

Alcohol, Sex and Illegal Activities: An Analysis of Selected Facebook Central Photos in  
Fifty States

*Literature Review*

Social networking sites are a relatively recent phenomenon that allows for the electronic socialization of friends via an online medium. Numerous sites including Friendster, Hot or Not, MySpace, Xanga, Facebook, etc. are hosts to social networking and all are similar in structure. Kendall (2002) likens online public communities to textual virtual realities that give people the “feeling of being present together in a social space” (p. 5). In fact, according to Kendall (2002), the online spaces that provide forums for social networking can also be viewed as physical spaces because pictures and video clips of other people and places are often included and can be seen by remote users and when users connect to these sites, “they in some sense enter a social, if not a physical, space” (p. 6). The basic premise of social networking sites is the allowance for profile posting that connects via links with friends on the system and because the nature of this type of electronic communication is asynchronous, it is alluring to teens and young adults, whose primary electronic mode of conversation with friends is instant messaging (boyd, 2006).

Facebook, a free social networking service developed in 2004 and originally designed for college students (but has since been expanded to include high schools) is now operating at over 2000 universities in primarily English-speaking countries across the world and has nearly 5.9 million users (Buckman, 2005). Essentially, Facebook is an electronic forum in which students (also faculty, alumni, and employers) share photos and personal information, gossip, join groups of friends, and flirt with one another

(Buckman, 2005). To participate, individuals need only have an official university email address ending in ".edu." Each participant has the option of posting a photo of him or herself on his or her personal Facebook.com page and that central photo is what appears when someone lists that person as a friend, or attempts to send that person an electronic message via Facebook.

A plethora of media reports have indicated that Facebook users are frequently posting photos that portray alcohol consumption (often by underage drinkers), campus violations (including the presence of alcohol on campus), suggestive/sexually explicit activity, and illegal drug use (Anderson, 2005; Buckman, 2005; Bugeja, 2006; Capriccioso, 2006; Dukes, 2005; Gianino, 2006; Hirschland, 2006; Jordan, 2006; Lipkin, 2006; Parker, 2006). The researchers in this study analyzed the central photos of a total of 150 University Facebook users at 50 Universities (the key photos of three individuals from each university), one in each of the 50 United States for evidence/examples of illegal/inappropriate activity often reported by newspapers and other media. More specifically, each photo was analyzed as to items appearing in the photograph along with the individual, activities taking place in the photograph and posturing/posing evident in the photo for evidence of the negative activities reported in the media and previously mentioned.

### *Facebook's Beginnings*

There is little scholarly information available in the literature concerning the Facebook phenomenon, but what is known is that 21-year-old Harvard dropout Mark Zuckerberg and friends founded Facebook in 2004 as an electronic student photo

directory for social purposes (Lashinsky, 2005). To say the idea was a hit with Harvard students is an understatement. Zuckerman expanded the site and then relocated across the country to start his own company, rapidly enticing major investors, including Accel Partners (investing \$12 million) and Peter Thiel, cofounder of PayPal (investing \$500,000) (Lashinsky, 2005). Its primary revenue source is advertisers such as Victoria's Secret and Paramount, who regularly purchase banner advertisements in Facebook (Malik, 2005).

#### *Facebook's Features*

Individuals wishing to participate in Facebook first create personal profiles that usually include a central photo, photos of friends (their photo albums), and personal demographic information such as student classification, major, concentration area, interests, memberships in organizations, address, relationship status, sexual orientation, political party affiliation and political perspectives, high school attended, and favorite music, movies, television shows, books and quotes among other things (Facebook website, 2006). Facebook allows other users to click on specific profile entries to find students with similar tastes and interests, however users are limited to viewing the profiles of students at their own institution (unless they are friends with students at other sites); they are not allowed access to textual information pertaining to students at other Universities (but they can view central photos of students at other Universities) (Facebook website, 2006).

Facebook users also have the option of perusing the profiles of other students and requesting a concession of "friendship." Once a student acknowledges a "friendship," the user adds that individual to his or her "friends" list and then has the option of indicating

how that friendship was formed from a list of possibilities such as: went to school together, took a class together, through Facebook, etc (Facebook website, 2006). The size of the “friends” list appears to be a status symbol among users, and it is not unusual to see lists of friends that span five pages or more. In fact, Newsweek named a University of Missouri computer science student Facebook’s celebrity because he supposedly amassed over 70,000 “friends” via a program he wrote to facilitate the addition of users to his “friends” list (Schwartz, 2005).

