

# CS 6474/CS 4803

## Social Computing:

### Social Computing Theories:

### Disclosure and Regulation

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# Why do people seek anonymity online?

[People are rarely anonymous in the offline world, unless they are a criminal or a CIA agent!]

## The Secret Life of Online Moms: Anonymity and Disinhibition on YouBeMom.com

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### **Abstract**

Moms are one of the fastest growing demographics online. While much is known about where they spend their time, little is known about how they spend it. Using a dataset of over 51 million posts and comments from the website YouBeMom.com, this paper explores what kinds of topics moms talk about when they are not constrained by norms and expectations of face-to-face culture. Results show that almost 5% of posts are about *dh*, or “dear husband,” but these posts tend to express more negative emotion than other posts. The average post is only 124 characters long and family and daily life are common categories of posting. This suggests that YouBeMom is used as a fast-paced social outlet that may not be available to moms in other parts of their lives. This work concludes with a discussion of anonymity and disinhibition and puts forth a new provocation that moms, too, spend time online “for the lulz.”

Prior work has examined how moms seek health information and social support online (Plantin and Daneback 2009; Sarkadi and Bremberg 2005). Related work has also studied the role of the Internet in family life (Boneva et al. 2004; Kraut et al. 2002; Mesch 2006). Though motherhood and the culture of information sharing has been studied extensively in offline settings (e.g. Scott, Brady, and Glynn 2001), less work has focused on how moms spend their time online. This is an important demographic to study. One-third of all bloggers are moms, older moms are one of the fastest growing demographics on Facebook, and younger moms are 85% more likely to visit Facebook than the average user (Nielsen 2009).

What moms talk about when they are not constrained by norms and expectations of face-to-face culture

The following stories deal with thoughts and feelings about the self, and they illustrate dilemmas about whether to reveal highly personal information about oneself to significant others (a friend, a spouse or lover, and parents). If the following statements were true of you, would you share this material? If so, when, how, with whom, and in what detail?

I started dating a new guy from work, and it's still very exciting. We're taking it slow, so we haven't told many people. I wonder what will happen when they find out?

I am really unhappy and unmotivated most of the time. My friends see me as a happy person. They also see me as a goal-oriented person. The only person whom I can tell about how I really feel is my husband.

I got a great job offer in Atlanta last week. I want to talk to my girlfriend about it, but she wants to stay here, so I don't know what I'd say.



Can people be empowered when they are anonymous online?

# Identity and Self disclosure

Self-disclosure refers to communication of personal information, thoughts, and feelings to other people, especially in interpersonal relationships

# Anonymity and Self- Disclosure on Weblogs

# Self disclosure and mental wellbeing

## Can Blogging Enhance Subjective Well-Being Through Self-Disclosure?

Hsiu-Chia Ko, Ph.D.<sup>1</sup> and Feng-Yang Kuo, Ph.D.<sup>2</sup>

### Abstract

Based on the self-disclosure theory and the social capital theory, this study investigates if bloggers' self-disclosure enhances their social capital and if these capitals in turn enhance perception of subjective well-being (SWB). The results reveal that the self-disclosure of bloggers significantly and directly affects a blogger's perception of social integration, bonding social capital, and bridge social capital, which in turn promote bloggers' SWB. It appears that as bloggers share their inner thoughts of their moods/feelings with others through writing, they may gain greater social support and improve their social integration. Therefore, self-disclosure through blogging may serve as the core of building intimate relationships. Furthermore, social capital, built through blogging, may improve a blogger's satisfaction with his or her social contact, interpersonal communication, and overall quality of life.

### Introduction

THE INTERNET HAS BECOME an integral part of daily life in today's sociotechnical environment. In the view of Amichai-Hamburger and Furnham, the Internet brings numerous positive benefits to our lives, such as enhancing the quality of life and well-being of marginal groups, constituting social recognition of individuals, and improving relationships of intergroups.<sup>1</sup> Liu and Kuo also discovered that

that individuals' social capital contributes positively to their perception of well-being.<sup>8-10</sup> For bloggers, it is likely that the more they disclose themselves in their blogs, the higher the social capital they can build and, eventually, the more well-being they can acquire.

