote in the primary was significantly predicted by intention to vote in the general election, β = .526, $t(237) = 9.955$, $p < .001$, η^2 = .293, the convenience score, β = .160, $t(237) =$ 3.082, $p < .002$, η^2 = .038, and the social utility score, β = .182, $t(237) = 3.533$, $p < .001$, η^2 = .050. Intention to vote in the primary was not significantly predicted by either the entertainment score, β = -.007, $t(237) =$ -.132, $p > .05$, $\eta^2 < .001$, nor the guidance score, β = -.012, $t(237) = -.241$, $p > .05$, $\eta^2 < .001$. Intention to vote in the general election, the convenience score, and the social utility score explained a significant portion of the variance in intention to vote in the primary election, R^2 = .362, $F(1, 241) = 9.610$, $p < .002$.

Political Information Efficacy

The five research hypotheses all predict relationships between the motivational factors and the political information efficacy score. Linear regression analysis was conducted to determine the relationships between the four factors and political information efficacy. That analysis revealed that the political information efficacy score was predicted significantly by three of the four variables: the convenience score, β = .157, $t(237) = 2.549$, $p < .05$, η^2 = .027, the entertainment score, β = .260, $t(237) = 4.215$, $p < .001$, $\eta^2 =$ .071, and the guidance score, β = -.125, $t(237) = -2.032$, $p < .05$, η^2 = .017. The social utility score did not predict significantly the political information efficacy score, β = .051, $t(237) = .822$, $p > .05$, η^2 = .003. The convenience score, the entertainment score, and the guidance score explained a significant portion of the variance in the political information efficacy score, R^2 = .110, $F(1, 235) = 4.100$, $p < .05$. Hypothesis H5a states: “The convenience score will predict the political information efficacy score;” this hypothesis was supported. Hypothesis H5b states: “The surveillance score will predict the political information efficacy score;” as no independent surveillance factor emerged, this hypothesis was not supported. Hypothesis H5c states: “The guidance score will predict the political information efficacy score;” this hypothesis was

supported. Hypothesis H5d states: "The entertainment score will predict the political information efficacy score;" this hypothesis was supported. Finally, hypothesis H5e states: "The social utility score will predict the political information efficacy score;" this hypothesis was not supported.

Discussion

Sample

As the population under study only includes people who use the internet to obtain information about the 2008 primary election, a sample of respondents who were directed to the survey through links posted on political websites was used. Though the sample is not random, the very nature of the internet makes random sampling not practically possible (Wu & Weaver, 1997; Kaye & Johnson, 2002; Kaye & Johnson 2004). Response rate was impossible to calculate because one can never know how many people saw a particular link and chose not to click on it. Moreover, since participation is voluntary, and since people who voluntarily fill out internet surveys may not be representative of everyone who sees the links for internet surveys, it is impossible to fully generalize the results. Nevertheless, there are reasons to believe the sample is sufficiently representative. Since the study's population consists of people who use the internet interactively, the sample is presumed to be fairly similar to the population.

Web 2.0 Motivations

The four factors which emerged from the motivational scale were somewhat different than those which emerged in previous studies. Items traditionally loading to an independent information-seeking/surveillance factor for the most part loaded to the social utility factor. This makes some sense, as previous research did not examine Web 2.0, which by its very nature combines that act of gathering information with the act of engaging others. For example, almost half (48.88%) of blog readers leave comments on the blogs they read, and two out five (41.37%) people who view user-generated videos leave comments on those videos.

One conceptually social utility item loaded to the convenience factor: "I use the internet to follow the primary campaigns to provide help to others." This was the third highest loading item to the

convenience factor (.733), and it did not load very highly to the social utility factor (.196). This is even more significant when contrasted with similar items "…to get support from others" (which loaded to convenience at .109 and to social utility at .736) and "…to give me something to talk about with others" (which loaded to convenience at .162 and to social utility at .519). There are several possible explanations for this oddity, but none of those explanations rise above the level of a guess; future research (e.g., follow up questions about what ways in which people help others) is needed to explain this phenomenon.

