

## Facebook and academic performance: Reconciling a media sensation with data

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### Abstract

A recent draft manuscript suggested that Facebook use might be related to lower academic achievement in college and graduate school (Karpinski, 2009). The report quickly became a media sensation and was picked up by hundreds of news outlets in a matter of days. However, the results were based on correlational data in a draft manuscript that had not been published, or even considered for publication. This paper attempts to replicate the results reported in the press release using three data sets: one with a large sample of undergraduate students from the University of Illinois at Chicago, another with a nationally representative cross sectional sample of American 14– to 22–year–olds, as well as a longitudinal panel of American youth aged 14–23. In none of the samples do we find a robust negative relationship between Facebook use and grades. Indeed, if anything, Facebook use is more common among individuals with higher grades. We also examined how changes in academic performance in the nationally representative sample related to Facebook use and found that Facebook users were no different from non–users.

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## Introduction

The proliferation of social networking sites has exploded in recent years, with an especially significant increase in membership levels as seen in the case of Facebook. In the nationally representative sample used in this study, Facebook users accounted for 16 percent of 14- to 22-year-olds in 2006 and 40 percent among that same population in 2008. Indeed, with over 200 million unique users, Facebook use may have a sizable real-world impact (Zuckerberg, 2009). Hence, as use of the social networking site has expanded, a variety of studies have attempted to understand the correlates and potential effects of using the medium.

Researchers examining Facebook use from a media effects tradition have focused either on the social implications of the medium or on the potential risks that users of social networking sites may experience. For instance, a variety of studies have noted that the use of Facebook is positively related to social capital (Ellison, *et al.*, 2007; Pasek, *et al.*, in press; Valenzuela, *et al.*, 2008). On the other hand, some research suggests that Facebook users underestimate the potential privacy risks of sharing information on the site (Acquisiti and Gross, 2006; Dwyer, *et al.*, 2007).

Mass expansions of new technologies, especially among young people, have been ripe topics for hysteria. Indeed, a large portion of the early research in mass communications was prompted by fears that the motion picture industry might be clouding children's minds (Blumer and Hauser, 1933). Similar concerns were voiced by Putnam (2000) regarding an apparent negative relationship between television use and social capital.

As with claims of dangers from older media, a recent study (and corresponding press release) indicating that Facebook use and collegiate grade point averages (GPA) were negatively correlated generated a great deal of media hype (hereafter "FG"; Karpinski, 2009). A Google News search for "Facebook" and "grades" identified over 500 references to the FG study over a three day span [1]. In the immediate course of only a few days, an unpublished and inadequately reviewed study that emphasized a simple correlation became an established fact when disseminated through the news media.

The current examination serves as an attempt to restrain media hype with regard to the purported negative relationship based on more rigorous investigation of more representative samples than the FG study offered. We first examine the original FG study as well as the claims made in the press release to show that the results were exaggerated. This misinterpretation was due both to the reporting and framing of the study, which presented a raw correlation in a small convenience sample as strongly suggestive evidence, as well as to failures on the part of mass media sources that reported the story. We also address the relationship between Facebook use and grades using three studies with datasets much more closely attuned to the question at hand.

In contrast to the FG study, we find no evidence that Facebook use is related to diminished academic achievement.



## The FG study

The FG study should be regarded as problematic for a variety of reasons. We briefly address issues with its sampling and analysis strategies that lead us to question the external validity of the results presented. We then compare these results to claims made in the researcher's press release that imply a causal and directional influence of Facebook use on academic performance.

*Sampling issues.* Data from "102 undergraduate and 117 graduate students at a large, public Midwestern university" were used in the FG study [2]. The draft manuscript explains that data were collected through a "convenience sample" [3], of volunteers from summer and autumn classes at the university. While the specifics of the classes and their potential attendees remain obscure, data reported in the paper make it clear that the individuals sampled were unrepresentative of any large, public Midwestern university. Indeed, a sample with 117 graduate students, 96 juniors and seniors, and only six freshman and sophomores is unrepresentative of any university population at all.

