ISS Collaborative Project Proposal: Pro-Social Behaviors in the Digital Age

Abstract

The capacity of digital technologies to facilitate both anti-social and pro-social behaviors has become a pressing challenge with significant science and policy implications. How do we stem the tide of negative interactions while actively promoting positive interaction? Understanding effective mechanisms for encouraging pro-social behavior in digital spheres requires disciplinary breadth and depth. To advance Cornell's leadership in this area, the proposed set of studies links scholars with expertise across an array of topics, disciplines and methodologies. It will permit integration of existing work among scholars while simultaneously creating opportunities for new and innovative collaboration across campus. Our team's expertise in knowledge transfer facilitates the integration of new research insights into practice and policy on and off campus.

Introduction

Digital technologies are often blamed for encouraging or supporting anti-social behaviors such as bullying, trolling, or spreading fake news and rumor (Kowalski et al., 2014; Shin & Thorson, 2017; Whittaker & Kowalski, 2015). While alarming and salient, emphasis on the proliferation of negative online behavior has eclipsed myriad positive individual and collective actions in which individuals use online forums to challenge or stop anti-social behavior and promote more cooperative, empathetic interaction. In fact, examples of "everyday digital altruism" are not uncommon (Klisanin, 2011), with digital technologies affording new opportunities for the provision of emotional support (Haberman, 2012; Lin & Margolin, 2014), the correction of false information (Starbird et al., 2014), and the provision of help to those in physical distress (He et al., 2017; Nazer, Morstatter, Dani, & Liu, 2016).

This collaborative project aims to improve efforts to encourage these and other pro-social behaviors by merging our collective expertise to 1) explore theoretical mechanisms through which online anti-social behaviors can be reduced, 2) explore theoretical mechanisms through which pro-social

behaviors in online settings can be effectively encouraged and reinforced, and 3) use digital technologies to implement findings and disseminate them to relevant communities.

Encouraging pro-social behavior in today's digital world requires collaboration across diverse theoretical perspectives. Though concern for pro-social behavior and the theoretical breadth required to address the problem pre-dates the rise of digital technology (Batson & Powell, 2003; Crick, 1996; Miller, 1999; Penner et al., 2005), these technologies have created new circumstances where previously isolated mechanisms act simultaneously on individual and collective behavior. For example, digital technologies can modify empathy and interpersonal concern by suppressing or enhancing the social cues that are natural in face-to-face communication (Roghanizad & Bohns, 2017). At the same time, they can transform an interaction's audience: from private or somewhat locally observed to scenes observed by large audiences and/or complete strangers. This untethering from the local context in which people are typically embedded can lead to reduced accountability and to the emergence of like-minded "echo chambers", but also to communities of support for previously silenced minorities (Bakshy, Messing, & Adamic, 2015; Centola, Willer, & Macy, 2005; Rainie & Wellman, 2012).

The design of technologies and the demographic characteristics of their users also play a role in changing behavior. For example, digital technologies can accelerate the spread of behaviors through "one-click" sharing and other features that can lead to the rapid, large-scale adoption of both anti-social and pro-social behaviors (Flanagin, 2017; French & Bazarova, 2017; Rice, 2017). At the same time, many of these technologies have been primarily adopted by younger people who are likely to have less-developed regulatory capacities and an undeveloped understanding of how to promote pro-social behavior and cope with anti-social behavior, making education a key pillar of any strategy of intervention (Kruzan & Whitlock, under review; Whitlock & Rodham, 2013). Thus, studying pro-social behavior in the digital age must draw on the varied theoretical and domain-related expertise of disciplines such as communication science, human development, social psychology, information science, sociology, and education, and must also promote the large-scale dissemination of psycho-educational messaging and training to target populations.
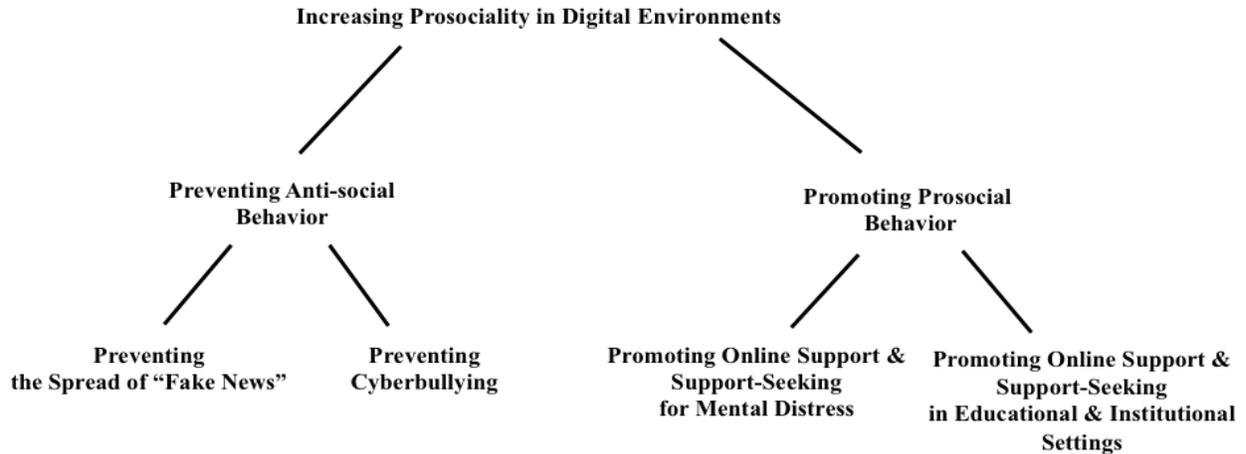
To push Cornell to the forefront on this issue, we have assembled a team with diverse theoretical and methodological approaches to this problem. As part of our preliminary collaboration we have identified a conceptual framework and specific domains where our expertise is strong. As the initiative grows, we expect to add expertise from beyond our team, both within our own areas of information science, communication, psychology, human development, and organizational behavior, and to areas beyond our own, including but not limited to sociology, economics, education, and political science.

Collaborative Framework

As reviewed above, digital environments can foster anti-social behaviors, such as cyberbullying and the spread of fake news and rumors; and they can also facilitate prosocial behaviors, such as social support and charitable giving. In order to shift the balance towards greater pro-sociality in digital environments, we must understand both how to prevent anti-social behaviors and promote pro-social behaviors in technology-mediated settings.

Drawing from each of our team members' specific areas of expertise, as well as areas of overlap, we propose a collaborative framework through which to tackle these broader goals. Specifically, our team has experience in topics such as preventing the spread of misinformation (e.g., "fake news" and rumors) online (Dr. Margolin, Dept. of Communication, CALS), preventing cyberbullying and other forms of online aggression (Dr. Bazarova, Dept. of Communication, CALS; Dr. Whitlock, BCTR, College of Human Ecology), and fostering support and support-seeking via technology in the domains of education (Dr. Kizilcec, Dept. of Information Science, A&S), organizations (Dr. Bohns, Dept. of Organizational Behavior, ILR), and mental health (Dr. Bazarova's, Dept. of Communication, CALS; Dr. Whitlock, BCTR, College of Human Ecology). An illustration of how this variety of topics fits within our overarching goal of fostering prosociality in digital environments is below.

