Do Word Of Mouth And Advertising Messages On Social Networks Influence The Purchasing Behavior Of College Students?

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ABSTRACT

Many online advertisers are exploring the use of Internet social networking to build brand awareness and loyalty. Social networking is particularly popular among the younger, 15-24 year-old generation, who is more computer savvy and spends more time on the Internet than adults. While this generation has substantial potential, they also represent a challenge to advertisers. This group is notoriously skeptical of being “advertised at.” They expect a more personal, interactive experience. The purpose of this research is to determine which types of social networks are used most by college students and what types of online marketing impact their purchasing choices. In carrying out this research, the following research questions were addressed: which social networks are used most by college students; do factors such as student and/or parent income, student age, classification, gender, marital status, or employment status influence use of social networks; do ads on social networks impact purchasing decisions; does advice from other users of social networks impact purchasing decisions; and do online games, scavenger hunts, and contests influence purchasing decisions? The research provides a better understanding of social network use and provides insight into effective online advertising to college students.

INTRODUCTION

The Internet was created without the intent of commercial advertising. However, in the early 1990s the primary purpose of the Internet, sharing of information among researchers and educators, was inevitably changed with the introduction of the World Wide Web. The World Wide Web incorporated hypertext and multimedia, which made it easier to link computers. Navigating, interacting, purchasing and conducting business became easier for users. The subsequent growth of the Web created a large international marketplace changing how business was conducted, and over time, creating a need for businesses to rethink advertising. As the web continues to mature as a competitive tool for business applications, its effectiveness for helping businesses achieve goals needs to be assessed (Acharya, Kagan, Lingam, & Gray 2008).

Through an evolution of Internet marketing strategies, advertising has commanded an increasing market share in advertising dollars. This is due, in large part to market penetration of Internet services. Bruner (2005) reports, “No medium since black-and-white television has penetrated 50% of U.S. households as quickly as the Internet: both did so in eight years.” Although the rate of diffusion of the Internet enables advertisers to reach large audiences, finding the right online marketing tools to woo consumers is a trial and error process. Often what works for one company does not work for another. Internet users are willing to click on relevant advertising, but are intolerant of the type of advertising commonly found on the Internet, such as pop-up advertising, email advertising, and spyware or adware (Fuscaldo, 2003; Hempel & Lehman, 2005; Webster, 2007). Consequently, many online
advertisers are seeking more creative ways to market their products and services. Many are exploring opportunities using Internet social networking websites to build brand awareness and loyalty.

Social networking websites are virtual communities created for people to connect with others by means of popular web-based tools such as email, chat, blogs, podcasts, etc. People participate in social networks to connect with others who have similar interests, whether they be romantic, friendly, or business related. Social networking via the Internet has grown rapidly. According to surveys of people with access to the Internet, 95% use email regularly, 19% regularly participate in blogs, and 31% post at least one review of a product in a typical month (Riegner, 2007). MySpace, a social networking website, acquired over 150,000,000 users in fewer than five years (Schultz, 2007). Due to the popularity of social networking on the Internet, many online advertisers are scrambling to figure out how they can leverage social networks to their advantage.

Social networking is particularly popular among the 15-24 year-old generation, which is more computer savvy and spends more time on the Internet than adults. This generation is the prime target market for entertainment such as movies, music, and games (Budden, Anthony, Budden, & Jones, 2007; Riegner, 2007). Members of this generation have substantial disposable income compared with previous generations and have purchasing power that extends beyond their own pocketbooks. Research suggests that they influence $30 billion of their parents’ spending (Kotler and Armstrong, 2006). As more companies focus on the lifetime value of customers, and relationship marketing, they recognize that capturing a market at a young age could influence spending, and consequently revenues, for years to come. While this generation has substantial potential, they also represent a challenge to advertisers. This group is notoriously skeptical of being “advertised at.” They expect a more personal, interactive experience (Kotler and Armstrong, 2006).

