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Title: Making or Maintaining Connections Online

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Making or Maintaining Connections Online? YouTube as Both Site and Tool of Social Interaction

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Internet technology may have increased our opportunities for interpersonal interaction and social networking, but has it done so by replacing or supplementing our offline networks? What is the relationship between the social worlds of Internet users, and their social use of Internet technology? Building off a body of Internet research, I tackle these questions by examining YouTube, a web-based video platform that relies on user-generated content and integrates aspects of social media. I conducted a survey of a random sample of university students at a liberal arts college and recruited a sub-sample of survey participants for follow-up in-depth interviews to understand how variations in the use of YouTube associate with other forms of social interaction. My findings show that the website holds distinct utility for varieties of users, reflecting diverse visions of what makes an ideal interaction community. Quantitative analysis found that users who were less social in the off-line world were more likely to interact in the YouTube environment. The interview data showed that although many of the other users are unlikely to engage in social interaction on YouTube itself, the site is an important tool in enhancing their relationships with online and offline acquaintances. Together these findings indicate a new potential for Internet technologies to facilitate social connection, both as tools and environments for social interaction.

The potential of the Internet to destroy or enhance social capital has sparked an intense debate over the past few decades, from which three distinct perspectives have emerged. On one side is the claim that extensive use of the Internet will diminish social interaction and undermine processes of community formation (Putnam 2000). Others emphasize the Internet's ability to connect people across space, time, and even status, thus overcoming potential barriers while linking people to communities of interest (Chen et al. 2005; Wellman et al. 2001). Finally, there are some scholars who believe that the Internet will neither transform nor diminish, but instead supplement offline social interaction by giving us new ways to maintain existing social connections (Best & Krueger 2006; Haridakis and Hanson 2009; Uslaner 2004).

These three perspectives—that the Internet will transform, diminish, or supplement social interaction—actually reflect two distinct ways of imagining the Internet: as a separate interaction environment that replaces offline social connection (either to beneficially
transform or diminish sociability), or as an interaction tool that merely serves to reinforce existing social networks. These two metaphors hold different implications for the types of interactions enacted on online platforms and the consequences of Internet use on the relationships of individuals. In a time when the Internet has become imperative to communication and networking, understanding how Internet spaces relate to social bonding can shed light on how people make and maintain connections in contemporary relationships.

My own study seeks to answer this question, by exploring explanations for the variations among users in the way they perceive and utilize the Internet. Often, the Internet is framed as the solo agent of change in our social lives. I turn my focus on users, with the opposing assumption that they are agents in the human-web interface, and are responsible for guiding how technologies will function as social tools. I examine social interaction in relation to YouTube, a broadcasting platform that also includes elements of social media (for instance, friend lists, personal channels, and commenting features). While in many ways resembling traditional media such as television and radio, YouTube’s interactive features in practice allow for “a seamless transition between traditional mass communication activity and social connection activity,” (Haridakis and Hanson 2009:318). The dual nature of the site as both a broadcast and interaction platform makes it a compelling case to test the above perspectives: If the Internet is replacing offline social interaction, we should expect widespread use of YouTube’s “community” features, whereas if the Internet’s effect is minor or supplementary we should see little in the way of contribution to interaction. Furthermore, since personal characteristics shape interaction in the offline world, variations among users may lead to differences in whether and how they use the Internet to foster social connection. These variations in how people may use the site present two questions that connect to the
broad debate about the Internet and social life. First, does YouTube serve as a site for social interaction, and for whom? Second, if users vary in how they create social bonds through YouTube, how does this variation reflect diverging perceptions of the Internet and social interaction?

To address these questions, I begin my investigation by outlining the major debates on the ways the Internet can affect users’ methods of social connection, including how pre-existing personality traits affect people’s ways of using the Internet socially. I use this framework to propose a series of hypotheses and research questions, which I take up through a two-stage study. In the first stage, I relate levels of personal interaction online to specific user characteristics and activities. In the second, I examine the specific mechanisms of social interaction at work on YouTube, and the motivations behind participants’ use of the Internet either as an interaction tool or interaction environment.

**Interaction Tool or Interaction Environment: Theoretical Considerations**

Is the Internet in a position to replace our offline forms of social interaction, or is it actually a form of media technology that will mainly link us to existing social networks? Scholars and social observers have noted certain aspects of the Internet that hold no equivalent in the offline world, and thus have the potential to either diminish our store of social capital, or to positively transform social interaction.

Some see the Internet as the harbinger of increased individualism and asocial behavior. The decline of civic engagement over the past century has been linked with a coincident rise in our dependence on technology and mass media for entertainment (Putnam 2000). A common explanation is that time spent engaged with technology takes away from
the time spent in offline group activities, while providing poor substitutes for elements of offline interaction, such as social cues given by facial expression and tone (Cook 2009; Preece 2000; Snickars and Vonderau 2009). Furthermore, some analysts have suggested that the abundance of information and opinions posted on the web may have lowered our receptivity, as we spend more time “talking” than listening (Petric 2006; Putnam 2000).

However, others have a more positive view of the Internet as an interaction environment. Scholars have exonerated both television and the Internet (Uslaner 2004), claiming that the level of interaction with people met on the Internet positively relates to social capital (Best and Krueger 2006). The Internet has the potential to link individuals with communities not otherwise accessible, encouraging people to relate by providing information and support across extant barriers and chasms. The ability to ignore limitations of time and space in order to communicate has radically changed the way people form social networks. People can now operate at the center of “partial personal communities,” in which they choose their group associations based on their own interests and hold memberships in more than one type of community simultaneously (Chen et al. 2005:13). In the process of forming communities, users apply a variety of interaction techniques in the online world just as they would in face-to-face interaction: they share information, express opinions and emotion, engage in repeated interaction, and establish social norms (Best and Krueger 2006).

These discussions portray the Internet as a separate space of interaction, one that could eventually replace or augment our offline social networks. However, evidence on Internet use from the 1990s has suggested that computer-mediated communication will complement, not replace, face-to-face communities (Putnam 2000). Studies show that the maintenance of interpersonal relationships is the primary motive for Internet use, and
describe how these same relationships are enacted through multiple modes of communication (Ramirez and Broneck 2009). For example, usage of the Internet includes not only entertainment and information seeking, but also networking, instant messaging, and emailing. Internet use can also be a shared social experience, such as co-viewing videos or browsing with friends (Haridakis and Hanson 2009). These aspects of Internet use challenge the idea that it will displace social circles.

