

# Unfriending on Facebook: Context Collapse and Unfriending Behaviors

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## Abstract

*Social network sites (SNS) like Facebook allow users to add friends from a variety of contexts to a single general-purpose social network. The variety of friend types that gather on the site can lead to context collapse where connections from a variety of context are grouped in a single collection. This research examines the friend types who are commonly unfriended and examines two particular friend types in detail to determine differences between these types of friends and the general population. The most common type of friend who is unfriended is the high school friend (18.6%), followed by other (uncategorized), friend of a friend, and work friend. These four friend types account for the majority (53.7%) of unfriending decisions. High school friends are unfriended for making online posts that are polarizing and for posting too frequently about unimportant topics. Work-related friends are commonly unfriended for engaging in disliked offline behavior and are not typically unfriended for their posting behavior.*

## 1. Introduction

Facebook is the single most popular website in the United States; globally there are over one billion active accounts and billions of dyadic connections that span the site's online network [25, 24].<sup>1</sup> Social network sites (SNS) are where Americans spend the largest share of their time online; Americans spend approximately 17% of their time online via personal computers on Facebook [24]. Social network sites like Facebook allow users to accumulate social capital; however, the site appears to benefit weak-tie relationships more than strong-tie relationships [8, 31]. Relationship strength may vary from weak- to strong-ties, although there is some consensus that the majority of ties on Facebook are weak [31, 19].

Facebook users can become friends with members from a variety of contexts and all of these friends are grouped together on a single general purpose site. boyd [3] defines *context collapse* as, "the lack of spatial, social, and temporal boundaries [that] makes it difficult

to maintain distinct social contexts." The lack of boundaries tends to group individuals from different contexts (family, friends, classmates, coworkers, neighbors, etc.) into the large group of "Facebook Friends" on a SNS like Facebook [32]. Vitak et al. [32] notes that there may be large differences between groups for some categories of users like users from work settings versus social settings.

Online friendships are fluid; friendships are created and dissolved on social network sites where a connection can be dissolved with the click of a button. Connections on social network sites are formed under a variety of contexts, ranging from maintaining existing relationships, forming new romantic connections, and creating new online friendships [33]. Unfriending has become a widely-used feature of social networking sites; Pew Internet found that 63% of users unfriended at least one member of their online social network in 2011 up from 56% in 2010 [20]. The word *unfriend* was named the word of the year by the New Oxford American Dictionary for 2009 [9]. The dictionary defined *unfriend* as follows: "unfriend – verb – To remove someone as a 'friend' on a social networking site such as Facebook."

There were three motivations for undertaking this study. First, there is a noted gap in the literature regarding context collapse and unfriending behaviors [19, 2]. Second, friendship dissolution in computer-mediated environments and non-computer-mediated environments (face-to-face), in general, is not well understood [22, 19, 2]. Because the friendship dissolution research is largely based on close relationships including close friends, romantic partners and divorce [22], unfriending on Facebook may differ simply due to the greater diversity of contexts in which the network operates through context collapse. Relationship dissolution, as it is understood by the social sciences, may or may not resemble unfriending. Indeed, research is needed to clarify the social causes of friendship dissolution [19, 27]. Third, and perhaps most importantly, greater understanding of the dissolution of online relationships will aid in the development of models for a life-cycle of online relationships. Certain aspects of online relationship dissolution make it easier to study because the friend requests and dissolution are visible. Facebook has technical affordances that explicitly mark events

<sup>1</sup><http://newsroom.fb.com/Key-Facts>

like the initiation of the friend request and dissolution of the tie through the feature-functions of the site. In offline settings it can be unclear who asked whom to be friends and it is often unclear who initiated the dissolution process. Unfriending someone on Facebook is a conscious act by one person to end the dyadic relationship and manifests itself through the removal of a link between the dyad.

There are two major research questions this study addresses:

- 1) What are the common friend types who are unfriended on Facebook.
- 2) What are the factors related to unfriending of two common types of friends (high school friends and work-related friends) and how do they differ.

## 2. Literature Review

boyd and Ellison [4] defined social network sites based on three system capabilities. The systems: “allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system” [4, p. 211]. After users join a site they are asked to identify others in the network with whom they have an existing relationship. The links that are generated between individuals become visible to others in the local subspace.

