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Senior Capstone Research Project

Fear of the Future: A Sociological Profile of Anxiety in College

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B.S. Sociology

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Dedication:

To my mother, Antonia Hannah, who loves me unconditionally, and from whom I inherited anxiety. Thank you for dealing with my bills, taxes, and insurance while I am drowning in papers, and for all the countless other things you do for me every day. I love you.

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I would like to sincerely thank all of the 415 Syracuse University students who participated in this survey, the faculty and staff who helped distribute it, and the Syracuse University counselors who volunteered their time to be interviewed. I would also like to thank my adviser, Professor Jacqueline Orr, for inspiring this project, believing that I could pull it off, helping me revise, and supporting me through every step of it. Additional thanks to my wonderful reader, Max Malikow, and to Wyatt Corman for the assistance in statistics.

Abstract

College students are currently experiencing what psychologists and media outlets refer to as an "anxiety epidemic." Undergraduates are self-reporting and seeking counseling for anxiety in record numbers. *Fear of the Future: A Profile of Anxiety in College* is an exploratory sociology project whose aim is to understand the experience, manifestations, and root causes of anxiety in late Millennial college students. The core research involves a survey of over 400 Syracuse University undergraduates and three interviews with some of Syracuse University's professional counselors. The demographic findings of the survey and the common threads among statements from counselors are synthesized to create a broad illustration of the ways culture and college life have fostered ever-rising levels of general and disordered anxiety.

One of the primary areas of investigation is social media's contribution to a rise in anxiety among college aged adults. The research helps to construct that argument that modern college students are subjected to a new kind of panopticon; one that operates through a socially mandated participation in a place of constant visibility. Counselors described how social media use behaviors can create extreme pressure for students, especially as many students rely on it as a source of cultural capital. The survey results showed a subtle but distinct correlation between both hours per day spent online and frequency of device checks and levels of anxiety. The results also confirmed that most students use a variety of social media platforms daily, and that these platforms are the primary source of news intake for college students. I construct the argument that the complete absorption of college students into the social media panopticon is one of the root causes of the anxiety epidemic.

The study also investigates students' relationships with psychopharmaceuticals, and the culturally informed reasons they choose (or reject) big pharma's solutions for anxiety and related mood disorders. Over 30% of survey participants self-reported some form of disordered anxiety, and over 20% of participants were currently taking an antidepressant to treat anxiety. The study reveals both a pervasive ethos of trust in psychiatry and the pharmaceutical industry, and a simultaneous lack of education about the risks and side effects of certain commonly prescribed medications. At this point, I show that antidepressant psychopharmaceuticals have become, for better or for worse, an integral part of life and identity for a large fraction of college students. I proceed to criticize, in a cost-benefit analysis, the trend toward casual and commonplace use of antidepressants.

The most commonly self-reported source of anxiety was not technology, interpersonal relationships, or volume of academic work. Instead, a majority of survey participants said that fear about future achievement is their greatest psychological stressor. The sociological implications of this finding are very important to consider in a profile of college anxiety. Fear of the future might be informed by social media, channels of information, reliance on mood-altering substances, socioeconomic background, gender, and parenting styles. All these factors are considered in a comprehensive discussion of the unique circumstances that produce anxiety for current students.

Executive Summary

This exploratory study, which includes a survey of over 415 SU undergraduates and interviews with three of SU's professional counselors, was conducted with the aim of constructing a broad profile of anxiety in college. It investigates the cultural roots, demographic trends, social conditions, and manifestations of anxiety and panic. The survey results show that there is a distinct correlation between frequency of social media/internet use and anxiety. A similar correlation was found between responsiveness to cell phone notifications and anxiety. These findings are suggestive of a causal relationship between high volume technology use and general anxiety. Over 30% of survey participants self-reported some form of anxiety disorder, and over 20% were currently taking an antidepressant to treat anxiety. These outcomes, although not drawn from a statistically representative sample, are sufficient to validate the idea of an "anxiety epidemic," as well as evidence that a substantial portion of college students rely on psychopharmaceuticals. Nearly 80% of survey respondents were female, indicating that college women more closely identify with, and/or are more willing to address the issue of anxiety. The consensus between the counselors, based on their statements during the interviews, is that the root causes of anxiety in millennial college students are a combination of technology use behaviors and particular parenting styles that engendered it. The most surprising finding of the study was that the number one cause of anxiety, according to students, is fear about future achievement. A majority of participants reported that fear of the future causes them more stress than any other factor in life, including academic work.

Chapter 1: Introduction

Undergraduate students at Syracuse University in the 2017 school year represent the last leg of the millennials; a generation culturally removed from its predecessors by rapidly evolving technologies and changing standards of communication. College students in the United States are currently seeking counseling in record numbers for mental health issues, most commonly anxiety and depression. In recent history, depression has been the most common mental health concern, but anxiety has risen to a close second according to the National Institute of Mental. In 2017 the Counseling Center at Syracuse University reported that anxiety is the number one issue students are seeking help for by a margin of almost 20% over depression. In total, nearly 70% of students who come to the Counseling Center report problematic anxiety (SU Student Association Mental Health Action Team 2017). Health College-aged adults are also a primary consumer group of psychopharmaceuticals for treatment of anxiety. More sociological research is needed to investigate the complex relationships between the culture of current college students and their record high levels of anxiety and panic.

This project was enacted to benefit Syracuse University students, counselors, advisers and administrators by giving voice to the anxiety epidemic and the unfulfilled needs of current students. The research is exploratory in nature, aiming to build a profile of the ways anxiety affects Syracuse University students and uncover its cultural roots. The study attempts to uncover demographic trends in the experience and manifestations of anxiety and analyze these trends to broadly illustrate how the sociocultural climate of modern college life interacts with different forms of anxiety. I have conducted this research in hopes that it will begin to clarify how the rising tide of self-reported anxiety is socially informed, and how we can begin to address it in a productive and reflective manner.

The core of the study consists of a short, multiple choice survey which includes an open comments section at the end for participants to share their thoughts, input and stories on the topics presented. 415 total undergraduate students participated in the survey, and over 50 of them entered personal commentary. The raw data from the survey are condensed in to several figures to reflect important statistical findings. The survey portion of the study was followed by a series of 3 in-person interviews with professional therapists at the Syracuse University Counseling Center. The insights of the counselors were extremely valuable to the study, both as validation for (or contradiction to) the demographic findings of the survey, and as they provide personal insights that are beyond the scope of what the survey gathered. I draw on all these topics with input from survey and interview participants to make policy recommendations for Syracuse University (and other universities) to help alleviate some of the collective psychological suffering that is evidently on the rise.

Although the project is exploratory and largely qualitative, there are several primary areas of investigation within the survey and interview questions. Firstly, the questions interrogate the gendered experiences of anxiety and panic in the college setting. The questions compare, both qualitatively and demographically, how college men and women express and relate to socially constructed concepts of normal and disordered anxiety. The questions also examine the social progression of ideas about what constitutes an anxiety disorder, and the stigma associated with anxiety as a mental illness. I make the argument that the culturally accepted definition of what constitutes disordered anxiety, and what constitutes mental illness in general, has diverged from the DSM definition of an anxiety disorder. As conversations about mental health become increasingly publicized, the social stigma surrounding the topic of mental illness has begun to fade, and more students who may not previously have self-identified as experiencing symptoms of

mental illness are seeking counseling. This project also aims to understand the social and cultural pressures that may be contributing broadly to the recent increase in students seeking counseling for anxiety.

Modern technologies, especially social media, have fundamentally changed the way students socialize, demonstrate cultural capital, and establish personal identity. The survey interrogates the modes and frequencies of student's interaction with their devices, and this data set is cross-analyzed with the students' answers to questions about anxiety. The outcome of this cross-analysis establishes a set of technology use behaviors that correlate positively with anxiety. Counselors also gave their input on the ways modern technology and social media can impact mental health. Both the Syracuse University counselors and many academic psychologists before them have pointed to social media as the primary cause of emerging psychological distress for teenagers and young adults. Previous literature, survey data, and qualitative interview data are combined to construct a novel sociological argument about how the new "techno-panopticon," a term that refers to surveillance and public scrutiny through social media and the social mandate of being constantly online fosters anxiety. It is within this new techno-panopticon, as the survey data also shows, that most students receive their news and information. This new channel of information has the ability to shape the truth and worldview of each user, and as I will argue, to deliberately manufacture panic. This section of the project reaches a logical conclusion about the collective psychological impact of social media and the social mandate of being online.

The study also examines the social location of antidepressants in college life. The survey and interviews reveal important insights about the sociology of antidepressants, and the ideas of students about psychopharmaceuticals as a form of social control. The relationship of students to these medications is complex and brings up questions of personal identity and sense of

reliance/intrapersonal control. We can be sure from previous research by the NIMH and many other entities that psychopharmaceuticals have become increasingly commonplace, and their uses have evolved to range from treatment of severe symptoms of depression to mild anxiety and insomnia. They are being prescribed to children and teens in record numbers. As the survey will reveal, a large fraction of college undergraduates self-identify with, or have been diagnosed with, an anxiety disorder. Psychopharmaceuticals, including SSRIs, SNRIs, tricyclics, MAOI's and benzodiazepines are the most commonly chosen course of therapy for anxiety disorders in college. The survey questions first attempt to uncover the current impact of social stigma surrounding anxiety disorders and antidepressants. Of those students who do take antidepressants, it investigates how these medications help (or do not help) to mitigate anxiety, and the complex feelings of patients toward their own medications. Finally, the project brings into question the social conditioning toward trust in psychiatry and the pharmaceutical industry, revealing this trust as a primary motivation for the choice to begin taking antidepressants. Aside from antidepressants, many students choose self-medication, psychotherapy, or both as a means of coping with disordered anxiety. The project aims to shed light on students' motivations for choosing or rejecting psychopharmaceuticals as a way of life.

In the interviews that followed the survey, the counselors at Syracuse University introduced a new topic to the sociological discussion; the impact of parenting styles on the collective psyche of the current college generation. According to the counselors, the phenomenon of "helicopter parenting," which has been detailed by many sociologists, has had a severe psychological impact on students. They hypothesized that over-protective parenting, which was a social norm for parents of younger millennials, fails to prepare children for difficulty and disappointment in the real world. Thus, as the children of helicopter parents reach college, they are fraught with anxiety and

extremely prone to depression as they are deprived for the first time of emotional shelter. Although the discussion on this topic is limited to speculation as the survey questions did not address parenting styles, it is nonetheless an important piece in this broad profile of a generation's anxiety, especially as it relates to the most frequently selected cause of panic among survey participants: fear about future achievement.

Chapter 2: Review of Literature

The United States is currently experiencing what the APA calls a mental health crisis on college campuses. The idea that there is a mental health crisis on college campuses is not new: it has been a subject of books and scholarly articles for over a decade, beginning with *College of the Overwhelmed* by Richard Kadison (2004). Mainstream media, including the New York Times, Huffington Post, and Psychology Today have all written on this topic recently. The 2014 National Survey of College Counseling Centers reported that 52% of counseling center clients have what they classify as "severe psychological problems," an 8% increase from 2013. In 2016, Boston University reported that the number of students seeking crisis counseling reached a record high (Brown 2016). A number of other colleges have recently experienced similar increases in demand for counseling (Beiter 2014). College counselors have also seen a notable increase in the number of students with chronic anxiety in the past 5 years (APA 2017). These findings are alarming considering how high the prevalence of anxiety in college students already was back in 2010. Eisenberg *et. al* found in a 2010 study (N=2843) that the prevalence of depressive and/or anxiety disorders among undergraduates was 15.6%. Additionally, 2% of respondents (N=57) had suicidal ideation in the past four weeks (Eisenberg 2010). In 2014, Penn State's Center for Collegiate Mental Health announced that anxiety had surpassed depression as the number one mental health issue among clients (Hoffman 2015). 18-22 year old college students have higher levels of anxiety

than their older peers, as well as an increased tendency to use destructive coping mechanisms such as drugs and alcohol than older students (Martin 2018).