Only 15 undergraduate students in the FG study reported that they did not use Facebook, making conclusions about this group dubious at best. Further, the study included data from a large number of graduate students, for whom grade point averages are often irrelevant unless they fall below a certain threshold [4]. A quick look at the sample's demographics reveals that individuals in the sample varied based on their status as graduate or undergraduate students, full- vs. part-time students, age (spanning more than a decade), gender, ethnicity, field of study, hours of external employment, Internet experience, and the like. The author showed that many of these variables were related to Facebook use. Nevertheless, none of these interrelated factors were controlled for in assessing Facebook "effects."

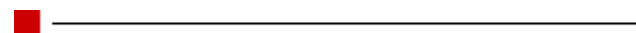
*Analysis strategy.* The FG study used only one control variable to assess the relationship between Facebook use and grade point averages — status as a graduate student. Use of only a single covariate leaves the model underspecified given the large number of different populations included in the sample. A separate finding of the study — namely that business and STEM [5] majors were much more likely to use Facebook than individuals in the Humanities and Social Sciences (one category) — raises particular doubts. Engineers generally have lower grade point averages than individuals in the

humanities and social sciences, *ceteris paribus* (Betts and Morell, 1999). Yet the author ignores this possibility when considering the Facebook–GPA relationship.

*Descriptions of findings.* In the FG study, the authors explained that “the suggested negative consequences of use can alert administrators to find ways to limit access [to Facebook] ... resulting in better academic performance.” [6] The author, however, was clearly aware of the limitations of these findings. Indeed, the draft paper later notes that directional relationships are not discernable using correlational data.

The press release published by the Ohio State University similarly juxtaposed recognition of the study’s limitations with broad–sweeping claims about the implications of the findings. At one point, Karpinski emphasizes that “we can’t say that use of Facebook leads to lower grades” but is also quoted as saying that “there’s a disconnect between students’ claim that Facebook use doesn’t impact their studies, and our finding showing that they had lower grades” (Grabmeier, 2009). Further, the only alternative explanation proposed in either the press release or the draft manuscript involved the suggestion that Facebook users might “still find other ways to avoid studying.” Yet it is quite possible that Facebook use is common for individuals in disciplines where lower grades are the norm, that both Facebook use and low academic performance are caused by some other untested factor, or that the relationship is entirely a function of a small unrepresentative sample of students at a single university.

*To what effect?* While the FG study noted the need for further research, media sources were quick to sensationalize the preliminary findings. On *Time* magazine’s Business and Tech blog the headline read: “What Facebook Users Share: Lower Grades” (Hamilton, 2009). Other coverage took it a step further by claiming a causal relationship: the Miami CBS affiliate proclaimed: “Study Finds Facebook Usage May Yield Lower Grades” (CBS4, 2009) and MyFox Dallas/FortWorth declared: “Study: Facebook Hurts Grades” (MyFox DFW, 2009). The study has also been widely reported globally. *The Australian’s* piece entitled “Facebook Fixation Harms Students” reported: “Now academic research has validated the nagging suspicions of many such students that Facebook is having a detrimental effect on their university results” (Wilson, 2009). Similar reporting is found in the U.K.’s the *Daily Telegraph* story headlined “Facebook Students Underachieve in Exams” (Khan, 2009). Indeed it should come as no surprise that media outlets have sensationalized this story and ignored the researcher’s minor caveats.



## Prior research

As Karpinski (2009) herself notes, she is not the first to examine the relationship between Facebook use and grade point averages. She references two studies that lead

to the hypothesis that academic performance and use of the site might be negatively correlated. First, she cites a Master's thesis by Matthew Boogart (2006). While the thesis offers some suggestive evidence, Boogart only examined the relationship between time spent on Facebook and GPA, and similarly failed to utilize control variables despite a diverse collection of students from four universities. The second study Karpinski cites by Kubey, Lavin, and Barrows (2001) does not mention social networking sites at all. The suggestion in the draft FG paper that social networking sites represent a type of exclusively recreational use actually runs counter to other literature in the field (*e.g.*, Shah, *et al.*, 2001; Pasek, *et al.*, in press). It should be noted that an additional paper by Kolek and Saunders (2008) found that there was no correlation between Facebook use and GPA in a representative sample of students from a public Northeast research university. The draft FG manuscript cited the Kolek and Saunders piece, but did not note its findings regarding the lack of a relationship between Facebook use and grades.