In the same vein, a few conceptually information-seeking items loaded to other factors. This is true for virtually all of the convenience items, since what people find convenient about the internet typically relates to the ease at which they can find information. Of particular note, however, is the top-loading item to the entertainment factor: "…to judge who is likely to win an election." This reflects the dichotomy discussed earlier between information relating to the horserace and information relating to substance (Lichter, 2001). This suggests a direction for future research; similar scales with questions covering more types of political information and campaign coverage should be included. For example, it would be useful to know who is motivated to access negative (vs. positive) coverage, as well as information about particular issues (e.g., information about the candidate's experience, information about foreign policy ideas, etc.).

A final note is necessary about the item "…to access political information from work." While this item loaded to the guidance factor, rather than the convenience factor as might be expected, this should not be interpreted as indicating that this item is actually a component of the guidance dimension, as it has no face validity. This is almost certainly an artifact of the large amount of young people (who do not have jobs) who responded to the survey. That this caused the item to load to the guidance factor suggests that having a job (and concomitantly using Web 2.0 to follow election campaigns while on the job) correlates with using Web 2.0 to help make a decision about who to vote for. Future research is necessary to tease this relationship out. It should be noted, finally, that none of the odd factor loadings can be attributed to order effects, because the order of the items was randomized.

The Role of Political Parties

While hypotheses H2c and H2d were supported by the research, the implications are trivial given that neither H2a nor H2b were not supported. This is because H2c and H2d identify certain groups of people who rely on party cues more than others – the motivations guidance and social utility, however, did not as predicted explain significantly any of the variance in party cue reliance. As there is limited previous research concerning the way people reliant on party cues behave during the primary elections, this finding does not contradict previous research, but it does suggest that people who have their minds made up about the general elections before learning any information about the candidates also have their minds made up about the primary elections. During the general election, these people vote for their party's candidate, but what criteria do these people use in the primary elections? While this is somewhat unclear, the strong correlation between party cue reliance and entertainment (discovered as part of the multiple regression analysis) suggests that horserace coverage guides how voting for this group of people. Given the obvious problems with post-hoc correlations (even in this case, which was significant at $p < .001$), as well as the tentative nature of this line of reasoning, future research is necessary to construct a concrete motivational model with respect to party cue reliance. This information would be useful to campaigns (and, by extension, to people who produce Web 2.0 content independently from official campaigns) so that content could be tailored to the needs of users.

Motivations and Production

As predicted, the social utility and entertainment motivations predicted the creation of social networking groups and blog authorship, but contrary to the hypothesis did not predict the creation of user-generated videos. Only 16.6% of the sample created user-generated videos, and there were only three ordinal categories of video production: never, once, and more than once. Future research should use a larger sample and use a better mechanism to rate production. A study which draws it sample only from YouTube users, for example, might better be able to understand the differing motivations behind video production. On the other hand, it may be the case that this study's findings are externally valid – perhaps the variables which lie behind the production of user-generated videos are not at all related to general motivations to use

Web 2.0. Blogging and creating social networking groups do not have heavy skill set or equipment requirements; the creative skill and technical expertise required to create and upload a video almost certainly confound Web 2.0 motivations. Future research that can control for those variables may gain better insights into the motivations behind video production. Additionally, future research should examine a wider variety of Web 2.0 behaviors in order to construct a more complex model characterizing the uses and gratifications of Web 2.0.

External Political Efficacy

With the importance placed on the Iowa Caucus, the New Hampshire primaries, and the primaries of Super Tuesday, residents of states which hold later primaries often find that one candidate has already secured enough votes to clinch the nomination by the time their primary race occurs. This study examined the effect this might have on the way those voters use Web 2.0 to follow the campaigns. It is important to note that the actual dates of the various primaries were not examined here – rather, respondents were asked whether they felt that the candidate would already be chosen by the time their primary occurred. While this certainly allows room for error (if, for example, respondents were confused about when their primary occurs), merely being in a late or early primary state can have no actual effect on Web 2.0 use unless one is aware of it.