Altogether, these studies suggest two things. First, spaces on the Internet are not uniform: particular spaces can encourage people to relate to one another, by providing information and support across barriers—they can also increase social anxiety by allowing for anonymous interactional vandalism through “trolling” and “flame wars.” Yet the design of Internet spaces is not the only, or even the primary factor in determining how this technology will affect social interaction. While Internet technology and web design affect the resources and activities available to us, users also have real consequences for internet-mediated social spaces, and their connection to offline social circles (Burgess and Green 2009; Chen 2008; Petric 2006; Uslaner 2004; van Dijck 2009). User characteristics and motivations shape whether interaction is strategic or communicative, informative or misleading, interpersonal or anti-social (Petric 2006). Ultimately, the competing metaphors for the Internet—as a separate interaction environment or a tool to enhance offline interactions—may be dependent on the personal goals and needs of individual users.

The distinction between types of users suggests that the better question to ask is not which model describing the Internet is correct, but rather for whom the Internet is a continuation of other social life, and for whom it is a separate space of interaction. While previous studies hold that different people may use the Internet in distinct ways, they leave
open the question of how to explain these differences. Understanding whether and under what conditions the Internet serves as a site or a tool for social relations will help understand the limits and possibilities of the Internet as a transformative platform. I now review possible conditions that might influence how people use the Internet.

Community Size

Studies in civic engagement indicate that group size is an important influence on involvement and participation. Small groups are essential to civic engagement: they provide the basis and space for social attachment, encourage individuals to participate in public discourse, and draw participation through the resources and commitment of others (Fine & Harrington 2004). Within small groups, individuals enact civil society, regulating the behaviors of members and providing a public identity for individuals. Boundaries of these groups are often porous, meaning that members may belong to several groups simultaneously—a trait that is shared by many Internet communities (Chen et al 2005). In fact, there is the strong possibility that the Internet’s strength is in creating a space for small groups to form informally through the participants’ personal motivations. As long as communities maintain a “critical mass”—a large enough number to maintain frequent interaction, but small enough to control chaos—they will be able to generate interest, attract new members, and keep old ones (Preece 2000). Thus, it is likely that participants who are part of smaller group settings are more likely than those who participate mainly in mass settings to see the Internet as an environment to engage in valued social interactions with other online users.
Technology and User Skill

Familiarity and technical skill are major factors in how people will use and engage with technology. Uneven diffusion and access affect who is likely to benefit from Internet resources (Chen et al. 2005). Even with access, people require additional resources in order to use the Internet meaningfully and productively (Chen et al. 2005). Technology mediates the production and communication of knowledge, and user familiarity with certain web interfaces will affect their social interaction opportunities (Thurk and Fine 2003), separating those who use the technology as a tool for social interaction, those who transform it into a social environment, and those who see it only as a source of information. Lead users (innovators and early adopters of new technology) are more likely to have greater technical skills on Internet platforms, have used it for longer, and also be more invested in the social aspects of the platform. Thus, there is a probable connection between the amount of technical skill users have, and the amount of social interaction they engage in within the Internet space.

Whether participants are content producers or content consumers also has implications for their level of social integration and engagement in online environments. This link works in multiple directions. Knowledge producers are often lead-adopters and are more socially connected and civic minded to begin with (Chen 2008; Chen et al. 2005). Producers “participate in structuring the social landscape of the Internet,” not only using it as a platform for their content, but also thinking creatively about ways to connect with others and form associations within the operating system (L. Nakamura, as cited in Petric 2006:298). This can be seen specifically on YouTube, where a portion of users known as “YouTubers” (both among themselves and in academic discourse) have formed a significant sub-culture based on supporting, conversing with, and collaborating with other dedicated users (Burgess & Green
In addition, producers are more likely to know what resources are available on various web-based media, and have greater incentive to share and exchange this knowledge with other producers.

*Offline Sociability and Trust*

Scholars disagree on how offline sociability and trust relate to social use of the Internet. One camp sees the Internet as a separate space of interaction, inherently different from the offline world, and posits that those who are less sociable in face-to-face environments are actually more active through Internet communities. In essence, the Internet becomes a safe space for the anti-social, while perhaps undermining the sociability of others, who are already well connected in the offline world. From a competing perspective, the Internet is a tool that supplements and extends offline relationships. If so, sociable individuals are more likely to participate online. Within the first scenario, empirical research on a variety of Internet spaces shows that the type of online community will play a role in who benefits most from interaction. Many online communities generally bring together trusting people who are already similar in interests and tastes, and reports imply that “online communities are not the haven of the misanthropic” (Uslaner 2004; Best 2006:407). Scholars in this tradition acknowledge that the Internet is not uniform, holding that exceptions—such as chat rooms—exist where users were in general less trusting both online and off (Uslaner 2004). Thus, in certain Internet sub-cultures, users with low levels of sociability and trust may find more secure or anonymous interaction environments available online.

In the second scenario, individuals who are very sociable and connected in the offline world will find that the Internet enhances these relationships, and thus will frequently use it
for interaction within their existing networks. In an examination of co-viewing behavior on YouTube, socially active people are the ones who seem to tune in to YouTube, using their existing networks to popularize videos (Haridakis and Hanson 2009). This finding suggests that for those who use the Internet as a tool for interaction rather than an interaction environment, online participation may be just as frequent, but occur through different means—perhaps through social media technologies such as Facebook and Myspace which, in contrast to Internet-based communities, focus on connecting people with offline acquaintances rather than strangers.

The Case of YouTube: Media or Network?

The work of other researchers on the YouTube phenomenon has covered many topics, such as practices of representation and transformations in the dynamic of knowledge through open broadcasting, and the implications of online discussion for cultural participation and policy-making. While drawing on this research, this study investigates more personal aspects of Internet use, asking when and how entertainment and informational technology become “social.” YouTube makes an intriguing case study, representing a convergence of traditional media and social media technology (Jenkins 2006; Snickars et al. 2009). Like television and radio, YouTube’s videos are meant for—or at least available to—mass audiences. This familiar one-to-many communication is supplemented, however, by a range of interactions more typical of online communities. Comment boards display discussions, feedback, and regulatory remarks, and dialogues emerge through the posting of video responses. What is especially interesting about these interactions is that they were not present in YouTube’s original design. YouTube became a social place. Features such as
comment boards and “ friending ” were added to the site after users had shown, through their actions, that they desired more social interaction. Users are also forming communities on YouTube, although its architecture was never meant for purposeful group work (Burgess & Green 2009). As a result of the site’s many evolutions, there are major variations both in the types of people it attracts and their reasons for logging on. YouTube poses interesting empirical questions, in addition to the larger theoretical query of the nature of the Internet. First, for which participants is YouTube more likely to be a site for social interaction, rather than a tool? The literature suggests several factors that may predict a user’s level of personal interaction:

1. **Participants who are part of smaller group settings** are more likely to have and value social interactions with other users online than those who participate mainly in mass settings.