The breadth and diversity of methodological approaches deployed within our team is also consistent with the interdisciplinary complexity of the problem and the need to identify realistic and effective interventions. As a whole, our team has methodological experience with field studies (Kizilcec) and lab experiments (Bohns, Bazarova), survey, longitudinal and qualitative methods (Whitlock),

Increasing Prosociality in Digital Environments

- **Preventing Anti-social Behavior**
  - **Preventing the Spread of "Fake News"**
  - **Preventing Cyberbullying**
- **Promoting Prosocial Behavior**
  - **Promoting Online Support & Support-Seeking for Mental Distress**
  - **Promoting Online Support & Support-Seeking in Educational & Institutional Settings**

naturally occurring data in social media streams using big data and computational science methods (Margolin), and in-situ data collected through experience sampling and momentary assessments methods (Bazarova). Furthermore, our team is pushing the state-of-the-art in social media experiments using naturalistic experimental paradigms and new forms of designed data (DiFranzo, Bazarova, Sundar, & Hancock, 2018). In particular, our team has prepared a social media simulation platform designed and developed by post-doc DiFranzo (PhD in Computer Science) working with Bazarova and Whitlock. This platform, called "Truman," simulates a social media site and its community of users, permitting naturalistic interactions and behaviors to be observed in a controlled environment (e.g., DiFranzo, Taylor, Kazerooni, Wherry, & Bazarova, 2018). The platform will be freely available for researchers interested in running naturalistic social media experiments. Finally, our team has experience developing educational programs for evaluation and in translating the results of research into policy and practice via training programs and education materials (e.g., a non-suicidal self-injury training for youth-serving professionals developed by Whitlock). This variety of theoretical, methodological, design, and translational expertise will allow for a rich and comprehensive study of prosocial and antisocial behaviors in different online contexts (e.g., Twitter, Facebook, email/text, MOOCs) and for a large-scale dissemination of psycho-educational communication to target populations.

As will become evident in the descriptions of our ongoing and emergent research streams, our team also brings unique interdisciplinary knowledge that will allow us to tackle our questions at different

levels of analysis and across a variety of domain areas. In the next section, we will narrow the scope of the proposed collaborative effort by describing in more detail the specific ongoing projects that fit within the collaboration, as well as describe emerging projects that draw from our unique areas of integration - projects we would not be able to accomplish individually.

<div align="center">**Research Streams: Ongoing and Emergent Projects**</div>

Preventing the Spread of "Fake News"

The discovery of the proliferation of "fake news" on Facebook and Twitter during the 2016 U.S. Presidential election has drawn substantial attention, both from researchers and the public, to the dissemination of truth and the refutation of falsehood as a basic pro-social activity (Allcott & Gentzkow, 2017; Mele et al., 2017). Indeed, Cornell has already highlighted this concerning public issue through such actions as the "Universities and the Search for Truth" symposium and the "Leadership in honesty and reliable knowledge" Faculty Senate resolution.

The problem of misinformation in the public sphere has been studied for several decades (Allport & Lepkin, 1945; Allport & Postman, 1947; Rosnow, 1991) in numerous contexts (Arsenault & Castells, 2006; Garrett, 2011; Lewandowsky et al., 2012; Starbird et al., 2014). This research has uncovered the multi-level, interdisciplinary nature of the problem. For example, misinformation is more likely to be believed and shared when it is consistent with an individual's prior beliefs and attitudes (Nyhan & Reifler, 2010; Shin, Driscoll, & Bar, 2016), yet it is also more likely to be believed and shared in times of collective uncertainty, when no one is sure if anyone knows the truth (Allport & Lepkin, 1945; Garrett, 2011). Misinformation also diffuses through social networks, often entering networks via disreputable sources but gaining credibility as it spreads (Gupta, Lamba, Kumaraguru, & Joshi, 2013).

Stemming the spread of misinformation thus requires addressing questions about both individual motivations and collective dynamics. One area where these intersect is the influence of social context on decisions to share and discuss misinformation. Dr. Margolin's observational studies of real-world misinformation sharing and correction on Twitter indicate that *who* is doing the sharing, or correcting, is critical (Hannak, Margolin, Keegan, & Weber, 2014; Margolin, Hannak, & Weber, 2017). Corrections

are more likely to be accepted by "friends" but more likely to be sent by strangers. Embeddedness in common social groups also appears to play a role in encouraging acceptance of corrections.

A next step in this work is to understand individuals' specific motivations and concerns in situations where pro-social interventions, such as corrections, are needed to combat fake news. In particular, drawing on Dr. Bohns' expertise in the study of perspective taking and Dr. Bazarova's work on individual motivations in social media interactions, the team will seek to understand how people feel about correcting misinformation. Are corrections received as hostile or maliciously intended? Do those making corrections consider how their behavior will be perceived? Do individuals focus on the content of the factual disagreement or on reputational concerns due to the salience of the surrounding audience on social media (French & Bazarova, 2017)? Dr. Bazarova and Dr. Margolin have also recently collaborated with Dr. Connie Yuan (Communication) on how news credibility is influenced by its source.

Another key question is how people perceive their responsibility to stem the spread of fake news. Dr. Bohns's research shows that individuals often underestimate their own influence, a finding consistent with perceptions of impact on social media (Bernstein, Bakshy, Burke, & Karrer, 2013). This raises the question of how accurate people are when anticipating the impact of the fake news they share. For example, do people feel differently about sharing news that has already been widely re-shared vs. news they are the first to introduce? The Truman system developed by Dr. DiFranzo affords an ideal setting for addressing such questions as it enables the manipulation of cues about community sharing behavior. In addition, drawing on Dr. Kizilcec's expertise in self-regulation and the learning sciences, the team will investigate how to convey the role each individual plays in stemming the spread of fake news and empower their active participation by closing the intention-action gap (Gollwitzer & Brandstätter, 1997). In particular, Dr. Kizilcec's research shows that brief and scalable interventions to construct concrete plans for how to achieve educational goals can promote productive habits and produce lasting effects (Kizilcec & Cohen, 2017). These metacognitive interventions may be adaptable to support individuals in raising their voice in social media environments.

Preventing Cyberbullying

One of the most widespread antisocial behaviors in social media is cyberbullying, with as many as 41% of individuals reporting having experienced cyberbullying, including offensive name-calling, purposeful embarrassment, physical threats, and sexual harassment (Duggan, 2014; Kraft & Wang, 2009). Cyberbullying is often aimed at marginalized groups based on political views, physical appearance, gender, race/ethnicity, religion, sexual orientation, and disability (Duggan, 2014). A powerful antidote to cyberbullying is bystander intervention (Latané & Darley, 1970), but most witnesses to online harassment - only three in ten (30%), according to Kraft & Wang (2009) - have reported intervening in any way, paralleling the inaction of offline bystanders.

The goal of our ongoing cyberbullying projects led by Dr. Bazarova, Dr. DiFranzo, and Dr. Whitlock is to examine socio-psychological and design factors that can encourage bystander intervention in online contexts (Kazerooni, Taylor, Whitlock, and Bazarova, in press). The initial study run on the Truman platform showed promising results in encouraging bystander intervention through the increased sense of personal responsibility in bystanders "witnessing" cyberbullying (DiFranzo et al., 2018). Participants took part in a three-day, in-situ experiment, in which they were exposed to several cyberbullying incidents in a realistic social networking environment. They were assigned to different manipulations of audience size and whether their viewing and commenting behavior was visible to others (social transparency). We found that the increased sense of social transparency and audience awareness increased bystanders' sense of accountability and personal responsibility, which led them to "flag" more cyberbullying posts to notify system administrators of the offender's behavior. These initial results suggest that people's inclination towards prosocial behavior is malleable and that cues and features in online platforms can serve as levers to encourage prosocial acts.

Our continuing effort in the cyberbullying domain is aimed at exploring other mechanisms and their limits for overcoming innate tendencies not to get involved, which provides collaboration opportunities within our team as well as with a broader campus community. For example, we are interested in exploring social and design mechanisms for reducing empathy gaps and increasing perspective-taking between bystanders and cyberbullying victims (with Dr. Bohns); empowering

individuals to act on their good intentions with self-regulatory activities (with Dr. Kizilcec); the use of intelligent virtual agents and robots in fostering peer intervention (ongoing collaboration with Dr. Malte Jung from Information Science); across different populations, especially based on gender and racial diversity (ongoing collaboration with Dr. Lewis from Communication) and socio-economic status (e.g., underserved communities with Dr. Naaman from Cornell Tech), and in different media platforms and virtual worlds (e.g., in virtual reality with Dr. Won from Communication).