In this study, the influence that social networks can have on the purchasing behaviors of college students through word-of-mouth and advertising on popular websites including Facebook, MySpace, YouTube, RateMyProfessor, blogs, ConsumerReports, Classmates.com, CNET, Podcasts, and Match.com is investigated. In addition, the effectiveness of interactive advertising experiences such as games, scavenger hunts, and contests was evaluated.

MARKETING THROUGH INTERNET SOCIAL NETWORKS

Social networks exist on any website that allows visitors to communicate and share information with one another (Schultz, 2007). Social networking is responsible for a larger portion of the content of some sites such as FaceBook or MySpace, in which social networking is the primary purpose of the site. On the other hand, some websites, such as CNET or YouTube, have a more informative or commercial function, but also give consumers the opportunity to post feedback, offer comments, or simply communicate with other consumers. Therefore, social networking takes place on these sites as well.

Marketing through Internet social networks has significant potential because social networks such as FaceBook, MySpace, and many others, are virtual hangouts for the younger generation. Hempel & Lehman (2005) contend:

> Although [social] networks are still in their infancy, experts think they’re already creating new forms of social behavior that blur the distinctions between online and real-world interactions. Most adults see the Web as a supplement to their daily lives. But for the most part, their social lives remain rooted in the traditional phone call and face-to-face interaction. The MySpace generation, by contrast, lives comfortably in both worlds at once (p. 2).

In their efforts to reach the more skeptical MySpace generation, many companies are exploring ways of integrating social networks into their advertising programs. Social networks are becoming a valuable component of advertisers’ buzz marketing efforts.
BUZZ MARKETING ON SOCIAL NETWORKS

According to eMarketer Inc., “Spending on Internet ads is growing faster than any other sector in the advertising industry and is expected to surge from $12.5 billion [in 2005] to $29 billion in 2010 in the U.S. alone” (Grow, Elgin, & Herbst, 2006). However, Internet marketing is still relatively new, and many corporate advertisers are grappling with how they should spend their ad dollars on the Internet. An increasingly popular way of advertising, particularly to 15-24 year-olds, is buzz marketing (generating contagious discussion about products or services) through Internet social networks. Buzz marketing often involves “multimarketing,” the use of both traditional and multimedia ads working together (Fuscaldo, 2003; Carl, 2006). Buzz marketing efforts that are implemented on the Internet are referred to as “viral marketing” (Kaikati and Kaikati, 2004). These campaigns sometimes include a mix of traditional Internet advertising in conjunction with interactive games, contests, short movies, and/or podcasts to create buzz (Freedman, 2006; Fuscaldo, 2003; Vranica, 2006). Viral marketing campaigns are typically less obvious than traditional marketing efforts and are designed to stimulate word-of-mouth conversations about a product or service.

Some companies have tried to launch their own social networks or have created fictional profiles on social networks to create buzz. For example, Ricky Bobby (character in “Talladega Nights”), John Tucker and each of his girlfriends (characters in “John Tucker Must Die”), and the Burger King mascot, are just a few fictional characters who have real-looking MySpace profiles (Holmes, 2006). Companies can track the number of visits and “friends” to each of these sites and thus gauge popularity. Some companies have been more successful than others in creating their own online social networks because the rule is “that users – not providers – drive the success or failure of social networks” (Budden, Anthony, Budden, & Jones 2007).

SOCIAL NETWORKS AND WORD OF MOUTH

One measure of the success of a viral marketing campaign is the amount of word-of-mouth generated by the campaign. In viral marketing efforts, word-of-mouth and traditional advertising work hand-in-hand. Word-of-mouth is driven by traditional marketing efforts (Niederhoffer, Mooth, Wiesendfeld, & Gordon, 2007). Fifty percent of word-of-mouth conversations referring to a brand include a reference to a traditional form of media advertising. Based on analysis of word-of-mouth conversations referring to a brand include a reference to a traditional form of media advertising. Based on analysis of word-of-mouth conversations, the most influential media is television and the second most influential media is the Internet (Keller, 2007). Therefore, traditional and online advertising cannot be ignored in companies’ efforts to reach consumers. However, word-of-mouth is especially crucial when attempting to reach the more skeptical and connected college-aged consumers (Lamb, Hair, & McDaniel, 2008). One of the most powerful tools that social networks offer is access to credible word-of-mouth information about company products and services.