## The current examination

Due to the potential harm from misreporting these results and the important nature of the question raised by the draft FG manuscript, we attempt to discern whether or not a relationship indeed exists between Facebook use and grade point averages. Our investigation utilizes a multipronged approach by asking the question in three different contexts. First, we look at a representative [7] cross-sectional sample of first-year students from the University of Illinois at Chicago (UIC). Second, we examine the relationship in a nationally representative sample of 14- to 22-year-olds. Additionally, we examine changes in grade point averages from 2007 to 2008 among a longitudinal panel of nationally representative American youth aged 14-23.



## Methods

### Data

Data for the UIC study come from 1,060 first-year students at the University of Illinois at Chicago in 2007. Paper questionnaires were handed to students taking the mandatory first-year writing class. Because the questionnaire was conducted in conjunction with the program, 85 of the 87 writing classes participated in the exercise. The overall response rate for the study was 82 percent of students in the course [8].

The cross-sectional data as well as the longitudinal panel data were collected as part of the annual National Annenberg Survey of Youth (NASY) conducted by The Adolescent Risk Communication Institute (ARCI) [9]. NASY respondents are initially recruited through random-digit dialing (RDD) telephone methods. Interviewers asked how many individuals between the ages of 14 and 22 resided in the household and requested parental permission to survey individuals under age 18. In 2008, 1,250 interviews were successfully conducted. From that sample, 835 were new participants representing the cross-sectional dataset with a response rate of 45 percent (AAPOR Formula 3) [10]. The additional 415 respondents were volunteers among 900 from the 2007 NASY who elected to be re-contacted as part of a panel. These panel participants were recruited in 2007 using the same RDD method as in other years [11]. The NASY response rate in 2007 was 50 percent (AAPOR Formula 3), with a 2008 panelist re-contact rate of 74 percent.

## **GPA**

Grade point averages were asked of respondents in both samples. In the UIC study, GPA was asked on an eight-point scale ranging from "Mostly F's" to "Mostly A's" with categories in between such as "A's and B's." These were recoded on a zero-to-one scale (with 1 as "Mostly A's") to allow for comparison with the other datasets in this paper (Mean = .76, SD = .19). Six (or less than one percent) of the 1,060 respondents did not provide GPA information. In the NASY studies, GPA was coded on a four-point scale from "D or less" (0) to "A" (1). Cross-sectional results (M = .75, SD = .24) were akin to panel results (M = .74, SD = .23). Because individuals who were not in school could not report a current GPA, these individuals were dropped from the sample (N = 145 for the cross-sectional analysis; N = 95 for the panel analysis) [12]. Additionally, some individuals who were either homeschooled or in school but refused or did not know their GPAs were dropped from the analysis (cross-sectional N = 12, panel N = 2). The approximate grade point average on the traditional one to four scale for these results (M's  $\approx$  .75) would be equivalent to a 3.5, or a mix of both A's and B's.

## **Facebook use**

For both studies, Facebook use was assessed using a dichotomous measure. In the UIC study, respondents were asked the following: "Have you ever used the following online sites and services?" regarding their experiences with a number of sites. They were given the following response options: "no, have never used it," "tried it once, but have not used it since," "yes, have tried it in the past, but do not use it nowadays," "yes, currently use it sometimes," and "yes, currently use it often." We consider Facebook users those who chose one of the last two options: "yes, currently use it sometimes" (15.9 percent) or "yes, currently use it often" (62.8 percent) for a total of 78.8 percent of the sample.

In the NASY samples, respondents were asked whether or not they had access to the Internet and how frequently they used social networking sites before they were asked about the specific use of Facebook. Only participants who reported both having access to the Internet and using social networking sites more frequently than “never” were asked about their Facebook habits. The Internet screening question was posed, “Do you have access to the Internet at home or somewhere else?” To determine whether individuals used social networking sites, respondents were asked if they “Use online social network sites (SNS) like MySpace or Facebook most days, once or twice a week, less often, or never.” For those who reported ever using SNSs, a follow-up question asked, “Which, if any, of the following social networking sites do you use?” Facebook was among the list of SNSs offered [13]. Respondents who did not have access to the Internet (N = 29 cross-sectional; N = 9 panel), who “never” used SNSs (N = 88 cross-sectional, N = 45 panel), or who did not report using Facebook were considered non-users, while those reporting Facebook use were considered users (46.2 percent cross-sectional, 48.8 percent panel) [14].