Another feature of Facebook is the option to join or create “groups.” Groups include established organizations such as sororities and fraternities or joke groups such as “Southern Gentleman, Where the Hell are They?” and “I Love the Weather Channel.” Users may also employ a Facebook feature to publicize information about parties, generate invitations, and receive RSVPs (Facebook Website, 2006).

Students can also post comments about their friends on Facebook’s “Wall” feature. According to Facebook’s Customer Support Page, the wall is a forum in which users post insights about each other. Each user has his or her own personal wall, which can be turned off or on at the user’s discretion. Anytime a new posting is added, the user is notified and has the ability to delete the message or comment.

Users can also send messages and “poke” one another. “Poking” is not clearly defined. According to Facebook’s website, “poking” has no real purpose, although it can be construed to be an attention seeking feature (Facebook website, 2006).

Unless they are “friends” with a student at another institution, the only Facebook information users can access about students at other schools are their central photos, the names of their schools, and whether or not they are graduate or undergraduate students.

Users can also view the individual's "friends" list, poke him or her, and send a message (Facebook website, 2006).

### *Central Photos*

Facebook users have the option of posting a key or central photo of themselves on their Facebook sites. Central photos are significant to Facebook users because they are self-chosen and are the only photos able to be seen by users at other institutions. Central photos are the first image seen by "friends" when accessing an individual's profile and the only image available to users from other institutions. These photographs, therefore, are often the first impression that "friends" and other potential "friends" or interested parties receive of individuals in Facebook.

### *Positive Implications of Facebook*

Earlier social networking sites such as Friendster were initially created for the primary purpose of online dating but boyd (2004) conducted an ethnographic analysis that indicated that although some dating does take place as a result of sites such as Friendster and Facebook, most users join because their friends have. Most participants use these sites to look for old and new friends.

Facebook is a means by which university students can meet one another and hook up with members of the opposite sex (or same sex depending on the orientation of the user), form communities and discussion groups and communicate with one another. Some participants also use the site to peddle textbooks, advertise for roommates, and post upcoming events such as concerts and parties. Facebook also provides space for students to create their own personal web pages in which they are able to share their interests, lifestyles, opinions, experiences, likes and dislikes, and memories and photos with their

friends and other interested users. According to student users, many a hook-up has taken place because of Facebook and these relationships often become official as they are announced via the site.

### *Negative Implications of Facebook*

Shortly after Facebook's inception, the media began voicing concerns and criticisms pertaining to the nature of the information shared by student users of Facebook. For example, some Facebook users have posted photographs that portray themselves and/or their friends in suggestive positions often with partial nudity or engaging in sexual activity; imbibing in alcohol at on- and off-campus settings (often underage) and partaking of illegal drugs (Anderson, 2005; Buckman, 2005; Bugeja, 2006; Cappriccioso, 2006; Dukes, 2005; Gianino, 2006; Hirschland, 2006; Jordan, 2006; Lipkin, 2006; Parker, 2006). Textual information included on individual Facebook sites might include detailed information of illegal activity including disclosures of substance abuse and sexual trysts as well as the revelation of cell-phone numbers, physical addresses, personal agendas, and other private information. In addition, according to Heer and boyd (2005) some users have even used these sites to sell drugs while others have used them as a medium for harassment and bullying. Barnes (2004) states that computer networks often promote a false sense of privacy among users, often because correspondents do not actually see the others who are reading their profiles or messages therefore users have a false sense of security about the content of the information they provide to others via photos or text in online settings.

An online social networking environment creates the convergence of users and contexts that essentially cause the merging of previously separated facets of life such as

work and social environments (boyd & Heer, 2006). Therefore classrooms, police stations, churches, offices and bars become one and “friends” become more than just “friends.” boyd and Heer (2006) describe the collapsing of contexts and people with a story about a young teacher in California who created a personal profile on an online social networking service. Her students became aware of her profile and accessed it. When her online “friends” connected themselves to her profile, her students also had access to their profiles. Some of the teacher’s online “friends” had profiles containing references to drug usage and one had jokingly mentioned a tendency toward pedophilia. The teacher’s students accessed this information and thus associated drug use and pedophilia with their teacher (boyd and Heer, 2006). Therefore, the old adage “you are who you hang out with” is particularly relevant to online social environments.