Context collapse occurs in online social networks because a variety of friends from different contexts are grouped together in a single location [3]. boyd [3] largely studied teenagers navigation of online spaces through three dynamic properties: invisible audiences, collapsed context and the blurring of public and private spaces. Vitak et al. [32] examined context collapse regarding work and personal life boundaries. Vitak et al. found three strategies for managing context collapse: the first strategy was to not accept friend requests from work-related friends on their personal account, the second strategy was to create multiple Facebook accounts for professional activities and one for personal contacts and the third strategy was to avoid controversial topics altogether - the “lowest common denominator approach” [12, 21, 32].

Marwick and boyd [21] examined context collapse on the social networking site Twitter to determine the techniques used to navigate the *imagined audiences* online. The imagined audience is often constructed by the user in order to present themselves in an appropriate manner. Twitter’s audience is difficult to determine for users because, under the default privacy options, *tweets* are publicly accessible, *followers* may not read

the tweets of those who they follow, and tweets may be *retweeted* by a receiver of the message [21]. Many Twitter users noted that they are tweeting to an audience that includes themselves where the content is a kind of running publicly available diary. The researchers found that the imagined audiences often included real-life friends, family and coworkers. One common approach for managing context collapse on Twitter was to adopt a lowest common denominator approach and simply avoid controversial topics.

Researchers have categorized Twitter users using a variety of methods and developed labels for their classification types. Java et al. [13] identified categories of tweets such as daily chatter (personal thoughts and information), sharing information & links and reporting news. Naaman et al. [23] classified Twitter users into two large categories - those who talk about themselves (*meformers* - 80% of Twitter users) and those who inform others (*informers* - 20% of Twitter users). Meformers talked about themselves in 48% of their tweets and informers provided some level of information in 53% of their tweets.

Friendships are formed and maintained because they are rewarding to individuals [34]. Friendships tend to be formed by people who share certain similarities (such as values) [16, 22]. People tend to create friendships with those who share a similar race and ethnicity followed by age, religion, education, occupation and gender and roughly in that order [22]. The largest portion of friendships that are formed with those who are not family members are through organizational structures [22]. Schools, work, and geographic location are major factors in how relationships are formed and may be a factor in how dyads are formed on online SNSs.

Friendships are formed for a variety of reasons on social network sites. boyd [4] found thirteen common reasons to become friends on SNS; being actual friends, acquaintances, friend collection, and “it’s easier to say yes than no,” were all reasons to extend and accept friend requests on SNSs. But friendships online can be fragile, unfriending can also occur and 63% of Facebook users have unfriended someone in their network [20]. Friendship dissolution is not the same process of friendship formation in reverse and is distinctly different [7]. Some friendships end in conflict but most simply fade away [30]. Friendships do not require the other person’s permission to end the relationship in either the online or offline world [1]. You need permission to be someone’s friend on Facebook; however, no permission is needed to end the relationship. One person can simply choose to “unfriend” the other person. In most cases the person who was unfriended does not receive notification that they have been unfriended.

Sibona and Walczak [28] found four common online reasons and two common offline reasons for unfriending on Facebook. The four online reasons were frequent/unimportant posts, polarizing posts (politics and religion), inappropriate posts (sexist, racist remarks, etc.) and everyday life posts (child, spouse, eating habits, etc.) and in that order of frequency. The two offline reasons were disliked behavior and changes in the relationship. The research also showed that 55% of people unfriended someone for their online posting behavior, 28% for their offline behavior and 17% unsure.

Quercia et al. [27] examined how online unfriending between Facebook dyads may differ from offline unfriending and found few differences. The research found that important factors that predicted friendship dissolution were whether the dyad was embedded in the same social circle, the age difference between the dyad, and whether one of the two members were neurotic or introverted. Relationships that had a common female friend were more stable than those with common male friends. Kwak, et al. [11] found factors that related to *unfollowing* on Twitter (another form of breaking the tie on a social network); these factors were relationship reciprocity, relationship duration, ones informativeness and shared relationships.

Social networking site research often view the connections between members as undifferentiated and understanding the different contexts in which these interactions occur may aid in understanding how members interact with each other in different manners (e.g. high school, work). Social networking site users may employ various strategies to manage context collapse including imagining their audience [21] or following a lowest common denominator approach [12, 21, 32]. Friendships are formed and dissolved online and the differing contexts in which friendships occur may affect how the members interact and how the connections may be dissolved.