Promoting Online Support and Support-Seeking for Mental Distress

That there is a strong, positive causal relationship between social connection and wellbeing is well established (Thoits, 2011, p. 145; Kawachi & Berkman, 2001). Less well understood are what and how specific factors influence the effective giving and receiving of support, particularly when involving emotionally charged or challenging topics. In light of the fact that social media are increasingly used to seek and provide support, most often from peers or unknown others, understanding the factors that govern effective provision of support are paramount (Naslund, Aschbrenner, Marsch, & Bartels, 2016). This is particularly true when those seeking or providing support are young or otherwise vulnerable, such as those with mental health challenges, both of whom are frequent users of internet-based platforms (Hennig, Craig & Crabtree, 1998; Pietrusza, Rothenberg, & Whitlock, 2011)

Peer support is most often defined as emotional giving or exchange and is, in offline contexts, frequently accompanied by instrumental support provided by persons with a shared condition (e.g., a similar physical or mental health challenge; Gartner & Riessman, 1982). The process of giving and receiving is complicated in online forums where anonymity options make understanding exactly *who* is providing support and accurately assessing their qualifications (e.g., similarity of condition, experience and/or life situation) is difficult, where few structures exist to guide the effective giving of support, and providing support may expose vulnerable individuals to anti-social communications from others.

Understanding the role social support plays in online distress has been a longstanding concern of both Dr. Whitlock and Dr. Bazarova, constituting one of the reasons for their initial collaboration and resulting in important contributions to the literature (Bazarova, Choi, Whitlock, Cosley, & Sosik, 2017;

Chang, Whitlock & Bazarova, in press). This work is also closely aligned with Dr. Bohns's interest in understanding and influencing the implicit assumptions and explicit expectations that individual help-seekers make when soliciting support. For example, while there exists some evidence for the benefits of peer support to the receiver of support within populations with shared mental health challenges (Adame & Leitner, 2008; Solomon, 2004), there exists clear evidence that *providers* of support are likely to experience personal benefits that outweigh those the receiver experiences (Bracke, Christiaens & Verhaeghe, 2008). These effects are most evident when peer support givers receive training on how to notice and respond to signs of distress in effective ways (Repper & Carter, 2011; Wyman et al, 2010), suggesting that there may be important and modifiable patterns of expectations and transaction between support seekers and givers.

Since our research (Chang & Bazarova, 2016; Whitlock, Powers & Eckenrode, 2006) and a growing body of other research (Rowe et al., 2014; Naslund et al., 2016) show that online support solicitation and response can lead to a complex mix of positive and iatrogenic effects, we intend to collaboratively use this line of inquiry to identify salient prosocial supportive contexts. We will build on our work and on the growing body of support for using web-based and mobile applications to reducing mental health symptomatology for a variety of disorders (Donker et al., 2013; Watts et al., 2013) by working with the developer of a peer-support application, **TalkLife**, that effectively uses "crowdsourcing" techniques for support provision through non-professional volunteers (i.e., listeners) who are trained to provide active listening, "micro-counseling," and emotional support skills (general technique described in Baumel, 2015, p. 312). We will then leverage this knowledge to experiment with ways of designing prosocial supportive features through direct education and self-awareness training, use of priming and "nudges" such as those Dr. Kizilcec researches and uses, and design-linked features (e.g., planned use of buttons, emojis, flags, and pop-up messaging), such as those post-doc DiFranzo uses in the Truman platform.

Promoting Online Support and Support-Seeking in Educational and Institutional Settings

Technology has opened a variety of avenues for seeking help. It is now astonishingly easy to request support from an instructor, a class peer, or a work colleague across the world. However, there are a variety of challenges that must be solved in order to encourage people to take advantage of these opportunities to ask for and offer support in educational and institutional contexts.

Dr. Bohns's primary research examines one of these barriers: the tendency of help-seekers to underestimate their chances of receiving help should they ask for it (Bohns et al., 2011; Bohns, Newark, & Xu, 2016; Flynn & Lake [Bohns], 2008; Newark, Flynn, & Bohns, 2014; Newark, Bohns, & Flynn, 2017). Across numerous studies in which participants collectively have made in-person requests of over 14,000 strangers (requests such as, "Will you loan me your cell phone to make a quick call?"), Dr. Bohns has found that participants consistently underestimate—by a large margin—whether those they approach will say "yes" (Bohns, 2016). The takeaway from much of her work has been an empowering one: that asking for help is not as terrible as we imagine, and we are more likely to receive requested help than we anticipate.

Digital technologies have further empowered help-seekers, making it easier and less awkward to ask for help; however, they have also made it substantially easier for those *being* asked to say "no" or effectively ignore a help request. Emails can be ignored, excuses can be crafted, and the restriction of nonverbal cues in mediated communication can decrease trust and empathy—key factors in helping. Accordingly, in a recently published study, Dr. Bohns and a former graduate student found that the robust tendency of help-seekers to underestimate their chances of receiving help was in fact reversed when they made requests over email; indeed, help-seekers *overestimated* their chances of receiving help in this context (Roghanizad & Bohns, 2017). Altogether, Dr. Bohns' findings suggest that there may be significant downsides to seeking help through technology-mediated channels, which could potentially be counteracted through design features. The ongoing examination of this possibility will require the added expertise of Drs. Kizilcec, Whitlock, and Bazarova who have studied support seeking and giving in online peer networks, e.g., on social network sites (e.g., Chang, Whitlock, & Bazarova, in press; Eckles, Kizilcec, & Bakshy, 2016; Kizilcec, Bakshy, Eckles, & Burke, 2018).

In educational settings, digital learning environments are not only providing new mechanisms for content delivery and assessment, they are also creating new communication channels between students and their peers. Peer learning, where students help each other understand the learning materials, can be a scalable and pedagogically effective approach to student support (Boud, Cohen, & Sampson, 2014). Students requesting help can learn from a diverse set of peers who may be globally distributed and receive help almost instantaneously in large online classes (Cambre et al., 2014; Kulkarni, Bernstein, & Klemmer, 2015; Kizilcec, 2013). At the same time, students giving help are deepening their own grasp of the materials in the process (Boud et al., 2014). Yet two major impediments to productive help-seeking and help-giving in education are the design of digital learning systems (Aleven et al., 2003) and insufficient self-regulation skills (Newman, 1994). Building on Dr. Kizilcec's expertise in online learning and self-regulation, Dr. Bohns' and Dr. Whitlock's research on help seeking in other domains, and Dr. Bazarova's expertise in online user motivation, the team will investigate ways to leverage strategic "nudges" in digital environments to encourage productive help seeking and help giving. Initially, the Truman platform provides an in-vivo social networking experience between students that lends itself to testing strategies to encourage helping behaviors. Promising strategies can subsequently be tested using online field experiments in large online courses or in hybrid courses at Cornell.

Impact

The research described above draws substantially on theoretical and methodological expertise from across the social sciences. It necessitates diverse disciplinary perspectives to accomplish the planned projects, opens opportunity for radical collaboration within Cornell, and will contribute theoretical advancement in our respective fields. At the theoretical level, the project focuses diverse expertise on specific, practical problems where the mechanisms favored by different disciplines intersect. We expect that the process of studying these situations, with practical intervention in mind from the outset, will contribute to scientific theory and advance a foundational understanding of how to effectively promote prosocial behavior in digital contexts. Furthermore, while our team's initial focus will be on the specific

collaborations described above, this research will support multiple opportunities for connections to other researchers on campus. Our work is already related to several important campus initiatives: the new "Notice and respond" and "Intervene" Bystander campaigns advanced by Skorton Center for Health Initiatives, the campus long-standing Mental Health initiative, and the Reliable Knowledge Initiative following the recently-passed Senate resolution on Cornell Leadership in Honesty and Reliable Knowledge. A related 2-year Theme Project on "Technology and the World of Work" at the ILR School will offer additional opportunities to highlight and present our collaboration across different educational, institutional, and organizational settings where online support and support-seeking is vital. The project has funding allocated for a planned capstone event, with a combination of workshop sessions and lectures, on the topic of prosocial behaviors in the digital age, in which we will invite scholars from the social sciences and related disciplines at Cornell, such as sociology, economics, information science, and law, to build off interdisciplinary knowledge and our findings.