Based on the self-disclosure and the social capital theories, this study investigates how self-disclosure influences users' perceptions of social capital and subjective well-being. Specifically, we study how self-disclosure influences its users



# Self disclosure as a form of expressive writing

© Academy of Management Journal  
1994, Vol. 37, No. 3, 722–733.

## EXPRESSIVE WRITING AND COPING WITH JOB LOSS

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**In an experiment with 63 recently unemployed professionals, those assigned to write about the thoughts and emotions surrounding their job loss were reemployed more quickly than those who wrote about non-traumatic topics or who did not write at all. Expressive writing appeared to influence individuals' attitudes about their old jobs and about finding new employment rather than their motivation to seek employment.**

The loss of a job is frequently cited as one of the top ten traumatic life experiences, along with divorce or the death of a spouse. The negative effects of job loss on physical and psychological health, particularly in middle-aged workers and during lengthy unemployment, are well documented (e.g., Ivancevich & Matteson, 1984; Quick & Quick, 1984).

Traumas such as job loss provoke powerful emotions, like anger and fear, that are often difficult to comprehend. There is a natural desire to discuss these feelings and the experience with others. Such discussion allows empathy and support to emerge and also helps the traumatized person attain a perspective on the experience. However, events that are humiliating or embarrassing may not be discussed. Indeed, surveys of those who have

## Opening Up: Therapist Self-Disclosure in Theory, Research, and Practice

Margaret F. Gibson

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**Abstract** While most therapists report that they do disclose some information about themselves to their clients, therapist self-disclosure continues to be both controversial and nebulous in clinical theory, research, and practice. This article considers what makes therapist self-disclosure so challenging to define and study and provides an overview of the empirical and theoretical literature. It then concludes with a consideration of therapist self-disclosure in contemporary legal, ethical, and technological contexts of clinical work.

**Keywords** Self-disclosure · Theory · Practice research · Feminist practice · Psychodynamic theories · Humanistic theories · Sexuality · Illness · Disability · Best practices · Ethics · Common factors · Reflexive practice

In this paper, I examine some of the ways in which the concept may be defined and the theoretical underpinnings of these definitions. I go on to discuss the existing research into the uses and effects of TSD, looking first at the challenges of conducting this research, then summarizing some findings on who is using TSD, when, with whom, and with what effects. This exploration considers the impact of diverse social locations of therapists and clients. I then examine how TSD is addressed in different practice theories, and how it connects to other “common factors” of therapy and pan-theoretical ethical and legal responsibilities. Finally, I consider the impact of the Internet on TSD in the 21st century.

**Research, Practice, and Self-Disclosure**

# BENEFITS



Therapeutic Effects



Socialization



Social Validation

## BUSINESS

# The Future of Anonymity on the Internet Is Facebook Rooms

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Danielle Citron looks at Facebook Rooms and sees a nice middle ground in the battle over anonymity on the internet.

Released last week, the new Facebook app is a place where you can chat with other like-minded people about most anything, from the World Series to 18th century playwrights, and because you needn't use your real name when joining one of its chat rooms, you have a freedom to express yourself that you wouldn't have on, say, the main

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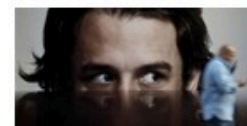
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The Future of Anonymity on the Internet Is



# Anonymity, Intimacy and Self-Disclosure in Social Media

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## ABSTRACT

Self-disclosure is rewarding and provides significant benefits for individuals, but it also involves risks, especially in social media settings. We conducted an online experiment to study the relationship between content intimacy and willingness to self-disclose in social media, and how identification (real name vs. anonymous) and audience type (social ties vs. people nearby) moderate that relationship. Content intimacy is known to regulate self-disclosure in face-to-face communication: people self-disclose less as content intimacy increases. We show that such regulation persists in online social media settings. Further, although anonymity and an audience of social ties are both known to increase self-disclosure, it is unclear whether they (1) increase self-disclosure baseline for content of all intimacy levels, or (2) weaken intimacy’s regulation effect, making people more willing to disclose intimate content. We show that intimacy always regulates self-disclosure, regardless of settings. We also show that anonymity mainly increases self-disclosure baseline and (sometimes) weakens the regulation. On the other hand, an audience of social ties increases the baseline but *strengthens* the regulation. Finally, we demonstrate that anonymity has a more salient effect on content of negative valence. The results are critical to understanding the dynamics and opportunities of self-disclosure in social media services that vary levels of identification and types of audience.