2. **Participants with greater technical skills and familiarity with the platform** will show a greater tendency to have and value social interactions with other users online.

3. **Producers of online content (videos)** are more likely than mere consumers to have and value social interactions with other users online.

4. **Participants who are less sociable in offline settings** are more likely to have and value social interactions with other users in online settings.

5. **Participants who are more active on other social media technology** are less likely to have and value social interactions with other users in an online setting.

The second part of my study explores the reasons behind divergent perceptions of the Internet and YouTube specifically: How do people use YouTube as a site or tool for social interaction? What motivates users to engage in social interaction—either in the YouTube space or with offline networks—through the posting, distributing, or viewing of media content? I address these research questions through a mixed-methods approach that incorporates analysis of both survey and interview data.
Methods

Data Collection and Sample Characteristics

To test my hypotheses, I conducted an online-survey by distributing an email invitation to 500 students at a liberal arts college. 155 completed responses were collected from the sample, for a 31 percent response rate. Almost all interaction on YouTube occurs among participants with user accounts, since only these users are allowed to use interactive features on the site. Thus, the sample used for my final analysis consists of only those users with registered YouTube accounts (N=96).

I supplemented the survey with semi-structured in-depth interviews of nine of the survey participants, focusing on my second set of research questions. The combination of survey and interviews has been used to great effect in several studies on the social aspects of Internet use (e.g., Wellman 2004). While previous surveys have provided space for participants to reflect on their subjective experience (Chen 2008; Petric 2006), surveys only allow room for exploration within previously known themes of interaction and social exchange. Since this study looks into new spaces of meaning-making, follow-up interviews with participants were central to understanding specific aspects of their experience and framework: Why they engage in particular activities, what motivates interaction in contrasting situations, and the extent and quality of the interactions they have experienced. Interviews centered on personal reactions to online user contact and social interaction on YouTube, relating it to offline interaction as well as other online communities they

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1 Women were more likely to complete the survey (71 percent of respondents were female, compared to slightly under 60 percent in the population). Due to males' tendency to be more actively engaged on YouTube (Table 1), the sample used for the main analysis in this study has a more representative gender distribution.
participate in. Through interviews, participants contributed insight into how and why people use (or do not use) YouTube for social interaction.

The student demographic is valuable for several reasons. Students have greater access to computers and the Internet, and are thus more familiar with its uses. Previous studies have also found that younger, more educated, and more technically literate users are likely to be lead innovators in Internet technology. This characteristic is an important one, as lead users are more likely to have been on the Internet longer, formed communities, and use it for social purposes rather than just seeking information (Burgess & Green 2009; Chen 2008; Chen et al. 2005; Petric 2006). Undergraduates are also more likely to be content creators, and thus may have more involvement and interaction with the community on the platform (Chen 2008). Though students may not be representative of all people who use YouTube, they are likely to comprise a significant portion of that population and to represent a large range of user types. Furthermore, studying a sample on a single campus holds constant the settings in which people could potentially interact offline, thus allowing for a closer focus on the differences among users.

Variables

I analyze variation in personal interaction on YouTube, a construct that covers a range of behaviors and levels of participation. To measure this construct, I identified specific behaviors on YouTube that indicate direct interpersonal communication. The survey asked people to rate how frequently they posted comments directly to video posters, to other viewers, and on specific users’ channels. In addition, they were asked to rate statements evaluating social interaction on the site and feelings of interpersonal connection with other
users (Table 2). Each of these responses was then added into one scale (range 3 to 24; Cronbach's $\alpha = 0.76$). Higher scores on the scale indicate a greater level of and value placed on user interaction.

I use a number of variables to test the hypotheses concerning variation in personal interaction (Table 4). I propose that the level of personal interaction among users may vary based on several determinants: (1) the size of the group setting (2) their technical skills and familiarity with the platform (3) their role as content creators or consumers (4) their offline social associations and relationships and (5) the type and amount of social interaction they engage in using other online media. The first three hypotheses relate to aspects of YouTube use. For Hypothesis 1, a dummy variable for group size measures if participants tended to watch videos that have fewer than 5000 views (a relatively small number in the YouTube world). A small number of views indicate that the video is targeted toward, or appeals to, a specific or specialized group of users. To test Hypothesis 2, I measured familiarity through time investment on the platform, by creating a dummy variable for users who visit the site at least once a day. Technical skill was measured by quizzing participants' familiarity with various YouTube features (Table 3). Responses were summed and made into a scale of the ten items (range 10 to 50; Cronbach's $\alpha = 0.89$); higher scores indicate greater technical expertise. Finally, participants were asked if they had ever posted a video on YouTube, the key variable for Hypothesis 3, which posits that producers of content will show a higher level of personal interaction.

The last two hypotheses concern social behaviors in other settings, both online and offline. My key independent variables for Hypothesis 4 are participation in group activity offline and feelings about offline social relationships. For the first, I used a dummy variable
based on participation in extra-curricular activities. The second variable, feelings about social relationships offline, was addressed with individual questions regarding the users’ sense of trust and mutual respect for others. The expected outcome is that those users who feel less trusting and comfortable around others in face-to-face interaction, and who lack any formal group association, will find social interaction online a more attractive outlet. Hypothesis 5 looks at another dimension of the relationship between users’ participation online and their immersion in other social networks, by measuring the number of hours they spend on social media technology (including Facebook, Myspace, and Twitter), as well as the type of interactions occurring through a dummy variable of participants who “always” or “often” directly communicate with other users while using these social media. A positive relationship between personal interactions on YouTube and frequent interpersonal interactions on social media technology would suggest either or both of the following: that there are some people who are more Internet-based in social orientation, and that Internet platforms benefit those who are already highly engaged in social networking, lending support to the idea that the Internet supplements offline networks. If there is no association, however, it implies that YouTube-specific features are distinct, and associated primarily with interaction in that space.

Analytical Strategy

I employed linear regression to relate the dependent variable—the scale measuring level of personal interaction on YouTube—to my predictor variables. Linear regression makes it possible to separate and analyze the effects of each predictor variable and find the significance of possible variations, thus giving a sense of what conditions are most influential
in determining users' levels of interaction online. Given the relatively small number of cases, I report results for bivariate analyses and use only those variables with significant bivariate association in multivariate models.