Recent media reports indicate that indeed the information users post to their profiles is increasingly accessed by law enforcement and university officials, employers, and others. Money magazine (Medintz, 2006) reported that employers are beginning to now use the Internet to “turn up dirt” on potential employees. A UCLA Career Center director stated, “there have been several cases of employers rescinding job offers to student candidates because of information obtained through Facebook” (Lipkin, 2005). She further indicated that at a conference she recently attended, all of the companies represented and in attendance were aware of Facebook and had accessed it periodically to search for information. Furthermore, Penn State University officials were able to pursue several students who posted pictures of themselves storming the football field after a game (a violation of university policy) on Facebook (Buckman, 2005). Police departments and universities across the country now use Facebook as an investigative

tool when illegal activities involving university students surface. Emory University charged certain Facebook group members with conduct violations after the members posted information regarding their alcohol use on-campus (Buckman, 2005) and four students at Northern Kentucky University (Buckman, 2005) were charged after posting photos of themselves consuming alcohol in a dorm room.

### *The Power of an Image*

Prosser (1998) asserts that Americans take some 20 billion photographs annually and these images are used “not only as representations of the objective world but also to communicate our deepest feelings” (p. 1). He further states that photographs serve as artifacts that provide us with specific information pertaining to our existence. Akeret (2000) agrees and further claims that photographs serve as tools to freeze moments in time so that weeks, months or years later, viewing a photograph would invoke similar feelings and emotions as were experienced at the moment the photograph was taken, no matter how long ago that might have been. Akeret (2000) states that photographs also serve a larger purpose – that of “making private acts and feelings public...and endows these acts and feelings with a certain legitimacy” (p. 59). Certainly that adds credence to Facebook’s claim that relationships are often legitimized via text and photographs on their site.

According to Anderson (2004), humans process information verbally and through intuition and image and although we often process verbally and via images simultaneously, “the more primary, primitive, and powerful process is the image. Images defy logic and deter refutation. There is no rebuttal or counterargument to an image” (p. 296). He further elaborates that images have a more powerful impact on viewers than

logical textual information, beautiful or handsome images can stimulate sexual arousal and images of strength “persuade us to follow leaders” (p. 299).

It is understandable therefore that the central photos posted on Facebook are particularly significant to posters and can be powerful images, inciting interest/curiosity, sexual arousal, and possibly the desire for viewers to make personal contact and eventually perhaps pursue personal relationships with posters. Since one of Facebook’s purposes is to provide a forum in which students have the opportunity to “hook up” with one another (Facebook website), the selection and posting of the central photo is conceivably the first step in this process and therefore the central photo is substantially noteworthy.

### *Identity Production*

In the computer-mediated communication (CMC) realm, users of social networking services who choose to post a photograph of themselves to their profiles go to great efforts to select a photograph that reveals specific aspects of their identities (boyd, Chang, & Goodman, 2005). Since posters do not have the option of presentation of self via a physical setting, they must compensate for this loss by creating alternate means by which they might present themselves to others, such as via photographs that are “constantly updated revelations of self” (boyd, Chang & Goodman, 2005). These photographs not only appear on the user’s profile, but they also are featured on the profiles of connected friends, thus “they become a part of the performance” of these individuals (boyd & Heer, 2006).

The display of friend connections in the social networking environment is also an integral component of users’ self presentations or online identities (Donath & boyd,

2004). According to Donath and boyd (2004), in a physical setting, an individual might display his or her personal connections via parties where friends are introduced to other friends, through the display of photographs, or simply by publicly associating with friends. The significance of the display of personal connections in either physical or online settings is complex and may arise from the simple desire to invoke pleasant memories or perhaps to gain social capital. In any case, when an individual publicly displays his or her personal connections, this demonstration allows others to learn more about that individual (Donath & boyd, 2004). By viewing the connections surrounding an individual, an interested person could learn information pertaining to that individual's political and religious beliefs, social status and academic interests. If the interested party identifies links the individual has with mutual friends, the likelihood of a relationship developing increases (Donath & boyd, 2004). According to Donath and boyd (2004), displaying connections in an online socially networked environment is an "implicit verification of identity" (p. 73). Because viewers can follow the links from photographs to profiles, honest self presentation should be ensured and since connections and their links are contactable, verifications can easily be made (Donath & boyd, 2004). Thus, "a public display of connections can be viewed as a signal of the reliability of one's identity claims" (Donath & boyd, 2004, p. 73).

### *Image Analysis in Photographs*

According to Collier and Collier (1986),

The analysis of photographs includes the decoding of visual components into verbal (usually written) forms and communication...Decoding or translation serves as a bridge between the visual, which in Western culture we associate with

intuition, art, and implicit knowledge, and the verbal, which we come to associate with reason, fact, and objective information. (p. 170)

Collier and Collier further contend that the decoding process also serves to transform the status of photographs from illustrations to systematic knowledge.