In October of 2017, the New York Times cover story posed the question; “Why are more American teenagers than ever suffering from severe anxiety?” The possible contributing factors suggested by the author range from conflicts with family and classmates to fear of terrorism, but the psychiatrists interviewed insist that social media is the major underlying cause (Denizet-lewis 2018). Facebook, Instagram, Snapchat, Reddit, Twitter, and other platforms are an integral part of modern life for teens and college students, and psychiatrists are beginning to suspect that the rapidly evolving culture of technology bears some responsibility for heightened anxiety levels.

Several studies have already been published suggesting that frequent social media, phone, and internet use are predictors of anxiety and depression in adolescents. Lepp *et al.* found that cell phone use was positively correlated with anxiety and negatively correlated with GPA and life satisfaction in college students (Lepp 2014). Other studies have also determined that people who have an addictive relationship with their smartphones experience higher levels of anxiety. (Beranuy 2009, Jenaro 2007, Lu 2011). Merlo suggests that even non-addictive cell phone use may lead to elevated anxiety because of the perceived obligation to be constantly available for communication (Merlo 2008). In a 2013 study, Rosen *et. al.* examined the relationship between withdrawal from technologies, particularly Facebook, and anxiety levels in people of all ages. They found through a series of comprehensive surveys (N=1143) that anxiety about being disconnected from technologies was a strong predictor of psychological problems including paranoid, antisocial, and compulsive disorders (Rosen 2013). Kalpidou *et. al.* learned that students who have larger Facebook networks report lower levels of personal satisfaction and emotional adjustment to college life (Kalpidou 2011). Another study conducted at the University of

Wisconsin found that excessive time spent on Facebook was a strong predictor of loneliness (Song 2014).

In a study of problematic internet use, Elias Aboujaoude claims that being deeply connected to the global community through the internet can affect certain people positively, but in some it causes “a state that appears to meet the DSM definition of a mental disorder” (2010). He cautions that excessive internet use may be causing broad psychological harm across cultures (Aboujaoude 2010). In 2012, Rosen and Whaling coined the term “iDisorder” to describe a perceived negative relationship between frequent technology use and mental health (Rosen 2013). It is evident from a body of previous research that young people across western cultures do experience psychological discomfort when separated from their personal devices for prolonged periods. In the UK, approximately 68% of young adults never go an hour without checking their phones (Anxiety UK 2012). These studies are not able to establish, however, whether the relationship between social media use and clinical anxiety in young people is causal. It may be the case that people who are prone to anxiety and depression choose to spend more time online than their neurotypical counterparts as a coping mechanism, as opposed to having psychological problems as a result of excessive time online.

Despite the number of studies which corroborate the hypothesis that technology use is positively correlated with psychological stress, there are also several studies which refute it. Chen and Tzeng found that women who use the internet for social communication and information seeking have better academic performance than those who rarely do so (Chen & Tzeng 2010). It is important to distinguish general anxiety from social anxiety in discussions of technology-anxiety relationships. While much literature has concluded that excessive technology use leads to general anxiety, it may actually be a solution for social anxiety. Katya Fernandez *et al.* suggest that people

with high social anxiety use Facebook for facilitated social interaction; thus, it benefits them by allowing them to form social ties without provoking anxiety (Fernandez 2012). A longitudinal study completed in 2008 validated his hypothesis: it found that frequent Facebook use was advantageous to people with low self-esteem because it helped them forge new social relationships (Steinfeld 2008). This study seems to imply that social anxiety motivates technology use rather than being caused by technology use. Some studies even report no correlation between social media use and depression/anxiety: in a sample of 190 teenagers, Jelenchick and Eickhoff found no relationship (Jelenchick 2013). Davila *et al.* concluded that it is the quality rather than the quantity of social media time that predicts the effects of social networking on mental health. (Davila 2012). Social media and the age of the internet have undoubtedly been parents of a new techno-culture, one which demands a polished public face that is entirely separate from private life. The broad psychological effects of this new culture are a subject of ongoing debate in both psychology and sociology.

What causes the growing prevalence of chronic anxiety in the college population is a complex question that requires both psychological and sociological demographic data to begin to answer. Some sociologists have suggested that trait anxiety in late millennials is the fault of a parenting style specific to generation X; “helicopter parenting.” Dr. Holly Schiffrin studied a population of 297 college students and measured their parenting styles against their levels of depression, anxiety, and overall satisfaction with life. She found that students who reported more controlling parents had significantly higher levels of depression and anxiety. She argues that this outcome is the long term result of a violation of children’s psychological need for autonomy and self-reliance (Schiffrin *et al.* 2013). In a study of parents and children with anxiety, Dr. Julia Asbrand observed that children with Social Anxiety Disorder were much more likely to have

parents who hovered excessively and intervened in simulated tasks assigned to the children. She explains that by controlling or intervening unnecessarily in children's daily activities parents can deprive growing minds of learned self-efficacy, leading to long term psychological consequences including severe anxiety in college (Asbrand 2017). These findings are strong evidence that the sociocultural mode of parenting that has raised the current generation of college students has contributed to the high prevalence of anxiety.

Women are considerably more prone to clinical anxiety disorders than men. The NIMH reports via the work of Kessler *et al.* that women are 60% more likely than men to experience an anxiety disorder at some point in life (2005). Abdel-Khalek and Lester examined gender differences in anxiety among college students in a 2006 cross-cultural study of American and Kuwaiti students. Female students in both groups had significantly higher mean anxiety levels than men, with Kuwaiti women scoring higher in anxiety than American women (Abdel-Khalek & Lester 2006). Their findings support Kessler's comprehensive study and additionally indicate that heightened anxiety in females is not limited to American culture. There may be profound differences in the experiences and symptoms of anxiety between men and women. In a large secondary analysis of data from the Collaborative Psychiatric Epidemiology Studies (CPES) in 2011, McLean *et al.* reported that American women are 70% more likely than men to be diagnosed with an anxiety disorder at some point in life (N=20,013). Additionally, women diagnosed with anxiety disorders are more likely than men to experience comorbid bulimia nervosa or major depression. They found that anxiety is not only more prevalent in women, but also more disabling. A notable caveat in their conclusion is that there was no significant gendered difference in the prevalence of social anxiety, which they distinguish from general anxiety and panic disorder (McLean *et al.* 2011). The Anxiety and Depression Association of America (ADAA) confirms that

women are twice as likely to have an anxiety disorder and more likely than men to suffer from multiple psychiatric disorders. There are measurable neurochemical differences between men and women which may partially explain these disparities (ADAA.org). The heightened prevalence of anxiety disorders among women is likely related to gendering of the cultural taboo surrounding mental illness. Women are also far more likely than men to seek professional help for an anxiety disorder. The National Institute of Mental Health has found that men are less willing to discuss their own mental health and emotions than women, and subsequently less often seek help for mental health crises. Furthermore, men tend to express their anxiety differently than women in clinical settings (NIMH.nih.gov). The different lived experiences, manifestations, and expressions of social anxiety, panic disorder and GAD between men and women undoubtedly affect our cultural constructions of anxiety.

American adolescents have a very low level of mental health literacy, a reality that unfortunately coincides with record high anxiety levels in teenagers. Teens and college students are frequently underprepared to cope with the challenges of the modern techno-culture and undereducated about the prevalence of mental problems in their own generations. A 2016 study by Coles *et al.* aimed to assess mental health literacy among 6-18 year-olds in order to better understand why 80% of youth with mental disorders fail to receive treatment (N=1,104). The participants had much better overall recognition of depression than of anxiety, and the female students were significantly better able than male students to identify symptoms of both anxiety and depression (Coles 2016). This finding suggests that women are not only more susceptible to anxiety, but more readily identify it in social settings. Women's higher levels of mental health literacy are very telling about the gendered social constructions of depression and anxiety. Perhaps

it is not only that women are better able to identify depression and anxiety, but that men are less willing to do so because it is less socially acceptable for them.

Some sociologists and historians have claimed that the ever-increasing global presence of anxiety is a cultural phenomenon rather than a medical one. In his book *Culture and Panic Disorder*, sociologist Byron Good examines the culturally situated nature of anxiety. He argues that it is difficult to establish the validity of a psychiatric classification across cultures because the constitution of a neurotypical personality is highly varied across cultures and time periods (Good 2009). This is an important consideration in any demographic study of panic disorder and any DSM anxiety disorders. Dr. Ian Dowbiggin believes that the increased global prevalence of anxiety disorders is a result of a new social ethos which teaches people that anxiety is “a socially and medically legitimate response to life in the modern age.” In other words, prior to the second world war, people did not acknowledge anxiety as a legitimate mental illness and thus did not self-report anxiety in clinical settings, or even identify it in others. (Dowbiggin 2009). The DSM III, published in 1980, marked the first time that the ASA identified anxiety disorders as a specific mental illness that is distinct from major depression. Dr. Dowbiggin asserts that rather than a newly discovered mental illness, the subcategories of anxiety described in the DSM III (GAD, SAD, and PD) were merely a validation of a burgeoning cultural ethos of victimization and powerlessness.

In his famous book “The Myth of Mental Illness,” psychiatrist Thomas Szasz famously hypothesized that there is no such thing as an illness of the mind. “Mental illness,” according to Szasz, is an inappropriate metaphor for a purely cultural phenomenon (Szasz 1961). Other academics have taken a less extreme approach to the same principle. Sociologist Allan Horowitz explains in his book *Creating Mental Illness* that while mental illness is very real in its effects, it is understood according to whatever criteria a particular cultural group uses to define it. Subsequently, our

understanding of what is a medically legitimate mental illness changes over time (Horowitz 2007). It may also be the case, as Dowbiggin suggests in his 2009 study, that culture informs the ways in which psychological stress manifests.

The popularity of psychopharmaceuticals as a solution for depression and anxiety disorders has been gradually increasing since the 1950s. Dr. James Tracy has written at length about the ways in which the commodification of psychopharmaceuticals has the power to affect our cultural understanding of mental and emotional health. American culture is that of capitalism, and thus the corporations who own and disseminate these drugs have become empowered to dictate what constitutes a legitimate mental illness. Anti-depressants, like smart phones and social media, have become ubiquitous in our culture, and particularly so for millennials, who were the guinea pigs for second-generation SSRIs (Tracy 2004). Tracy questions whether psychopharmaceuticals became so commonly prescribed by universal medical necessity, or rather because big pharma has advertised so convincingly to society that these drugs are a miraculous solution to the real traumas and stresses of life. Another New York Times headline by Duke University psychiatrist Doris Iarovici recently referred to Millennials as “the antidepressant generation.” Between 1994 and 2006, the percentage of college students using antidepressants tripled while advertising of the drugs simultaneously became more commonplace (Iarovici 2014).

Antidepressants are the most common social problem that sociologists rarely talk about. A researcher who studied the lived experience of college students on SSRIs in 2010 learned that most students who take them feel a sense of emotional numbness and generally dislike their medications, even if they find them useful (Aselton 2010). Although they have been proven repeatedly by research to be effective at treating depression and chronic anxiety, it is clear that many college students who elect to take them also experience negative side effects. Qualitative researcher

Pamela Aselton's subjects reported feelings of increased passiveness, inability to express emotion, lack of empathy, and "dehumanization." Many cited pressure to perform academically as the primary reason they continued to take antidepressants, and some were embarrassed to talk about their medications (Aselton 2013). There is reason for concern that certain SSRIs may lead to suicidal ideation; which is very problematic for teenagers as they are already at higher risk for suicidal ideation (NIMH 2006). After this public health warning was announced by the NIMH, a mandated government advisory for SSRIs went into effect in 2007. Sexual dysfunction is also a common side effect of many antidepressants; one that can be particularly embarrassing and damaging to the quality of life of college students (Higgins 2010). Estimates of the number of college counseling center clients who have been prescribed antidepressants range from 25-50%, but there have been very few studies besides Aselton's thus far that examine the lived experience of students who take them.