Because my quantitative analysis could only address the links between personal interaction and user characteristics, I conducted in-depth interviews to understand the more complex motives behind online participation. Recurring themes in the interviews were organized according to a coding scheme, including the following headings: the importance of offline relationships, standards of online communication, and feelings of affinity between video posters and viewers. I then sorted and scanned the data for patterns of behavior and personal impressions, as well as for significant divides in use of the Internet among participants. Ranging in skill and involvement, respondents provide different perspectives that highlight the common aspects of the social experience on YouTube among frequent users.

Results: For whom does YouTube operate as an Interaction Environment?

Testing the hypotheses in bivariate regression models, I found that a small group of users who were less social in the off-line world were more likely to interact in the YouTube environment. There is also a very strong association between participants' level of social interaction on YouTube, and their technical familiarity with the platform (Table 5). In bivariate regressions, group size did not have a significant association with interaction on YouTube, and was not included in the multi-variate models. The frequency of communication with others on Internet-based social media technology likewise does not seem to affect the extent of personal interaction on YouTube. This finding suggests that
personal interaction among users on YouTube does not look the same as interaction on other social media, but follows a unique set of standards and applies to different sub-group of users. Users may see the platform as a separate social environment, and chose to inhabit or avoid interaction within it according to personal standards and needs. Interview data further corroborate this distinction between the usage and perceptions of YouTube and other social media technology. Finally, two of the three variables testing an association between offline relationships and activities with YouTube user interaction seemed to be significant, and were included in multivariate models.

Table 6 shows the results of nested multivariate models. Technical skill is by far the most robust predictor of a high score on the Personal Interaction scale. Not only does it increase the prediction ability of the general model, but it also maintains its relative significance in each of the subsequent models. Technical skill seems to mediate the influence of video posting as well. This pattern of elaboration suggests that it is not the act of creating content on YouTube that leads to more personal interaction, but rather the skills and comfort on the platform that lead to both posting content and personal interaction. The causal ordering, however, might be more complex, since creating content could also result in greater technical skill and comfort.

These quantitative tests partially support two hypotheses about people who are more likely to engage in personal interaction on YouTube. First, users with greater technical skill will show higher levels of interaction, and second, online interaction is inversely related based on offline group participation and sociability, in particular feelings of trust. Three of my hypotheses found little support in the data. Community size on YouTube did not seem to affect levels of interpersonal interaction. Somewhat surprisingly, neither did the user's role as
a producer of content. There was also no correlation between levels of participation on other social media and interaction on YouTube. In terms of the debates on the nature of the Internet, these findings suggest that participation online does not necessarily translate across platforms. It also may indicate that in this context, producing content does not signify engagement with a creative community, but may represent a large range of motivations, from recording personal memories to sharing events with offline friends.

Altogether, the quantitative results describe which types of users are more active participants in online personal interaction: technically competent, less socially connected in the offline world, and more involved in the YouTube environment. What the quantitative findings are unable to answer is what types of interaction these users are seeking, and why. In addition, the fact that YouTube is equally popular among those who choose to comment and those who do not begs the question of what motivates use of the platform in each case, and whether these motivations reflect different desires, or only different opinions about what the YouTube platform can offer. In-depth interviews fill in these gaps, revealing a more complex relationship between the social (or asocial) world of the users and their social use of YouTube, and complicating either/or visions of YouTube’s purpose and larger impact.

Mechanisms of Social Interaction in Offline and Online Relationships

Perceptions of YouTube as a medium of social communication are wide-ranging. This diversity of opinion reflects not only the website’s distinct utility for a variety of users, but also the diverse visions of what makes an ideal interaction community. Most participants use YouTube as a tool for gift-giving and relationship maintenance within the context of pre-existing offline social networks. For particular users—and other individuals in special
circumstances—YouTube provides an interaction space where they can connect to individuals, groups or the viewing community at large. Responses suggest that this varies, however, based on their feelings of agency in creating positive interactions, and their investment in communities of interest. While all participants are governed by personal standards of interaction and norms of reciprocity, those who see the Internet as a tool will engage in conversation only in specialized situations, usually in bilateral communication with select users, while participants who see it as a separate setting express more agency for reproducing interaction norms in the space and often direct their participation to a wider audience.

*Interaction Currency: Video “Gift-Exchange”*

Among interview participants, the prevailing attitude is that YouTube holds little value as an online community. Inferring that YouTube exists only for individual entertainment, however, would be incorrect. In fact, the majority of activities users engage in on the platform are inherently social. In practice, participants use YouTube videos as a type of interaction currency to maintain offline relationships. Whether it is the need to be “in the know” by keeping up to date with popular video content, or the act of sharing and distributing the videos through offline social networks, participants enact traditional types of interaction practices in original ways, using video-as-currency to both facilitate and enhance social interaction.

The concept of gift-exchange is appropriate here: in Western society, gift giving signifies the moral ties between people and the expectations of reciprocity and equal returns. At the same time, gifts are felt to be an altruistic offering reflecting the emotional distance of
the relationship and the strength of the bond (Komter and Vollebergh 1997). Thus, gift-exchange plays a significant role in relational maintenance, especially among close friends and family.

Traditional types of relational maintenance are interestingly supplemented by video-sharing technology. When distributing links to friends and family through online means, or co-viewing videos with a group, the video is offered as a type of social lubricant that encourages reciprocal sharing, while also communicating personal feelings of care and empathy. For example, one user noted that in addition to sending greeting cards “around the holiday seasons we’ll have different neighbors or relatives [in their sixties] sending us various parody type videos...well-known songs rewritten with Jewish lyrics.” The picture of an older generation using new technology to strengthen kinship ties follows the trend of previous online tools such as email that have complemented face-to-face social interaction in similar ways. As previous researchers have suggested, this trend depicts the Internet as an everyday tool, hinting that its ultimate impact on social life will be in ordinary, familiar types of interaction (Ramirez and Broneck 2009).