### 3. Study Design

This research was conducted using a survey to determine the survey respondents' opinions and behaviors about unfriending on Facebook. The survey was conducted solely on the Internet using a commercially available survey application.

Part one of the survey asked questions about the type of person unfriended, whether it was for online or offline behavior, questions about the friendship and questions about online and offline behavior. Part two mirrors part one of the survey and asks questions about the type of person who unfriended the survey respondent, their perception of whether it was for online or offline behavior, questions about the friendship and questions about their

offline behavior. Part two adds additional questions to part one to determine how the survey respondent was affected by the unfriending. Part three asks questions about how many friends the survey respondent has, how many people they have unfriended, how many people they regularly interact with, and questions about their online posting behavior. Part three also asks questions about satisfaction, perceived usefulness and perceived ease of use of Facebook. Part four asks demographic questions: age, gender, education, the number of years of social network use and whether the person lives in the United States of America. The analysis of this study concentrates on part one of the survey.

#### 3.1. Data Collection

Survey recruitment was conducted by sending Twitter users who posted about unfriending a reply asking them to take a survey about the topic - see Sibona and Walczak [29] for an in depth description. Twitter was used to recruit survey participants for several reasons: Twitter has a large user population where the majority of users have publicly accessible messages; Twitter users had a good fit with research (social network sites); it is a simple process to contact a person on Twitter through the @reply mechanism; and the tweets can be screened for recruitment purposes. It is also helpful to recruit people to the survey who had a recent experience with the matter for two important factors: (1) Those who experienced an event more recently may be able to provide more accurate answers because the event occurred recently. (2) Those had recently experienced an event may be more willing to take a survey about the topic because they may still be thinking about the topic. Experiences need to be reported immediately after they have happened in order to be remembered [6]. There is not a random sample in this research; a purposive sampling method was used to recruit participants. The recruitment tweet was sent in a single tweet of 140 characters and provided enough information to the Twitter user to take the survey. The recruitment tweet was designed to follow the methodology of Dillman et al. [6] as much as possible within the constraints of Twitter.

Surveys were collected between April 17th and September 15, 2010 for 151 total days. 7,327 recruitment tweets were sent during the time period. A total of 2,865 surveys were started and 1,552 were completed; 54% of those who started the survey completed the survey. The number of surveys in the analysis vary depending on the path the user took during the survey as not every survey respondent answered all four parts of the survey. The analysis of friend types and common reasons for unfriending analyzed 1,077 survey responses. The

surveys were started by 39.6% of those who were sent tweets and completed by 21.3%. Twitter respondents were gathered by screening tweets that had the term “unfriend,” “defriend,” or “unfriending.” Tweets that met a screening criterion were sent replies inviting the person to take the survey about unfriending. The tweet reply sent was retweeted by many people who received the initial tweet.

### 3.2. Method

The raw data was collected from a commercially available survey application and analyzed with a commercial statistical package. The survey used methods such as Cronbach’s alpha to measure reliability and multivariate analysis of covariance (MANCOVA). Constructs were generated based on the factor analysis and interpretation of the results. Cronbach’s alpha measure of reliability was calculated for each construct. Constructs were generated by averaging the individual Likert-type questions into a single composite variable. MANCOVA was used to determine how the independent factors predicted the five dependent variables, with covariates. The five dependent variables are *polarizing* topics, *frequent/unimportant* topics, *everyday life* topics, *inappropriate* topics and *disliked behavior* - see Table 3 and 4.

Statistical tool selection is based on the appropriateness to the model and unit of analysis. MANOVA is used to analyze multiple dependent variables that are correlated with each other in a low to moderate level [18]. MANCOVA is used to adjust for difference between the groups based on another typically interval-level variable called the covariate [18]. The analysis used friend type as an independent variable and compared the levels of five dependent variables with covariates.

There are several control variables used to adjust the primary constructs in the study; the control variables are: age, gender, location (reside in U.S. or outside U.S.), number of interactions with Facebook users, number of friends on the site and years of social network site use. Madden noted significant gender differences in the way men and women manage their profiles; women were more restrictive in how they managed their privacy settings [20]. Age has been shown to be correlated with unfriending behavior as well; Madden noted that younger Facebook users unfriended members of their social networks more often than older users [20]. Several studies have found cultural differences (based on location) in how information systems are perceived by the user [17, 15, 26]; this study uses location as a proxy to culture to determine whether U.S. Facebook users have different behaviors regarding unfriending compared to those who reside outside the U.S. The *number of*

*interactions* measures the number of friends with whom the user typically interacts and may be related to the bridging social capital that users obtains from the site [35]. Joinson [14] found several differences in frequency of use and time spent on the network site that varied based on the *number of friends* on the site and may have an their unfriending behavior. The variable *years of social network site use* is used as a proxy for SNS self-efficacy. Users who have used SNS for longer periods of time (which includes sites other than Facebook, such as Twitter) may be related to that user’s SNS self-efficacy and may have an effect on the dependent factors. The control variables are not the primary predictive variables in this research but are used to control for user differences.