First, the relationship between primary date and social utility was examined. It was hypothesized that those feeling their primary vote might be meaningless would try to gain a sense of efficacy by relating with others and promoting their candidate among those whose vote will come earlier. The addition of the political efficacy score in the regression did not significantly modulate effects one way or the other. Contrary to the prediction, no significant relationship was found. Instead, post-hoc testing revealed a significant relationship between primary date and convenience. This suggests that those who feel that their vote is meaningless are more interested in getting information easily than in connecting with one another. With a larger sample, however, as well as a better way to control specifically for other elements of external political

efficacy, a segment of the population similar to that predicted in H4a may emerge. In any event, future research is required.

Second, the relationship between primary date and the production of user generated content was examined. No relationship was found. Much like in H3a, H3b, and H3c, (post-hoc) relationships were discovered for blog production and social networking group production, but not for video production. The limitations with respect to video production measurement adumbrated above apply here. Nevertheless, that primary date was correlated with blog production and social networking group production is an important finding. This demonstrates that those who feel their primary will occur late are more likely to try to influence others by creating content on the internet. This seems to contradict the finding that H4a was not supported. There are two possible explanations for this. First, it may be the case that knowledge that one's state's primary will occur late correlates with some kind of technical proficiency. Primary dates are not everyday knowledge—those who have this knowledge might be more intelligent in general, on average. That such a large segment of the sample are college students, who do not have experience voting in previous primaries, but perhaps have recent knowledge from a high school government class, further confounds this variable. Future research must address and control for these extraneous variables. Second, it may be the case that those who vote in late primary states (and who know it) do in fact try to influence others, but the social utility motivation may not properly capture it. Certainly, they are producing user-generated content for some reason—future research should seek to establish the uses and gratifications of Web 2.0 production itself. Given that the '…to provide help to others' did not load on the social utility dimension suggests that other, more specific factors, may emerge with a larger sample and more directed motivational items.

The interpretation of these findings is further complicated by the results of a post-hoc test which replaced the late primary variable with the intention to vote in the primary variable. Web 2.0 production was directly correlated with the intention to vote in the primary. This suggests that Web 2.0 production can be predicted generally by external political efficacy. In any event, the positive finding in this study merits further investigation.

Political Information Efficacy

Multiple regression analysis revealed that the convenience, surveillance, and entertainment motivations all predict the political information efficacy score, as predicted. Social utility, however, did not predict the political information efficacy score, as hypothesized. This supports the political information efficacy model advanced by Kaid and Postelnicu (2005); guidance and convenience correspond with the technical and guidance factors of political information efficacy. The prediction that entertainment would predict political information efficacy was based on Newhagan's (1999) finding that entertainment negatively correlates with efficacy, especially for people of color. The findings of the present study suggest a reason to be optimistic: while there was a predictive relationship between entertainment and political information efficacy, it went the other direction. While racial characteristics were not taken as part of this study, the general finding that entertainment directly correlates with political information efficacy turns previous research on its head, and suggests that people have found much more entertaining means of empowering themselves (and others). However, Newhagan's (1999) findings cannot be wholly disregarded, as Newhagan examined all media use, not just politically directed media use. It still may be the case that people use the internet to be entertained by non-politically relevant material, and that material may decrease levels of political information efficacy. Future research should examine the effects of Web 2.0 broadly, beyond the arena of politics, to construct a more complex model of political information efficacy.

The finding that social utility does not predict significantly political information efficacy further refines the model advanced by Tedesco (2007), who found that interactivity increases political information efficacy, as well as the model advanced by Hardy and Scheufele (2005), who found that social interaction modulates gains in efficacy originating from information acquisition. Tedesco (2007) explained that his findings were experimental, as participants were assigned to interactive and non-interactive groups; no research up to this point indicates that those with high political information efficacy will self-select an interactive condition, and this present study suggests that they will not (any more than those with low

political information efficacy). Future research is needed to further tease out the ways in which the interactive and social nature of Web 2.0 can modulate political information efficacy.