supporting goals such as social validation, relational development, social control and resource gain, as well as goals related to benefiting others [5]. At the same time, self-disclosure – especially on social media – involves inherent risks. The ill-defined audience creates challenges such as context collapse [36], increased vulnerability, and loss of privacy [5], limiting the benefits that self-disclosure could bring.

Anonymity is known to increase self-disclosure, both in offline and online settings. Early evidence that anonymity increases self-disclosure is the “stranger on a train” phenomenon [47] where people may self-disclose quite intimately to fellow passengers on a train. Similarly, in online settings, Suler observed the disinhibition effect [53] where people self-disclose more in many online environments than in person. For the HCI community, anonymity, as a design choice, can be leveraged to influence online interaction and norms, such as in the case of Reddit or 4chan/ [7, 32].

However, in all these cases, the effect of anonymity is strictly coupled with the target audience and context of self-disclosure. It is not clear that people self-disclose more to others, online or offline, because of anonymity, or because the audience in each particular settings results in different benefit/risk dynamic. For example, it is possible that people self-disclose more to those in physical proximity because of propinquity or because they share common knowledge about what is happening around them.

The Qian and Scott study on blogs dates back a decade ago, over which Facebook has now emerged as a complex ecosystem of nuanced privacy features. How would these privacy settings impact self-disclosure today?

# Creepy but Inevitable? The Evolution of Social Networking

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## ABSTRACT

This paper focuses on the fifth year of a cross-sectional trend study of enterprise social networking. Several stable patterns are evident—some activities have plateaued, others steadily increase in frequency. The fifth year did see a new development: As social networking companies visibly embraced behavior tracking and targeted advertising, concerns shifted from boundary regulation within personal networks to unsettling evidence of activity monitoring. However, benefits of use continue to outweigh drawbacks.

## Author Keywords

Social networking; Facebook; LinkedIn; Twitter; Boundary

## ACM Classification Keywords

H.5.3 Group and Organization Interfaces

## INTRODUCTION

*At the end of our first interview, we asked a 30-year-old senior program manager, “What haven’t we asked (about her use of social networking) that might be noteworthy.”*

*She replied, “I don’t know how Facebook is using my information. Somehow, whenever I type in something, the marketing ads on Facebook seem to match what I typed in, so that’s creepy...”*

*One of us said, “When I go to the supermarket I have a card and they scan things in and I get these offers that are clearly tuned to me because they’re things I bought before, (sometimes) I get one free, so that doesn’t seem creepy...”* She was nodding. *“So what’s your feeling as to why it feels creepier with Facebook?”*

*She replied, “When I’m in the grocery store and that happens, I’ve physically purchased something at that specific place. But if I’m in conversation with somebody and said ‘Oh yeah, I’m looking for a house,’ and then some random person back there comes up and says ‘I have five houses in that area,’ it’s super creepy.”*

*A senior software design engineer explained why she has resisted her partner’s constant encouragement to join Facebook. “I do not like how much information they collect about people (and) I don’t need that kind of potential time sink.” But without rancor, she said “Facebook I see as an inevitable thing. One day I will have to have a Facebook account. I am holding out as long as I can.”*

In ten years, social media went from relative obscurity to over a billion active users [14]. LinkedIn, Facebook, and the once-popular MySpace and Orkut were launched in 2003 and 2004; predecessors Friendster and Plaxo in 2002. New users and sites appear and established sites evolve, but as experience accumulates, habits and social conventions form. Where designers cannot or do not address challenges, people find workarounds.