## 4. Results

### 4.1. Friend Type Analysis for Unfriending

The survey asked the survey respondent to identify the last individual who they unfriended; a total of 1330 survey respondents answered this question. The survey respondent was offered 15 choices of friend types and the ability to specify “other” and specify the relationship in an open text field. The majority of unfriending happens in the first four types (53.7%): High School, *Other*, Friend of a Friend, and Work - see Table 1. The *Other* category consists of answers from the specified categories with more specificity and new classifications of friend types. Examples of types of friends that could be classified in the existing categories are: “elementary” (*grade school*), “MBA School” (*graduate school*), “college classmate” (*college*), “former romantic partner” (*romantic partner*), etc. The previous examples show the respondent’s text field in quotes and could be classified into the categories in italics as provided by the survey. *Other* friend types that were not included in the survey choices include: “didn’t know her,” “enemy,” “former student.” The 15 categories of friend types could classify 87.5% of the friend relationship where the remaining 12.5% were specified as *other*.

The survey asked the survey respondent, in a subsequent section, to identify the last individual who unfriended the survey respondent; a total of 614 survey respondents answered this question. They survey respondent was offered 14 choices of friend types and also the ability to specify “other.” The majority of unfriending happens in the first four types (52.8%): High School, Common Interest Friend, College, and Coworker - see Table 2. The *Other* category consists of answers from the specified categories with more specificity and new classifications of friend types. Examples of types of friends that could be classified in the existing categories are:

**Table 1**  
TYPE OF PERSON UNFRIENDED BY THE SURVEY RESPONDENT

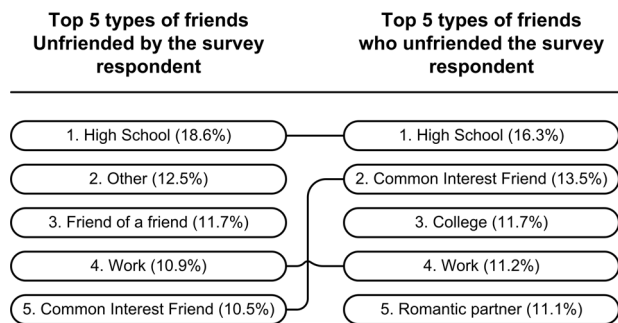
Friend Type	Number	%	Cumulative %
High School	247	18.6	18.6
<i>Other</i>	166	12.5	31.1
Friend of a Friend	156	11.7	42.8
Work	145	10.9	53.7
Common Interest Friend	139	10.5	64.1
College	117	8.8	72.9
Romantic Partner	103	7.7	80.7
Internet	84	6.3	87.0
Family Member	63	4.7	91.7
Church	26	1.7	93.7
Grade School	22	1.7	95.3
Friend through Spouse	22	1.7	97.0
Graduate School	19	1.2	98.4
Friend through Child	9	0.7	99.1
Neighbor	8	0.6	99.7
Friend through Parent	4	0.3	100.0
<b>TOTAL</b>	<b>1330</b>	<b>100.0</b>	<b>100.0</b>

“sibling,” “daughter” (*family member*), “college roommate” (*college*), “business contact” (work), “potential romantic partner” (*romantic partner*), etc. The previous examples could be classified into the categories in italics. Example types that were not included as a survey choice are: “spouse of a close friend,” “he liked me and I didn’t like him,” “celebrity.” The 14 categories of friend types could classify 89.1% of the friend relationship where the remaining 10.9% were specified as *other*.