We also plan to leverage this collaboration to secure external funding to support our continued research efforts in this area. Dr. Margolin, Dr. Bazarova, and Dr. Whitlock already have a grant proposal, "Good Samaritan by Design," related to this collaborative project under review with the NSF Division of Information and Intelligent Systems. We are also actively pursuing external funding opportunities with foundations, e.g., the William T. Grant Foundation and the Russell Sage Foundation, which support innovative research on stronger and cooperating communities. Dr. Kizilcec's global perspectives in large-scale digital learning contexts, Dr. Bohn's organizational and psychological expertise, and Dr. DiFranzo's design innovations will allow us to expand our grant seeking efforts in other directions, for example, to apply for a new NSF program solicitation on Cyberlearning for Work at the Human-Technology Frontier and others. As a team, we also possess a strong capacity for and interest in disseminating research into a diverse set of audiences. For example, Dr. Kizilcec's prior work on large-scale interventions in higher education settings offers a unique opportunity to apply our work to encourage pro-social interaction within Cornell itself. Dr. Kizilcec has extensive experience both developing and evaluating wise interventions (Walton, 2014) that improve student performance and well-being in residential university

settings, online, and hybrid courses. Relying on Cornell's existing digital communication channels, the team will implement brief, scalable interventions informed by insights from our collaborative research efforts to promote pro-social behavior on campus.

As a means of disseminating research-based knowledge to key community-based stakeholders, efforts led by both Dr. Whitlock and Dr. Bazarova's labs have been fruitful and offer models for disseminating practical findings to those in the best position to teach, support, and enhance adoption of pro-social digital behaviors among young people and those who work and live with young people. For example, Dr. Whitlock works with an existing e-learning entity within Cornell (e-Cornell) to develop and deliver course content to diverse and international audiences of mental health providers, school staff, and parents related to mental health. The interactive, adult-learning informed content provides an additional model that can be followed for disseminating findings emerging from this collaboration of scholars. She is also the director of the new BCTR-sponsored Cornell Translational Research Summer Institute, which is dedicated to preparing aspiring and established researchers for effectively translating their research into practice and policy materials and processes.

Another example of our social media literacy efforts is a new initiative called Social Media TestDrive, based on groundbreaking design work led by post-doc DiFranzo in Dr. Bazarova's lab, which allows children ages 10-13 to functionally "test drive" social media environments before they are introduced to the myriad social media platforms they will encounter later in life. While there exist a number of curricula aimed at teaching digital literacy and citizenship, there are currently no tools that allow students to practice their social media and technology skills in a realistic but safe and educational environment. By using the Truman platform, which simulates a controllable social media environment, Social Media TestDrive allows educators and students to learn how to effectively detect and respond to anti-social behavior, such as cyberbullying, and to adopt and promote pro-social online behaviors. Findings from this collaboration can be integrated into the TestDrive project as it evolves and the platform can be iteratively modified to enable the development of interactive educational interventions that can be disseminated at scale and targeted to different populations.

Conclusion

The challenge of encouraging pro-social online behavior is particularly urgent today. By bringing together interdisciplinary perspectives, different methodologies, and domain expertise, our team is poised to advance theoretical knowledge and create effective, practical interventions on this important topic. Our efforts also address a number of topics and populations of interest on campus, and so we expect our project to engage collaboration and innovation across the university.

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He, X., Lu, D., Margolin, D., Wang, M., Idrissi, S. E., & Lin, Y.-R. (2017). The signals and noise: Actionable information in improvised social media channels during a disaster. In *Proceedings of the 2017 ACM on Web Science Conference* (pp. 33–42). ACM.

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Kazerooni, F., Taylor, S. H., Whitlock, J., & Bazarova, N. N. (in press). Cyberbullying bystander intervention: The number of offenders and retweeting predict likelihood of helping a cyberbullying victim. *Journal of Computer-Mediated Communication.*

Kizilcec, R. F. (2013, June). Collaborative learning in geographically distributed and in-person groups. In *AIED 2013 Workshops Proceedings Volume* (Vol. 67).

Kizilcec, R. F., Bakshy, E., Eckles, D., & Burke, M. (2018). Social influence and reciprocity in online gift giving. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI). Montreal, Canada.

Kizilcec, R. F., & Cohen, G. L. (2017). Eight-minute self-regulation intervention raises educational attainment at scale in individualist but not collectivist cultures. *Proceedings of the National Academy of Sciences*, 201611898.

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Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. *Psychological Bulletin, 140*(4), 1073–1137.

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Mele, N. (2017). *Combating fake news: An agenda for research and action*. Northeastern University, Boston, MA, 2017.

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Newark, D. A., Bohns, V. K. & Flynn, F. J. (2017). The value of a helping hand: Help-seekers' predictions of help quality. *Organizational Behavior and Human Decision Processes, 139,* 18-29.

Newark, D., Flynn, F. & Bohns, V. K. (2014). Once bitten, twice shy: The effect of a past refusal on expectations of future compliance. *Social Psychological and Personality Science, 5,* 218-225.

Nyhan, B., & Reifler, J. (2010). When corrections fail: The persistence of political misperceptions. *Political Behavior, 32*(2), 303–330. https://doi.org/10.1007/s11109-010-9112-2

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Pietrusza, C., Rothenberg, P., & Whitlock, J. (2011, June). Reaching out: The role of disclosure and support in non-suicidal self-injury. Poster session presented at the *6th annual meeting of the International Society for the Study of Self-Injury* (ISSS), New York, NY.

Rainie, H., & Wellman, B. (2012). *Networked: The new social operating system*. Cambridge, MA: MIT Press.

Repper, J., & Carter, T. (2011). A review of the literature on peer support in mental health services. *Journal of Mental Health, 20*(4), 392-411.

Rice, R. E. (2017). Intermediality and the diffusion of innovations. *Human Communication Research, 43*(4), 531-544.

Roghanizad, M. M. & Bohns, V. K. (2017). Ask in person: You're less persuasive than you think over email. *Journal of Experimental Social Psychology, 69,* 223-226.

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Rowe, S. L., French, R. S., Henderson, C., Ougrin, D., Slade, M., & Moran, P. (2014). Help-seeking behaviour and adolescent self-harm: a systematic review. *Australian & New Zealand Journal of Psychiatry, 48*(12), 1083-1095.

Shin, J., Driscoll, K., & Bar, F. (2016). Political rumoring on Twitter during the 2012 US presidential election: Rumor diffusion and correction. *New Media & Society,* 1–22. https://doi.org/10.1177/1461444816634054

Shin, J., & Thorson, K. (2017). Partisan selective sharing: The biased diffusion of fact-checking messages on social media. *Journal of Communication, 67*(2), 233–255. https://doi.org/10.1111/jcom.12284

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Starbird, K., Maddock, J., Orand, M., Achterman, P., & Robert M. Mason. (2014). Rumors, false flags, and digital vigilantes: Misinformation on Twitter after the 2013 Boston marathon bombing. In *Proceedings of iConference 2014*. iSchools. https://doi.org/10.9776/14308

Thoits, P. A. (2011). Mechanisms linking social ties and support to physical and mental health. *Journal of Health and Social Behavior, 52*(2), 145-161.

Walther, J. B, & Valkenburg, P. M. (2017). Merging mass and interpersonal communication via interactive communication technology: A symposium. *Human Communication Research, 43*(4), 415-423.

Walton, G. M. (2014). The new science of wise psychological interventions. *Current Directions in Psychological Science, 23*(1), 73-82.

Watts, S., Mackenzie, A., Thomas, C., Griskaitis, A., Mewton, L., Williams, A., & Andrews, G. (2013). CBT for depression: a pilot RCT comparing mobile phone vs. computer. *BMC Psychiatry, 13*(1), 49.