Akeret (2000) likens photographs to language and contends that to understand this language “we need to approach photographs with the openness of a child who is learning to read and the intensity of a cryptologist who is trying to break a code” (p. 13). Most importantly, Akeret posits that we must approach the analysis of photos imaginatively; we must become familiar with them from “the inside out (p. 13).”

We can never know for certain that what we see in photographs and the stories we surmise the photographs tell are *true* (Akeret, 2000). Even surface level photo analysis can be fraught with ambiguity as each of us approach photos with our own assumptions, prejudices, preoccupations, fears, etc. and invariably we will project at least some of those into our photographic analysis (Akeret, 2000). According to Akeret (2000), there are three stories for every photo: “the story we find *depicted* in the photograph, the story *around* (or behind) the photograph, and the story we *project* onto the photograph” and perhaps at the point where these three stories intersect will be the “*true*” photographic story (p. 16).

### *Methods*

Since the previously described central photos are self-chosen by Facebook users and the first (and sometimes only) photographic image of the user viewed by friends and potential friends, we chose to evaluate central photos found in Facebook sites at universities across the United States. Because this study involved the Internet, the time

and space constraints typically associated with traditional research methodologies were removed. We had access to the data 24 hours per day, allowing for excellent data collection and a massive sample spread over a large geographic area (Christians & Chen, 2004).

We randomly selected three Facebook users who were listed as either undergraduate or graduate students from a major university (participating in Facebook) in each of the 50 states and evaluated the central photos they chose to represent themselves on their profile pages in Facebook. We sampled participants from each state's primary university according to state university websites. When complications/disagreements arose concerning which state university to sample, we chose the university with the highest population of students because it would most likely have a greater representation of students subscribing to Facebook. **Table 1** provides a listing of the universities whose Facebook members' photos we analyzed.

**Table 1**  
*List of States and Universities Sampled*

<i>State</i>	<i>University – City</i>
1. Alabama	University of Alabama-Tuscaloosa
2. Alaska	University of Alaska -Anchorage
3. Arizona	Arizona State University - Phoenix
4. Arkansas	University of Arkansas - Fayetteville
5. California	University of California – Los Angeles
6. Colorado	University of Colorado -Boulder
7. Connecticut	University of Connecticut -Storrs-Mansfield
8. Delaware	University of Delaware -Newark
9. Florida	University of Florida -Gainesville
10. Georgia	University of Georgia - Athens
11. Hawaii	University of Hawaii - Manoa
12. Idaho	University of Idaho - Moscow
13. Illinois	University of Illinois - Urbana
14. Indiana	University of Indiana -Bloomington
15. Iowa	University of Iowa – Iowa City
16. Kansas	University of Kansas -Lawrence
17. Kentucky	University of Kentucky - Lexington
18. Louisiana	Louisiana State University - Baton Rouge
19. Maine	University of Maine - Orono
20. Maryland	University of Maryland -College Park

21. Massachusetts	University of Massachusetts – Amherst
22. Michigan	University of Michigan - Ann Arbor
23. Minnesota	University of Minnesota - Minneapolis
24. Mississippi	University of Mississippi – Oxford
25. Missouri	University of Missouri – Columbia
26. Montana	University of Montana – Missoula
27. Nebraska	University of Nebraska – Lincoln
28. Nevada	University of Nevada – Las Vegas
29. New Hampshire	University of New Hampshire - Durham
30. New Jersey	Rutger’s University – Piscataway
31. New Mexico	University of New Mexico - Albuquerque
32. New York	University of New York - New York City
33. North Carolina	University of North Carolina - Chapel Hill
34. North Dakota	University of North Dakota - Grand Forks
35. Ohio	Ohio State University – Columbus
36. Oklahoma	University of Oklahoma - Stillwater
37. Oregon	University of Oregon – Eugene
38. Pennsylvania	Pennsylvania State University - University Park
39. Rhode Island	University of Rhode Island - Kingston
40. South Carolina	University of South Carolina - Columbia
41. South Dakota	University of South Dakota - Vermillion
42. Tennessee	University of Tennessee - Knoxville
43. Texas	University of Texas – Austin
44. Utah	University of Utah - Salt Lake City
45. Vermont	University of Vermont – Burlington
46. Virginia	University of Virginia - Charlottesville
47. Washington	University of Washington – Seattle
48. West Virginia	University of West Virginia - Morgantown
49. Wisconsin	University of Wisconsin – Madison
50. Wyoming	University of Wyoming – Laramie