Social networks have obliterated the old-fashioned notion that opinion-leaders are a small, elite, highly-connected group. Today, anyone can log on to the Internet and post opinions that can influence large numbers of people (Smith, Coyle, Lightfoot, and Scott 2007). Research on social networking via the Internet has found that certain products such as restaurants, computers, movies, and vehicles, are more likely to stimulate word of mouth among social networks than others such as personal care products (Allsop, Bassett, and Hoskins, 2007). Yet, more and more, consumers are looking to social networks to help them navigate the overwhelming number of media messages to which they are exposed. Thanks to the Internet, consumers with very little experience or information can access experienced opinions from people just like themselves. Consequently, they become more knowledgeable, savvy shoppers (Plummer, 2007).

Word of mouth is considered to be the most effective form of product-related consumer contact due to its credibility which stems from the fact that the consumer, not the marketer, is in control (Keller, 2007). Research on the influence of word of mouth found that nearly 50% of those who are recipients of word-of-mouth information about a product or service plan to share that information with others and 50% also plan to make a purchase decision based on that information (Keller, 2007). Online word of mouth is expected to play an even greater role in the purchasing behaviors of the 15-24 age group. This generation is more engaged in online communication than are other age groups. For example, in selecting entertainment, 48% of the 13-24 year-old age group is influenced by online word of mouth (Riegner, 2007).
RESEARCH QUESTIONS

Although there have been successful online advertising campaigns conducted through social networks, online buzz marketing is not always successful and the outcomes are not easily measurable (Freedman, 2006; Fuscaldo, 2003; Haygood, 2007; Jack Morton Worldwide, 2008). Freedman (2006) reports that, “Internet buzz tends to build best over humorous, offbeat, edgy concepts that aren’t weighed down by even a hint of overt marketing.” Therefore, it is often impossible to measure the link between buzz and sales.

Compounding the difficulty of measuring online advertising effectiveness are the unknowns of what websites are being used by which consumers. Since many websites and advertising techniques are still in infancy, there are large numbers of consumers who are not acquainted with specific websites and/or media. Additionally, consumers may be aware, but may not be participants. For example, a 2007 study found that 37% of Americans are aware of podcasting. However, only 16% reported ever listening to or watching a podcast (Webster, 2007). Therefore, a starting point in determining the effectiveness of viral marketing via social networks is to determine which websites are used by which consumers. Because social networking is exceptionally popular among college students, many companies attempt to target this generation with viral marketing through these sites. Therefore, this study focuses on college students and their use of social networks.

The purpose of this research is to determine which types of social networks are used most by college students and what types of online marketing impact their purchasing choices. In carrying out this research, the following research questions were addressed:

Research Question 1: Which social networks are used most by college students?
Research Question 2: Do factors such as student and/or parent income, student age, classification, gender, marital status, or employment status influence use of social networks?
Research Question 3: Do ads on social networks impact purchasing decisions?
Research Question 4: Does advice from other users of social networks impact purchasing decisions?
Research Question 5: Do online games, scavenger hunts, and contests influence purchasing decisions?

DATA COLLECTION

In the first phase of the study, a focus group of students was asked to identify the most popular social networks. The networks identified in the focus group became a part of the survey instrument. Next, a convenience sampling method was used to survey undergraduate and graduate students attending a university in the southern United States. Participating students were asked to complete an online questionnaire relating to their own perceptions and experiences of social networks and online marketing. The respondents were informed that the surveys were anonymous and no individual student responses would be identified. They were also informed that they could withdraw during the survey at anytime and choose not to disclose their responses.

A total of 396 usable questionnaires were completed. The respondents reported a variety of majors, although business majors were more heavily represented. In addition, 25% were juniors, 53% were seniors, 14% were Graduate students, and the remaining 8% were freshmen and sophomores. Sixty-four percent of the respondents were male. The ages of the respondents ranged between the ages of 18 and 57, with 90% being under the age of 30.