The initial public offerings of LinkedIn and Facebook in 2011 and 2012 indicated that investors believe that the rapid rise and fall of major sites is over. Obligations to shareholders and regulators require a new level of corporate responsibility and oversight. These sites responded to the heightened attention to revenue and profitability by expanding on-site advertising. Their valuations have risen.

For five years, we have studied the use of social networking sites for personal and professional purposes by Microsoft employees. Not a typical company, Microsoft has many early adopters of digital technologies, although fewer than half of the employees are engaged in product development.

Trends within the organization over the first four years were previously published [1]. This paper focuses on two unexpected deviations in 2012. (1) Daily LinkedIn by employees has risen significantly. Daily Twitter use plateaued at a much lower rate, yet occasional Twitter use is rising. To understand these phenomena, we interviewed 46 employees. (2) The interviews revealed that although people expressed the same moderate level of overall concern about social networking sites, the nature of those concerns in our population has shifted dramatically.

Summarily, discursive (not visual) anonymity was positively associated with self-disclosure.

Would this result of Qian and Scott hold true on newer social media platforms like Instagram and Snapchat?



# Understanding Social Media Disclosures of Sexual Abuse Through the Lenses of Support Seeking and Anonymity

# Linguistic Markers Indicating Therapeutic Outcomes of Social Media Disclosures of Schizophrenia

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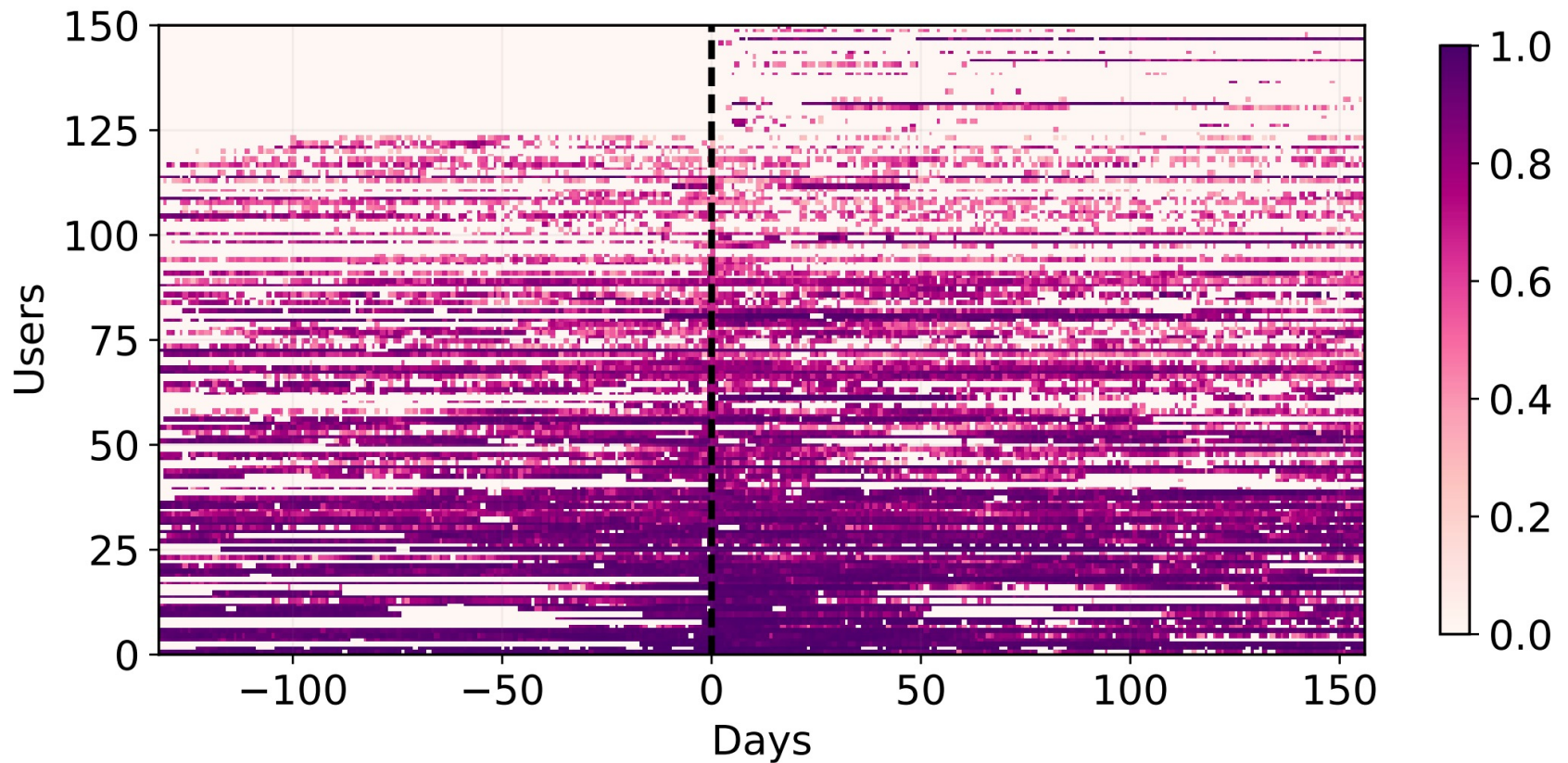
MUNMUN DE CHOUDHURY, Georgia Institute of Technology