Whitlock, J.L., Powers, J.L., Eckenrode, J. (2006). The virtual cutting edge: Adolescent self-injury and the Internet. *Developmental Psychology: Special Issue on Children, Adolescents and the Internet, 42*(3), 407- 417.

Whitlock, J. & Rodham, K. (2013). Understanding NSSI in youth. *School Psychology Forum: Research in Practice, 7*(4): 93-110.

Whittaker, E., & Kowalski, R. M. (2015). Cyberbullying via social media. *Journal of School Violence, 14*(1), 11–29.

Wyman, P. A., Brown, C. H., LoMurray, M., Schmeelk-Cone, K., Petrova, M., Yu, Q.,... & Wang, W. (2010). An outcome evaluation of the Sources of Strength suicide prevention program delivered by adolescent peer leaders in high schools. *American Journal of Public Health, 100*(9), 1653-1661.

Natalya (Natalie) Bazarova
Biographical Sketch

Professional Preparation

Far Eastern National University	Linguistics/English Philology	B.S., 2000
Cornell University	Communication	M.S., 2005
Cornell University	Communication	Ph.D., 2009
	(Minor in Social Psychology and Cognitive Science)	
Cornell University	Communication	Postdoc, 2009-2010

Appointments

2016-Present   Associate Professor of Communication & Field Member of Information Science, Cornell University

2010 – 2016   Assistant Professor, Department of Communication, Cornell University

Selected Publications & Peer-Reviewed Proceedings

Liao, W., **Bazarova, N. N.,** & Yuan, C. (in press**).** Expertise judgment and communication accommodation in linguistic styles in computer-mediated and face-to-face groups. *Communication Research.*

French, M., & **Bazarova, N. N.** (2017). Is anybody out there?: Understanding masspersonal communication through expectations for response across social media platforms. *Journal of Computer-Mediated Communication, 22*(6), 303-319.

Bazarova, N. N., Choi, Y. H., Whitlock, J., Cosley, D., & Sosik, V. (2017**).** Psychological distress and emotional expression on Facebook. *Cyberpsychology, Behavior, & Social Networking, 20(3),* 157-163.

Sannon, S., Choi, Y. H., Taft, J., & **Bazarova, N. N.** (2017). What comments did I get? How post and comment characteristics predict interaction satisfaction on Facebook. (ICWSM'17).

Chang, P. F., & **Bazarova, N. N.** (2016). Managing stigma: Exploring disclosure-response communication patterns in pro-anorexic websites. *Health Communication, 31,* 217-219.

Bazarova, N. N., Choi, Y. H., Sosik, V., Cosley, D., & Whitlock, J. (2015). Social sharing of emotions on Facebook: Channel differences, satisfaction, and replies. *Computer-Supported Cooperative Work* (*CSCW 2014)*, March 14-18, Vancouver, Canada (28.3%)

Choi, Y., & **Bazarova, N. N.** (2015). Self-disclosure characteristics and motivations in social media: Extending the functional model to multiple social network sites**.** *Human Communication Research, 41,* 480-500.

Bazarova, N. N., & Choi, Y. H. (2014). Self-disclosure in social media: Extending the functional approach to disclosure motivations and characteristics on social network sites. *Journal of Communication, 64,* 635-657.

Sosik, V., & **Bazarova, N. N.** (2014). Relational maintenance on Facebook: How Facebook communication predicts relational stability and change. *Computers in Human Behavior, 35,* 124-131.

Bazarova, N. N. (2012). Contents and contexts: Disclosure perceptions on Facebook. *Proceedings of the Computer-Supported Cooperative Work Conference (CSCW 2012),* February 11-15, Seattle, WA. (39.5%)

Bazarova, N. N., Taft, J., Choi, Y. H., & Cosley, D. (2013). Managing impressions and relationships on Facebook: Self-presentational and relational concerns revealed through the analysis of language style. *Journal of Language and Social Psychology, 32,* 121-141.

Selected Book Chapters

Taylor, S. H., & **Bazarova, N. N.** (2017). A relational perspective on the impact of information and communication technologies on well-being. In Z. Papacharissi (Ed.), *Networked Self: Love.*

Bazarova, N. N. (2016). Online disclosure. In C. R. Berger & M. E. Roloff (Eds.), *International Encyclopedia of Interpersonal Communication.* Hoboken, NJ: Wiley-Blackwell.

Bazarova, N. N., & Walther, J. B. (2009). Attribution of blame in virtual groups. In P. Lutgen-Sandvik & B. Davenport-Sypher (Eds.), *The Destructive Side of Organizational Communication: Processes, Consequences, and Constructive Ways of Organizing* (pp. 252-266). Mahwah, NJ: Routledge/LEA.

Selected Refereed Conference Papers

*Kazerooni, F., *Taylor, S., **Bazarova, N. N.,** & Whitlock, J. **(**2017**).** Cyberbullying bystander intervention: The number of offenders and retweeting predict likelihood of helping cyberbullying victim. NCA'2017.

Choi, Y., & **Bazarova, N. N.** (2017). Mediated social interactions and well-being: The role of self-disclosure, perceived responsiveness, and relatedness. NCA'2017.

Liao, W., **Bazarova,** N. N., & Yuan, C. (2017). Development and application of an analytical framework for analyzing social behaviors with social relations model in CMC groups. ICA '17.

Sannon, S., & **Bazarova, N. N.** (2016). From theory to design: Technological interventions for coping with stress and anxiety. *Extended Abstract for the Workshop on Computing and Mental Health, Computer-Human Interaction (CHI 2016),* May 7-12, San Jose, CA.

Choi, Y. H., Taylor, S. H., Sannon, S., & **Bazarova, N. N.** (2016). Social media affordances and interpersonal aspects of depression in Facebook Communication. Paper presented at the National Communication Association 102nd Annual Convention*,* Nov. 10-13, Philadelphia, PA.

Choi, Y. H., **Bazarova, N. N.,** Whitlock, J., Cosley, D., & Sosik, V. (2016). Psychological distress and emotional expression on Facebook. *Presented at the 2016 Society for Research on Adolescence (SRA) Biennial Conference.* Baltimore, MD.

Chang, P., **Bazarova, N. N.,** & Whitlock, J. (2016). To respond or not to respond, that is the question: The decision making process of providing social support to distressed posters. *Presented at the 2016 Society for Research on Adolescence (SRA) Biennial Conference.* Baltimore, MA.

Choi, Y., & **Bazarova, N. N.** (2015). Self-disclosure characteristics and motivations in social media: Extending the functional approach to multiple social network sites. *Paper presented at the National Communication Association Annual Meeting*, Chicago, IL.

Liu, Y-C., & **Bazarova, N. N.** (2015). Making a statement: Motivations and concerns underlying political conversations on social network sites. *Paper presented at the National Communication Association Annual Meeting,* Chicago, IL.

Chang, P. F., & **Bazarova, N. N.** (2014). Managing stigma: Exploring disclosure-response communication patterns in pro-anorexic websites. *Paper presented at the International Communication Association Annual Meeting,* Seattle, WA.

Choi, Y. H., & **Bazarova, N. N.** (2014). Self-disclosure on Facebook and Twitter: An examination of medium and audience as contextual factors. *Paper presented at the International Communication Association Annual Meeting,* Seattle, WA.

Selected Previous Grant Support

- **PI**, NSF CHS: Medium: *Understanding and designing for online disclosure and its effects on well-being* (2014-2018; $1,179,821, with Co-PIs Cosley and Whitlock).
- **Co-PI**, NSF II-New: *Laboratory for studying next-generation computer-mediated Teamwork.* ($225,010, with PI Fussell).
- **PI,** USDA NIFA Hatch: *Parents, teens, and online safety: Improving parenting practices in the Digital Age.* (2015-2017, $75,000).
- **PI,** Cornell Institute for the Social Sciences Pilot Grant: *Gratifications and Social Media Use.* (2014-2015, $10,000).
- **PI,** Bronfenbrenner Center for Translational Research Innovative Research Grant: *Mental health disclosure and secondary effects on social networking sites.* (2012-2013, $11,200, with Co-PIs Cosley and Whitlock).
- **PI**, USDA NIFA Hatch: *Social media and relationships: How to reduce social isolation and improve quality of life for older Americans.* (2011-2014, $90,000).
- **PI,** Cornell Institute for the Social Sciences Pilot Grant: *Expertise recognition in cross-cultural collaboration in groups: The impact of computer-mediated and face-to-face communication.* (2010-2011, $10,000, with Co-PI Yuan).