The survey instrument listed eleven popular social networks and provided space for the user to add two additional social networks that they personally use. For each of the social networks used, students were asked if they had ever made decisions or purchased products or services based on banner or traditional ads or from advice from other users on the site. The participants were also asked about their participation in online games, scavenger hunts, and contests. The participants were asked to complete a section on demographic characteristics to determine if any of those characteristics have a significant impact on social network use and opinions about online marketing.
RESULTS

Which social networks are used most by college students? A list of the social networks used most by college students is provided in Table 1. Ninety-eight percent of the respondents surveyed use Email. Over half of them also use FaceBook, MySpace, and YouTube. Forty-seven percent of respondents also use RateMyProfessor. Other websites were used by 26% or fewer of the respondents.

Table 1
Social Networks Used by College Students

<table>
<thead>
<tr>
<th>Social Network</th>
<th>% of students who use each site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>98%</td>
</tr>
<tr>
<td>FaceBook</td>
<td>66%</td>
</tr>
<tr>
<td>MySpace</td>
<td>62%</td>
</tr>
<tr>
<td>YouTube</td>
<td>54%</td>
</tr>
<tr>
<td>RateMyProfessor</td>
<td>47%</td>
</tr>
<tr>
<td>Blogs</td>
<td>26%</td>
</tr>
<tr>
<td>ConsumerReports</td>
<td>26%</td>
</tr>
<tr>
<td>Classmates.com</td>
<td>11%</td>
</tr>
<tr>
<td>CNET</td>
<td>9%</td>
</tr>
<tr>
<td>Pod Casts</td>
<td>6%</td>
</tr>
<tr>
<td>Match.com</td>
<td>5%</td>
</tr>
</tbody>
</table>

To address the remaining research questions, those social networks used most by college students, including MySpace, FaceBook, RateMyProfessor, Blogs, ConsumerReports, and YouTube were used.

Does student and/or parent income influence use of social networks? Chi-square analysis was used to determine whether student or parent income might influence which social networks were used most often. The results are provided in Table 2. Based on the chi-square analysis, parent income did not have any impact on the use of social networks, therefore, to simplify the results, the chi-square statistics for parent income are not included in the table. However, student income yielded several significant results. Over 70% of respondents with incomes between $10,000 and $30,000 use MySpace. Over 70% of respondents with incomes less than $30,000 use FaceBook. Other income levels showed a significantly lower percentage of users for MySpace and FaceBook. Between 40% and 50% of respondents with incomes less than $30,000 use RateMyProfessor, but significantly fewer respondents with income levels over $30,000 use the website. Respondents with income levels over $40,000 are more likely to use ConsumerReports than those with lower income levels.

Table 2
Influence of Student Income on the Use of Particular Social Networks

<table>
<thead>
<tr>
<th>Social Network</th>
<th>Chi-Square Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>MySpace</td>
<td>19.254*</td>
</tr>
<tr>
<td>FaceBook</td>
<td>62.048**</td>
</tr>
<tr>
<td>RateMyProfessor</td>
<td>17.245*</td>
</tr>
<tr>
<td>Blogs</td>
<td>3.921</td>
</tr>
<tr>
<td>ConsumerReports</td>
<td>17.475*</td>
</tr>
<tr>
<td>YouTube</td>
<td>8.137</td>
</tr>
</tbody>
</table>

* p<0.05  
**p<0.001

Does student age influence use of social networks? T-tests were conducted to determine if there was a significant difference between the ages of users and nonusers. T-test results are provided in Table 3. The average age of users of MySpace (t = 4.73, p < .001), FaceBook (t = 7.386, p <.001), and YouTube (t = 2.661, p. < .05) was 23, this was
significantly younger than nonusers of these websites. On the other hand, the average age of the users of ConsumerReports was 26 and significantly older than nonusers ($t = -3.558, p < .001$).