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Table 1

Motivations for using Web 2.0 to follow the 2008 U.S. presidential primary elections

	Factor matrix			
	Convenience	Social Utility	Entertainment	Guidance
"I use the internet to follow the primary campaigns…"				
Factor 1: Convenience				
To access political information quickly	**.783**	-.018	.175	.166
To access political information at any time	**.745**	.052	.269	.165
To provide help to others	**.733**	.196	.085	.104
Because information is easy to obtain	**.714**	.190	.152	.125
To find specific information I am looking for	**.622**	.155	.327	.131
Because the mainstream media do not sufficiently cover all the news	**.496**	.429	-.149	.235
Factor 2: Social Utility				
To find out about issues affecting people like me	.190	**.753**	.118	.193
To get support from others	.109	**.736**	.147	.143
To keep up with the main issues of the day	.092	**.696**	.098	.187
To use as ammunition in arguments with others	.220	**.654**	.091	.230

Table 1 (Continued)

Motivations for using Web 2.0 to follow the 2008 U.S. presidential primary elections

	Factor matrix			
	Convenience	Social Utility	Entertainment	Guidance
Factor 2: Social Utility (Continued)				
To see what a candidate would do if elected	-.037	**.605**	.452	.044
To remind me of my candidate's strong points	.050	**.535**	.136	.331
To give me something to talk about with others	.162	**.519**	.411	.033
Because I can find unbiased viewpoints	.196	**.485**	.057	.370
Factor 3: Entertainment				
To judge who is likely to win an election	.175	-.017	**.745**	.141
To enjoy the excitement of an election race	.196	.268	**.656**	.050
Because it is entertaining	.441	.253	**.610**	-.003
Because it is enjoyable	.394	.350	**.595**	-.057
To help me relax	.015	-.041	**.560**	.323
To find people who share my political views	.102	.495	**.529**	-.092
To cheer me up	.115	.337	**.466**	.273
Factor 4: Guidance				
To make up my mind about how to vote	.085	.184	.105	**.798**
To make up my mind about the issues	.254	.203	.091	**.651**

Table 1 (Continued)

Motivations for using Web 2.0 to follow the 2008 U.S. presidential primary elections

	Factor matrix			
	Convenience	Social Utility	Entertainment	Guidance
Factor 4: Guidance				
To judge the personal qualities of the candidates	.215	.315	.178	**.613**
To see how the candidates stand on the issues	.544	.098	.029	**.568**
To access political information from work	.385	.327	.117	**.505**

Table 2

Political Efficacy Items

	Item total correlations	
	Political Efficacy	Sub-Scale
Political Efficacy (Cronbach's α = .508)		
Internal Political Efficacy (Cronbach's α = .790)		
"I consider myself well qualified to participate in political discussions."	.599	.718
"I feel I am better informed about politics and government than most other people."	.563	.653
"I feel that I have a pretty good understanding of the important Political issues facing our country."	.450	.573
"I feel I could do as good a job in public office as most other people." .379	.504	
*"Sometimes politics and government seem so complicated that a person like me can't really understand what is going on."	.386	.341
External Political Efficacy (Cronbach's α = .582)		
*"People like me don't have any say about what the government does." .101	.410	
*"I don't think public officials care much what people like me think."	.028	.410

*Scores were reversed.