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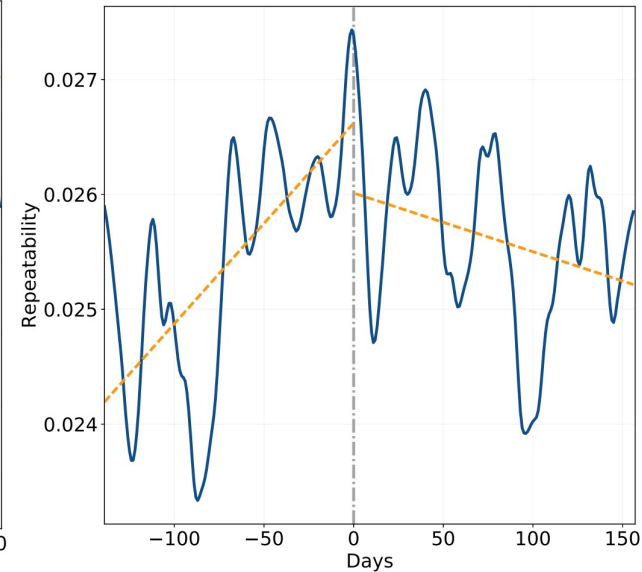
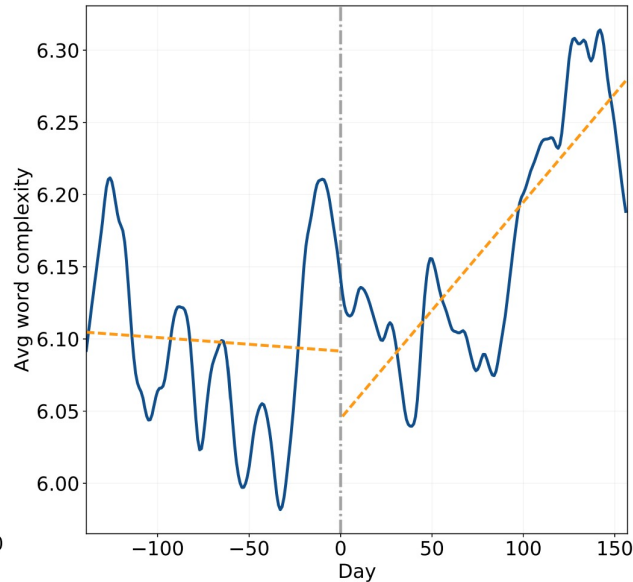
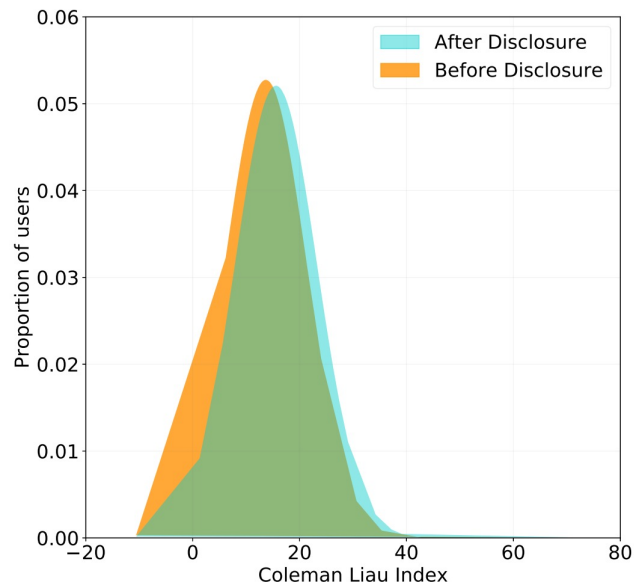
Self-disclosure of stigmatized conditions is known to yield therapeutic benefits. Social media sites are emerging as promising platforms enabling disclosure around a variety of stigmatized concerns, including mental illness. What kind of behavioral changes precede and follow such disclosures? Do the therapeutic benefits of “opening up” manifest in these changes? In this paper, we address these questions by focusing on disclosures of schizophrenia diagnoses made on Twitter. We adopt a clinically grounded quantitative approach to first identify temporal phases around disclosure during which symptoms of schizophrenia are likely to be significant. Then, to quantify behaviors before and after disclosures, we define linguistic measures drawing from literature on psycholinguistics and the socio-cognitive model of schizophrenia. Along with significant linguistic differences before and after disclosures, we find indications of therapeutic outcomes following disclosures, including improved readability and coherence in language, future orientation, lower self preoccupation, and reduced discussion of symptoms and stigma perceptions. We discuss the implications of social media as a new therapeutic tool in supporting disclosures of stigmatized conditions.