### Table 3

<table>
<thead>
<tr>
<th>Social Network</th>
<th>t</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>MySpace</td>
<td>4.783</td>
<td>.000***</td>
</tr>
<tr>
<td>FaceBook</td>
<td>7.386</td>
<td>.000***</td>
</tr>
<tr>
<td>RateMyProfessor</td>
<td>2.053</td>
<td>.041*</td>
</tr>
<tr>
<td>Blogs</td>
<td>0.279</td>
<td>.781</td>
</tr>
<tr>
<td>ConsumerReports</td>
<td>-3.558</td>
<td>.000***</td>
</tr>
<tr>
<td>YouTube</td>
<td>2.661</td>
<td>.008*</td>
</tr>
</tbody>
</table>

* $p<0.05$
** $p<0.001$

Do student classification, gender, marital status, or employment status influence use of social networks? Results of the chi-square analyses for this research question are presented in Table 4. A significantly larger proportion of freshmen and sophomores use MySpace ($X^2 = 8.672, p < .05$) and RateMyProfessor ($X^2 = 24.896, p < .001$) than upperclassmen. Upperclassmen are more likely to use ConsumerReports ($X^2 = 14.714, p < .05$). A significantly larger proportion of males use FaceBook ($X^2 = 10.101, p < .001$), RateMyProfessor ($X^2 = 5.306, p < .05$), ConsumerReports ($X^2 = 3.889, p < .05$), and YouTube ($X^2 = 25.055, p < .001$) than females. In fact, over 70% of males visited YouTube while only 44% of females visited the website. With respect to marital status, respondents who were single were significantly more likely to use MySpace ($X^2 = 23.799, p < .001$), FaceBook ($X^2 = 65.075, p < .001$), and YouTube ($X^2 = 10.429, p < .05$). A larger proportion of those who were divorced used RateMyProfessor ($X^2 = 8.736, p < .05$) and ConsumerReports ($X^2 = 17.159, p < .001$) than those who were single or married.

### Table 4

<table>
<thead>
<tr>
<th>Social Network</th>
<th>Classification</th>
<th>Gender</th>
<th>Marital Status</th>
<th>Employment Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>MySpace</td>
<td>8.672*</td>
<td>0.006</td>
<td>23.799**</td>
<td>5.434</td>
</tr>
<tr>
<td>FaceBook</td>
<td>3.441</td>
<td>10.101**</td>
<td>65.075**</td>
<td>24.129**</td>
</tr>
<tr>
<td>RateMyProfessor</td>
<td>24.896**</td>
<td>5.306*</td>
<td>8.736*</td>
<td>11.400*</td>
</tr>
<tr>
<td>Blogs</td>
<td>4.685</td>
<td>2.753</td>
<td>3.869</td>
<td>1.741</td>
</tr>
<tr>
<td>ConsumerReports</td>
<td>14.714*</td>
<td>3.889*</td>
<td>17.159**</td>
<td>2.533</td>
</tr>
<tr>
<td>YouTube</td>
<td>4.430</td>
<td>25.055**</td>
<td>10.429*</td>
<td>6.878*</td>
</tr>
</tbody>
</table>

* $p<0.05$
** $p<0.001$

Do ads on social networks impact purchasing decisions? For each of the social networks that study participants used, they were asked to specify to whether or not advertisements on those sites impacted their decisions to make product or service purchases. With the exception of ConsumerReports (18%) and Email (12%), less that 10% of participants on each of the other sites were influenced by banner advertisements (See Table 5). Banner ads on RateMyProfessor reportedly influenced very few of the respondents.

Does advice from other users of social networks impact purchasing decisions? Respondents were asked whether or not advice from other users (word of mouth) on the specific websites they visited impacted their decisions to make product or service purchases. Nearly half of those who visit ConsumerReports use advice from other users of that website (see Table 5). Fourty-seven percent of the users of RateMyProfessor were influenced by the opinions of others on that site.
Table 5
Influence of Banner Ads and User Advice on Purchasing Behavior

<table>
<thead>
<tr>
<th></th>
<th>Banner Ads</th>
<th>Advice from Other Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>12%</td>
<td>30%</td>
</tr>
<tr>
<td>FaceBook</td>
<td>6%</td>
<td>22%</td>
</tr>
<tr>
<td>MySpace</td>
<td>7%</td>
<td>25%</td>
</tr>
<tr>
<td>YouTube</td>
<td>8%</td>
<td>22%</td>
</tr>
<tr>
<td>RateMyProfessor</td>
<td>4%</td>
<td>47%</td>
</tr>
<tr>
<td>Blogs</td>
<td>5%</td>
<td>22%</td>
</tr>
<tr>
<td>ConsumerReports</td>
<td>18%</td>
<td>49%</td>
</tr>
</tbody>
</table>