Although non-benzodiazepine antidepressant medications are not generally considered addictive substances, discontinuation of them after long term use can cause withdrawals (Haddad 1998). Although in most cases the withdrawal symptoms are mild and resolve within a month, certain SSRIs (particularly Paxil) can cause severe prolonged illness after discontinuation (Bloch & Stager 1995). Psychiatrists may not warn clients about the possibility of illness as a result of withdrawal when initially prescribing antidepressants because the causes and variations of SSRI withdrawal are little understood (Belloeuf 2000). The effects vary from vertigo, headache, and nausea to confusion and insomnia. It is common practice for psychiatrists to recommend tapering off antidepressants rather than sudden discontinuation. Antidepressant withdrawals are uniquely problematic for college students, who live and work in competitive, high-stress environments. Students rely on consistent physical health to perform well and attend classes. As Aselton's work

teaches us, many college students react adversely to the antidepressants they are prescribed and choose to stop taking them either temporarily or permanently. More research is needed to determine the extent of collateral damage caused by discontinuation of antidepressant medications in young people.

Chapter 3: Study Design and Methodology

Phase one of this study consisted of an anonymous online survey distributed through the Qualtrics survey software. No names, IP addresses, or other identifying information about survey respondents was collected at any time. All respondents read and acknowledged a standard disclaimer as specified by the IRB for anonymous electronic surveys. The survey demographic was limited to undergraduate students currently enrolled at Syracuse University. In total, 423 students responded to the survey, but only 415 of those responses were included in the data analysis for this study because 8 of the responses collected were invalid. These 8 responses were omitted from the data pool because the respondents had either not answered any of the demographic/background questions or purposely falsified their responses (checked all answer boxes, indicated impossible age, wrote inappropriate comments, etc). Data was analyzed for significance using the built-in data analysis package of the Qualtrics software, which automatically generates figures based on specified parameters. Other figures were generated in Microsoft Excel.

The survey included 35 questions in total, but its design was adaptable such that the number and format of the questions varied based on prior answers by the respondent. This design ensures that the respondent is only presented with questions that are relevant to his or her experience with anxiety and is not confused or overburdened. For example, if a student responds that she does not have any type of anxiety disorder, she will not be subsequently asked whether she takes medications to treat her anxiety disorder. The survey was intended to take 5-7 minutes to complete,

and the average time taken to complete the survey was about 5 minutes among all respondents according to Qualtrics. At the end of the survey, respondents were presented with a text box in which to enter any comments, research concerns, or personal stories that they wished to share. These text boxes yielded an interesting additional set of subjective data from the participants.

This survey was distributed through several networks at the university. The survey link was emailed to undergraduates by the Honors Program at Syracuse University (all majors) as well as the Coronat Scholars program (selected Arts & Sciences Honors students). The Biology and Chemistry departments at SU also distributed the survey to students via email. Three sociology professors emailed the survey to their classes, including one class of freshmen and sophomores from various academic divisions. Additionally, the survey was advertised by the Cultural Disability Center at SU. The survey was posted via social media to one social sorority, one social fraternity, and one co-ed professional fraternity. I also advertised the survey to all other undergraduates in my network at SU via social media. As a result of this distribution method, the majority of respondents were from the College of Arts and Sciences at SU, however all colleges are represented in the pool of responses. The data pool contains freshmen, sophomores, juniors and seniors of all genders from a variety of academic divisions. Unfortunately, although the data pool is large (approximately 2.7% of all undergraduates took the survey), this data is not a statistically representative sample of Syracuse University students. It is a cross section of primarily high-achieving students.

Phase two of this study consisted of a series of three interviews with professional psychologists at the Syracuse University counseling center. They ranged in length from 22 to 27 minutes. The questions asked in the interviews reflected the information gathered by the online survey. These interviews were recorded using a mobile phone and manually transcribed for

purposes of this study. Names of the counselors who participated will not be revealed, and any identifying information about these counselors has been redacted from the transcripts. These interviews are supplemental, subjective data to contribute to this sociological analysis of the culture of anxiety among undergraduates. Interview transcripts are coded in alignment with the coding for the survey data, in terms of the variables each question addressed. These interviews helped to solidify the overall thesis of this project regarding the pervasive culture of anxiety experienced by students.

Data Parameters

The survey was a combination of multiple choice, matrix, and fill-in answer questions. The only questions that respondents answered manually were their age, how long they had been taking anxiety medications (if they indicated that they were), and their additional comments at the end of the survey. One matrix of questions was used to gauge participants' sources of anxiety (i.e. exams, jobs, relationship problems). The rest of the questions in the survey were either multiple choice (single answer) or multiple answer (check all that apply) questions. Most of the questions, aside from the disclaimer and basic demographics of age, college and academic year, were not obligatory in order for the respondent to proceed with the survey, however the survey did notify the respondent if he or she missed a question and request an answer. If a student chose not to answer a question, he or she is automatically omitted from the data analysis for that particular variable. The survey was designed this way in order to ensure maximum comfort and efficiency for participants, and not alienate those who were uncomfortable answering specific personal questions about their anxiety.

The majority of participants chose not to leave any additional comments or information at the end of the survey, but 50 respondents chose to write something. None of the comments were

concerns about the integrity or validity of the survey. Some students choose to include personal stories or experiences, or suggestions for the university to help students manage anxiety. Others stated their feelings about professors, academics, university culture, and other specific things that they identified as exacerbating anxiety.

Limitations

This survey is somewhat limited in both the scope of its questions and its representation of the student population at SU. One major limitation of the data is that it does not ask participants to identify their race or ethnicity. It can be safely assumed, given the racial and ethnic breakdown of the primary distribution networks, that the study population is mostly Caucasian. Analysis of the small percentage of minorities who participated would likely not have yielded any meaningful data that could be broadly applied to describe those racial or ethnic groups. Race and sexual orientation were topics that came up in my interviews with counselors, however, and I do address this matter qualitatively in the discussion. I acknowledge the lack of analysis along racial lines as a limitation of my survey because racial or ethnic identity can undeniably impact one's perception and experience of anxiety.

The main student demographic groups that this survey does not sufficiently represent are athletes and men. I attempted to reach more athletes by requesting that the survey be distributed through the University Athletes academic center and Falk College of Sports and Human Dynamics, but both institutions declined to distribute any information on behalf of this research. Out of 415 respondents, only four stated that they are Division I athletes. With only four athlete participants, it is impossible to gain any meaningful sociological insight regarding the culture of anxiety on SU sports teams.

The survey received a disproportionate number of responses from women. Out of 415 responses, only 86 (20.7%) were from self-identified men. There are several probable reasons for this, and to some extent this response bias was expected, although 78% women was a much more drastic bias than anticipated. Five respondents (1.2%) identified their gender as a third option, something other than male or female. The primary reason for the large majority of female respondents is the gender demographic of Syracuse University and its Honors Program. Syracuse is a large liberal arts school which attracts more female applicants than male applicants, and the overall population of students is over 55% female (2016 statistic). The Honors program, which constitutes a substantial portion of survey participants, is comprised of an even greater percentage of women than the university as a whole. Another large portion of survey respondents were students in the sociology department, whose undergraduate population is also predominately female. None of these demographics, however, are as overwhelmingly female by percentage as the population who responded to this survey. There must be additional factors which account for this gendered response bias.

The participants represent all of the extracurricular activities on campus aside from Division I sports. While it underrepresents athletes, it probably slightly over-represents both humanities majors and students in the Honors Program as a result of the networks it was distributed to. Over all, the survey data contains a broad range of participants across the many academic colleges within Syracuse University (Table 1) and across the academic years, which improves the validity of the data pool for sociological analysis. 35.4% of participants were Freshmen, 22.0% were Sophomores, 23.7% were Juniors, and 18.9% were Seniors.

Arts & Sciences	Information Sciences	Citizenship	Sports & Human Dynamics	Journalism	Business	Architecture	Engineering & Computer Science	Visual & Performing Arts	Music	Education
44.1%	2.67%	5.10%	5.58%	14.56%	9.47%	2.18%	6.07%	5.58%	0.49%	4.13%

Table 1: Academic divisions of survey participants. Note that although the College of Arts and Sciences comprises approximately one third of the student body, it is still slightly over-represented in the survey sample.

Survey Results, Analysis, and Discussion

Chapter 4: Demographic Findings and Social Constructions of Pathological Anxiety

After the background demographic questions, the first portion of the survey consisted of very general multiple-choice questions whose purpose was to create a broad profile of college students and anxiety. These questions included “how often do you feel nervous or anxious,” do you suffer from any [of the following] anxiety or panic disorders,” and “do you have trouble managing feelings of anxiety or nervousness?” The responses to these questions demonstrated very clearly that the “anxiety epidemic” discussed in the media today is real and measurable. However, what is described as an epidemic may also be a de-legitimatization of the high level of anxiety that was once considered normal for college students. In other words, American culture has shifted such that young people are more willing to discuss anxiety as a hindrance to productivity, a drain on quality of life, and a potential mental illness. Chronic anxiety is no longer being accepted as a given for college students, and students are in turn seeking more counseling nationwide. The “epidemic” may be, at least in part, a cultural phenomenon. 26.8% of survey participants responded that they experience anxiety “often,” 23.5% “very often,” and 11.1% “almost always.” 32.4% of participants have trouble managing their feelings of anxiety. With no point of reference, these percentages appear shockingly high. The question that underlies all this data is whether levels

of anxiety and anxiety disorders are truly on the rise, or whether students' willingness to perceive their own anxiety as excessive (or disordered) is on the rise. Both may be the case.

The survey participants were generally very willing to self-identify as having anxiety disorders. Respondents were given the choice to identify as having general anxiety disorder, social anxiety, panic disorder, "other chronic anxiety," or "none of the above." 27.3% of the sample population claimed to have general anxiety disorder and 7.6% claimed to have panic disorder. 16.2% identified with social anxiety and 5.3% identified with "other chronic anxiety." Only 43.55% chose "none of the above." Overall, at least 34.9% of participants believe that they have a legitimate, diagnosable anxiety disorder. The fact that such a high percentage of students are willing to identify their own current psychological conditions as medically disordered is in itself evidence of a cultural shift. Young millennials have come to accept the idea of psychological divergences in themselves and in their peers, and perhaps even begun to normalize them. In the case of college anxiety, the line between the normal and the pathological has become increasingly blurry. 47.8% of students responded that they know "one or two" other students who also suffer from severe or disordered anxiety, and 36.6% responded that they know several. Only 15.5% did not know any. This means that even among those who responded that they did not have any type of excessive, abnormal, or pathological anxiety, the large majority of them are aware of its prevalence among their peers. The student population has become attuned to the problem of anxiety, accepting of it, and perhaps some are even complacent with it.

While many students are becoming more understanding of mental health issues, the taboo of psychological disorders and the label "mental illness" persists. One student surveyed who suffered from anxiety said "I don't consider myself to have any type of 'disorder' but do feel challenged by social anxiety." She continued, "Seeking help and possibly being diagnosed as

having a disorder would be counterproductive for my ability to deal with anxiety. I don't want to internalize anxiety as a state of being that I identify with." Despite this claim, she identified strongly with anxiety in most of the survey questions. Social anxiety is unique from GAD and panic disorder because it may or may not be a trait to the extent that it would be considered pathological and/or diagnosable. While panic and general anxiety both come with the suffix "disorder," social anxiety floats on a scale of public perception between the characteristic of introversion and the pathological fear of social interaction.

Students who responded that they suffer from either social anxiety, GAD, or panic disorder were then asked whether the condition was self-diagnosed or professionally diagnosed. The ratios of their answers provide further evidence of the cultural nature of the anxiety epidemic. 38.9% of these DSM anxiety disorders were not diagnosed by a psychologist, counselor, or other medical professional – meaning that they were "diagnosed" by the students themselves (or their parents/friends). The broad willingness to self-diagnose an anxiety disorder, and thus internalize the notion of oneself as being mentally ill, marks a new cultural ethos. We have reached a point in society where a young person may easily perceive him or herself as mentally ill without any validation from a medical professional. In fact, only 22.2% of respondents (less than half of those who identified as suffering from some form of anxiety) were currently seeking or receiving any form professional counseling for the condition.