CCS Concepts: • **Human-centered computing** → **Collaborative and social computing**; **Computer supported cooperative work**; **Social media**; • **Applied computing** → *Psychology*;

# Social media self-disclosures of mental illness yields therapeutic benefits



Topical coherence improves following a social media disclosure of a diagnosis of schizophrenia



- Readability improves following a social media disclosure of a diagnosis of schizophrenia
- Linguistic complexity increase following a social media disclosure of a diagnosis of schizophrenia
- Repeatability decline following a social media disclosure of a diagnosis of schizophrenia



# Changes in Social Media Affect, Disclosure, and Sociality for a Sample of Transgender Americans in 2016's Political Climate

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## **Abstract**

In the wake of 2016's divisive political climate in the US, media reports indicated that vulnerable people, such as the transgender population, may be experiencing lower than normal rates of emotional wellbeing. To test these claims, we analyzed social media linguistic markers of affect, disclosure, and sociality in late 2016 as compared to the same month a year prior in a sample of US Tumblr blogs documenting people's gender transitions. We find that negative affect, and words related to anger in particular, increased for trans people in 2016. At the same time, social words used to describe family decreased, indicating that trans people may have interacted less with family and friends in late 2016. Self-disclosure decreased for trans women in 2016, potentially indicating increased political language vs. personal content, or self-censorship in response to a hostile political environment. Results highlight ways large-scale external political events may impact how people communicate and disclose on social media. Additionally, our results indicate that social media data could be used to identify those most in need of mental wellbeing resources in response to a hostile political climate.

## **Introduction**

In recent years, transgender<sup>1</sup> Americans have celebrated both increased visibility (David 2017) and gains in rights protections (U.S. Equal Employment Opportunity Commission). Yet, at the same time, trans Americans continue to face substantial discrimination and harassment, and

and genders (Landsbaum 2016; Newmark 2016). 2016 involved substantial increased attention to trans people, often in hostile ways.