Do online games, scavenger hunts, and contests influence purchasing decisions? Respondents were asked whether or not they had ever participated in such online activities, whether or not they had learned anything about the product or service as a result of their involvement, and whether or not the involvement had motivated a purchase of the product or service. We found that 25% of respondents had participated in at least one online game, scavenger hunt, or contest. Sixty-five percent learned about the product or service as a result of the activities. Fifty percent made a purchase as a result of their participation.

IMPLICATIONS AND CONCLUSIONS

The marketing potential for social networks is huge, for example, MySpace claimed over 98 million profiles as of August 2006, and nearly 45.7 million unique visitors in June, 2006 alone (Holmes, 2006). However, companies face the challenge of determining which social networks can exert the greatest influence on college students. The results of this study provide very useful information about the use of electronic media and advertising by university students. Apparently, most students tend to flock toward “the latest and greatest” social networks. In fact, the social networks that are used by more that 50% of study participants were all created within the past five years. In contrast, older and more established sites, including the general use of blog sites, were barely used by the participants. Therefore, FaceBook, MySpace, YouTube, and RateMyProfessor are excellent sites for advertisers to use when trying to reach this demographic.

Because this study focused on college students who typically have lower income levels, additional research is necessary to determine the impact of income on social network usage. However, despite the typically low income levels, one cannot dismiss the power of this generation. Members of this generation tend to have relatively high discretionary income and also influence the purchasing habits of others, such as their parents, who have greater incomes.

It appears that a significant difference between the ages of users and nonusers of Facebook, MySpace, Utube, and ConsumerReports exist. Users of Facebook, MySpace, and Youtube were significantly older than nonusers while users of ConsumerReports were significantly older than nonusers. One explanation could be that older users may already have been familiar with the Consumer Reports brand name before the Internet age, as it was one of the limited sources of peer rankings of products publicly available. Whereas the younger student has “grown up” in the electronic age, many older consumers may still rely on traditional ways of learning about products and services.

Even though the results regarding the influence of ads on social networks might look dismal to online advertisers, it is important to keep in mind that the goal of advertising is not always to initiate a purchase. This is particularly true with viral marketing campaigns. Understanding that the MySpace generation is more strongly influenced by word of mouth than by traditional advertising, the goal of much of the traditional online advertising is to stimulate word of mouth. Therefore, even if an advertisement does not directly influence a purchase it can still be effective through its indirect effect on word of mouth.

Overall, as with traditional marketing, word of mouth or advice from other users, proved to have the greatest impact. Although students reported a higher use of advice from others than banner advertisements when
making decisions, no site had more than 49% of its participants reporting that they relied on word of mouth from other users. This may be attributed to the fact that online consumers are becoming more aware of marketers “planting” consumers who receive company incentives to endorse products. Another explanation is that consumers use multiple sets of information from various sources when making decisions. One study found that consumers combine many different resources in making purchase decision with no single source influencing more than 27% of purchase transactions (Riegner, 2007).

In their efforts to reach the elusive MySpace generation, many advertisers are implementing viral marketing campaigns that contain interactive online games, scavenger hunts, or contests. Although the analyses are based on a small sample of 98 participants, we found that activities such as these offer some marketing potential.

Research has suggested that buzz marketing efforts should be implemented in conjunction with traditional media. This study has examined social networks that are commonly used in buzz marketing campaigns to reach college students. This study provides a framework to understand what types of social networks students are using and relying on to make purchasing decisions. It is apparent that keeping a close watch on online social networking trends may be an important key in determining where and how to focus marketing campaigns. Further studies comparing larger populations with more diverse ages and experiences may reveal more information about age, gender, and income differences in consumers and their use of electronic means of communication.

REFERENCES