The results of the top five friend types are shown in Figure 1 where differences in ordering may be seen depending on the perspective of the survey respondent. Three of the top five friend types are in both the *unfriended by the survey respondent* column and the *friend type who unfriended the survey respondent*. The rank for the most common type of friend unfriended by the survey respondent or who unfriended the survey respondent is the *high school* friend. Survey respondents may have differed in how they categorized the friend types by context. Survey respondents who did the unfriending seemed to have a more difficult time categorizing the user and placed more friends in the *other* category. *Friend of a friend* only shows up in the *unfriended by* list and *common interest friend* is ranked higher on the *friend type who unfriended* the survey respondent. Work friends maintains the same ranking on both lists (4) and may indicate how common it is to unfriend someone

**Table 2**  
TYPE OF PERSON WHO UNFRIENDED THE SURVEY RESPONDENT

Friend Type	Number	%	Cumulative %
High School	100	16.3	16.3
Common Interest Friend	83	13.5	29.8
College	72	11.7	41.5
Work	69	11.2	52.8
Romantic Partner	68	11.1	63.8
<i>Other</i>	67	10.9	74.8
Friend of a Friend	53	8.6	83.4
Family Member	39	6.4	89.7
Grade School	15	2.4	92.2
Friend through Spouse	12	2.0	94.1
Church	11	1.8	95.9
Graduate School	10	1.6	97.6
Friend through Child	7	1.1	98.7
Neighbor	6	1.0	97.7
Friend through Parent	2	0.3	100.0
<b>TOTAL</b>	<b>614</b>	<b>100.0</b>	<b>100.0</b>



**Figure 1. Top 5 Commonly Unfriended Friend Types**

from work-related contexts. The rankings may indicate that the perspective of the person varies depending on who does the unfriending on the social network. More defined organizational contexts such as *high school* and *work* may be more clear in how friends are categorized where other friend types such as *common interest friend* or *friend of a friend* may vary more widely based on the perspective of the survey respondent. That is, it may be more clear for a survey respondent to say that they went to high school with this friend and assign that category to a person, whereas deciding whether a person is a *friend of a friend* or *common interest friend* may be somewhat more challenging and open to interpretation.

## 4.2. Analysis of Friend Type by Common Reasons for Unfriending

Two common friend types were chosen for further investigation to determine whether certain online topics or offline behavior may be related to unfriending a particular friend type at higher rates than others. The two types of friends for further analysis are *high school* friends (ranked number one in both the unfriending done by the survey respondent and unfriending done to the survey respondent) and *work* friends (ranked fourth in both friend type surveys). These two types were chosen because *high school* friend is the most common type of friend and prior research on context collapse indicates that *work-related* dyads require some management [21, 32]. The analysis compares common reasons for unfriending for the two friend types (*high school* and *work*) to determine the dynamics of unfriending behavior through multivariate analysis of covariance (MANCOVA). The analysis used friend type as the independent variable and polarizing topics, frequent/unimportant topics, everyday life topics, inappropriate topics and disliked behavior as the dependent variable - see Table 5 for reliability measures and sample items for the constructs. The construct *change* was removed from the analysis as its alpha level was less than a .60 threshold. The analysis used age, gender, education, years of social networking use, number of friends, number of interactions number of unfriends and whether the person lives in the U.S. as control variables. A total of 1,077 survey respondents were analyzed in this analysis. The analysis compared 206 high school friend types to 871 non-high school friend types in Table 3. A second analysis of the same survey respondents was conducted to compare 119 work friends to 958 non-work friends in Table 4.

The results show that survey respondents who unfriended high school friend types indicated that the person they unfriended posted statistically significantly more often about polarizing topics and frequent/unimportant topics than friends who were not from high school. The analysis found no differences in how the survey respondent perceived the posts of the person who they unfriended regarding everyday life posts and inappropriate posts. Facebook users were less likely to unfriend their high school friends for offline behavior compared to other friend types.

There were covariates that show statistically significant differences for three of the four topics areas and the offline category. Higher educated survey respondents perceived that Facebook friends posted too often about polarizing topics compared to those who had lower levels of education. Survey respondents in the U.S. perceived that their friends posted too often about polarizing topics than those who lived outside the U.S.

Younger survey respondents were less tolerant of their Facebook friends posting too often about unimportant topics than older survey respondents. Female survey respondents were more tolerant regarding their friends frequent/unimportant posts compared to male respondents. Survey respondents who did more unfriending were less tolerant of their friends posts about everyday life events than those who did unfriended fewer members of their social network. Older Facebook users were less likely to say that the unfriending of their high school friends was related to disliked behavior. Female respondents were more likely to say that the unfriending of their high school friends was related to disliked behavior compared to male survey respondents. Higher educated users were less likely to say that the unfriending was related disliked behavior.