Participants also refer to video distribution among offline social networks as a way to open up friendly exchange. One user explains, “I use videos to cheer up friends. If a friend of mine is really down...I have a whole list of videos that are really amusing. I kind of collect them.” Another recounts “If I go to concerts with friends, they’ll post a song by the artist and be like ‘I can’t wait till next week!’” These types of videos are sent out as a way of “checking in” with friends, rather than for the specific information they contain. As such, they often implicitly require responses—a reply, a “thumbs up,” or a video sent back in return. According to one participant “If you enjoy a song, at least, you comment on it. Send
something back. You don’t just say nothing.” While the motives behind sharing the videos display the personal and warm feelings of the senders, the expectation of continued interaction highlights the videos’ role as a gift in a reciprocal exchange. Sharing in the experience of viewing the video (by commenting back) stands in for participation in the exchange, while sending a video back is an even more active gesture of reciprocity. For participants, the continued interaction is an acknowledgement of their gift of attention.

In addition to sending videos, co-viewing videos with one or more people is a popular way for people to enhance interaction with others offline. Co-viewing is a social experience unique to the YouTube platform, alluded to by all users regardless of their investment or familiarity with YouTube. Since YouTube is the main host for practically all popular videos, with unlimited and on-demand access, means that co-viewing happens spontaneously and frequently. However, unlike watching a TV show sponsored by a media network or a movie chosen by mutual agreement, participant exchange is a central element of co-viewing. Interviewees describe it as “that inevitable 40-minute YouTube video swapping” that often occurs in groups of more than two people, and “always ends up with a bunch of people on YouTube exchanging videos.” Furthermore, co-viewing is often described as interactive, as opposed to passive. One interviewee describes how co-viewing changes how she watches videos on YouTube. She says:

I generally will skip through if I’m not...but if my friend, or if my sisters are right there, they make me watch the whole thing. They’re not videos that they’ve made. They’re just videos that they found and adore and quote all the time. So I have to have seen it to be able to understand what they’re doing. And a lot of times they are hysterical, and then I will come back and tell my friends [whispers] “You have to see this.”

Not only is YouTube important in drawing her closer to her sisters and sharing their cultural references, but her interaction with the website itself is affected by the social
incentives of others. In turn, she uses the tool in a new way, as cultural capital to confirm her status in other relationships. Going back to her friends and sharing these funny videos, she establishes herself as a source of cultural information and becomes the center of new social exchange. The emphasis on group participation and the mutual exchange of video “offerings” highlights the important social value of co-viewing: participants have the opportunity to share their interests and tastes as well as command equal attention and time among peers, both of which encourage mutual respect and rest on norms of reciprocity.

Finally, posting videos on YouTube is for certain users a potential way of extending their offline relationships and facilitating interaction with friends. Most of these users cite convenience and a desire to relive shared events with friends as their reasons or posting. One respondent created a string of parody video skits through high school, which were followed online by 25-30 subscribers, all of whom he knew personally “in real life.” Sharing these videos allowed him to get and give feedback on creative work within a friend group of other video posters. Another respondent described his idea of posting video political commentaries “during a big election… I just wanted to get my thoughts out there. Or a regular weekly thing, get my friends involved.” Just as co-viewing transforms the traditionally passive activity of media viewing into an active social event, these two users demonstrate how the typically solo act of creating and uploading a video is treated as (and thus turned into) a tool for social participation. Furthermore, these two users illustrate the potential to take YouTube’s role as an interaction tool even further, enhancing offline interaction with new forms of participation in the online world. In this case, although YouTube does not explicitly state that videos should be made by one person, collaborative creation and editing is difficult to formally credit through YouTube’s existing design features: user profiles are individual-oriented and
interaction features throughout the site focus on individual interests and patterns of behavior. Thus, the choice to work collaboratively despite these structural constraints shows clearly users’ ability to utilize the tools available in a way that will fit their wants and needs, and generate social bonds. The attitude shared by these users has major implications for how user agency transforms the function and feel of Internet spaces. On YouTube, we see that the social utility of videos can be greater than their entertainment value, and furthermore, that the use of videos as interaction currency encourages participation with peers through participation with media, not in spite of it.

Attitudes toward video posting also illustrate a divergence in users’ perceptions of YouTube’s potential for social activity. Although uploading a video in reality requires minimal technical expertise, many users claim that they would never do it because they are “not so great with technology.” Their assumed role as unskilled users, despite their obvious comfort navigating multiple web interfaces, prohibits them from following this avenue of possible social interaction. The variations in user perception and potential add a new dimension of interpretation to the survey findings, which revealed a relationship between technical skill and online personal interaction. Here, the divide lies between perceived skill and particular ways of extending offline action. The common element between the two is in particular ways of inhabiting online space; video-posters take on a traceable, visible presence online, unlike others who are merely invisible browsers. Furthermore, although users show some degree of agency in how they use the tools available, we will see that a similar ability (or desire) to shape the space of interaction does not always exist.
On-site Interaction: Strategies of Communication

Although YouTube’s potential to be an interaction space is widely noted, most interviewees are unwilling to participate in conversation or communication with anonymous users for two reasons. The first is a general lack of trust in public Internet spaces, which makes people wary of engaging in anonymous interaction. The second reason is rooted in particular standards of interaction that users hold for online communities—idealized ways of communicating and deliberating that they find lacking in the YouTube setting. Deviance from this standard is often called “trolling,” which one user describes as “saying stupid, racist things on a video or on the Internet to try to rile someone up.” Trolling is an “obnoxious” culture and runs rampant on YouTube comment boards. The comments range from being simply “devoid of intellectual content” and “a low level of discourse” to outright antagonistic. Describing the types of comments they have read, users express both explicit and tacit disappointment, and reveal how their trust and respect for other users is affected by trolling culture:

It’s mostly useless blabber, so I just don’t worry about it.

I don’t really have much of a stake in what people on the Internet think of something, because people post things that aren’t genuine or are just stupid. I mean, these are not my friends.

I’ve never seen a productive conversation in the comment section of YouTube, and I don’t really expect to.

The high value placed on genuine, productive conversation highlights the two things most lacking in open, anonymous environments like YouTube. When participants are asked to describe what an alternative, more positive interaction space looks like, they inevitably turn either to Facebook—a social environment limited to chosen and “approved” friends—or to
other online communities that attract users with similar interests or intellectual values, such as video game or news sites. The implication is that YouTube, by being open to a large public, also opens itself to destructive participation that actually lowers its interaction value.

Ironically, as the survey results imply, smaller spaces on YouTube are either not attractive to users or do not encourage community building. Even participants who watch videos attracting targeted audiences do not perceive themselves as belonging to a viewership, but instead see their actions as merely representing an individual interest. Despite the narrowness of the groups, the open environment of YouTube allows for too much anonymity and symbolic vandalism for users to feel a strong connection with the other unknown members online.