While the social construction of pathological anxiety may be increasingly normalized in the college social sphere, the negative effects of anxiety on individual students' quality of life has not subsided. If anxiety may be metaphorically described as a cultural contagion, the daily toll it takes on productivity and happiness is an invisible symptom. The most common negative impact that students reported from anxiety is trouble falling asleep (16.8% of participants). A high number

of students reported that anxiety negatively impacts their ability to socialize with peers (14.9%), their intimate relationships (14.06%), their ability to communicate effectively, (12.2%) and their ability to make healthy nutritional choices (12.4%). Symptoms of anxiety are a drain on the minds, bodies, and lifestyles of a large portion of college students.

One student added in her survey response, “I know that anxiety has significantly negatively impacted my life, including poor coping abilities that have led to bad grades for simple classes and having a small social circle.” It is also an invisible drain on the academic potential of many students. 17.5% of students sampled reported that anxiety affects their ability to concentrate and 15.2% said that it hinders their ability to study for exams and quizzes. >11% said that anxiety prevents them from communicating face-to-face with instructors and participating in class discussions.

The academic fallout from anxiety and anxiety disorders in a given course is not easily understood from the perspective of a professor or teaching assistant and is often difficult for students to discuss openly for fear of judgement or reprimand. One sophomore participant said, “I’m reluctant to get academic help for my [anxiety] issues because I don’t think ‘has mental health problems’ is an acceptable label in business.” A 20-year-old male added, “it has been hard and awkward to tell professors that I have anxiety because it seems like they will think I’m just making up excuses.” In the academic setting, the taboo of anxiety persists, and anxiety-related mental health issues are not perceived by professors as a valid excuse for lagging performance.

Another study participant brought up an interesting point regarding the place of anxiety disorders among passable academic exemptions with the Office of Disability Services; namely, that their place is unclear. She wrote, “it is difficult for me to know at what level of anxiety it would be morally/socially acceptable to reach out to disability services.” According to the DSM,

anxiety disorders are mental illnesses. Legally, however, a mental illness does not necessarily constitute a disability that warrants special assistance or exemptions. The Syracuse University Office of Disability Services allows exemptions such as extra missed classes, extra time on exams, or recording privileges to those who can provide proof of a physical or cognitive disability that warrants such exemptions. However, it does not explicitly state whether it considers mental illnesses to constitute disabilities, and one can only assume that the answer is on a case-by-case basis. On the list of mental disorders that might constitute a legitimate disability, however, anxiety disorders fall to the bottom. Perhaps because anxiety disorders and major depression are the most common mental disorders according to the NIMH, they are also considered less serious than other mental illnesses such as schizophrenia or dissociative identity disorder (DID). Anxiety and depression are often subject to public debate over their legitimacy and criticized by the neurotypical public eye as excuses for lacking performance or work ethic. This social circumstance is well illustrated by the comment of a male student, who concluded the survey by writing “Don’t encourage a victim society. People who panic because of college have no business working at any level of real responsibility.”

Survey participants who suffered from excessive anxiety or anxiety disorders were asked to describe their physical manifestations of this problem. It is clear from their answers that anxiety disorders, although they are not considered disabilities, do come with an array of deleterious physical symptoms. So much so that one Syracuse University counselor observed that “students often think that they are sick and go to health services or the hospital... when really the symptoms they are experiencing are psychosomatic and caused by extreme stress. A lot of people don’t realize that that’s possible.” The most common symptoms reported in the survey were shaking/trembling (11.1%) and feeling of detachment (11.2%) followed by drowsiness (11.0%), insomnia (9.5%),

nausea (8.6%), sweating (8.5%), and heart palpitations (8.02%). These frequencies were approximately the same for both genders in the survey pool. Some of the physical symptoms associated with anxiety are psychosomatic, while other symptoms (such as gastrointestinal problems) result from the effects of stress and insomnia on the body. Anxiety causes such a wide variety of physical manifestations that it can indeed be difficult to differentiate between psychosomatic symptoms and other unrelated medical conditions.

“The Engineers are Definitely the Most Stressed Out Students:” True or False?

Survey participants were asked which of the 11 college(s) within Syracuse University they are enrolled in. The distribution of students in each college in the survey pool is approximately proportional to the total enrollment in each school, with the College of Arts and Sciences being slightly over-represented and the School of Music being under-represented. It is generally accepted among Syracuse University students that Engineering, Architecture, Communications Design, and natural sciences majors have the heaviest workloads and/or most challenging courses of study. As proof of this perception, Engineering and Architecture majors wear orange school spirit shirts with the logo “Real Majors Wear Orange.” By extension, we might assume that students who choose those majors experience the most stress and anxiety. If that is the case, it is not the trend that students reported in this study.

The results of several cross-tabs of college major and measures of anxiety instead suggest that anxiety level is not a direct function of workload and degree of academic difficulty. Rather, it implies that collegiate anxiety is a social condition, and as we have learned from the matrix on factors that cause anxiety, it is a condition that is more oriented toward discussions of the future than circumstances of the present. Based on the survey pool data, there was no single college within Syracuse University which stood out as having a higher ratio of students suffering from

anxiety or anxiety disorders. Students across all colleges answered that they experience anxiety “very often” or “almost always” at approximately the same relative ratios. Additionally, across all colleges, fear about future achievement was the most frequently selected cause of high stress. Interestingly, regardless of whether their college major was perceived as lucrative (such as information technology) or risky (such as performing arts), students named fear about future achievement as the most stressful element of their lives. In the comments section of the survey, not a single student cited the difficulty level of their major(s) or poor grades as a cause of their anxiety. However, they did mention volume of work/workload. During interviews, college counselors were also asked whether they perceived that students from any specific colleges or majors experienced more stress and anxiety. All three agreed that there was no such trend, and that they perceive the same frequency of anxiety (and depression) among all academic divisions.

Students had varying opinions regarding whether or not the campus social environment and its physical spaces actively foster anxiety. Only 3% of participants said that the college environment has improved their anxiety level and 5.1% said college does not contribute to anxiety. 64.6% said that college causes them some anxiety, 21% said that it causes them excessive anxiety, and 6.3% were unsure how it affects them. These relative percentages were approximately the same across all academic divisions. In the comments, several students mentioned specific elements of the campus spaces that contribute to anxiety, the biggest standout being discomfort surrounding dorm residence, which was mentioned four separate times. One student wrote that his assigned roommate had attempted suicide in their room during the previous year, which caused him anxiety and trauma. Another student wrote “Being in a dorm with a roommate which never lets me be completely alone has added to my anxiety.” A third student echoed her thought, writing “My freshman year I would cry from anxiety because I could not find a place to be alone in my dorm

complex. There was noise and people everywhere at all hours.” A final student commented, “I lived in the dorms last year and my anxiety was so much worse, everyone's energy comes together

	Which college are you in?											Total
	Arts and Sciences	ISchool	Maxwell	Falk College	Newhouse	Whitman	School of Architecture	School of Engineering & Computer Science	School of Visual and Performing Arts	School of Music	School of Education	
Extreme stress	79	5	9	5	13	6	1	5	11	0	8	142
A lot of stress	49	4	9	4	21	14	5	7	7	1	3	124
A moderate amount	33	1	0	8	15	12	2	7	2	0	3	83
Relatively little	9	1	2	4	8	2	0	4	1	1	1	33
None or almost none	5	0	1	0	2	2	1	2	0	0	1	14
Total	175	11	21	21	59	36	9	25	21	2	16	396

and it causes me to panic.” It seems to be the case that the interaction between the social and physical spaces of college, namely the close quarters and high energy social environment, produces extra anxiety for those already suffering.

Table 2: Cross section of students’ academic divisions and how much anxiety the college environment causes them. Statistical analysis of this cross section yields no significant correlations.

*ISchool = information technology, Maxwell = citizenship/political science, Falk = sports and human dynamics, Newhouse = journalism/communications, Whitman = business.

In summary, the results of this survey are sufficient to confirm the presence of the “anxiety epidemic” at SU. Although what constitutes an epidemic in a population may be subjective, it is evident that a substantial portion of college students believe that their anxiety level exceeds what is normal and productive. Additionally, the preliminary data suggest that is no specific correlation between academic division and anxiety. Therefore, the cultural roots of the anxiety problem are not likely to be observed in classrooms.

Chapter 5: Gender and Conversations about Anxiety

Of 414 survey respondents, 323 (78.2%) identified themselves as female. Although as previously mentioned, the sample population was a majority female demographic, it is highly improbable that nearly 80% of the students who received an invitation to take the survey were female. Therefore, it would not be a stretch to say that there were sociological factors in play which account for the observed gender discrepancy. The NIMH has already established through research that men are less likely than women to discuss mental health issues in clinical settings and are less likely to engage in help-seeking behaviors. What can be learned by sociologists from this phenomenon is that American men are culturally conditioned to resist the appearance of psychological vulnerability, both socially and intrapersonally (Eisler 1988). In contrast Western concept of ideal masculinity is a vision of perfect strength, and anxiety disorders are culturally regarded as a mark of weakness. American men are perhaps even conditioned to view psychological distress in the form of anxiety as a female attribute. The gender composition of the respondent population in this study suggests that men resist discussions of psychological distress not only in social situations, but in personal reflective situations, as this survey was to be taken anonymously and privately through a phone or computer. It is as if the social conditioning of men to avoid discussions of psychological suffering runs so deep that even on an individual basis, potential male respondents deleted or ignored the survey.

There are several other potential reasons why more men than women might have disregarded the survey. The NIMH has also established that far more women than men suffer from clinical anxiety, and by extension, more men than women likely made the assumption that they would not be “good” candidates for the survey (although the only qualification was being an undergraduate at Syracuse University). In this sense, women were more likely to self-select as

participants. More men than women did not think the survey content would be applicable to them at all and therefore ignored it. Additionally, it has been well-established in health survey research that people tend to self-select as participants when they have a strong connection to the subject at hand, while those who are averse to the subject tend to disregard the study (Etter 1997). Therefore, those who were not emotionally invested in the subject of anxiety due to personal experience were less likely to take the time to participate. The sociological explanation, however, would be that the subject matter – anxiety disorders – triggered the men’s socially acquired aversion to this cultural taboo. The number of male students who did not participate in this project tells the story of a broad, culturally enforced resistance by the male psyche; resistance to the admission of fear, both in social situations and intrapersonally. The sociological relationship between panic, social anxiety and the performance of masculinity would make an interesting study by itself. The outcome of this survey has provided grounds for further speculation on the social structures that prevent men from engaging with their anxieties (or perhaps even shield them from certain types of anxiety).

Psychiatry statistics tell us that women experience more variations of clinical anxiety, more intensely, and more frequently than men do (Kessler *et al.* 2005). Whereas psychology stops at demographic observations about gender and abnormal anxiety, sociology demands to know the reasons behind them, and to interrogate the complex relationship between the performance of – and identification with femininity, and the experience of anxiety. In one survey question, anxiety was treated as a synonym for nervousness. The question asks how often the student feels nervous or anxious with the answer choices never, rarely, sometimes, often, very often, and almost always. Figure 1 summarizes the data from this question in a cross-tab with gender. The first result that immediately stands out from this figure is the relative percentages of participants who “very often” or “almost always” feel anxious. 23% of men and 38% of women chose one of these two options

– a statistically significant disparity ($p = .003$). The mode falls squarely on “sometimes” for both genders, but for women it extends to “often” with about 30% in each category. It is shocking in itself that 42 of 323 women surveyed almost always feel anxious in their daily lives. No matter how anxiety is being defined by the respondent, what is being observed might indeed be considered a collegiate mental health crisis; particularly one that affects women. The question that follows is why anxiety so disproportionately affects women, and which factors of the college experience contribute to it.

	Never	Rarely	Sometimes	Often	Very Often	Almost Always
Male	2.3%	17.4%	39.5%	18.6%	18.6%	3.5%
Female	0%	3.7%	23.9%	28.7%	25.1%	13.90%

Table 3: Answers to the question “how often do you feel nervous or anxious?” by gender.