The results in Table 4 show that survey respondents who unfriended work friends indicated that the person they unfriended did not post too frequently about unimportant topics compared to other friend types. The analysis found no differences in how the survey respondent perceived the posts of the person who they unfriended regarding inappropriate posts, everyday life posts and polarizing posts. Work friends were more likely to be unfriended for engaging in disliked behavior than non-work friends; i.e. work friends were unfriended more often for their non-computer-mediated behavior.

There were covariates that show statistically significant differences for three of the four online topics areas and the offline category. As in the analysis regarding high school friends, female survey respondents were more tolerant regarding their friends frequent/unimportant posts compared to male respondents. Survey respondents who did more unfriending were less tolerant friends posts about everyday life events than those who did unfriended fewer members of their social network. The last two topics have similar findings to the high school friend results. Higher educated survey respondents perceived that Facebook friends posted too often about polarizing topics compared to those who had lower levels of education. Survey respondents in the U.S. perceived that their friends posted too often about polarizing topics than those who lived outside the U.S. Older Facebook users were less likely to say that the unfriending of their work friends was related to disliked behavior. Female respondents were more likely to say that the unfriending of their work friends was related to disliked behavior compared to male survey respondents.

## 5. Discussion

The results of this research are helpful in that they contextualize friendships and unfriending beyond broad

**Table 3**  
HIGH SCHOOL FRIENDS AND COMMON REASONS FOR UNFRIENDING

Topic	H.S. Mean	Non-H.S. Mean	Diff	Sig
Polarizing	3.133	2.703	.430	.003 **
Frequent/-Unimportant	4.000	3.674	.326	.031 *
Everyday Life	2.117	2.557	-.140	.145
Inappropriate	2.493	2.644	.150	.168
Disliked Behavior	3.864	4.268	-.584	.001 ***

Covariate Results	
Topic	Covariate $p < .05$
Polarizing	ed $B=.129$ $p=.019$ * US $B=-.402$ $p=.002$ **
Frequent/Unimportant	gender $B=-.330$ $p=.011$ *
Everyday Life	num-unfriend $B=.071$ $p=.020$ *
Inappropriate	NONE
Disliked Behavior	age $B=-.107$ $p=.003$ ** gender $B=.460$ $p=.001$ *** ed $B=-.112$ $p=.043$ *

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$   
*B* is the *B* coefficient for the MANCOVA  
Means based on Likert-type questions 1-7  
H.S. Mean - High School Mean for the topic  
Non-H.S. Mean - The mean for all other friend types for the topic  
Diff - Mean difference H.S. to non-H.S.  
ed - Education where education is increasing levels of education  
US - 0 denotes U.S. survey respondent and 1 denotes non-U.S. survey respondents  
age - age where age is increasing age  
gender - 0 denotes male survey respondents and 1 denotes female survey respondents  
num-unfriends - number of unfriends the survey respondent has enacted

categories of *friend* on Facebook in the face of context collapse. Many different kinds of friends may be co-located on Facebook because the site serves as a general purpose social network site as opposed to more specialized sites (e.g. LinkedIn which is designed for professional contacts). The analysis shows some of the most common types of friends who are unfriended and friend types who commonly do unfriending. The general term of *friend* on social networking sites can be misleading because a given dyad does not always represent friendship in the common sense as the tie strength may vary from weak to strong [4, 2]. Some friend types have strongly defined organizational boundaries like *high school friend*, *work friend*, *college*, and *family member* where other friend types are more amorphous like *friend of a friend*, *common interest friend*, and *friend through*

**Table 4**  
WORK FRIENDS AND COMMON REASONS FOR UNFRIENDING

Topic	Work Mean	Non-Work Mean	Diff	Sig
Frequent/-Unimportant	3.391	3.780	-.389	.041 *
Inappropriate	2.305	2.549	-.244	.075
Everyday Life	2.216	2.350	.134	.267
Polarizing	2.755	2.789	-.034	.853
Disliked Behavior	4.499	4.113	.386	.035 *

Covariate Results	
Topic	Covariate $p < .05$
Frequent/Unimportant	gender $B=-.322$ $p=.013$ *
Inappropriate	NONE
Everyday Life	num-unfriend $B=.067$ $p=.027$ *
Polarizing	ed $B=.125$ $p=.024$ * US $B=-.415$ $p=.001$ ***
Disliked Behavior	age $B=-.112$ $p=.003$ ** gender $B=.454$ $p=.001$ ***