---

### *Pilot Study*

Because the researchers wished to establish a sound methodological base for the actual study, possibly identify logistical problems that might arise during the study, develop a rating format (checklist), and assess our proposed data analysis prior to the research study as suggested by Teijlingen and Hundley (2001), we elected to conduct a pilot study on the same scale as the final research study (using 150 photos from 150 students, 3 from each of the 50 states from **Table 1**). Photos evaluated for use in the pilot study were randomly selected, printed and numbered. To increase the validity of the investigation, we elected to use investigator triangulation in both the pilot and key research studies. According to Guion (2002), “investigator triangulation involves using

several different investigators/evaluators in an evaluation project” (p. 2). Investigator triangulation involves the comparison of all evaluators’ independent ratings. If all evaluators have the same conclusions, the findings are said to be valid (Guin, 2002). Each rater (3 total) in this investigation received an identical set of photos for evaluation. Emergent coding was utilized during the pilot study whereby categories were established following some preliminary examination of the data. First, all three raters independently reviewed the data and came up with a set of features/characteristics that formed a checklist. Second, the researchers compared notes and reconciled any differences that appeared on their initial checklists. Third, the researchers utilized a consolidated checklist to independently apply coding.

Initial content analysis from the pilot study revealed several flaws in the initial methodology. The first indication of a somewhat weak procedure was the emergence of several different classifications being applied to the same category by one rater. This demonstrated that not all classifications within each category were mutually exclusive. Another problem arose when raters wrote in specific classifications not described by a particular category. This demonstrated that not all categories were exhaustive within the classification scheme and they were also not adequately accounting for the all of the different types of potential ratings. Moreover, agreement among raters for several of the categories failed to reach the 80% expected agreement level (for Cohen’s kappa) suggested early on by the researchers, partially due to multiple ratings and unspecified classifications.

For this reason, the researchers employed the use of triangulation and retraced the initial steps of designing a coding scheme. This time the pilot study data helped

researchers eliminate unnecessary categories and specific classifications, as well as consolidate and/or add specific classifications to more accurately describe the content available through each photograph.

### *Key Research Study*

Once the pilot study was complete and the inventory form finalized, another set of 150 photos from 150 students, 3 from each of the 50 states (see **Table 1**) were randomly selected for the key research study. The first stage of the analysis of this second set of selected photographs occurred as the researchers collectively viewed the photographs as they were randomly selected. This procedure was consistent with Collier and Collier's (1986) description of the ideal analytical procedure in visual anthropology which includes a period in which photographs are openly or unstructurally evaluated. During this initial collective viewing period, first impressions of the photographs were formed and those first impressions aided in the development of "categories for more structured counting, measuring and comparison procedures" (Collier & Collier, p. 172). The checklist/inventory rating form developed from the pilot study was utilized to facilitate the analysis process that included pre-selected settings, actions, events and people as well as spaces for writing in additional descriptors as the need arose. The use of a standardized inventory or logging process is consistent with Collier and Collier's (1986) second stage of ideal photographic analysis whose purpose "is one of becoming familiar with even the mundane content of the visual records and identifying the location of data within the total sample" (p. 173).

Once the photos were selected and first impressions developed, the central photos (total of 150) were printed and organized with each photograph being assigned a number

and receiving a correspondingly numbered inventory sheet (developed from the pilot study), thus establishing a visual chronology and order as is consistent with Collier and Collier's (1986) first defined activity of photographic analysis. The numbered and printed photos and inventory sheets were then disseminated to the researchers/raters for individual analysis. Raters analyzed the photographs according to: settings, actions, events, and people. For example, raters indicated the apparent setting of a photograph (outdoors, home, academic, etc.), actions (postures) depicted in the photograph (eating, dancing, sleeping, partying, drinking alcohol, hugging, kissing, posing, etc.), events portrayed (formal-such as prom, athletic, holiday celebration, etc.), and other people or pets depicted in the photo (children, males, females, mixed gender, etc.). Extra space was provided on the inventory forms for additional categories that might emerge during the key research study not seen in the pilot study.

As the analysis of the photographs using the inventory forms progressed, the researchers met regularly to discuss the findings. We found that these discussions helped generate new questions about the data which sometimes resulted in a modified inventory form, clarified details pertaining to the content of the photographs, increased the precision of our analysis of the photos, and defined conclusions. Once the three researchers/raters completed the individualized photographic analysis the inventory sheets were evaluated for discrepancies among raters. When disagreement was evident among all three raters, a discussion ensued until agreement could be reached. When two out of three raters agreed, the selection of the two raters in agreement took precedence over the third rater.