Table 2 (Continued)

Political Efficacy Items

	Item total correlations	
	Political Efficacy	Sub-Scale
Political Information Efficacy (Cronbach's α = .850)		
"I consider myself well qualified to participate in political discussions." .599	.778	
"I feel I am better informed about politics and government than most other people."	.563	.735
"If a friend asked me about the presidential election, I feel I would have enough information to help my friend figure out who they should vote for."	.499	.644
"I feel that I have a pretty good understanding of the important political issues facing our country."	.450	.602

Table 3

*Web 2.0 Behavior by Percentage of Respondents (*n *= 274)*

Type of Web 2.0 Technology	Consumption		Production	
	Heavy	Light	Heavy	Light
Groups on Social Network Websites	39.6%	22.3%	6.2%	8.1%
Videos on Video Sharing Websites	39.6%	52.7%	12.9%	3.7%
Comments on Video Sharing Websites	NA	NA	14.1%	24.1%
Blogs	21.4%	60.6%	8.1%	2.2%

Table 4

Crosstabulation of Web 2.0 Production and Late Primary Belief

		Production of Web 2.0 Content		
		No Production	Production	Total
"The candidates for the general election will already be chosen by the time my state primary occurs."				
Strongly Disagree	Count	9	7	16
	Expected Count	11.2	4.8	16
Disagree	Count	39	16	55
	Expected Count	38.6	16.4	55
Neither Agree nor Disagree	Count	65	21	86
	Expected Count	60.3	25.7	86
Agree	Count	55	26	81
	Expected Count	56.8	24.2	81
Strongly Agree	Count	20	10	30
	Expected Count	21	9	30
Total	Count	188	80	268
	Expected Count	188	80	268

Table 5

Crosstabulation of Social Networking Group Production and Late Primary Belief

		Social Networking Group Production			
		None	Once	> Once	Total
"The candidates for the general election will already be chosen by the time my state primary occurs."					
Strongly Disagree	Count	9	3	4	16
	Expected Count	13.8	1.3	1	16
Disagree	Count	46	5	4	55
	Expected Count	47.4	4.3	3.3	55
Neither Agree nor Disagree	Count	79	3	4	86
	Expected Count	74.1	6.7	5.1	86
Agree	Count	69	8	4	81
	Expected Count	69.8	6.3	4.8	81
Strongly Agree	Count	28	2	0	30
	Expected Count	25.9	2.4	1.8	30
Total	Count	231	21	16	268
	Expected Count	231	21	16	268

Table 6

Crosstabulation of Blog Production and Late Primary Belief

		Blog Production			
		None	Once	> One	Total
"The candidates for the general election will already be chosen by the time my state primary occurs."					
Strongly Disagree	Count	12	3	1	16
	Expected Count	14.3	1.3	.4	16
Disagree	Count	46	7	1	54
	Expected Count	48.3	4.5	1.2	54
Neither Agree nor Disagree	Count	78	6	2	86
	Expected Count	76.9	7.1	1.9	86
Agree	Count	74	6	1	81
	Expected Count	72.5	6.7	1.8	81
Strongly Agree	Count	28	0	1	29
	Expected Count	25.9	2.4	.7	29
Total	Count	238	22	6	266
	Expected Count	238	22	6	266

Table 7

Crosstabulation of Video Production and Late Primary Belief

		Video Production			
		None	Once	> Once	Total
"The candidates for the general election will already be chosen by the time my state primary occurs."					
Strongly Disagree	Count	12	0	4	16
	Expected Count	13.4	.5	2	16
Disagree	Count	47	3	5	55
	Expected Count	46.1	1.9	7	55
Neither Agree nor Disagree	Count	75	3	8	86
	Expected Count	72.1	2.9	11	86
Agree	Count	67	2	11	80
	Expected Count	67.1	2.7	10.2	80
Strongly Agree	Count	23	1	6	30
	Expected Count	25.2	1	3.8	30
Total	Count	224	9	34	267
	Expected Count	224	9	34	267

