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14 Can Social Media Photos Influence College Students' Sexual Health Behaviors?

Abstract: Beth, a 20-year-old transfer student to South Oregon University, logs on to Facebook on a Friday afternoon in the second week of classes. Her previous school, Chesapearo Community College, was well-known for its wild parties. Chesapearo students' Facebook photos, teeming with alcohol and sexually suggestive poses, reflected the school's stereotypes and reputation as a hotbed for sexual promiscuity and unintended pregnancy. However, while browsing the South Oregon University Facebook network, Beth notices that students at her new campus don't showcase photos of themselves drunk and provocatively posed. Instead, most of the pictures show students sitting in dorm rooms talking with friends, or spending time with their families. This makes Beth rethink her plans for the party she's attending in the evening. Maybe instead of donning a short skirt and "pre-partying" with several shots of liquor, she'd fit in better at her new campus if she arrived at the party sober and wore more conservative clothing. She decides that she won't make sexual conquest a goal for the evening. She puts on her jeans to hang out with her new girlfriends and grabs a condom so that just in case something does happen with a boy, she'll be ready for it.

Can social media sites such as Facebook affect college students' sexual health behaviors? Could Facebook photos, for example, make a person reconsider his or her intention to have sex or use a condom? In this chapter we address this question empirically and test the prediction that viewing Facebook photos can act as an intervention that increases college students' intentions to use condoms—at least at schools where the actual prevalence of sexual promiscuity is not as high as students might imagine.

14.1 Sexual Health Behaviors: The Influence of Perceived Norms

Reducing risky sexual health behaviors among American college students is an extremely important but difficult goal to achieve. Despite the fact that using condoms during sexual intercourse can reduce the risk of contracting a sexually transmitted infection by 70-100% (Roper, Peterson, & Curran, 1993), only about 40% of sexually active college students report using condoms (Strader & Beaman, 1991; DiClemente, Forrest, & Mickler, 1990; Eisenberg, 2001). According to one study, for example, 36% of college students did not use a condom during their initial sexual experience with a new partner, and more than 50% failed to use a condom during their most recent sexual involvement (Freimuth, Hammond, Edgar, McDonald, & Fink, 1992). These



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alarming high rates of unprotected sex among college students not only contribute to unplanned pregnancies, but also appear to contribute to the current HIV epidemic in the United States (Centers for Disease Control and Prevention, 2003). Designing effective interventions to increase condom use is therefore critical to redressing these social problems.

Psychological research may provide useful insights into creating successful interventions to reduce risky behavior. According to work within social psychology on the perception of norms, people's behaviors—including their sexual health behaviors—are strongly influenced by their estimates of whether their peers are engaging in these same behaviors. If a person thinks that the majority of his or her peer group is frequently having unprotected sexual intercourse, then that person may be more likely to engage in such behavior. In one study of 725 college students, for example, students' overestimations of the peer-prevalence of sexual behavior led them to increase their own sexual behavior to conform to the perceived norm (Page, Hammermeister, & Scanian, 2000; see also Lambert, Kahn, & Apple, 2003). Drawing on the same insight, that perceived norms may influence students' health behaviors, researchers in another study attempted an intervention in which students were provided with information aimed to curb their prevalence overestimates. In this study, male college students were told that risky sexual behavior was relatively rare among college students (Chernoff & Davison, 2005). These students reported being more likely to use condoms than males who read general information about AIDS. College students' overestimations of risky sexual behavior may therefore increase their rates of engaging in risky sexual behaviors, whereas interventions that highlight low normative rates of sexual behavior may decrease their likelihood of engaging in these behaviors.

14.2 Facebook Photos and Condom Use: A Pilot Study

As college students increasingly turn to Facebook to learn about and interact with their peers, we predict that Facebook use may influence students' sexual health behaviors by providing information about peer-group norms. Specifically, we predict that user-uploaded photos on Facebook convey information to students about sexual norms, and that these perceived norms may affect their own sexual health behaviors in turn. Photos that suggest sexual responsibility or restraint, or that focus on alternative forms of entertainment other than sexually suggestive experiences, might be used as an intervention to increase sexual health and responsibility.

In an attempt to test this hypothesis, we ran a pilot study assessing the influence of Facebook photos on Stanford University undergraduates' perceptions of peer sexual behavior and their own intentions to engage in sexual behavior. Compared to UCLA and UC Berkeley networks, random samples of photos from student profiles at Stanford University revealed dramatically less sexually suggestive content, suggesting

that Facebook use among Stanford students may *decrease* rather than increase students' perceptions of the peer-prevalence of sexual behavior.

Seventeen students in our experimental group were asked to look at 15 Facebook photos of their Stanford peers. After examining these photos and completing some filler questions, the students were asked, among other things, to estimate the percentage of their peers who have sex without condoms, as well as their own likelihood of using a condom when having sex with a person of unknown HIV status. A control group of 21 students answered the same questions without first looking at Facebook photos.

What we discovered was fascinating and served to demonstrate the power of Facebook in forming college students' decisions. Consistent with our hypothesis, students who first looked at Facebook photos made significantly lower estimates of the peer-prevalence of unprotected intercourse (14%, vs. 26% in the control group). Similarly, students who looked at Facebook photos reported a significantly greater intention (a 10% increase compared to the control group) to use condoms when having sex with a person of unknown HIV status.

14.3 Discussion and Future Directions for Research

In this study, we found that having college students look at peers' Facebook photos led them to perceive a lower peer-prevalence of unprotected sex and to state a greater intention to use condoms themselves in future sexual encounters. We attribute these results to the infrequent representation of sexuality in Stanford undergraduates' Facebook photos. Although students might overestimate base rates of sexual risk behaviors in the absence of prevalent information, the reality represented in Facebook photo albums may serve as a corrective against exaggerated perceptions of student debauchery. Of course, it is also possible that students in the control condition actually estimated the prevalence of unprotected sex more accurately than students in the experimental condition, and the low frequency of sexuality in Facebook photos was due to campus cultural norms against appearing promiscuous.

No matter the interpretation, this study provides evidence that Facebook use—in particular viewing peer photos—may influence college students' perceptions of sexual health behavior norms among their peers, which may in turn influence students' own sexual health behaviors. At schools where students' Facebook photos do not show sexually suggestive material, Facebook use may serve as an effective intervention against risky sexual behaviors. Future research might examine whether our effects can be replicated in the domain of testing for sexually transmitted infections, where stigma reduces students' willingness to test for diseases such as HIV (e.g., Young, Nussbaum, & Monin, 2007), or in the domain of alcohol use, where students also tend to overestimate the peer-prevalence of risky behavior (e.g., Prentice & Miller, 1993; see also Schroeder & Prentice, 1998). In addition, research should examine whether

Facebook use might have detrimental effects on health behaviors in college settings where risky behavior is more commonly depicted in online photos.

More generally, we believe that researchers in psychology and other disciplines should investigate how Facebook affects students' perceptions of their peers' lives, and how these perceptions affect their expectations about their own lives. For example, recent research suggests that college students systematically overestimate the proportion of their peers who are out having fun at any given moment, whereas they underestimate the peer-prevalence of negative emotional experiences (Jordan, Monin, & Dweck, 2008). Such errors may detract from students' well-being. Does Facebook use—viewing photos of classmates at drunken parties, for instance—exaggerate or attenuate these errors in social perception? How does the answer to this question depend on cultural norms that dictate the content that students choose to present on their Facebook pages and depict in their photos? The study we presented in this chapter demonstrates the potential for such investigations to shed light on the social psychological complexity of online social networks and pave the way for interventions that improve student health behaviors and well-being.

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