### Control variables

For all studies, we controlled for age, gender, race/ethnicity, and socio-economic status (SES). The two studies used different SES measures. In the UIC study, we used self-reported parental education levels where we include the highest level of education for either parent. For NASY, individuals were assigned the median household income for the zip code [15] in which they lived. In the case where individuals did not provide a home zip code or an income match was not possible (N = 38), an imputed median income (US\$36,146) was inserted. Table 1 shows means for all variables, full question wordings are included in Appendix 1.

**Table 1: Means for Facebook users and non-users for all variables.**

Notes: Percentages by column where reported, because of rounding numbers may not add to 100. 1: NASY samples only report information for individuals who were in school at the time of the survey. 2: Asian individuals included in other category for NASY samples, as are responses for any non-white, non-black, non-Hispanic group. 3: GPA is used as a 0–1 variable in the text.

	University of Illinois at Chicago		2008 NASY Cross-Section <sup>1</sup>		2007–2008 NASY Panel <sup>1</sup>	
	Facebook user	Non-user	Facebook user	Non-user	Facebook user	Non-user
N	831	224	319	381	156	164

Age	18.4	18.5	17.9	16.2	18.2	16.2
Female (%)	56.3	53.6	47.0	43.4	54.5	55.5
White, non-Hispanic (%)	44.9	33.8	77.7	62.3	74.4	54.9
Black, non-Hispanic (%)	7.9	7.3	6.6	9.7	6.4	18.3
Asian, non-Hispanic (%)	31.6	22.4				
Other, non-Hispanic (%) <sup>2</sup>			8.2	7.3	10.9	6.1
Hispanic (%)	15.4	34.8	6.6	20.5	7.7	20.7
Parental Educ (Less than HS) (%)	6.0	12.5				
Parental Educ (High School) (%)	17.6	23.7				
Parental Educ (Some College) (%)	18.8	25.0				



Parental Educ (College Grad) (%)	37.4	23.2				
Parental Educ (Post-College) (%)	20.0	15.6				
Income (US\$, Based on zip code)			52,412	44,162	53,399	43,673
Education — High School or Less (%)			47.0	83.6	44.2	85.4
Education — In College or More (%)			53.0	15.9	55.8	14.6
GPA (1–4) <sup>3</sup>	3.29	3.27	3.34	3.17	3.34	3.13
Lagged GPA (1–4) <sup>3</sup>					3.42	3.11



## Results

None of the three studies detect a robust negative relationship between grade point averages and use of Facebook. Instead, the three studies find a mixed bag of results, which reiterates the fact that corollary relationships should be considered in their environmental and methodological context rather than used to generalize trends (See [Table 2](#)). For example, in the UIC sample, even without controls there is no statistically significant relationship between the two (Pearson's  $r = .010$ ,  $\rho = .746$ ). However, the NASY studies do indeed have statistically significant relationships when controls are absent, albeit in opposite directions. The cross-sectional data in this nationally representative sample report a positive correlation without controls (Pearson's  $r = .122$ ,  $\rho = .002$ ). In contrast, we find that 2008 Facebook use is negatively related to changes in grades from 2007 to 2008 within the NASY panel (Pearson's  $r = -.148$ ,  $\rho = .010$ ).