The survey also asked participants whether they suffer from any type of diagnosable anxiety disorder or social anxiety. Figure 2 shows the results of that question split by self-identified gender. 121 women (33%) responded that they have a general anxiety disorder (GAD) and 63 women (19.5%) identified as having social anxiety. For men, there was no skew toward GAD: 17 males (19.7%) identified as having GAD while 18 men (20.9%) identified with social anxiety. Similar to the report by (McLean *et al.* 2011), the rates of social anxiety in this sample were approximately the same in both genders. GAD and panic disorder, however, were significantly more common among the women sampled. Those who did not respond “none of the above” to the question posed in figure 2 were then asked whether they were seeking or receiving professional help for their anxiety. 15% of men were currently seeking or receiving help as compared with 24.3% of women. Although this result cannot be presumed to represent the general student population, it aligns with other studies which conclude that men are somewhat less likely to actively seek out psychological counseling.

	Male	Female
General Anxiety Disorder	19.7%	37.4%
Social Anxiety Disorder	20.9%	19.5%
Panic Disorder	5.8%	10.21%
Other Chronic Anxiety	5.8%	6.2%
None of the Above	65.1	51.7%

Table 4: Answers to the question “do you suffer from any of the following?” by gender. Note that sums of percentages in columns do not add up to 100% because some participants selected multiple forms of anxiety

There are several additional sociological explanations for the elevated levels of anxiety in women as compared to men, especially with regard to expectations for long term success. Firstly, the immediate environment of the SU campus poses a perceived physical threat to women. Female students who live off campus often must walk alone at night through high crime areas, particularly in the city of Syracuse. It should be noted that Syracuse University’s conduct policy does not allow students to carry self-defense weapons of any kind on campus, including mace or pepper spray. Collegiate women also find themselves as objects of a new iteration of the classical panopticon; one through which the public gaze operates not only in public spaces, but through smart phones and social media. As objects of the new social media surveillance, women experience added pressure to meet a high standard of beauty at all times of day, performing the time and money-consuming rituals of sartorial and corporeal femininity. Syracuse University is also predominately one gender (female), creating a competitive dating climate which favors men. Academically, women are forced to constantly push back against a burden of low expectations; one that is perpetuated by stereotypes of women as less serious students and of femininity being mutually exclusive with success in STEM subjects (Kiefer 2007).

	Male	Female
Every 6 months	16.6%	16.6%
Every 3 months	23.3%	20.5%
Monthly	10.0%	30.1%
Weekly	13.3%	12.8%
Every few days	10.0%	6.4%
Daily	0%	1.9%
Never	26.6%	11.5%

Table 5: Answers to the question “how often do you experience panic attacks?” by gender.

Women also experience a unique anxiety about life after college. Women at Syracuse are aspiring skilled professionals, leaders, and executives in their respective industries. For women, fear of the future is enhanced by an awareness of pre-existing obstacles for professional women. College women are taught about the gender-wage gap in humanities classes. They become aware of subtle sexism that pervades the business world, which creates a barrier for women in upper management euphemistically known as the “glass ceiling.” College women gradually become aware that the eventual goals of motherhood and high-powered careers present conflicting interests. Sociologist Pamela Stone discusses the struggles of balancing motherhood and career development in her book *Opting Out?* (2007). For a variety of reasons, highly educated women “opt out,” or are pushed out of their careers in favor of full time motherhood. In the face of impending financial adversity from student loans, college women also anticipate the notoriously difficult lifestyle of a working mother. In short, young women experience an anxiety of high expectations; that they will successfully compete with male counterparts in a society which favors men in terms of financial and professional success.

The most surprising result of this survey, and perhaps the most telling about the problem of severe anxiety in college, is that students cited fear about future achievement as the single greatest cause of their daily worry. 38.5% of students responded that fear about future achievement causes them “extreme stress,” as compared to only 17.7% who responded that academic work (the

second most selected answer) causes them extreme stress. One might imagine that academic work and exams place the heaviest burden on the body and psyche of an average college student, but that was not the case based on the survey responses. The third most common cause of stress among participants (behind fear about the future and academic work/exams) was financial difficulties. According to the survey data, nearly 67% of participants experience either “a lot of stress” or “extreme stress” due to fear about future achievement (Supplemental Figure 3). It is fair to say that any age demographic might experience some future-oriented anxiety, but this study has shed a light on what is most unique about the anxiety of college students: that the idea of the future inspires more psychological distress for them than any other element of daily life and work. This is surprising when we consider that Syracuse University is an elite private institution whose average post-graduate salary and probability of employment is higher than the national average for college graduates (SU Career Services 2016 Outcome Report). Rather than excited about the probability of their future success and relative socioeconomic advantage, students are pessimistic about their future outcomes. This survey was distributed in May of 2017, nearly seven months after the 2016 presidential election, however the fear being indicated was not likely related to the sociopolitical climate of the United States. It was not an apocalyptic fear, but rather a quiet and enduring psychological distress that is shared between younger millennials. The fear that was indicated is a fear of failure. It is a fear of failure to succeed financially and socially, a failure to gain respect and recognition, or failure to ultimately find fulfillment.

The significance of different stressors also varied between genders in the sample group. 58% of women indicated that volume of academic work causes them high stress compared with only 38% of men. 72% of women indicated that fear about future achievement causes them high stress compared with 48% of men (although it was the number one stressor for both genders).

Financial problems also caused slightly more stress for women surveyed (39% vs. 27%). Social interaction, relationship problems, and jobs/internships were approximately equal in terms of stress level for men and women. There were no categories which men selected more often than women as causes of either “extreme stress” or “a lot of stress.” Interestingly, “illness or medical condition” was selected as a high stressor by 19% of women and less than 7% of men. Although it may be the case that a higher percentage of women than men in this sample suffer from chronic medical problems, it is not likely. This result suggests that college women either experience greater stress in general due to their chronic medical problems, or alternatively are getting acutely sick more frequently than men. It is entirely possible, and furthermore logical that college women become acutely ill more often than college men for the simple reason that women are less physically tolerant of sleep deprivation than men. The demands of college life, which result in lack of sleep, are more likely to weaken women’s immune systems and make them susceptible to viruses that spread through the close quarters of dorms and sorority houses. Women require, on average, at least 20 more minutes of sleep per night than men to achieve peak physical and brain function (National Sleep Foundation).

Chapter 6: Anxiety, Social Media, and the New Panopticon

Foucault's original concept of the panopticon in his book *Discipline and Punish: the Birth of the Prison* (1975) described a system of prison control under which the inmates were under surveillance at all times, from all angles. Under a panopticon, it is not a physical restraint, but rather the knowledge that one is under public observation which motivates obedience to laws and customs. Because it uses psychological rather than physical force to govern behavior, the panopticon is highly efficient at controlling human behavior. Panoptic methods have been put to use in schools, hospitals, prisons, and transportation systems to prevent crime and limit socially deviant behaviors. The term "panopticon" takes on a new meaning in the digital age, where citizens know they are under observation by security cameras in public as well as voluntary personal cameras in private spaces. Social media has been described by several sociologists as a new type of panopticon in the sense that it subjects users to the daily surveillance of their friends and followers (Mitrou *et al.* 2014, Romele *et al.* 2017). Is not the type of surveillance which threatens immediate harm to those who do not follow social customs, although online accounts are sometimes used by law enforcement as a tool to locate or expose criminals. Rather, social media governs the behavior of users with a subtle but ever-present threat of alienation, disapproval, and lack of social capital. It is a more demanding, intrusive, and arguably addictive morphology of public surveillance.

Followers on social media may be limited to friends and family or may include a large network of distant acquaintances and unknown people. As a social media user with a large network, which most college students are, one can only imagine the true identities, attitudes and perspectives of his or her followers. Social media thus becomes a one-way glass through which the public views an individual, creating a sense of constant surveillance and a psychosocial

pressure to portray oneself as attractive, interesting, and successful. In this way, students generate social capital (i.e a network of relationships) through their online interactions. This social capital becomes tangible as employers and universities look increasingly to social media to vet, background check, or assess the potential value of candidates. Individuals with followers numbering in the thousands on social media are frequently offered payment to advertise specific brands or merchandise through their platforms. This knowledge motivates young people to increase their online following, and for those already relying on social media as a source of income or a measure of career potential, the stakes are high.

Facebook, Twitter, Instagram, LinkedIn, Snapchat, and many other social media platforms comprise a new oppressive and potentially anxiety-producing space in which any written word, video, or photograph enters the permanent memory of corporate cyberspace. The digital panopticon threads social lives into a collective memory which drastically increases pressure to police one's own language, body, and public image at all times. A major goal of this study was to search for correlations between anxiety levels and modes of technology use in college students. The questions were intended to be exploratory; they were not modeled under the hypothesis that anxiety and social media use are positively correlated. Because the pre-survey description and survey recruitment messages did not include any discussion of technology or social media use, there was no intervention from self-selection response bias in this section of the study. With regard to social media use, the survey population is probably close to a representative sample of Syracuse University student behaviors.

Participants were first asked which forms of social media they use. 91.3% of students used Facebook, 85.7% used Snapchat, 81.4% used Instagram, 55.4% used Twitter, and 42.9% used LinkedIn. Other less popular platforms include Tumblr (25.7%), Pinterest (33.9%), and Reddit

(13.9%). A large majority used 3 or more social media platforms on a given day. Only two students responded that they do not use any forms of social media at all. In principle, using social media is a choice, and anybody can “delete” their online profiles at any time and fully disconnect, but this statistic provides another take on the narrative of choice. Simply, for college students, disconnecting from all social media would be akin to self-imposed alienation. So much of our social life is now dependent on technological interface that to voluntarily reject that interface would be to effectively reject one’s own current and potential friends, not to mention the world of match-made dating through Tinder, Bumble, and other apps. The illusion of choice is there; the “off” button on our devices holds the promise of freedom from surveillance, but participation in the social sphere is a human psychological need that is not easily eschewed.

Surveillance aside, the time and effort required to maintain a presence on three or more social media platforms is sufficient to produce stress and anxiety. The enormous amount of face-time that students have with their device interfaces (and, presumably, device cameras) is evident from participants answers to the question “how many hours per day do you spend online or on social media?” 31.8% spend 1-2 hours, 35.4% spend 3-4 hours, and 19.84% spend at least four hours online every day. According to this data, the average SU undergraduate spends 3-4 hours online per day. However, these numbers are rough estimates on the part of the participants. A more accurate description of students social media interface behavior would be to say that they are constantly “wired-in,” a phrase coined by the 2010 David Fincher film “The Social Network.” Wired in, in a metaphorical sense, means to be attached to one’s phone or computer. Students carry their devices at all times, and many even sleep with their phones on the bed. Hours are not specifically planned and set aside for social media, but rather students are constantly on-call for their devices. Whenever there is a text or notification, there is a social expectation of being

available to respond to it within a short window. It may even be considered rude not to respond quickly to a message or social media tag. The expectation of being on call for social media can produce anxiety, depression, and, according to many psychologists, patterns of thought and behavior resembling addiction (Song 2004). Addiction may not be the best phrase to describe this cultural phenomenon, however, since an addiction and a social expectation tend to be mutually exclusive ideas.

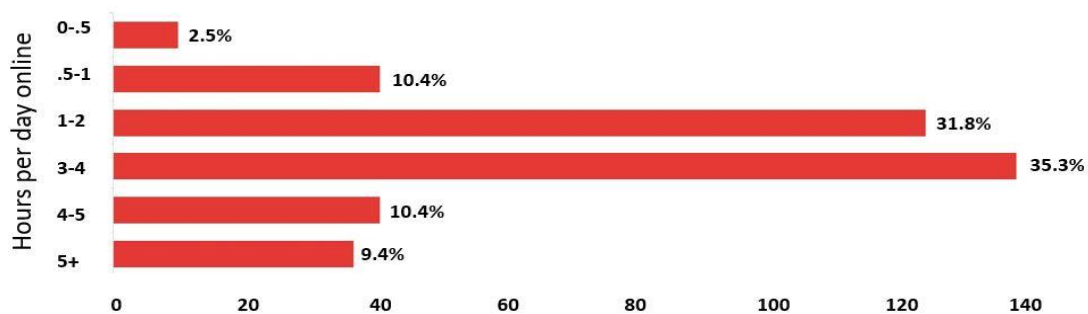


Figure 1: Answers to the question “how many hours per day do you spend online or on social media?”