#### *Inter-Rater Reliability*

Cohen's kappa was utilized to assess inter-rater reliability because the nature of the data was nominal. Following the steps espoused by Siegel and Castellan, Jr. (1988), this measure was used as an improvement upon simple percent agreement to assess the reliability among three independent raters. Although a kappa greater than .70 is satisfactory, researchers in this investigation set a level of .80 as the suggested kappa standard of agreement. As can be seen from **Table 2**, the kappa values for all categories reached numbers exceeding the level of expectation. This shows that the raters had an optimal amount of agreement across all levels of coding, interpreted as a high rate of inter-rater reliability.

**Table 2**

*Inter-rater reliability using Cohen's kappa (k) coefficient*

<b>Category</b>	<b>Kappa Statistic</b>
<i>Sex</i>	.991*
<i>Number of people in picture</i>	.955*
<i>Items</i>	.966*
<i>Setting</i>	.945*
<i>Actions</i>	.946*
<i>Poses</i>	.930*
<i>People</i>	.980*

\*Significant at the  $p < .01$  level.

When agreement was reached among at least two out of three raters and all discussions ended, another unstructured collective viewing of the photographs took place that included the completed inventory forms. According to Collier and Collier (1986) by returning to an open-viewing setting, researchers are able to produce a more fluent and cohesive conclusion that combines the scientific approach to the study (the inventory

analysis in this study) with a collectively creative attempt to “reveal the study in its full perspective” (Collier and Collier, p. 205).

*Central Photos: Demographics*

The central photos of both undergraduate and graduate students were utilized for this research study. **Table 3** provides a representation of undergraduate and graduate student photos.

**Table 3**

*Undergraduate/Graduate Representation*

	Frequency	Percent
<i>Undergraduate</i>	136	90.7
<i>Graduate</i>	14	9.3

There was an adequate representation of males and females depicted in the central photos utilized in the research study. It should be noted that the sex of two individuals was not readily apparent from photographs or names. **Table 4** provides gender information for central photo subjects.

**Table 4**

*Gender Representation*

	Frequency	Percent
<i>Male</i>	67	44.7
<i>Female</i>	81	54.0
<i>Unknown</i>	2	1.3

**Table 5** is a combination of descriptive statistics pertaining to gender and student classification (graduate vs. undergraduate). As can be seen, there is an adequate representation of gender across both levels of classification.

**Table 5**

*Classification by Gender*

<b>Gender</b>	<b>Classification</b>	<b>Frequency</b>	<b>Percentage</b>
<i>Male</i>	<i>Undergraduate</i>	62	92.5
	<i>Graduate</i>	5	7.5
<i>Female</i>	<i>Undergraduate</i>	73	90.1
	<i>Graduate</i>	8	9.9
<i>Unknown</i>	<i>Undergraduate</i>	1	50.0
	<i>Graduate</i>	1	50.0

#### *Data Analysis*

Once the formalized inventory ratings and unstructured viewings were complete and all disagreements resolved, the data from the inventory rating forms were entered into SPSS and statistically analyzed. Specific categories of interest in this research included the Items, Actions, and Poses (postures) categories.

The Items category noted any items of interest depicted in the Facebook photographs. An important classification that was analyzed was the presence of alcohol or illegal substances (e.g., marijuana) depicted in each photograph. **Table 6** displays the results of this analysis, as well as the presence of these items in male and female student photographs. Further analysis using an independent samples t-test revealed no significant differences between undergraduate and graduate students in terms of incidence of these items.

**Table 6**  
*Alcoholic Items/Other Substances*

	<b>Frequency</b>	<b>Percent</b>
<i>Total Alcoholic Items/ Other Substances</i>	14	9.3
<i>Male</i>	7	10.4
<i>Female</i>	7	8.6

The Actions category was analyzed to determine what was occurring in the photographs. In particular, the researchers evaluated the frequency of drinking (alcohol) and drug use and the portrayal of illegal activities. The results are depicted in **Table 7**.