To test how these factors were associated with trans participation and content on social media, we applied computational linguistic methods to a sample of 199 Tumblr "transition blogs," a genre of blog through which trans people document their gender transitions. We compared word use in a one-month period in late 2016 to the same month in 2015. We found significant differences in linguistic characteristics between the two time periods. Trans people's language showed increases in negative affect and angry words. At the same time, social words related to family decreased, implying that people may be interacting less with family and in late 2016, or at least reflecting on and documenting those interactions less. While trans men's levels of self-disclosure increased, for trans women we found a significant decrease in self-disclosure. This leaves open questions about how people communicated their emotions while potentially self-censoring content, replacing personal content with political content, or vice versa.

We show how large external political factors may have significantly impacted a group of marginalized Americans, as portrayed via their personal lives and wellbeing on social media. Social media content can be used to infer people's mental wellbeing (De Choudhury et al. 2013). Thus, we ex-

# What are the risks of self-disclosure?

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## To Seek Help or Not to Seek Help: The Risks of Self-Disclosure

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Investigations into the reasons why people seek counseling have, for the most part, focused on approach factors, those variables that are associated with a potential client's increased likelihood of seeking psychological services. The purpose of this research, however, is to explore the role of avoidance factors, those factors that are associated with a potential client's decreased likelihood of seeking services. Across 2 studies of primarily Caucasian college students ( $ns = 209$  and  $268$ , respectively), the results of simultaneous multiple regression analyses demonstrated that avoidance factors predict negative attitudes toward counseling as well as decreased intentions to seek counseling. Overall, results demonstrate that avoidance factors account for at least as much help-seeking variance as traditionally studied approach factors.

What leads people to seek counseling? Indeed, this is a serious question given that only about one third of the people who could likely benefit from psychological treatment are recipients of such services (Andrews, Hall, Teesson, & Henderson, 1999). In addition, people often see counseling as a last resort, one to consider only after other options of support have been exhausted (Hinson & Swanson, 1993; Lin, 2002; Maniar, Curry, Sommers-Flanagan, & Walsh, 2001). Perhaps a better understanding of the reasons underlying people's decisions to seek or not to seek counseling could allow the profession to reach out to those who need services (Komiya, Good, & Sherrod, 2000). Unfortunately, although at-

that distress, are those that increase the likelihood one would seek out psychological services. For example, individuals are more likely to seek counseling when they perceive their problems as more severe than the problems of others (Goodman, Sewell, & Jampol, 1984). *Avoidance factors*, conversely, are those that decrease the chances an individual will seek out services and therefore lead them to avoid counseling. Although not always reporting their work as such, researchers have begun to examine variables that could be considered avoidance factors. These studies include research on the impact of a client's fear of treatment (Deane & Chamberlain, 1994; Deane & Todd, 1996), desire to conceal

# RISKS



Loss of Privacy



Social Judgement



Context Collapse



# TO DISCLOSE OR NOT TO DISCLOSE



— *Bazarova & Choi (2014)*

## ORIGINAL ARTICLE

# **Self-Disclosure in Social Media: Extending the Functional Approach to Disclosure Motivations and Characteristics on Social Network Sites<sup>1</sup>**

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*This article introduces the functional model of self-disclosure on social network sites by integrating a functional theory of self-disclosure and research on audience representations as situational cues for activating interpersonal goals. According to this model, people pursue strategic goals and disclose differently depending on social media affordances, and self-disclosure goals mediate between media affordances and disclosure intimacy. The results of the empirical study examining self-disclosure motivations and characteristics in Facebook status updates, wall posts, and private messaging lend support to this model and provide insights into the motivational drivers of self-disclosure on SNSs, helping to reconcile traditional views on self-disclosure and self-disclosing behaviors in new media contexts.*



# Class Activity

You and three of your friends have been contracted by a large social computing company, say Facebook, to build a capability, e.g., an app for their platform that would allow self-disclosure. The purpose of this self-disclosure is to enable people who have been harassed online to find support and be able to talk about their experiences and feelings they are unable to share otherwise or elsewhere. What features would you like it to have? What features would you make sure it doesn't have? You can draw inspiration from existing platforms and the papers you read for today.

Are users of social computing platforms likely to face a tension between desire for impression management through self-presentation and desire to self-disclosure?

How do you currently navigate this tension?

What are the differences between the two papers? Methodologically? Conceptually?