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$   
*B* is the *B* coefficient for the MANCOVA  
Means based on Likert-type questions 1-7  
Work Mean - Work Mean for the topic  
Non-Work Mean - The mean for all other friend types for the topic  
Diff - Mean difference work to non-work  
gender - 0 denotes male survey respondents and 1 denotes female survey respondents  
num-unfriends - number of unfriends the survey respondent has enacted  
ed - Education where education is increasing levels of education  
US - 0 denotes U.S. survey respondent and 1 denotes non-U.S. survey respondents

*spouse*.

The goal of capturing the friend types is to gain better insight into the commonly found contexts for online friends. Broadly four types of friends are most commonly unfriended on the network (53.7%) are: High School, *Other*, Friend of a Friend, and Work. The goal was not to collect the entire set of every kind of relationship but contextualize unfriending into a relatively small number of categories. 87.5% of people chose one of the fifteen categories provided (12.5% choose *other*) and three categories captured less than 1% of unfriending (friend through child, neighbor and friend through parent). The results help understand patterns of friendship and dissolution.

The most common type of friend who is unfriended is from a relatively well-defined organizational structure; most users could clearly categorize a person as someone with whom they went to high school or not. It may be that high school friends on Facebook were never

**Table 5**  
**RELIABILITY MEASURES FOR CONSTRUCTS**

Construct	Cronbach's alpha	Num of Items	Sample items "the person I unfriended posted too often about <i>item</i> "	N.
Polarizing	.754	2	politics, religion	1096
Frequent/-Unimportant	.693	2	unimportant, too frequently	1140
Everyday Life	.908	11	spouse, pets, celebrities, eating habits	973
Inappropriate	.808	6	cursing, sex, sexist, racist	1018
Disliked Behavior	.919	7	dislike, distrust, betray, did misdeed	999
Change	.573	5	incompatible friends, romantic end, learned new information, moved away (geographical)	1096

close and became friends more for social surveillance purposes rather than to keep in touch with the person on a more personal level. Joinson's [14] research regarding Facebook users' motivations and uses of SNSs found that *keeping in touch* [with friends and acquaintances] was the main motivation of most users (47.3%), and *social surveillance* was the second largest motivation (17.3%). High school friends may have accepted the friend request for one of boyd's [2] 12 categories of friends that is not an *actual friend* but one that represents a weaker tie such as "[someone] who it would be socially inappropriate to say *no* to because you know them," or it was easier to accept the friend request than to reject it [2]. The dyad from high school may have been friends on the social network largely because of the organizational context and the number of friends in common but eventually the friendship dissolved.

High school friends appear to be unfriended for discussing polarizing topics too often (politics and religion) and for posting too frequently about unimportant topics compared to other friend types. High school friends did not post too often about every day life topics or post too often about inappropriate topics (sex, racist comments, etc.) compared to other friend types. Additionally, high school friends were far less likely to be unfriended for disliked offline behavior compared to other friend types. It may be that people who are friends from high school did not know the political or religious views of their high school classmate when they became friends on Facebook. It is also possible that the political or religious views once held in high school have changed

by one or both members of the dyad. McPherson et al. [22] notes that friendships tend to be formed by those who share similar race and ethnicity, followed by age, religion, education, occupation and gender. Strongly held views on polarizing topics such as politics and religion may be difficult to reach agreement on between friends who hold strong opposing views. One way of managing context collapse is to avoid discussing these potentially hazardous topics but not everyone follows the lowest common denominator approach and some may feel quite free to discuss deeply personal matters with their social network. High school friends may not be seen as often as other friend types for geographical reasons so these high school friends may be unfriended less often for disliked offline behavior.