Interestingly, while all users agree that these types of interaction are upsetting, their responses will vary based on whether they ultimately prioritize people or content within that space. When not specifically seeking people, users are not motivated to reinforce norms of positive interaction in a social environment. It is only when forced to occupy the YouTube space—for example, when following the work of a favorite band or collaborating with an artistic community—that users feel a need, even a responsibility, to change the negative tone of interaction and reach out to strangers for productive conversation. Many participants feel that they have no agency to change the negative tone of YouTube interactions. However, highly involved users, particularly those who have posted multiple videos in the past, often take a more active approach to managing this issue. One respondent attempts to manage the chaos on comment boards by posting more positive or regulatory remarks—a personal

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2 The strong reactions to unintelligent “blabber” by the majority of interviewees may also reflect a bias of the sample: young, liberal arts college students seem less likely to identify with the anonymous masses, and hold higher standards of productive interaction. Future research on YouTube demographics, user profiles, and comment analysis may find interesting trends along the lines of class and education.
impulse often targeted towards keeping conversation relevant to the videos being offered: “Sometimes honestly I just feel the need to post a comment, less to silence the trolls and more to bring the conversation back to ‘Hey, wasn’t this a good video.’” His initiative sometimes garners positive responses from other viewers, who support his calls for tolerance and constructive discussion. In his experience, there is a reward for investing in the community and raising the level of discourse. This user sees his role on YouTube not as an anonymous mass consumer, but as a source of feedback for video creators, perhaps as much focused on the video as art and aesthetic as he is on being entertained. He encourages this kind of participation for other users as well, emphasizing the importance of rating videos and reinforcing good work. However, this was user was one of few, as the majority opted for more passive strategies of avoidance when facing negative experiences.

Users who have posted videos on YouTube expressed significantly more positive reactions to the comment system than other respondents. This reaction is due largely to their experiences with comments posted on their own videos. An interviewee enthusiastically described viewer reactions to her video of a concert she’d attended, just a few days before:

It was amazing. By two hours there were views and comments [from other attendees]. When I checked, I was like, ‘Whoa, this is so cool!’ [People would say] ‘Oh the concert was so cool.’ At one point a girl in the crowd had collapsed [...] I had written in the caption, ‘Does anybody know what happened?’ and somebody answered. [The concert] was Saturday night, and I posted Sunday night. Who would’ve thought? I guess they wanted to relive it.

The comment stream on her video reflected a continuation of the social activity from the night before, but it also began new threads of social interaction that only existed in the YouTube space, extending the temporal and spatial boundaries of the offline world. Within this interaction environment, users shared information (about the concert), suggested similar
videos, and collectively re-experienced the event. The revelation experienced by the video poster is even more interesting than the types of interaction her video inspired: her commentary illustrates that prior to this experience, she’d had no idea of the social possibilities on YouTube. Posting the video and thus becoming “visible” on the site opened up new ways for her to see YouTube as an interaction environment, and not just as a sharing tool or storage space, while also extending offline interaction.

On highly specialized videos, targeted perhaps toward a smaller audience and of special interest to the viewer, even less-involved users may be drawn into participation. In these cases, comments usually take the form of critique, both solicited and unsolicited. A student who has six years of dance experience and frequently views dance-related videos on YouTube observes that the only time she has left on comment was when a stranger posted a video asking for feedback on her dancing. A music aficionado who mainly prowls YouTube for different versions of songs also remembers his only comment:

This person tried to do [a remix of a song I was looking for] and did a really horrible job and ruined it for me, and I posted a comment saying that it would be better if you...did it properly. I wasn’t trying to be mean or anything. I was kind of hoping to encourage them to fix it, so I could enjoy it.

In both cases, the comment was given directly to the video poster/creator, and was aimed at improving the quality of the creative work being shown. While neither of these participants claim to comment often or have any relationship with the video posters, their efforts were prompted by a particular interest in the fields of dance and music. There is a similarity of motives between these interactions and the first few cases. Users are inspired to connect with video posters when they see themselves as fellow members of an artistic community that follows certain standards. Likewise, more active users on YouTube may find that the video-
craft itself is the creative goal of the group, and work towards keeping that set of principles relevant. The difference between the two circumstances lies in how communication is continued on or off the site. Users who are consciously involved with the video-creation community may see the YouTube site itself as their interaction environment, and thus continue participation through comment forums and video subscriptions. In the second situation, users may locate particular individuals (such as music artists) on YouTube but continue to interact with them through more direct forums such as Facebook or personal websites.

The difference in outcomes draws attention to YouTube's failings as a social networking site in the eyes of users. Among the Internet's social spaces, most users do see YouTube as an interaction tool rather than an interaction space, but in addition to using it to supplement offline social interactions, they also find it central to their online interactions—for example, on message boards and forums where members share a range of media from videos to news articles and images. Convenient video-embedding technology is one way that YouTube has attempted to popularize usage, leading some to describe it as “promiscuous” in its occupation of Internet space (Grusin 2009). Desiring to create both a wide audience and a dedicated “community,” YouTube has made efforts to seem more user-friendly on its own host site as well. However, despite having features copied from Facebook, such as the “like” ratings and “friend” options, YouTube's design still emphasizes the content of the video over the user who posted it, and thus sends the unspoken message to participants that they should take further interaction elsewhere. A respondent explained that “you don’t have easy access from user to user or person to person. If I’m looking for a video, it’s difficult to find it by username.” Others expressed confusion regarding YouTube’s “friend” features in context of
the other social options available to them, saying "I don’t see YouTube as a 'friend'-ing thing," and "YouTube is not a social networking site, it’s a video-sharing site, and Facebook is for that." The labeling of various Internet spaces as "social" or "anti-social" does not only reflect the characteristics of the space itself. It also provides some insight into how the different focuses or intents guiding action in that space will affect the types of interaction that occur. In the case of Facebook, users are seeking interaction with specific people, and thus use social media as both a tool and a space to support this interaction. Activity on YouTube, conversely, more generally reflects content-seeking behavior, for which the YouTube site acts as a host. These differences in user needs, and thus Internet function, hold implications for how users will continue interaction in that space and reinforce norms. The necessity of occupying Facebook space in order to connect with specific individuals leads to greater accountability and policing among users. YouTube, however, does not require such user management, as the focus of the activity is on the content and thus, distasteful interactions can simply be avoided. The multi-layered intersections of web design and function with user characteristics, perceptions, and frameworks lead us beyond conventional metaphors for the Internet as space or tool, into a new social world containing aspects of both.