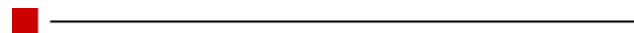
<b>Table 2: Correlations between Facebook use and GPA.</b>			
Note: 1: Correlation for the NASY Panel is between 2008 Facebook use and change in grade point average from 2007–2008. ** $p < .01$ .			
	<b>Pearson's Correlation</b>		
<b>Study</b>	<b>Coef.</b>	<b>sig.</b>	<b>N</b>
UIC study	.010	.746	1049
NASY Cross-Section	<b>.122**</b>	.002	660
NASY Panel <sup>1</sup>	<b>-.148**</b>	.010	303

These initial results highlight the precarious situation for researchers trying to decipher correlations. At first glance, these unsophisticated outcomes offer mixed conclusions in regards to the relationship between Facebook use and academic performance. Nonetheless, we wanted to ensure that these results were not spurious. For instance, we could imagine that the preponderance of Facebook use among college students might lead college-bound high school students to adopt the site at a higher rate than others. This might lead us to conclude mistakenly that the relationship is more positive than would actually be the case. By controlling for demographics, we partially mitigate this possibility, among other potential confounds.

With the control variables inserted, however, the results are nearly identical across our data sets. In both the UIC study and the NASY panel, Facebook use is completely unrelated to students' grades (Beta = -.003 and -.004, s.e. = .015 and .025, respectively; [Table 3](#)). In the NASY cross-section, the relationship remains significantly positive after controls (Beta = .051, s.e. = .021), but represents a distinction of only one-fifth of a letter grade and is no longer significant if the sample is limited to college students (Beta = .022, s.e. = .036). All relationships remain consistent when we control for hours of Internet use (not shown).

<b>Table 3: Regressions predicting grade point averages.</b>						
* p < .05   ** p < .01   *** p < .001.						
	<b>UIC study</b>		<b>NASY Cross-Section<sup>1</sup></b>		<b>NASY Panel<sup>1</sup></b>	
	<b>Beta</b>	<b>s.e</b>	<b>Beta</b>	<b>s.e</b>	<b>Beta</b>	<b>s.e</b>
Intercept	.492***	.140	.734***	.025	.306***	.039
Age	.014	.007	.012	.033	-.051	.045
Female	.033**	.012	.074***	.018	.006	.021
Black, non-Hispanic	-.114***	.024	-.166***	.028	-.099***	.029
Asian, non-Hispanic	.002	.014				
Other, non-Hispanic			-.065	.037	-.083*	.042
Hispanic	-.032	.018	-.036	.025	-.019	.031
Parental Educ (Less than HS)	-.002	.027				
Parental Educ (High School)	-.012	.019				
Parental Educ (College Grad)	.026	.017				
Parental Educ (Post-College)	.034	.019				
Income by zip code			-.066	.073	.043	.089

Education level			-.018	.035	.016	.045
Lagged GPA					.608***	.044
Facebook	-.003	.015	.051*	.021	-.004	.025
N	1022		658		303	
R-Squared	.044		.089		.456	



## Discussion

This paper is intended both to get at the heart of the Facebook–GPA connection and to set the record straight. As researchers, we have long known the importance of replication and peer review. Without these safeguards, an intriguing preliminary finding can enter the popular discourse as if it represents established fact. Indeed, it is often difficult to convey to those outside our fields the proper heft to bestow upon a particular study. The FG study did not suggest or attempt to provide a definitive understanding of the Facebook–GPA relationship. Yet easily sensationalized results and a widely distributed press release positioned the findings on a path bound to spiral out of control.

The results presented in this response paper suggest that there is no negative relationship between Facebook use and academic performance. Two of our analyses suggest that Facebook users were no more or less likely to get good grades than non–users. The third study found evidence that Facebook use was slightly more common among individuals with higher grades. Indeed, our findings are in direct contradiction to those presented in the original FG study as well as the flurry of sensational media that ensued.

A few distinctions between the NASY cross–section and UIC studies may account for the slight difference in results. Because Facebook use began in relatively privileged environments (first at Harvard University, then at select U.S. colleges; boyd and Ellison, 2007), individuals more likely to enter those elite environments may have been prone to both higher grades and Facebook use. By accounting for prior grades in the NASY panel, we show that Facebook users neither seem to be deteriorating nor improving relative to non–users. Nonetheless, it is still possible that Facebook use could be having an effect on these individuals. Of particular note, since we do not have a reporting category higher than an “A” for GPA, GPA could be experiencing a ceiling effect

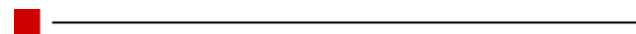
whereby individuals who had an "A" in 2007 had no possibility for improvement. Hence, with higher initial grades, Facebook users had less room to improve.