Selected Awards and Honors

- 2017: *Top Four Paper Award*, Human Communication and Technology Division, NCA
- 2016: *CALS Rising Star Faculty Award,* Cornell University
- 2015: *Institute of Social Sciences Fellow*, Cornell University
- 2016: *Best Student-Led Conference Paper Award,* Gender and Diversity in Organizations Division, Academy of Management; *Translational Research Best Conference Student-Led Paper Award,* Gender and Diversity in Organizations Division, Academy of Management
- 2012: *Bronfenbrenner Center for Translational Research Innovative Research Award*
- 2011: *Top Four Paper Award,* Communication and Technology Division, NCA
- 2010: *Top Dissertation Award,* Interpersonal Division, ICA
- 2009: *Cognitive Science Fellowship*, Cognitive Science Program, Cornell University
- 2008: *Top Three Paper Award,* Group Communication Division, NCA
- 2007: *Top Paper Award*, Group Communication Division, NCA; *Outstanding Graduate Teaching Assistant,* Dept. of Communication, Cornell University
- 2006: *Top Four Paper Award,* Information Systems Division, ICA; *Anson Rowe Award for Academic and Research Excellence*, Dept. of Communication, Cornell University

Courses Taught

COMM3400 Personal Relationships & Technology
COMM4400 Communicating Self in Social Media
COMM6460 Graduate Seminar in Mediated Interpersonal Communication
COMM2820 Communication Research Methods

VANESSA K. BOHNS
Cornell University
ILR School
394 Ives Hall
Ithaca, NY 14853
vkb28@cornell.edu

EDUCATION

Ph.D., Psychology, Columbia University, New York, NY	2008
M.Phil., Psychology, Columbia University, New York, NY	2007
M.A., Psychology, Columbia University, New York, NY	2005
B.A., Psychology, Brown University, Providence, RI	2000

ACADEMIC APPOINTMENTS

Associate Professor of Organizational Behavior, Cornell University, Ithaca, NY	2017-present
Assistant Professor of Organizational Behavior, Cornell University, Ithaca, NY	2014-2017
Assistant Professor of Management Sciences, University of Waterloo, ON, Canada	2011-2014
Post-Doctoral Fellow, Management, University of Toronto, ON, Canada	2008-2011

EXTERNAL GRANTS

Insight Grant ($98,870), Principal Investigator Social Sciences and Humanities Research Council (SSHRC) of Canada	2014-2017
Insight Development Grant ($71,728), Principal Investigator Social Sciences and Humanities Research Council (SSHRC) of Canada	2012-2014

PUBLICATIONS

Most Relevant Publications

1. Roghanizad, M. M. & Bohns, V. K. (2017). Ask in person: You're less persuasive than you think over email. *Journal of Experimental Social Psychology, 69,* 223-226.

2. Bohns, V. K. (April 11, 2017). A face-to-face request is 34 times more successful than an email. *Harvard Business Review*.

3. Bohns, V. K. (2016). (Mis)understanding our influence over others: A review of the underestimation-of- compliance effect. *Current Directions in Psychological Science, 25,* 119-123.

4. Newark, D. A., Bohns, V. K. & Flynn, F. J. (2017). The value of a helping hand: Help-seekers' predictions of help quality. *Organizational Behavior and Human Decision Processes, 139,* 18-29.

5. Bohns, V. K., Roghanizad, M. & Xu, A. (2014). Underestimating our influence over others' unethical behavior and decisions. *Personality and Social Psychology Bulletin*, *40,* 348-362.

6. Bohns, V. K. & Flynn, F. J. (2010). Why didn't you just ask? Underestimating the discomfort of help-seeking. *Journal of Experimental Social Psychology*, *46*, 402-409.

7. Flynn, F. J. & Lake (Bohns), V. K. B. (2008). If you need help, just ask: Underestimating compliance with direct requests for help. *Journal of Personality and Social Psychology, 95,* 128-143.

Other Significant Publications

8. Bohns, V. K., Newark, D. & Xu, A. (2016). For a dollar, would you…? How (we think) money influences compliance with our requests. *Organizational Behavior and Human Decision Processes, 134*, 45-62.

9. Bohns, V. K. & Flynn, F. J. (2015). Empathy gaps between helpers and help-seekers: Implications for cooperation. In Robert A. Scott and Stephen M. Kosslyn (Eds.), *Emerging Trends in the Social and Behavioral Sciences.* Hoboken, NJ: Wiley.

10. Bohns, V. K. (August 3, 2015). You're already more persuasive than you think. *Harvard Business Review.*

11. Newark, D., Flynn, F. & Bohns, V. K. (2014). Once bitten, twice shy: The effect of a past refusal on expectations of future compliance. *Social Psychological and Personality Science, 5,* 218-225.

12. Bohns, V. K. (February 9, 2014). Would you lie for me? Why we underestimate our own powers of persuasion. *The New York Times.*

13. Bohns, V. K. & Flynn, F. J. (2013). Underestimating our influence over others at work. *Research in Organizational Behavior, 33, 97-112.*

14. Bohns, V. K. & Flynn, F. J. (2013). Guilt by design: Structuring organizations to elicit guilt as an affective reaction to failure. *Organization Science*, *24,* 1157-1173.

15. Flynn, F. J. & Bohns, V. K. (2012). Underestimating one's influence in help-seeking. In D. T. Kenrick, N. Goldstein, & S. L. Braver (Eds.), *Six Degrees of Social Influence: Science, application, and the psychology of Robert Cialdini* (pp. 14-26). New York: Oxford University Press.

16. Bohns, V. K., Handgraaf, M. J. J., Sun, J. M., Aaldering, H., Mao, C., & Logg, J. (2011). Are social prediction errors universal? Predicting compliance with a direct request across cultures. *Journal of Experimental Social Psychology, 47,* 676-680.

17. Zhong, C., Bohns, V. K. & Gino, F. (2010). Good lamps are the best police: Darkness increases self-interested behavior and dishonesty. *Psychological Science*, *21*, 311-314.

CONFERENCE ACTIVITIES

Conference Talks (Abridged)

1. Sommers, R., DeVincent, L., & Bohns, V. K. (November, 2017). *Judging consent for self, other, and the reasonable person: Behavioral and psychological responses to digital privacy violations.* Paper presented at the annual meeting of the Society for Judgment and Decision Making, Vancouver, BC.

2. Bohns, V. K. (May, 2017). *Empathy gaps in social influence: Underestimating the awkwardness of saying "no".* Paper presented in M. Kardas' (Chair), New directions in empathy gaps: Insights for improving learning, social interactions, and wellbeing, symposium at the Association for Psychological Science annual conference, Boston, MA.

3. Newark, D. N. Bohns, V. K. & Flynn, F. J. (August, 2016). *The value of a helping hand: Do help-seekers accurately predict help quality?* Paper presented at the annual meeting of the Academy of Management, Anaheim, CA.

4. Bohns, V. K., Xu, A. & Newark, D. N. (August, 2015). *For a dollar would you...? How (we think) money influences compliance with our requests.* Paper presented at the annual meeting of the Academy of Management, Vancouver, BC.

5. Bohns, V., Roghanizad, M. & Xu, A. (August, 2014). *I can't believe you agreed to that! Underestimating our influence over others' unethical behavior.* Paper presented in C. Rader and V. Bohns' (Co-Chairs), Under- and over-estimating our influence over others at work, symposium at the annual meeting of the Academy of Management, Philadelphia, PA.