For some students, social media and internet browsing may be a tool for relaxation and escape from the anxieties of daily life. For others, it may be a source of anxiety. It may be both at the same time. The numerical cross-evaluation of students’ anxiety levels and their estimated hours spent online produces a table that is difficult to analyze visually. This figure has been condensed to compare the mode frequencies of anxiety for students who spend 1-2 hours online per day and those who spend 4+ hours online per day (Figure 2). In the survey sample, the mode frequency of anxiety for students who spend 1-2 hours online per day was “sometimes” (34.6%). The mode frequency of anxiety for students who spend 4+ hours online per day was “often” (35.0%) A much greater percentage of those who spend 1-2 hours online per day said that they “rarely” experience anxiety than those who spend 4+ hours (2.5% vs. 10.2%). 16.8% of those who spend 4+ hours “almost always” feel anxious compared with 10.7% of those who spend 1-2 hours.

The data cannot be considered conclusive evidence of a relationship between the two variables, but it does suggest that more hours spent online per day correlates with a higher frequency of anxiety. If this correlation holds true across the entire population of Syracuse University undergraduates, it still cannot be assumed that there is a causal relationship between high volume social media use and anxiety. There are several other potential variables in play that might account for this correlation, and it may even be an inverse causal relationship. For example, it may be the case that students who have higher levels of anxiety choose to spend more time online each day because it helps them feel calmer. It is also possible that students who have greater workloads (and therefore more stress) spend more time online because they must communicate constantly with their classmates, TA's, professors, group members, partners, etc. An interesting addendum to this portion of the data, shown in Supplemental Figure 1, is that the mode number of hours spent online per day is the same across all students surveyed, regardless of whether they identify themselves as having an anxiety/panic disorder. From this data, no correlation can be observed between technology use and anxiety or panic disorders.

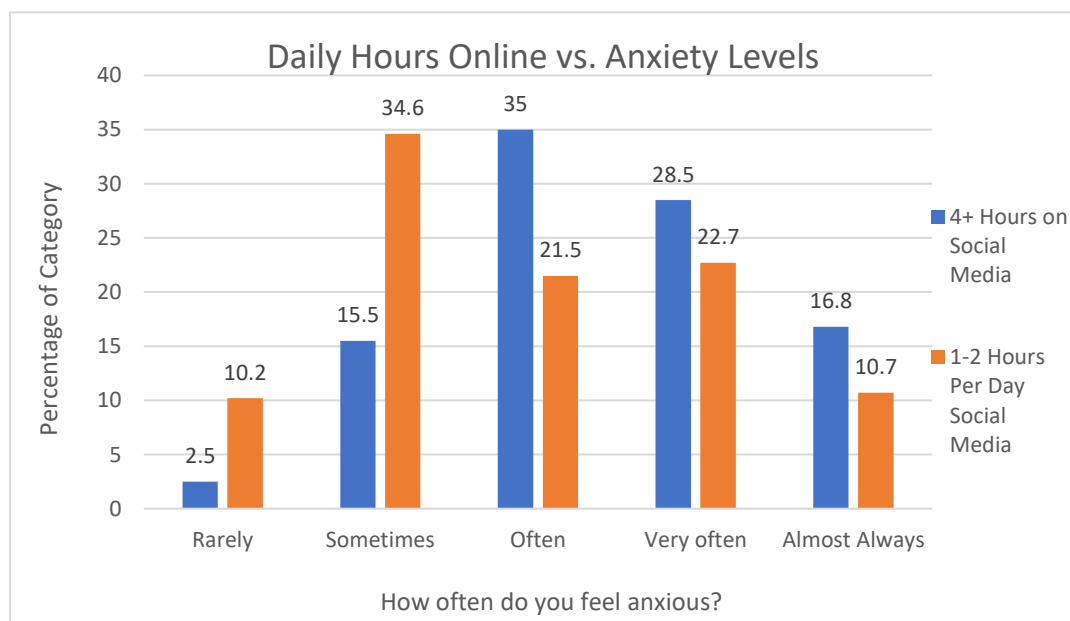


Figure 2: Condensed cross-analysis of number of hours students spend online per day vs. how often they report feeling nervous or anxious

College students tend to rely heavily on their phones for communication, information, problem solving, social media, and a range of other tools. Many of the hours students spend online are spent browsing on an iPhone or android rather than a laptop or desktop computer. Smartphones have become the focal point of millennial life in a very literal sense, absorbing the social positions previously occupied by iPods, televisions, personal computers, speakers, cameras, microphones, gaming systems, GPS, alarm clocks, and even watches and calculators. It is not surprising that as the capabilities of many technologies are condensed into one device, we spend most of our days connected with our smartphones, watching them, with the vague sense that they are watching back.

As the source of our social capital, our devices begin to have expectations of us, expressed in the form of notifications, messages and requests for information. Only 4.3% of survey participants check their phones “a few times per day” or less. 33.3% check hourly, 37.4% check every few minutes, and 24.9% check every time they get a notification (which is, for most iPhone users, every few minutes). Most students respond to messages very quickly at all times. 33.8% respond within an hour, 36.6% within a few minutes, and 5.3% respond “instantly.” Most students also use their phones to monitor emails, which they check several times a day (43.7%), hourly (18.1%), or whenever a new email comes in (23.2%). The frequency of these social behaviors is evidence of a collective compulsion to maintain and increase social connections, although it may not be a result of a natural cultural progression. Collective smartphone addiction is no accident according to the confessions of tech executives such as Justin Rosenstein and Tristan Harris (Stolzoff 2018). iPhone algorithms are deliberately designed to persuade users to become more and more “social,” using a psychological mechanism that operates through short-term reward, much like a slot machine, to bring users back into focus every few minutes.

Being wired into the global smartphone network has become an expectation for college students, and for those with fields of study such as marketing and journalism it is a necessity. It is a well-established group behavior that students cannot help but participate in for the sake of convenience and entertainment, if not for social acceptance, or otherwise psychological addiction. This study aimed to investigate the relationship between smartphone use behaviors and forms of anxiety in undergraduates. This cross-analysis produces another complex figure (Supplemental Figure 2), which has been condensed into Figure 3 to directly compare frequency of anxiety with responsiveness to cellphone notifications. For purposes of comparison, respondents are lumped into two categories; those who check their phones hourly or a few times daily, and those who check their phones every couple of minutes or whenever a notification arrives (which is normally every few minutes). The correlation in this graph is subtle but nonetheless observable; students who

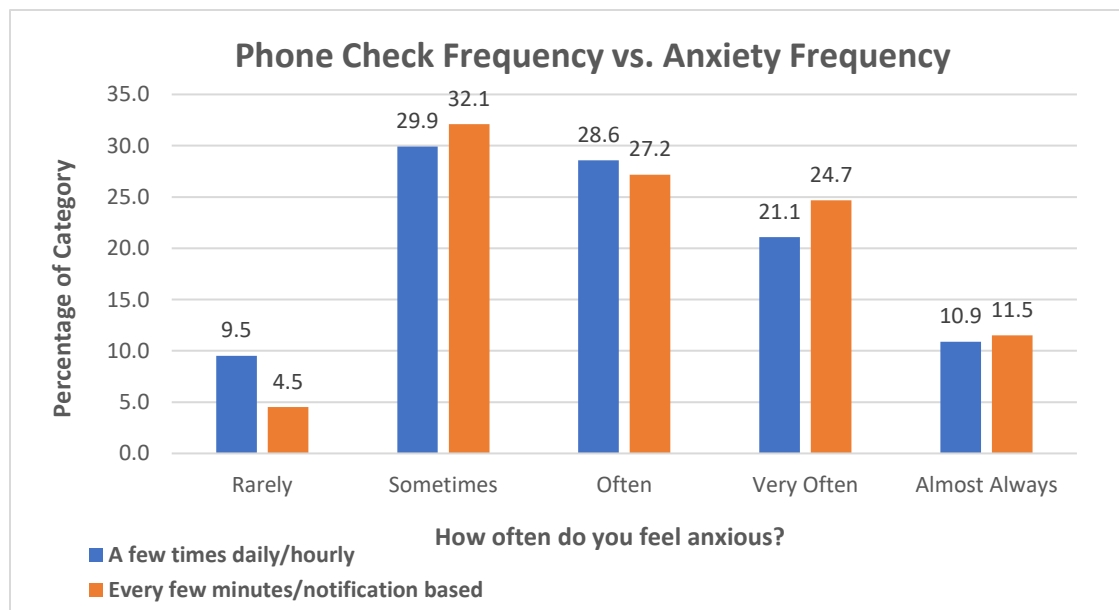


Figure 3: Condensed cross analysis of the frequency of phone checks by a given student and his or her self-reported frequency of anxiety. Note that the survey question did include several additional degrees of freedom which have been condensed into two groups for the purpose of this visual comparison.

check their phones less often have comparatively lower frequencies of anxiety. The disparity is most pronounced among students who rarely feel anxious, with a 5% discrepancy between those

who check phones more often vs. less often. Among students who very often feel anxious, the discrepancy between categories is reversed (3.6%). However, for both groups, the mode frequency of anxiety is “sometimes.” Based on this data set, it appears that how responsive students are to their phones does correlate somewhat with anxiety levels. This is also interesting from a sociological standpoint because millennials are often criticized by their older counterparts for being so often absorbed by their smartphones. Millennial enthrallment with smartphones may appear ominous to older generations, and while “addiction” may not be the right phrase to describe millennials’ culture of smartphone use, it does appear to be a detriment to the mental health of college students based on this study.

Another metric in the survey was the speed with which college students respond to text messages. While the question sounds similar, it is an entirely different metric from the question of “how often do you check your phone” because smartphones present a wide variety of notifications and communication aside from text messages. Often, students check their phones for robotic notifications from apps, news platforms, services and retailers, and social media. The question “how quickly do you respond to texts only measures how attuned the students are to incoming communication from their immediate circle of friends – not the panopticon of social media. Figure 4 shows a cross-analysis of the speed at which participants respond to texts and how often they experience anxiety.

While this variable is not related to the concept of anxiety-producing panoptic surveillance I have presented, it does relate to social pressure to be responsive and available inside the cybersphere. Figure 4 is more difficult to interpret visually previous figures because the degrees of freedom in the original question have not been condensed. This cross analysis is only statistically significant in one focus group – those who respond to text messages “instantly.” For

those students, the mean frequency of anxiety is “very often” and the largest percentage of that category (~27%) are almost always anxious. What can be learned from this graph is that speed of responding to texts does not predict anxiety for students who take more than a few minutes to respond to texts, but for those who are compelled to respond instantly the story is different. For the minority of students who respond instantly to texts, an unusual number have very high anxiety. It is important to I emphasize that this is a correlation and not a causal relationship. There are many intervening variables that are responsible for this observation. Students who spend more time online and respond to notifications more quickly, a result of behavior resembling addiction to the techno-sphere, also likely respond to texts instantly.

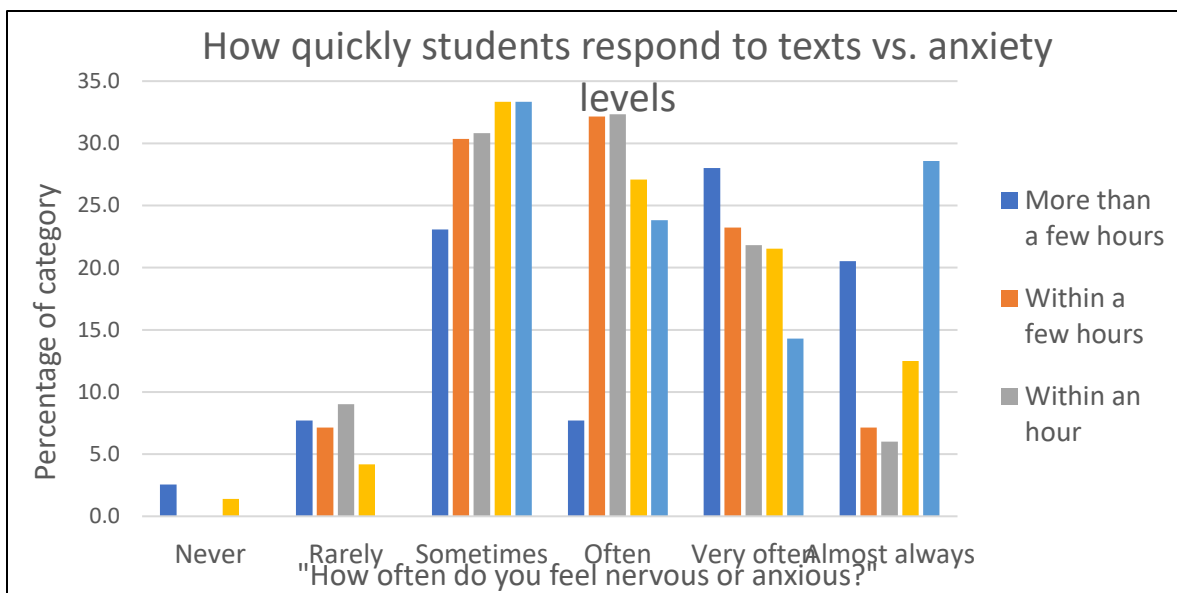


Figure 4: Cross analysis of the answers to the question “how often do you feel nervous or anxious?” and how long a student normally takes to respond to a text message.