## Limitations and future studies

As with all research on new and evolving media, the changing nature of Facebook use may itself lead to changing media effects. We should not be content to assume that this study — or any other for that matter — provides a definitive answer on the implications of a medium. This is especially true given that Facebook only emerged in 2004 and that 79 percent of our UIC sample and 43 percent of our nationally representative sample were using the site by 2007 and 2008 respectively [16]. Indeed, in another few years it is hard to imagine what could happen in our constantly evolving media environment.

We also do not intend this study to suggest that Facebook use, writ large, cannot exhibit a negative relationship with academic performance. Individuals spending more than 30 hours a week on the site will likely suffer from some sort of extreme time replacement effect (Pasek, *et al.*, 2006). In that vein, we do not suggest that Facebook use is some unmitigated good. As with most engaging hobbies and community activities, Facebook use can be an effective means of participating in society as well as a means of withdrawing from it. The question is not whether individuals are using a particular medium, but how. While common media uses can induce broad effects, this did not seem to be the case with regard to Facebook and academic disengagement.



## Conclusions

In this study we examined the relationship between Facebook use and academic achievement. In contrast to recent sensational and unsubstantiated news reports that Facebook use lowers academic performance, results from three studies indicate that the two variables are likely unrelated. We found no relationship in a representative study of first-year undergraduate students at the University of Illinois at Chicago and a slight positive relationship in a nationally representative survey of youth. Further, we used national longitudinal data to assess changes in academic achievement from 2007 to 2008 in a nationally representative panel study of young people. Changes in academic achievement did not vary with Facebook use when demographic controls were considered. Facebook simply does not seem to have a generalizable impact on grades.



## About the authors

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The Adolescent Risk Communication Institute (ARCI) was created by the Annenberg Foundation in 2002 as part of the Annenberg Public Policy Center at the University of Pennsylvania. ARCI aims to inform researchers, policymakers, and the public regarding strategies to prevent risks to healthy adolescent development and to enhance the well-being of youth. It conducts the annual National Annenberg Survey of Youth, the Annenberg Media Health Coding Project and reviews of research by panels of experts. ARCI would like to thank Shulman, Ronca, and Bucuvalas, Inc. for their help in collecting responses and preparing the data set.

## Notes

- [1.](#) This search on Google News covered 12 to 15 April 2009.
- [2.](#) Karpinski, 2009, p. 7. While the conference presentation and press release refer to Adam Duberstein as a second author, only Karpinski's information was included on the draft paper circulated to the news media. For this reason, we cite the paper as single-authored throughout the text.
- [3.](#) Karpinski, 2009, p. 7.
- [4.](#) In one study, attrition from Ph.D. programs was slightly more likely for individuals with higher GPAs (Lovitts and Nelson, 2000).
- [5.](#) The authors define STEM as statistics, technology, engineering, math, and medical majors.
- [6.](#) Karpinski, 2009, p. 12.
- [7.](#) Throughout this paper, we use the term "representative" to refer to data derived from probability samples.
- [8.](#) Further information about the sample can be found in Hargittai, 2007.
- [9.](#) ARCI is a research department under the Annenberg Public Policy Center of the Annenberg School for Communication within the University of Pennsylvania. Details about NASY can be found online at <http://www.annenbergpublicpolicycenter.org/ProjectDetails.aspx?myId=10>.
- [10.](#) NASY response rates are comparable to those obtained by the CDC in its national telephone surveys of behavioral risk factors in adults.

[11.](#) 2007 NASY respondents were randomly assigned the opportunity to take the survey online on the condition that they had access to the Internet, if they opted to take it online but failed to do so, a phone interview was conducted instead. This opportunity was not granted to new 2008 participants. The 415 panelists were contacted via e-mail in 2008 — or by letter if no e-mail address had been obtained — and given the opportunity to take the survey online once again. A phone interview was conducted for those who did not complete the Web survey.

[12.](#) Only respondents enrolled during both years were kept in the panel sample.