6. Bohns, V. & Flynn, F. (August, 2014). *The "Asking Tax": Different expectations for requested versus volunteered favors and concessions.* Paper presented in J. Schroeder's, (Chair), The pronounced impact of subtle factors in negotiations: Pre-meetings, handshakes, anger, and asking, symposium at the annual meeting of the Academy of Management, Philadelphia, PA.

7. Bohns, V. K. & Flynn, F. J. (August, 2012). *Guilt by design: Structuring organizations to promote guilt as an affective reaction to failure.* Paper presented at the annual meeting of the Academy of Management, Boston, MA.

TEACHING ACTIVITIES

Courses Taught at Cornell
Negotiation & Conflict Resolution; Morality at Work; Introduction to Organizational Behavior

Student Advisees at Cornell
Lauren DeVincent (PhD student '21); Harry Trabue (Undergraduate Honors Student '18); Daniel Stein (Undergraduate Honors Student '17)

RENÉ F. KIZILCEC

Graduate School of Education
Barnum Center, 505 Lasuen Mall
Stanford University
Stanford, CA 94305
kizilcec@stanford.edu

EDUCATION

Ph.D., Communication, Stanford University, 2017
    Dissertation: *Identity, threat, and belonging in online learning environments*
    Committee: Geoff Cohen (chair), Jeremy Bailenson, Jeff Hancock, John Mitchell, Candace Thille

M.S., Statistics, Stanford University, 2015

B.A. (1st class honors), Philosophy and Economics, University College London, 2011

ACADEMIC POSITIONS

Starting July 2018   Assistant Professor, Information Science Department, Cornell University

2017 – present   Director of Digital Learning Research, Stanford Graduate School of Education, Stanford University

2017 – present   Assistant Research Professor, School of Computing, Informatics, and Decision Systems Engineering, Arizona State University

RELEVANT PUBLICATIONS

Kizilcec, R. F., Saltarelli, A., Reich, J., & Cohen, G. L. (2017). Closing global achievement gaps in MOOCs. *Science, 355(6322)*, 249.

Kizilcec, R. F. & Cohen, G. L. (2017). Eight-minute self-regulation intervention raises educational attainment at scale in individualist but not collectivist cultures. *Proceedings of the National Academy of Sciences (PNAS), 114*(17), 4348–4353.

Kizilcec, R. F., Perez-Sanagustin, M., & Maldonado, J. J. (2017). Self-Regulated learning strategies predict learner behavior and goal attainment in Massive Open Online Courses. *Computers & Education, 104*, 18-33.

Kizilcec, R. F., Davis, G. M., & Cohen, G. L. (2017). Towards equal opportunities in MOOCs: Affirmation reduces gender & social-class achievement gaps in China. In *Proceedings of the ACM Conference on Learning at Scale* (L@S).

Eckles, D., Kizilcec, R. F., & Bakshy, E. (2016). Estimating peer effects in networks with peer encouragement designs. *Proceedings of the National Academy of Sciences (PNAS), 113*(27), 7316-7322.

Kizilcec, R. F. (2016). How Much Information? Effects of Transparency on Trust in an Algorithmic Interface. In Pro*ceedings of the ACM Conference on Human Factors in Computing Systems* (CHI).

Kizilcec, R. F. & Schneider, E. (2015). Motivation as a Lens to Understand Online Learners. ACM *Transactions on Computer-Human Interaction (TOCHI), 22*(2).

AWARDS

Nathan Maccoby Outstanding Dissertation Award, Stanford University, 2017

Best Paper Award, ACM Learning at Scale Conference, 2017

FELLOWSHIPS AND GRANTS

Computational Social Science Fellowship, Stanford University, $10,000 research funding, 2015

Stanford Interdisciplinary Graduate Fellowship, Ph.D. funding for three years, 2014-17

SPICE grant for Stanford Workshop on Questionnaire Design, Stanford Office of the Vice Provost for Graduate Education, $1,500, 2014

Faculty Seed Grant for Innovation in Researching Online Courses, Stanford Office of the Vice Provost for Online Learning, $7,100, 2013

RELEVANT PRESENTATIONS

"Making Online Learning Work for Everyone." Invited keynote at the Conference on Higher Education Research, Higher School of Economics**,** Moscow, Russia, October 2017.

"Lowering Social Psychological Barriers in Higher Education." Invited talk at Pontifical Catholic University of Chile, Santiago, Chile, October 2016.

"Psychological interventions in online learning." Invited talk at the Institute of Design, UC Berkeley, November 2015.

"Psychological interventions in online learning." Invited talk in the xTalk series, Massachusetts Institute of Technology, 2015.

"Peer encouragement designs: Estimating peer effects of social feedback." Conference presentation at CODE@MIT, Boston, MA, 2015.

DREW B. MARGOLIN

Department of Communication, 472 Mann Library Building
College of Agriculture and Life Sciences
Cornell University
Ithaca, New York 14853-7601
dm658@cornell.edu

EDUCATION

2012   Ph.D. Communication
            University of Southern California
            Major Areas of Study: Communication Networks, Semantic Networks,

            Dissertation: *The Evolution of Social and Semantic
               Networks in Epistemic Communities*
            Committee: Peter Monge (Chair), Janet Fulk, Thomas Valente

1996   B.A. Economics, *cum laude* with distinction in major
            Yale University

ACADEMIC POSITIONS

2013-present   Assistant Professor, Communication and Technology
               Department of Communication
               College of Agriculture and Life Sciences
               Cornell University

2012-2013   Post-Doctoral Research Associate
               College of Computing and Information Science
               Northeastern University
               Lab Director: David Lazer

2012-2013   Visiting Fellow
               Institute for Quantitative Social Science
               Harvard University

RELEVANT PUBLICATIONS

Refereed Journal Articles and Proceedings

Margolin, D., Hannak, A., & Weber, I. (2017). Political Fact Checking on Twitter:
    When Do Corrections Have an Effect? *Political Communication.*
     doi.org/10.1080/10584609.2017.1334018

Hannak, A., **Margolin, D.,** Keegan, B., Weber, I. (2014). Get back! You don't know me
    like that: The social mediation of fact checking interventions in Twitter

conversations. In *Proceedings of the 8th International Conference on Weblogs and Social Media (ICWSM)*. AAAI.

He, X., Lu, D., **Margolin, D.**, Wang, M., El Idrissi, S., Lin, Y-R. (2017). The Signals and Noise: Actionable Information in Improvised Social Media Channels During a Disaster. *WebSci '17.* ACM

Lin, Y-R., **Margolin, D.,** & Wen, X. (2017). Tracing Distress Following Terrorist Attacks Using Social Media Streams. *Risk Analysis*. 37(8), 1580–1605. https://doi.org/10.1111/risa.12829

Lin, Y.-R., & **Margolin, D**. (2014). The ripple of fear, sympathy and solidarity during the Boston bombings. *EPJ Data Science*, *3*(1), 1–28.

Margolin, D. B., Goodman, S., Keegan, B., Lin, Y.-R., & Lazer, D. (2016). Wiki-worthy: collective judgment of candidate notability. *Information, Communication & Society*, 1–17. http://doi.org/10.1080/1369118X.2015.1069871

Lin, Y. R., **Margolin, D.,** Keegan, B., & Lazer, D. (2013). Voices of victory: a computational focus group framework for tracking opinion shift in real time. In *Proceedings of the 22nd international conference on World Wide Web*(pp. 737-748).

Lin, Y. R., **Margolin, D.,** Keegan, B., Baronchelli, A., & Lazer, D. (2013). #Bigbirds Never Die: Understanding Social Dynamics of Emergent Hashtags. In *Proceedings of the 7th International Conference on Weblogs and Social Media (ICWSM)*. AAAI.

Invited Journal Articles and Book Chapters

Margolin, D. (in press). A satisficing search model of text production. In Brooke Foucault Welles and Sandra González-Bailón (Eds.). *The Oxford Handbook of Networked Communication*. Oxford University Press.

Margolin, D. B., & Monge, P. (2013). Conceptual retention in epistemic communities: Examining the role of social structure. In P. Moy (Ed.), *Communication and community* (pp. 1-24). New York: Hampton Press.