From the data gathered on variable of technology use behaviors, we can conclude that there is indeed a correlation between the mean level of anxiety and the frequency or intensity of technology use for SU students. Responsiveness to texts, frequency of phone checks, and number of hours spent online per day all yield the same correlation with varying degrees of significance.

This finding is suggestive of a causal relationship between being excessively “wired in” and experiencing heightened anxiety.

One interesting caveat to this trend emerged, however, in the cross-analysis of the question “how many people do you text in a given day” and levels of anxiety. The trend in this data is clear; students with larger social circles (as measured by the number of people they text) have slightly lower levels of anxiety. The relationship observed in Supplemental Figure 4 is not a direct or causal relationship between the physical act of texting and anxiety, but rather a measure of anxiety against quantity of interaction with one’s immediate circle of friends and family. Students who text 0-3 people on a given day said that they “almost always” feel anxious 10% more often than those who text 8 or more people. Among those who rarely or never feel anxious, >10% more students text 8+ people in a day.

The first possible explanation for this finding is not a causal one; simply that those who experience greater social anxiety tend to text fewer people due to their hesitance to initiate interactions. The data suggests that social anxiety affects social media and texting behaviors in addition to face-to-face social interaction. Even with the added psychological security of being veiled by distance and communicating through text, students’ social interactions are limited by their anxiety. It is also fair to speculate that a non-causal reason behind the observed correlation is that students with higher levels of anxiety have smaller social circles in general. This would be the case either because their anxiety has hindered them from making friends or because they have chosen to keep their social networks small.

Anxiety, Social Media, and Channels of Information

In the age of social media, the channels through which young people receive news have been altered drastically. The definition of news has been warped beyond recognition by the new

technosphere in which anybody claiming to be a journalist has a platform through websites such as Vox, BuzzFeed, Salon, Ranker, and other advertisement-laden news databases popularly known as “clickbait.” The items that gather the most attention are controversial quick digest and editorial pieces whose content usually waxes more speculative than informative. Among these quick, fear-provoking digests, which are funneled to young readers largely through social media, it can be hard to differentiate between sponsored content and factual stories. The authenticity of individual claims can often only be traced back to other news digest websites rather than original documents, therefore blurring the line between fact and hearsay.

Social media platforms, particularly Facebook, gather data about the user’s interests and values as they browse the web and chat via online messaging servers. As a result, social media platforms deduce the political and religious affiliations, interests, and socioeconomic status of all users. In its new algorithm, Facebook only shows users content that it has determined will be “valuable” to them, leading to a phenomenon of personal interest bubbling. Users are deliberately inundated with content that an algorithm finds them most likely to click on – namely, articles that would incite anger and/or fear. For example, a student who is known by social media to be a Republican would be exposed to mainly right-wing biased editorials about the supposed transgressions of Democrats, and vice versa. A person who is an environmentalist might be shown articles about global warming, and a person who is passionate about social justice might be shown articles about hate crimes. The news that we receive is now tailored by the techno-panopticon to incite strong emotions, especially anger and fear, in every individual. The collateral damage is that we are shielded from media that presents opposing viewpoints – constantly being tugged on by the bait of manufactured interest. If the new emotional-bait-digest mode of news intake does nothing to add to students’ anxiety levels, it certainly does not help them.

The survey asked students what their main source(s) of news are. The most commonly selected answer was social media posts (71.0% of participants). The second most commonly selected answer was online newspapers/online magazines (70.1% of participants). The online newspapers option is partially redundant with the social media option because social media is often the source of links to various online publications. In other words, students are more likely to read an article in the New York Times or the Wall Street Journal because their friend shared it on social media than to read it after browsing through the newspaper's main web page. Only 26.9% of participants received news through television stations (the third most selected option), and 18.5% receive news through YouTube. YouTube is owned by Google, and its arrangement of "suggested" videos is also based on an algorithm that tracks and categorizes users' interests. Only 12.3% of students selected print materials/newspapers as a source of information.

Among students who chose "social media posts" as their main source of news intake, 34% feel anxious "very often" or "almost always." Among those who chose print materials, only 23.5% fall into these categories. Although not statistically conclusive, this disparity is enough to raise eyebrows. Students do not likely choose print news materials over social media as a result of anxiety, nor are there any obvious intervening variables in this comparison. It is difficult to provide a more detailed statistical analysis of the news/media question because it was formatted as a "check all that apply" list, allowing for individuals to fall into multiple categories. Participants chose an average of 2.23 different sources of information. Therefore, the overall effect of news and media reception on anxiety cannot be proved or disproved by the scope of this project, but the basic findings are enough to demonstrate that the new techno-panopticon is the broker of news and the perception of truth, in addition to personal information and social interaction. The relationship

between modes of news reception and mental health in college students certainly warrants further investigation.

Chapter 7: The Social Location of Psychopharmaceuticals in College Life

Personal use of psychopharmaceuticals among college students, particularly SSRIs and SNRIs, is interesting to study via an anonymous survey because it is a topic seldom discussed publicly or in social situations. Use of psychopharmaceuticals to combat anxiety and depression in college is a conversational taboo, and as such students may not realize just how ubiquitous life on antidepressants is among their peers. Two out of three counselors mentioned in their interviews that use of SSRIs, SNRIs, and other medications to combat anxiety and depression has become increasingly common among students over the past few years. Whereas a few decades ago, these medications were only prescribed to adolescents in extenuating circumstances, counselors observed that today they are commonly prescribed even to those without a formal diagnosis of major depression, anxiety, or panic disorder. Some students may also use them for “cosmetic” psychological health purposes because many psychopharmaceuticals act as emotional stabilizers. This survey aimed to create a profile of the ways students are using medications to cope with anxiety, and the broader sociological impact of these medications on college life.

96 total students (23.1% of all survey respondents) were currently taking at least one medication to cope with anxiety. The most common medication used among respondents was Zoloft (16 students) followed by Lexapro (15 students). Other common medications were Prozac (11 students) and Xanax (10 students). Of the 96 students who use medications to cope with anxiety, at least 71 were using an SSRI or SNRI. An additional 19 students reported that they were using benzodiazepines for anxiety. Lexapro, Prozac, and Zoloft all fall under the category of second-generation antidepressants, a class of medications that also includes Paxil, Luvox, Celexa,

Cymbalta, and several others. They were first FDA approved and marketed in the U.S. beginning in the early 1990s; much more recently than the former tricyclic and tetracyclic antidepressant medications. They are also widely considered safer for long term use than the first generation of psychopharmaceuticals because they have fewer complications and side effects than their retired counterparts. Although SSRIs and SNRIs are primarily used to treat depression, they are also commonly prescribed for GAD and panic disorders because of their mood-stabilizing effects. The survey sample pool is not a perfect representative sample, however it does cast a wide net, and the data suggests that a sizable portion of the whole student population uses second-generation antidepressants to cope with psychological suffering.

Although psychopharmaceuticals have not found their place in public conversation the way certain topics have in recent years, they have become increasingly normalized as a medical intervention for moderate to severe anxiety. Young people are aware of the potential “cosmetic” and mood-enhancing effects of these drugs, and many are actively seeking them out to assist in coping with stress and anxiety. However, the primary consumers of antidepressants remain vastly unaware of their potential side effects and the possibility of physical dependence. It seems that the conversation surrounding second and third generation antidepressants carries an ethos of trust in the pharmaceutical industry rather than suspicion of it. In fact, many of the student participants who benefitted from their anti-anxiety medications were not even aware of which class of pharmaceutical that they were taking. The project did not intend to prove that students were not informed about the nature of their medications, but evidence of that unawareness manifested in the data regardless. In the survey, those who listed their medications as “other” than the 13 specific drugs and classes of drugs provided were asked for the name of the medication. Nine out of 17 students who listed their medications as not being a tricyclic, SSRI, SNRI or benzodiazepine were

incorrect. Interestingly, almost all these students who did not know their drug classifications listed their medications by their generic names rather than brand names (such as “escitalopram oxalate” for Lexapro or “duloxetine” for Cymbalta), indicating that they likely were unaware of them being the same substance. This finding leads to the observation that we spend very little time investigating the nature and history of the medications we are prescribed. We as a society are taught to trust what is given to us by our physicians and psychiatrists – no personal research necessary. For students especially, this can be a dangerous social custom because undergraduates are the age demographic which consumes the most alcohol. Alcohol has serious interactions with benzodiazepines such as Lorazepam (Ativan), and three individual students in the survey who were prescribed Ativan were not aware that was a benzodiazepine.

Anti-anxiety medications are a multi-million dollar industry with young and middle aged women constituting the majority consumer base. These companies are not shy in their desire to foster psychological dependency. The mental-makeover train has accelerated in America and internationally, picking up speed every year since the landmark bestseller “*Listening to Prozac*” was published (Kramer 1993). Originally marketed exclusively as solutions for diagnosed mental disorders, second and third generation antidepressants are now being marketed as a readily available opportunity to cosmetically improve one’s mindset and experience greater psychological clarity.

Several students in the survey openly described their relationship with antidepressants as reliant or highly dependent, although not necessarily in a negative context. Students demonstrated that they have widely varying and complex relationships with their antidepressants. A female senior wrote, “If I had not started anxiety medication before coming to college, I would probably be dead. I often get low but the medication helps the low and now I have coping methods to lift

myself out of that mood.” The bluntness of her statement reinforces the severity that anxiety disorders take on in many older adolescents. She reminds us that despite much criticism and debate, antidepressants are highly effective in some cases and they have the potential to save lives that may otherwise have been absorbed by debilitating mental illness (Table 6). Another student wrote, “I have taken the same anti-anxiety medication for many years now and I don’t know if I’ll ever be able to stop taking it. It has helped me in so many ways and I’m a better version of myself because of it, but every time I try to taper off I go through withdrawals and I can’t cope with life in general, so I start again.” The reason she was trying to taper off the medication in the first place was unclear from her statement. Perhaps it had to do with negative side effects or the financial burden of the medication itself. She may also have been trying to “outgrow” the need for antidepressants.

Wall Street Journal author Katharine Sharpe poses an important question about outgrowing antidepressants. She asks, as people who grow up on antidepressants settle into their adult lives, should they stay on their medications or try to stop taking them? (Sharpe 2012) This is a looming, if perhaps rhetorical question for almost every student who depends on antidepressants to cope with daily life. Of all students in the survey who were currently taking an antidepressant, about 32% of them had been taking that medication for more than 3 years, and 17.5% for more than 5 years. Several respondents had been taking their medications consistently for most of their lives. When, if ever, is the right time to stop taking mood balancing drugs? Only one survey participant brought up the subsequent question of life on antidepressants as it relates to personal identity. It is an often-overlooked conversation, but it is nonetheless a barrier that every millennial who has grown up on antidepressants will eventually confront. A college student who has taken antidepressants for several years will inevitably begin to wonder; am I my true self on this

medication as it alleviates symptoms of a disorder, or am I my true self off this medication because its effects are cosmetic? When attempting to taper off antidepressants, this question of identity and anxiety is further complicated by the withdrawal process, which can make it difficult to differentiate between withdrawal symptoms and symptoms of an underlying psychological disorder. Often times, attempting to taper off anti-anxiety medication results in even more anxiety than would otherwise be present due to fluctuation of serotonin and norepinephrine levels in the brain during withdrawal.