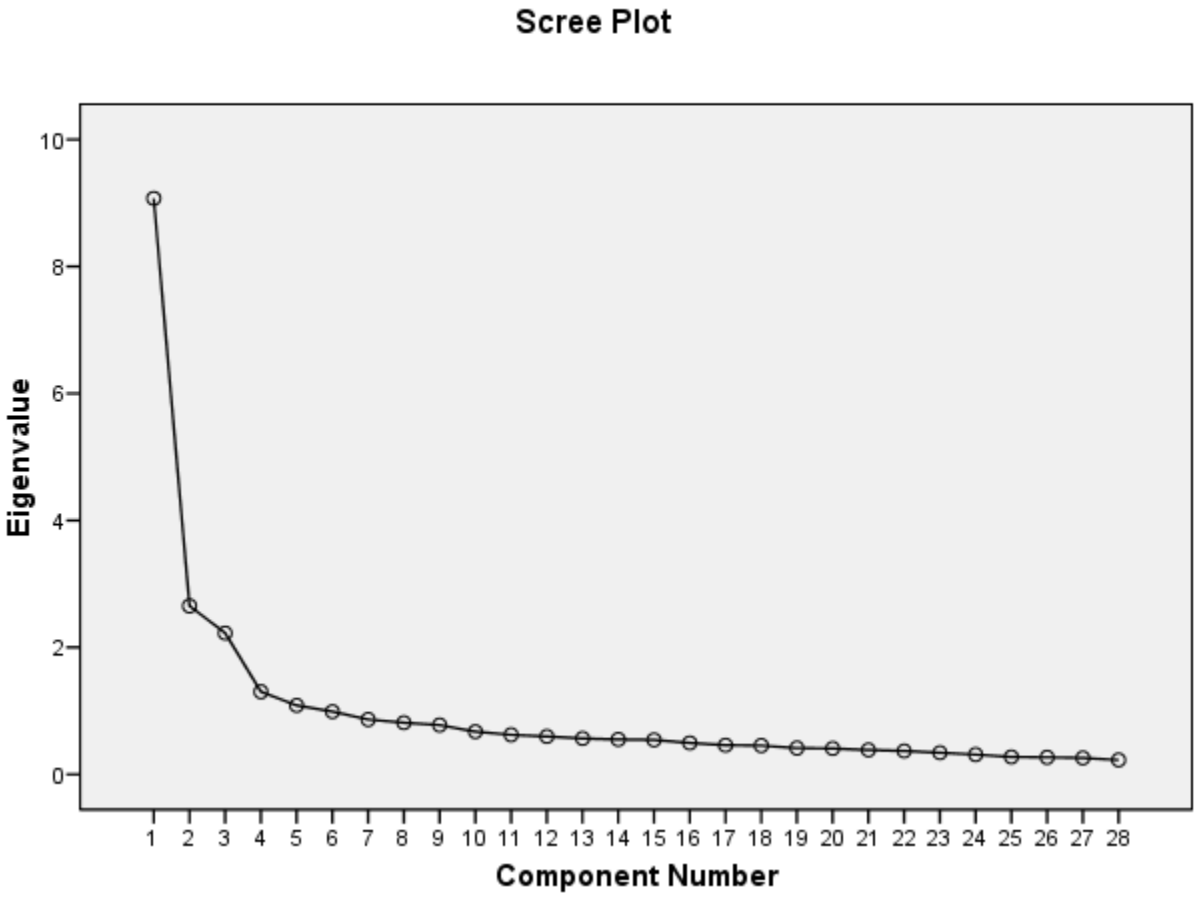
Table 8

Crosstabulation of Web 2.0 Production and Primary Voting Intention

			Production of Web 2.0 Content		
			No Production	Production	Total
"I will vote in my state's primary election."					
	Strongly Disagree	Count	10	3	13
		Expected Count	9.1	3.9	13
	Disagree	Count	6	1	7
		Expected Count	4.9	2.1	7
	Neither Agree nor Disagree	Count	23	4	27
		Expected Count	18.8	8.2	27
	Agree	Count	52	13	65
		Expected Count	45.3	19.7	65
	Strongly Agree	Count	97	61	158
		Expected Count	110	48	158
Total		Count	188	82	270
		Expected Count	188	82	270

Figure Caption

Figure 1. Scree plot of factors among motivations for Web 2.0 use.


Scree Plot
Eigenvalue
10
8
6
4
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
Component Number