AWARDS & HONORS

2017   Innovative Teacher Award -- Cornel College of Agriculture and Life Sciences

2014   Top Reviewer Award – 6th International Conference on Social Informatics (SocInfo)

GRANTS AWARDED

Co-PI -- Social Connections to Local Food Producers using Immersive and Non-Immersive Video. Hatch grant. $151,145

PI -- Collective sense making following a terrorist attack: The immediate and long-term impact on public resilience. National Science Foundation. $178,055. 2016-2018

Co-PI -- Improving distributed teamwork through mobile robotic telepresence systems. National Science Foundation. $1,200,000. 2016-2019

PI -- Collective Indicators of Community: Community Supported Agriculture and Social Media. Hatch grant. $30,000. 2014-2016.

PI -- The Dissemination and Refutation of Rumor. Institute of Social Sciences of Cornell (ISS). $13,470.

GRANTS PENDING

PI – CHS Medium: Good Samaritan by design: Understanding and designing for pro-social behavior in in social media. National Science Foundation. $1,199,166.
PI -- CAREER: Spontaneous Organization in Digital Crowds: A Systematic Study. National Science Foundation. $939,595.

RELEVANT CONFERENCE PRESENTATIONS

Margolin, D., Fownes, J., Chao, Y., Hodge, A., Chatrchyan, & Allred, S. (2017). Tweeting Climate Change: Who or What Motivates Politicians to Address The Topic?. Paper presented at the annual meeting of the International Communication Association, San Diego, CA, May 25-29.

Margolin, D., Hannak, A., & Weber, I. (2016). Political Fact Checking on Twitter: When Do Corrections Have an Effect? Paper presented at the annual meeting of the International Communication Association, Fukuoka, Japan, June 8-11.

Margolin, D., Hannak, A**.** Keegan, B., & Weber, I. (2014).The Social Mediation of Political Fact-Checking During the 2012 U.S. Electoral Campaign. Paper presented at Political Network Conference, Montreal, Canada, May 29-31.

Margolin, D., Kennedy, R., & Lazer, D. (2013, October). Who Told You That? The Diffusion of Information and Misinformation About the Boston Marathon Bombings. Poster presented at the Workshop on Information and Networks (WIN), New York City.

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Janis Whitlock
Biographical Sketch

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Professional Preparation

University of California at Berkeley	Social Science	B.A., 1988
University of North Carolina at Chapel Hill	Public Health	M.P.H, 1992
Cornell University	Human Development	Ph.D., 2003

Appointments

2006-present	**Research Scientist**, Bronfenbrenner Center for Translational Research, Cornell University, Ithaca, NY
2003-present	**Director**, Cornell Research Program on Self-Injurious Behavior in Adolescents and Young Adults, Cornell University, Ithaca, NY
2003-2006	**Senior Research Associate**, Family Life Development Center, Cornell University, Ithaca, NY
2001-2003	**Research Assistant**, Professor Stephen Hamilton, Department of Human Development, Cornell University, Ithaca, NY
1996-1997	**Statewide Community Planning for HIV Prevention Director**, HIV Coordinating Council of New Mexico, Albuquerque, NM
1994-1995	**Director of Education and Training**, Planned Parenthood of the Capital and Coast, Raleigh, NC

Publications

Most closely related to this project

1. Bazarova, N. N., Choi, Y. H., Sosik, V., Cosley, D., & Whitlock, J. (2015). Social sharing of emotions on Facebook: Channel differences, satisfaction, and replies. *Proceedings of the 18th ACM Conference on Computer-Supported Cooperative Work & Social Computing:* 154-164, March 14-18, Vancouver, Canada.
2. Duggan, J.M., Whitlock, J. (2012). An investigation of online behaviors: Self-injury in cyber space. *Encyclopedia of Cyber Behavior.* IGI Global.
3. Whitlock, J.L., Purington, A., Gershkovich, M. (2009). Influence of the media on self injurious behavior. In *Understanding Non-Suicidal Self-Injury Current Science and Practice,* edited by M. Nock. American Psychological Association Press. 139-156.
4. Whitlock, J.L., Powers, J.L., Eckenrode, J. (2006).The virtual cutting edge: Adolescent self-injury and the Internet. Special Issue on Children, Adolescents and the Internet, *Developmental Psychology. 42*(3): 407- 417. PMID: 16756433.
5. Whitlock, J.L., Lader, W., Conterio, K. (2007). The Internet and self-injury: What psychotherapists should know. *Journal of Clinical Psychology/In Session 63*: 1135-1143.

Other significant publications

1. Whitlock, J.L., Wyman, P., & Moore, S. (2014). Connectedness and suicide prevention in adolescence. *Suicide and Life Threatening Behavior. 44*(3) 247-272.

2. Whitlock, J.L., Exner-Cortens, D. & Purington, A. (2014). Validity and reliability of the non-suicidal self-injury assessment test (NSSI-AT). *Psychological Assessment 26*(3): 935-946.
3. Eisenberg, D., Golberstein, E., Whitlock, J., Downs, M. (2012). Social contagion of mental health: Evidence from college roommates. *Health Economics, 22*(8): 965-986. PMCID: PMC4381550

Synergistic Activities

- Co-PI, Centers for Disease Control and Prevention (CDC): Testing the Efficacy of a Strengths-Based Curriculum to Reduce Risk for Future Sexual Violence Perpetration among Middle School Boys. 1,800,000 / 4 years. 9/30/16 – 9/29/20.
- Co-PI, NSF-IIS, HCC Medium: *Building multi-theoretical models and multi-functional systems of online disclosure to improve well-being and disclosure outcomes for young adults*. (NSF IIS 1405634, for $1,179,821, 2014-2018; PI: Bazarova). 6/2014 – 6/2019.
- PI, National Institute for Food and Agriculture /Hatch: Assessing the Efficacy of a Mobile Intervention for Reducing Self-Injury. $90,000/ 3 yrs. Role: PI. 10/17 – 9/20.
- PI, National Institute for Food and Agriculture /HATCH: *Adolescent sexual health in the digital age: Provider and parent assessment of knowledge and need.* 10/2015 – 10/2018.
- National Advisory Board Member, Crisis Text Line
- Research Advisory Board Member, JED Foundation for Suicide Prevention

Collaborators and Other Affiliations
Collaborators:
Lloyd-Richardson, Elizabeth. UMass, Dartmouth; **Haskings, Penelope**; Curtin University; **Baetens, Imke**, University of Belgium, Brussels**; Muhelenkamp, Jennifer**, University of Wisconsin; **Wyman, Peter**, Universdity of Rochester; **Eckenrode, John,** Cornell University; **Powers, Jane**, Cornell University; **Anderson, Adam**, Cornell University; **Cosley, Daniel,** Cornell University; **Exner-Cortens, Deinera**, University of Calgary; **Wentworth, Leah**, New York State Department of Health; **Sellars, Debbie**, Cornell University; **Heath, Nancy**, McGill University; **Eels, Greg**, Cornell University; **Marshel, Tim,** Cornell University**; Lewis, Stephen**, University of Guelph; **Ernhout, Carrie**, University of Buffalo (doctoral student).

Graduate Advisors:
PhD Advisor: Dr. Stephen Hamilton
MPH Advisor: Dr. Vangee Foshee

Thesis advisees:
Nicole Ja (graduated)
Kaylee Kruzan (3rd year)
Celine Cammarata (3rd year)

Proposed Timeline

ITEM	Y1	Y2	Y3
Planning period	▓		
Study design	▓		
Development of study platform	▓		
Study deployment, data collection	▓	▓	
Data cleaning and analysis		▓	
Drafting of academic articles		▓	▓
Capstone Lecture			▓
Presentation of findings at conferences & meetings			▓
Planning for next phase of project/larger project			▓
Seeking support for larger project	▓	▓	▓
Regular group meetings	▓	▓	▓
Meetings with stakeholders & partners	▓	▓	▓