[13.](#) The full list included MySpace, Facebook, Friendster, LinkedIn, Flickr, and an "Other" option that allowed them to provide their own response.

[14.](#) Descriptive statistics are unweighted and reported for individuals who were in school at the time of the study.

[15.](#) From 2000 Census Summary File 3  
([http://factfinder.census.gov/servlet/DownloadDatasetServlet?\\_lang=en](http://factfinder.census.gov/servlet/DownloadDatasetServlet?_lang=en)).

[16.](#) The lower rate of Facebook membership in the NASY data is likely a result of sample composition. NASY recruits younger participants of whom a slight majority are in high school. Facebook membership, however, is more common for college-aged youth. Among only college students in the NASY cross-sectional sample (N=228), frequency of Facebook use was comparable to that of the UIC sample (74.1 percent).

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#### **Appendix 1: Full question wordings.**

Notes: Both datasets also recorded if a respondent offered "Don't Know" or refused to answer a question. These numbers were universally small and represented a total loss in N of 38 in the UIC sample, 42 in the NASY cross-sectional study, and 17 in the panel.

1: Question was preceded by a filter question.

Variable	UIC question	Response options	NASY question	Response options
Age	In what year were you born?		"Just to confirm, what is your age?"	
Gender	Are you:	Male, Female	"Is the [person] a male or female?"	Male, Female
Hispanic origin	Are you of Hispanic or Latino origin?	Yes, No	"Are you yourself of Hispanic or Latino origin or descent, such as Mexican, Puerto Rican, or Cuban?"	Yes, No
Race	What is your race? Check all that apply.	White/Anglo/Caucasian/Middle Eastern; Black/African American; Asian, please specify; American Indian or Alaskan Native; Other, please specify.	"How would you classify your race? Do you consider yourself to be White, Black, Asian, Alaskan/Pacific Islander, Native American, or some combination of races?"	White/Caucasian, Black/African American, Asian, Alaskan/Pacific Islander, Native American, Other
Education			"What grade or level of school are you in?" <sup>1</sup>	Response coded by interviewer as: Grade 8 or lower, High school freshman, High school

				sophomore, High school junior, High school senior, First year of technical or vocational school after high school, Second or higher year of technical or vocational school after high school, First year of college, Second year of college, Third year of college, Fourth year of college, First year of graduate or professional school after college, Second or higher year of graduate or professional school after college
Income			Matched to zip code using Census 2000 decennial long-form data "What is the postal zip code of your permanent home address?"	
Parental education	What is the highest	Less than high school degree, High school degree, Some college, College		

	level of education your father obtained? [repeated for mother]	graduate (for example: B.A., B.S., B.S.E), Advanced graduate (for example: master's, professional, Ph.D., M.D., Ed.D.)		
Grades	How would you describe the grades you received last semester?	Mostly A's, A's and B's, Mostly B's, B's and C's, Mostly C's, C's and D's, Mostly D's, Mostly F's	"What is your approximate letter grade average in the school you currently attend?" If a numerical grade is given, ask "Would that be an A, B, C, D, or something else?" <sup>1</sup>	A, B, C, D, Other
Facebook use	Have you ever used the following sites and services? For each site or service, let us know if you have never used it, used it once but have not used it since, used to	No, have never used it; Tried it once, but have not used it since; Yes, have used it in the past, but do not use it nowadays; Yes, currently use it sometimes; Yes, currently use it often	"Which, if any, of the following social network sites do you use?" <sup>1</sup>	MySpace, Facebook, Friendster, Flickr, Other

	use it but no longer do, currently use it sometimes or currently use it often.			
Hours of Internet use	On an average <u>weekday</u> , <i>not</i> counting e-mail, chat and phone use, about how many hours do you spend visiting <u>Web sites</u> ? [repeated for "Saturday or Sunday"]	None; More than zero, but less than one hour per day; 1 hour; 2 hours; 3 hours; 4 hours; 5 hours; 6 or more hours	"About how many hours do you spend using the Internet on a typical weekday?" <sup>1</sup>	Less than 1 hour, 1 to 2 hours, 3 to 5 hours, 5 to 8 hours, More than 8 hours

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