**Conclusion**

Employing YouTube as a case study, I find that particular user characteristics—technical skill and level of offline interpersonal interactions—can distinguish those who utilize the Internet as a site for social interaction. Users who were more technically skilled, familiar with the platform, and connected to the YouTube community were more likely to have contact with strangers and feel agency about creating positive interactions within the
online space. I also find that for the majority of users YouTube is an effective tool for social interaction by producing videos-as-gifts that can be used to maintain relationships. YouTube’s roles as an interaction tool or environment are also reflected in students’ attitudes about where purposeful social action should take place: involved users were more likely to spend time on the YouTube website itself, while others would rather view embedded videos through another host, and transfer social interactions to Facebook or Internet forums.

How should we understand the implications of these findings for broader phenomena? Previous debates on the Internet’s impact on social life have framed it rather generally, as a replacement of rich, offline social connections, as a transformative space encouraging new interactions, or as a tool supplementing offline interactions. The findings of this study complicate these descriptions, showing that the consequences of Internet use on the relationships of individuals rely heavily on user perceptions, skills, and needs. Social life through and around technology has become multi-dimensional, as in the cases of the kinship-building holiday videos or the music concert collectively re-experienced online. More and more, important social actions are being transferred into and out of online forums. Romantic relationships break up through Facebook status updates, while followers of the social network Twitter will often stage “tweetups,” or informal offline gatherings of users. All these actions show us particular user agency in shaping the nature of tools available, and also in creating new social environments based on familiar norms of interaction. The other major insight this study offers is a closer look at what people seek in their interactions. User investment in an interaction environment does not only reflect the virtue of the space, but also the kind of focus the user desires. Furthermore, these characteristics are changeable, as users engage in new behaviors and open different pathways of interaction.
With multiple types of social interaction flowing through and around technology, there is also the question of how to define “community.” While the academic debate puts forth social interaction and community as commonly understood concepts, the diversity of perception and opinion among users show that individual understandings can hold greater implications for how norms are reinforced in new environments. While there may be certain people who are more likely to use the Internet as either a social interaction tool or as a separate social world, this perception of the Internet is based on a variety of factors, including the outcomes they desire in particular Internet spaces, and with particular people. Community alone may be conceived in multiple ways—as collaborative groups, culture groups, or fan bases—and each way of framing community may lead to different styles of interaction and engagement. Further research may ask what types of communities are most suited for online connection, or whether specific structural features, such as user profiles, can communicate an atmosphere of trust and accountability. My study also introduces a re-evaluation of the mechanisms of gift-giving in contemporary relationships. Media becomes an object, valued not only for its cultural or informational content, but also for its symbolic value. This social offering demands the reciprocal gift of attention, another highly prized and symbolic commodity.

In order to hold constant the setting in which to observe the nuances and patterns of social interaction, this study limited its sample to college students and its focus to the YouTube platform. This sample is not completely representative of the range of users on YouTube, and lack of variation in characteristics such as class and educational level problematizes descriptions of online “norms.” While this study makes a good start on identifying and analyzing these perceptions, with demographic data on a larger sample of
registered users we might address the consequences of this divide. How significant is this cultural capital in shaping what users look for in online interactions. Who is not participating?

Finally, as this study is concerned primarily with the personal experiences of users, data was interpreted at the level of the individual. Although this approach limits the ability to generalize results to other Internet spaces, it allows a deeper focus into the particular choices and actions participants will take when faced with similar circumstances. My focus follows a literature that credits the "human" side of the human-web interface for guiding how new technologies will function as social tools (Petric 2006; Thurk & Fine 2003; Uslaner 2004), rather than framing technology as the solo agent of change in our social lives. I put forth just a few examples of how the changing social uses of the Internet come mutually from technological innovations and user behavior: via video link embedding, users share YouTube videos with offline acquaintances through social networking websites. Online relationships with other individuals may start on YouTube but continue through other spaces, or conversely, YouTube video links may be shared within online communities that users are already embedded in.

These findings lead to further questions, relating to how other platforms and environments might fare in the minds of Internet users, and what types of communities are most suited for online connection. Do specific structural features, such as comment boards and user profiles, communicate an atmosphere of trust and accountability? What particular topics or genres (e.g. political, health-related, new talent) are most likely to encourage the development of small groups and one-to-one conversation? This study can contribute both theoretically and methodologically to future research in under-explored areas.
Complementing our knowledge on the social aspects of viewing and sharing videos, research might examine the actual *physical* performance of browsing videos and websites. Inquiries using both extensive and intensive methods might compare YouTube and Facebook-based interaction, or explore how other online content, such as news articles, are shared among offline networks as social offerings. As the Internet diversifies and new spaces emerge and evolve through use, these questions need to be asked in increasingly creative ways. Re-evaluating old ways of looking at social bonding may reveal new metaphors and models, not only for the Internet, but also for how we pursue and maintain relationships in the modern world.
References


### Tables

#### Table 1. Activity and Engagement on YouTube by Gender (N = 155)

<table>
<thead>
<tr>
<th></th>
<th>Total (N)</th>
<th>Male (%)</th>
<th>Female (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered user</td>
<td>95</td>
<td>77.3</td>
<td>55.5</td>
</tr>
<tr>
<td>Posted a video</td>
<td>46</td>
<td>58.8</td>
<td>42.6</td>
</tr>
</tbody>
</table>

#### Table 2. Frequencies For Questions Measuring Personal Interaction On YouTube (%), Registered Users (N = 96)

<table>
<thead>
<tr>
<th></th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Makes comments directed at video poster</td>
<td>2.1</td>
<td>6.3</td>
<td>25.0</td>
<td>66.7</td>
</tr>
<tr>
<td>Makes comments directed at other viewers</td>
<td>2.1</td>
<td>6.4</td>
<td>22.3</td>
<td>69.1</td>
</tr>
<tr>
<td>Make comments directly on a channel</td>
<td>0.0</td>
<td>0.0</td>
<td>16.7</td>
<td>83.3</td>
</tr>
<tr>
<td>I enjoy reading the conversations/dialogue between other users on comment boards.</td>
<td>15.6</td>
<td>50.0</td>
<td>34.4</td>
<td></td>
</tr>
<tr>
<td>I enjoy using the comment boards to engage in conversations/dialogue with other users.</td>
<td>1.0</td>
<td>4.2</td>
<td>94.8</td>
<td></td>
</tr>
<tr>
<td>Without comments/user interaction, YouTube would be far less valuable to me.</td>
<td>3.1</td>
<td>14.6</td>
<td>82.3</td>
<td></td>
</tr>
</tbody>
</table>