**Table 7***Actions*

	<b>Frequency</b>	<b>Percent</b>
<i>Drinking (alcohol)</i>	15	10.0
<i>Drug Use</i>	0	0
<i>Illegal Activities</i>	0	0

Another category of evaluation was the Poses category, which involved the different ways students portrayed themselves in particular positions and postures. The primary interest in this analysis was to see if any of the students posed in suggestive or obscene ways, which included inappropriate gestures (such as the middle finger), engaging in sexual acts, or appearing nude or partially nude. **Table 8** provides data regarding the Poses category. Additional analysis revealed that no graduate students displayed any suggestive/obscene or nude/partially nude photographs; undergraduate students were the only ones to post these as primary Facebook photographs.

**Table 8***Poses*

	<b>Frequency</b>	<b>Percent</b>
<i>Suggestive/Obscene</i>	4	2.7
<i>Nudity/Partial Nudity</i>	1	.7
<i>Sex Acts</i>	0	0

### *Discussion*

The purpose of this research study was to evaluate the central photos of 150 students in 50 states participating in Facebook for evidence of alcohol consumption, illegal activities and portrayal of sexually inappropriate behaviors (including nudity or partial nudity). Because the media has frequently reported evidence of these behaviors in Facebook, the researchers wished to conduct a formal, scientific investigation to determine the actual rate of occurrence of these behaviors as portrayed in Facebook by college students.

#### *Alcohol and Drugs, Sexual and Illegal Activities*

The evidence collected during this research study indicated that 14 incidences of alcohol consumption (out of 150 photos) were portrayed in Facebook central photos, for a total percentage of 9.3. The researchers were unable to determine whether any of these instances of alcohol consumption occurred on campus, nor were they able to identify ages of individuals (thus underage drinking could not be verified). Alcoholic items were seen equally in graduate and undergraduate photographs. These research findings refute the media reports that indicate that alcohol usage is portrayed prolifically on Facebook. There were no incidences of illegal drug use or other illegal activities portrayed in any of the photos examined by the researchers in this study, again refuting media reports. There were four total depictions of suggestive or obscene behavior (2.7 %) and one photo involved nudity or partial nudity (.7%), all of which occurred at the undergraduate level. No photos were evaluated that provided evidence of students engaging in sexual acts.

#### *Conclusion/Limitations*

The recent media reports indicating student users of Facebook routinely post questionable photos on their sites such as pictures of themselves engaging in excessive alcohol consumption and activities such as illegal drug use, and pictures of themselves in sexually compromising positions, etc. appear to be largely unfounded based on the evidence elicited from this research study. While it is true that alcohol was included in approximately 9% of the central photos, some photos were sexually suggestive (2.7%), and one photo contained partial nudity (.7%), these statistics clearly indicate that the incidence of such negative depictions are far less frequent than the media seems to indicate.

It is important to note however, that the researchers in this study could only evaluate central photos and cursory demographic information at Facebook sites outside their home university. Therefore, they did not have access to textual information posted by student Facebook users at other institutions, nor any photos posted in the students' "photo album" sections of their Facebook sites. Having access to textual information and additional photos for each student would have yielded supplementary information that could have influenced the data.

In conclusion, the results of this study indicate that the vast majority of college student Facebook participants post appropriate central photos of themselves either alone or just hanging out and having fun with their friends. According to boyd (2006), "moral panics are a common reaction to teenagers when they engage in practices not understood by adult culture" (p. 1). Social networking may appear to be mystical to many adults and parents, therefore they are often vulnerable to media reports of misbehavior, stalking, and other negative issues related to the phenomenon. It is important not to exaggerate

perceived potential risks, because in the words of danah boyd: “What they are doing is really fascinating” (p. 1).

## References

- Akeret, R. (2000). *Photolanguage: How Photos Reveal the Fascinating Stories of Our Lives and Relationships*. New York: W.W. Norton and Company.
- Anderson, A. (2005, April 17). A wet campus. *Alcoholics Anonymous Reviews*. Retrieved March 10, 2006 from <http://www.aa-uk.org>
- Anderson, N. (2006, January 19). Google + Facebook + Alcohol = Trouble. *Ars technical*. Retrieved March 10, 2006 from <http://www.arstechica.com>
- Anderson, P. (2004). *The complete idiot's guide to body language*. New York: Alpha Books.
- Barnes, S. (2004). Issues of attribution and identification in online social research In M.D. Johns, S.S. Chen, & G.J. Hall (Eds.), *Online Social Research: Methods, Issues, & Ethics* (pp. 203-222). New York: Peter Lang.
- boyd, d. (2004, April). Friendster and publicly articulated social networks. Paper presented at the Conference on Human Factors and Computing Systems, Vienna.
- boyd, d., Chang, M. & Goodman, E. (2004, November ). Representations of Digital Identity." CSCW Workshop Organizer's Proposal. Chicago, IL.
- boyd, d., & Heer, J. (2006, January). Profiles as conversation: Networked identity performance in Friendster. Paper presented at the meeting of the Hawaii International Conference on System Sciences, Kauai, HI.
- Buckman, R. (2005, December 8). Too much information?; Colleges fear student postings on popular Facebook site could pose security risks. *The Wall Street Journal*, P. B1.