Work-related friends appear to be unfriended for disliked offline behavior more often compared to other friend types. Work friends were less likely to be unfriended for posting too often about unimportant topics compared to other friend types. There were no statistically significant differences for inappropriate posting, everyday life posting and polarizing posts compared to other friend types. Work-related friends was intentionally broad to cover any work-related relationship which can include working in the same company (co-workers), buyers & suppliers (outside company), professional societies, etc. Work-related friendships may mean that the dyad sees each other in non-computer-mediated environments (in real life) more often than other relationships (e.g. high school friends). It may be harder to unfriend someone that you see more often for their posting content because the unfriended person may confront the person and ask why they were unfriended. However, when one member of the dyad engages in disliked behavior the other person may feel that the online relationship should be terminated. Posting too frequently about unimportant topics was less likely to be a factor in work-related unfriending; it may be that dyads who see each other more frequently are more tolerant of frequent posting of those they see often. Work-related dyads may also know the other's view of polarizing topics and either disregard opinions that are contrary or simply not engage in a discussion about these polarizing topics.

Message content on Facebook may share some similarities to that of the social network site Twitter. Java et al. [13] and Naaman et al. [23] classify many posts on Twitter to be about the daily life of the user and Marwick and boyd [21] state that users often use the site as a running publicly accessible personal diary. Facebook users may exhibit similar posting behavior where they are less concerned about how the imagined audience consumes their posts and may use Facebook



more for self-expression like a personal diary or to inform others of their daily routines (*meformers*). In the high-school related dyads posting about personal topics like politics and religion may cause difficulty in the dyad and eventually friendship dissolution whereas in other contexts it seems to cause less difficulty. Context matters in the context collapse of Facebook; less than 1% of survey respondents said they had less than a high school education which means that people in the survey who were identified as a certain type of friend were also likely to be a high-school friend of someone else (e.g. one dyad may be a high-school friend and another dyad of the same person may be work-related). The interpretation of the post or the interpretation of the relationship may have an large impact on whether a person decides to unfriend another on the site.

The individual user may acquire social capital through the use of Facebook [8]. Social capital generally refers to the skills and knowledge that are accessible to an individual through their relationships with others [5]. Coleman [5] notes that an important form of social capital is the ability to acquire information through relationships; information itself may be valued highly and is generally costly to acquire. Access to a large and weakly-tied network may provide more benefits a smaller strongly-tied network [10]. Ellison et al. [8] found a strong positive relationship with Facebook use and bridging social capital. Friendship dissolution may be related to a loss of social capital as ties are pruned. A lowest common denominator approach may reduce the amount of unfriending on a SNS but also may reduce the usefulness of the site [32]. It is likely that there is a life-cycle to the relationships that are held online; some relationships will be maintained or strengthened while others that will be dissolved through unfriending. Understanding the specific context of the dyad's friend relationship may help bring greater understanding to the life-cycle of online relationships.

## 6. Limitations

Participants in the present study were not recruited randomly. Respondents were recruited via Twitter by approaching users who had used the terms "unfriend," "defriend," or "unfriending." The goal this sampling method was to reach people from whom Facebook's unfriending tool was meaningful, relevant, and recent, but it may also have led to the over-representation of those who had been strongly affected by a recent experience.

The survey did not assess the role of privacy in unfriending behaviors related to context collapse. Privacy may be a factor in many unfriending decisions and is not

used in the models in this research. Future research may look at the role of privacy specifically in the face of context collapse to determine how privacy controls such as limiting the dissemination of posts to specific users or categories of users can be used to better the dyadic relationship. Facebook users have the option to hide posts from specific users and this technical capability was not analyzed in this research. Facebook users may have multiple accounts to manage different contexts (privacy) and the survey did not assess whether users had multiple accounts.

## 7. Conclusions

This research attempts to answer two research questions - what are the common types of friends who are unfriended on Facebook and what are the factors related to unfriending two particular friend types. The research can successfully categorize 87.5% of friend types into 15 groups (the remaining are in the *other* category). The top four categories account for over 50% of unfriending; these include high school friend, *other*, friend of a friend and work friend.

Two friend types were investigated in greater depth, the high school friend and work-related friend. High school friends were more commonly unfriended for posting too often about polarizing topics and posting too frequently about unimportant topics compared to other friend types. High school friends were less likely to be unfriended for disliked offline behavior compared to other friends. Work friends were more commonly unfriended for disliked offline behavior compared to other friend types. Posting frequently about unimportant topics was less likely to be related to unfriending for work-related friends compared to other friend types.

Examining unfriending behavior on Facebook provides a unique opportunity to study friendship dissolution, because there is a definite marker for the beginning of the online relationship (the initial friend request) and a marker for the dissolution of the relationship through unfriending. This study examined two friend types in depth, work friends and high school friends; future analysis can more fully explore the friend types to determine how friend types are similar and how they are different.

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