*Responses including "Strongly Disagree", "Disagree", and "Don't Know"

#### Table 3. Frequencies for Measures of Technical Skill and Familiarity on YouTube (%), All Users (N = 155)

**Question: Please rate your familiarity with the following processes/features.**

<table>
<thead>
<tr>
<th></th>
<th>Not at all Familiar (1)</th>
<th>Somewhat Familiar (2)</th>
<th>Very Familiar (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video commenting</td>
<td>27.7</td>
<td>13.5</td>
<td>15.5</td>
</tr>
<tr>
<td>Tagging Favorites</td>
<td>43.5</td>
<td>17.5</td>
<td>12.3</td>
</tr>
<tr>
<td>Subscribing to Channels</td>
<td>34.6</td>
<td>17.0</td>
<td>16.3</td>
</tr>
<tr>
<td>Using Search Filters</td>
<td>32.3</td>
<td>20.0</td>
<td>16.8</td>
</tr>
<tr>
<td>Creating a video playlist</td>
<td>40.9</td>
<td>17.5</td>
<td>7.7</td>
</tr>
<tr>
<td>Embedding video links</td>
<td>18.8</td>
<td>9.1</td>
<td>29.9</td>
</tr>
<tr>
<td>Recording videos</td>
<td>22.7</td>
<td>14.3</td>
<td>19.5</td>
</tr>
<tr>
<td>Editing videos</td>
<td>31.8</td>
<td>23.4</td>
<td>16.2</td>
</tr>
<tr>
<td>Uploading videos to YouTube</td>
<td>49.0</td>
<td>14.2</td>
<td>15.5</td>
</tr>
<tr>
<td>Embedding tags in a video</td>
<td>64.1</td>
<td>15.7</td>
<td>4.6</td>
</tr>
</tbody>
</table>
Table 4. Means and Standard Deviation for Predictor and Dependent Variables (N = 94)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Percentage of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Interaction(^a)</td>
<td>6.82</td>
<td>3.61</td>
<td></td>
</tr>
</tbody>
</table>

Independent Variables (continuous)
- Technical Skill\(^b\)  | 28.58 | 9.73               |
- Hours on SMT\(^c\) per day | 0.72  | 10.58              |

Independent Variables (dichotomous)
- Participates in small group setting on YouTube | 2.1               |
- Visits YouTube at least once a day | 53.2               |
- Has posted a video | 42.9               |
- Often directly interacts with others on SMT\(^c\) | 62.8               |
- Belongs to outside group\(^d\) | 88.3               |
- Generally very trusting of others\(^e\) | 68.1               |
- Openly shares honest opinions with friends | 83.0               |

a. Scale of six items, reliability (alpha) of .760
b. Scale of ten items, reliability (alpha) of .890
c. SMT = Social Media Technology, including Facebook, Myspace, Twitter, and Foursquare.
d. Participates in at least one of the following activities: Student/Campus Government, Other Political Organization or club, Religious organization, Volunteer/Community Service, Intercollegiate or Intramural Athletics, Performing Arts, Student organization or club

d. Participates in at least one of the following activities: Student/Campus Government, Other Political Organization or club, Religious organization, Volunteer/Community Service, Intercollegiate or Intramural Athletics, Performing Arts, Student organization or club

e. SMT = Social Media Technology, including Facebook, Myspace, Twitter, and Foursquare.

Table 5. Bivariate Regressions on Personal Interaction Scale, Hypotheses 1-5
Predictor variables include Group Size, Technical Skill, Video Posting, Online Activities, and Offline Group Participation

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Predictor</th>
<th>Beta</th>
<th>t-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 1</td>
<td>Small group setting</td>
<td>-.035</td>
<td>-.332</td>
<td>.741</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>Technical Skill(^a)</td>
<td>.309</td>
<td>3.095</td>
<td>.003</td>
</tr>
<tr>
<td></td>
<td>Visits YouTube once a day</td>
<td>.178</td>
<td>1.739</td>
<td>.085</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>Has posted a video</td>
<td>.209</td>
<td>2.051</td>
<td>.043</td>
</tr>
<tr>
<td>Hypothesis 4</td>
<td>Belongs to group(^b)</td>
<td>-.219</td>
<td>2.157</td>
<td>.034</td>
</tr>
<tr>
<td></td>
<td>Trusting of others</td>
<td>-.215</td>
<td>-2.114</td>
<td>.037</td>
</tr>
<tr>
<td></td>
<td>Openly shares honest opinions</td>
<td>.051</td>
<td>.489</td>
<td>.626</td>
</tr>
<tr>
<td>Hypothesis 5</td>
<td>Hours on SMT(^c) per day</td>
<td>.018</td>
<td>.172</td>
<td>.864</td>
</tr>
<tr>
<td></td>
<td>Often directly interacts with others</td>
<td>.003</td>
<td>.024</td>
<td>.981</td>
</tr>
</tbody>
</table>

NOTE: N = 93; Beta = standardized regression coefficient
a. Scale of ten items, reliability (alpha) of .890
b. Participates in at least one of the following activities: Student/Campus Government, Other Political Organization or club, Religious organization, Volunteer/Community Service, Intercollegiate or Intramural Athletics, Performing Arts, Student organization or club
c. SMT = Social Media Technology, including Facebook, Myspace, Twitter, and Foursquare.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Equation 1</th>
<th></th>
<th>Equation 2</th>
<th></th>
<th>Equation 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>p-value</td>
<td>Beta</td>
<td>p-value</td>
<td>Beta</td>
<td>p-value</td>
</tr>
<tr>
<td>Technical Skill&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.309</td>
<td>.003</td>
<td>.276</td>
<td>.019</td>
<td>.239</td>
<td>.038</td>
</tr>
<tr>
<td>Has posted a video</td>
<td></td>
<td></td>
<td>.064</td>
<td>.581</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belongs to group</td>
<td></td>
<td></td>
<td>- .178</td>
<td></td>
<td>.087</td>
<td>.444</td>
</tr>
<tr>
<td>Trusting of others</td>
<td>- .171</td>
<td></td>
<td></td>
<td></td>
<td>.087</td>
<td></td>
</tr>
</tbody>
</table>

$R^2$                              | .095       |          | .098       |          | .169       |

NOTE: N= 93; Beta = standardized regression coefficient

a. Scale of ten items, reliability (alpha) of .890
b. Participates in at least one of the following activities: Student/Campus Government, Other Political Organization or club, Religious organization, Volunteer/Community Service, Intercollegiate or Intramural Athletics, Performing Arts, Student organization or club