- Bugeja, M. (2006, January 23). Facing the Facebook. *The Chronicle of Higher Education*. Retrieved February 1, 2006 from <http://chronicle.com>
- Cappriccioso, R. (2006, February 14). Facebook face off. *Inside Higher Education*. Retrieved March 10, 2006 from <http://insidehighered.com>
- Christians, C. & Chen, S. (2004). Technological environments and the evolution of social research methods. In M.D. Johns, S.S. Chen, & G.J. Hall (Eds.), *Online Social Research: Methods, Issues, & Ethics* (pp. 15-23). New York: Peter Lang.
- Collier, J. and Collier, M. (1986). *Visual Anthropology: Photography as a Research Method*. Albuquerque: University of New Mexico Press.
- Donath, J. & boyd, d. (2004). Public displays of connection. *BT Technology Journal*(22)4, 71-82.
- Dukes. T. (2005, November 1). Facebook write-ups move ahead. *Technician*. Retrieved March 10, 2006 from <http://www.technicianonline.com>
- Facebook (2006). *Facebook website*. Retrieved February 6, 2006 from <http://www.facebook.com>
- Epstein, D. (2005, October 3). Cleaning up their online acts. *Inside Higher Education*. Retrieved March 10, 2006 from <http://www.insidehighered.com>
- Gianino, C. (2006, February 15). Many colleges using Facebook to penalize students. *Quadrangle*. Retrieved March 10, 2006 from <http://www.mcquadrangle.org>
- Guion, L. (2002). Triangulation: Establishing the validity of qualitative studies. Report: University of Florida Extension Service (FCS6014).

- Harrison, B. (2004). Snap happy: Toward a sociology of “everyday” photography. In *Seeing is Believing? Approaches to Visual Research Studies in Qualitative Methodology*,7 (pp. 23-29).
- Heer, J. & boyd, d. (2005). Vizster: Visualizing Online Social Networks.Symposium presented at IEEE Symposium on Information Visualization (InfoViz 2005). Berkeley, CA.
- Hirschland, J. (2006, January 19). Busted on the Facebook. *Columbia Spectator*. Retrieved March 10, 2006 from <http://www.comunbiaspectator.com>
- Jordan, E. (2006, January 22). Online postings could hurt students searching for work. *The Des Moines Register*. Retrieved March 10, 2006 from <http://www.desmoinesregister.com>
- Kendall, L. (2002), *Hanging out in the virtual pub: Masculinities and relationships online*. University of California Press: Berkeley and Los Angeles, CA.
- Lashinsky, A. (2005, November 28). Facebook stares down success. *Fortune*, p.40. Retrieved February 1, 2006 from <http://proquest.umi.com>
- Lipkin, D. (2006, January 25). A closer look: Facebook may mar even the best of resumes. *Daily Bruin*. Retrieved February 6, 2006 from <http://www.dailybruin.ucla.edu>
- Malik, O. (2005, June). Scoring a hit with the student body: How a Harvard undergrad transformed the humble freshman Facebook into a profitable social network. *Business 2.0*, p. 76. Retrieved February 1, 2006 from <http://proquest.umi.com>
- Medintz, S. (2006, February 1). Talkin’ bout MySpace generation. *MoneyMagazine*. Retrieved February 6, 2006 from <http://money.cnn.com>

Parker, R. (2006, February 28). Alcohol policy violated. *Kansas.com*. Retrieved March 10, 2006 from <http://www.Kansas.com>

Prosser, J. (2000). *Image-based research: A sourcebook for Qualitative Researchers*. London & New York: Taylor & Francis Group.

Schwartz, J. (2005, August 22). High-tech hot spots. *Newsweek*. Retrieved February 1, 2006 from <http://www.msnbc.msn.com>

Seigel, S., & Castellan, J. N. (1988). *Nonparametric Statistics for the Behavioral Sciences (2<sup>nd</sup> Ed.)*. New York: McGraw-Hill.

Teijlingen, E.R. & Hundley, V. (2001). The importance of pilot studies. *Social Research Update* (35).