Most of the students who were taking one or more psychopharmaceuticals responded that the drugs were at least moderately helpful (Table 6). For the majority of students suffering from debilitating anxiety, the pros of taking anti-anxiety medications outweigh the undesirable side effects. Nevertheless, students expressed resentment of the personality-dimming characteristics of SSRIs and SNRIs. A male senior said, “It really interferes with my creative process. I consider myself a really creative person. [The medication] makes it so nothing inspires or arouses me anymore but its still worth it to take it to get through the semester.” A female junior added to this sentiment; “I may be a less colorful person on Lexapro, but at least I’m a more stable one.” Complaints of feeling withdrawn or robotic are common among people who take second generation antidepressants. The lows are not as low, but the highs are not as high. The amplitude of life, so to speak, has been reduced, and the personal question therein is whether it is better to be fully oneself with panic disorder, or to experience a potentially watered-down version of life without it. With the high stress, high energy, and high pressure social and academic climates of college, students often choose the latter and willfully view the world through the lens of Lexapro.

Complete Solution	1.33%
A lot	36.0%
A moderate amount	40.00%
A little	17.33%
Not at all	5.33%

Table 6: Answers to the question “How much has your medication helped you?”

The survey questions also aimed to account for those students who choose to self-medicate using alcohol or other non-prescribed drugs. American college students have a reputation for drinking often and in excess and using recreational drugs at tailgates, bars, sporting events and parties. This project aims to expose and discuss a lesser acknowledged facet of college drinking and drug culture; that of self-medicating for stress and anxiety relief. The survey did not ask participants whether their anti-anxiety pharmaceutical drugs were prescribed, but a number of students listed medications which are not commonly prescribed as a first line of anxiety treatment. Several students were taking schedule IV benzodiazepines such as Ativan and Xanax or strong sedatives such as hydroxyzine and propranolol. Two students also mentioned taking Adderall as a treatment for anxiety. These medications are unorthodox choices for a psychiatrist to prescribe for primary anxiety management. These instances may or may not have been students using psychopharmaceuticals without a prescription. Perhaps in cases of students taking unprescribed antidepressants, it is not the idea of taking medication for disordered anxiety that feel isolating, but instead the necessity of being psychoanalyzed and diagnosed by a doctor in order to obtain these medications. They may have negative or mistrustful feelings toward doctors and counselors, or as one participant expressed, be fearful of forced hospitalization depending on the severity of the condition. That, in addition to another major reason so many students will never seek out professional help for mental health issues; that they are too anxious or depressed to go about doing so.

It is worth noting that Syracuse University has a documented problem with benzodiazepine abuse, which was also mentioned by several students in the survey comments. In the 2017-2018 academic year, three SU students passed away in incidents related to misuse of drugs and alcohol. One student specified in the survey, "...I am uncomfortable with the amount of students on this campus abusing Xanax." Abuse and sale of illegally acquired Xanax, among other benzodiazepines, is indeed a widespread issue among undergraduates, particularly in Greek social circles, but it has scarcely addressed by university administration in the past four years. In another student's observation, "Frats refer to Xanax as bars. As in, the pills look like little bars. I guess that word downplays the danger of taking too many or mixing them with liquor." Her note was of sociological interest because it demonstrates the normalization of casual benzodiazepine use for fun and stress relief. Given the obvious danger of Xanax abuse, the fact that using "bars" has become an element of fraternal social leisure time is very worrisome. One counselor mentioned in her interview when asked about recreational drug use that despite a mandatory freshman online drug and alcohol education seminar, college students are dangerously unaware of how harmful and addictive benzodiazepines can be.

For some students, particularly males according to the survey outcome, self-medicating may be a more socially acceptable alternative to seeking professional or medical help for anxiety. Over 15% of men vs. only 8.2% of women responded that they use drugs and/or alcohol frequently or daily to cope with anxiety. In all, 31.6% of participants use drugs and/or alcohol to cope with anxiety occasionally, 7.6% do it often, and 2.2% do it daily. That adds up to a surprising ~41.4% of all respondents who are self-medicating with non-prescription substances specifically to cope with anxiety in college. These self-medicating behaviors may be an alternative to, or supplemental to prescribed medications. A few students responded in this category that they used marijuana as

a holistic solution for anxiety. At the time of this study, medical marijuana was legal in New York State for certain conditions, but only recreationally legal in seven states. Marijuana may be the most socially accepted method of self-medicating in college, although its merit as a solution for anxiety is subject to scrutiny since it is known to cause paranoia to varying degrees depending on its THC/CBD ration and the individual's reaction to it. Some people specifically avoid marijuana because it provokes feelings of paranoia, while others become psychologically dependent on the euphoric effects of cannabinoids to cope with daily life. Without passing any moral judgement with regard to the choice to self-medicate as opposed to, or in addition to seeking professional help for anxiety, we can conclude that college students are using both prescribed psychopharmaceuticals and unprescribed drugs/alcohol to cope with anxiety. We use these psychosocial tools very often, and in greater volumes than a given student would imagine. With or without formal diagnosis of disordered anxiety, psychopharmaceuticals for mental health have found a stronghold among younger millennial college students.

Chapter 8: Interviews with SU Counselors; Diverging Opinions and Common Threads

As a supplement to the survey of undergraduates, three professional student counselors from the Syracuse University Counseling Center were personally interviewed for the project. Their responses and helpful discussions provide backing for the findings of the survey research, as well as new perspectives on the culture of anxiety among college students. The names and identifying details of the counselors have been changed or omitted from this report to protect their anonymity. The first counselor, Alina, is a general mental health counselor who interacts with a wide range of students and issues. She is in her thirties and has been working at Syracuse University for more about three years. The second counselor, Jennifer, is in her forties and has been working at Syracuse University for more than five years. Jennifer specializes in mood disorders and works frequently with students who have “marginalized identities.” The third counselor, Sarah, is a Ph.D. candidate who works primarily with students who have been referred for violating the university’s code of student conduct (mainly prohibited drug and/or alcohol use). Sarah is relatively new to Syracuse University and is slightly younger than Alina and Jennifer.

It is important to observe that all three counselors are women, as the large majority of the university’s practicing counselors are female. There are only two male staff therapists, compared with thirteen female counselors. As many people are more comfortable seeking professional counseling from someone of the same gender, this ratio alone could be a strong deterrent for male undergraduates seeking counseling. Although criticism of the counseling center’s internal structure is beyond the scope of this project, it becomes relevant in the sense that the male students surveyed were seeking help far less often, and 60% of the male survey respondents who were currently receiving counseling for anxiety were not seeing an SU counselor. This statistic was similar for the women surveyed, however, it is well established in mental health literature that men

are less likely than women to seek counseling in general. It is vital that university counseling centers offer an environment that is comfortable and accessible for all genders.

Each interview began with a question about the most common mental health issues that they address at the Counseling Center, and all three of the staff therapists gave the same answer. The most common concern that students seek their help for is depression, followed closely by anxiety and anxiety disorders. Alina said, “I wouldn’t know any numbers, but many if not most of my clients cite anxiety as part of the problem, in addition to mood stuff and feeling depressed.” Alina and Sarah both emphasized that there is a very high co-morbidity of anxiety and depression, and many students require a targeted therapy to address both issues. Their observations are consistent with demographic research on collegiate mental health, which unanimously asserts that anxiety has come to rival depression as the most common mental health concern, and more students than ever are seeking counseling for anxiety.

The counselors were then asked whether they observe any particular student demographics to have higher anxiety levels intra-university. Interestingly, the counselors had varying answers. Alina answered, “Definitely women [report more anxiety], but probably just because they’re more comfortable talking about mental health concerns in general. I don’t know if that means they’re necessarily more anxious than men.” Other than that, she could not point out any specific race, activity, or field of study that correlates with higher frequencies of anxiety. Jennifer spoke in greater detail on this topic, answering without pause, “No, not at all. I think the presentation might look different, and how they might describe it or experience it may be different, but I wouldn’t say one college has more [anxiety] than others. There may be some similarities within the colleges, architecture for example. They get little sleep, they stay up late in the studio doing projects, but that doesn’t mean other people aren’t experiencing stress and anxiety. They just present it

differently.” Her words are insightful, and they accurately reflect the findings of the survey about women. Students across all academic divisions reported anxiety at similar frequencies, which underlines the fact that anxiety and stress are not synonymous. Students experience anxiety resulting from many factors aside from volume and difficulty of assignments. For example, fear about achievement may have a more pronounced psychological effect on students whose majors are widely considered less lucrative or employable. A fine arts major may feel more harshly judged for his or her life choices than an engineering major.

Jennifer agreed with the statement that different colleges have different *cultures* of anxiety. She also agreed that women report more anxiety than men, and elaborated that “I would probably speak more to contributing factors to the impact of anxiety that other groups might not experience.... Such as their marginalization or systematic oppression or discrimination. It’s kind of like apples to oranges. They have additional factors that other groups don’t experience, but you might also say marginalized groups won’t experience certain types of anxiety.” According to Jennifer, women, minorities, and other marginalized groups experience more factors that may contribute to anxiety, and they may also have different cultural experiences of it. Sarah also spoke on the topic of how minorities and marginalized identities experience anxiety. She said, “I think that students who are from a lower socioeconomic background struggle a lot, and it’s hard for them to find people that they relate to. I have students, specifically black and Latinx students, who like their white friends but don’t know how to talk to them about things that are specific to them. And I think too there’s a lot of stress among students who are queer or LGBTQ identified. It’s a really small population and it’s very hard for them to date...” The survey did not ask students to state their race/ethnicity or sexual orientations, but studying anxiety specifically within collegiate

LGBTQ, black, and Latinx communities at Syracuse University would be an important extension of this research.

Sarah also had important input on the subject of academic work and anxiety. In her observation, some students who are the highest achievers experience the most anxiety as a result of psychological pressure from themselves or others to over-extend. It is not the work itself, but the psychological pressure associated with it that brings those students to Sarah for counseling. She said, “We all have a level of anxiety, and there’s a point in the middle of the bell curve where anxiety is useful. If it’s not too much or too little, it’s going to make us the most productive. However, I think that students who are high achieving and have a perfectionist attitude tend to be on that side of having too much anxiety.” Her explanation adds a level of depth to Jennifer’s observation that no specific academic division, regardless of its purported rigidity, seems to foster more anxiety. Anxiety is a psychological condition that can be brought about by pressure to work as hard as possible, be competitive, and gain recognition- and that pressure is distributed equally among Syracuse University’s different colleges. High achieving individuals can be found in all academic divisions. What can be learned from the reflections of these student psychotherapists is that stress level is not necessarily a function of academic division or workload, but of personality type. Although it may be directly produced by conditions of daily life, the experience of high anxiety correlates more with how much students pressure themselves to succeed. This is important in relation to the survey finding that the factor causing most stress for students is fear about future achievement.

The three counselors expressed differing opinions on the importance of antidepressants and other psychopharmaceuticals in student life. However, all three of them said that they do not recommend prescription medications as a first course of action for any students who come in for

anxiety counseling. Although they are so commonly prescribed and widely used, none of the counselors take SSRIs and SNRIs lightly. Jennifer said, “I don’t always recommend medication, unless the problem is significantly hindering their day to day functioning, where they’re not eating or sleeping or are isolating themselves. It has to be at that threshold for me to recommend medication, unless the student is wanting medication or looking for it, and even then I begin with education.” Although she does not recommend it lightly, Jennifer said that she has seen many students with debilitating anxiety and/or depression improve from psychopharmaceuticals. She said that they can be a great relief, especially for students who do not want to actively engage in psychotherapy. Sarah had similar feelings about recommending antidepressants. She said of SSRIs, “I think they can be [effective]. To some extent they can work, and it’s not the fault of clients, but they’re overprescribed. They’re cheap and they’re easy to give out if you have insurance. I’m bigger on learning to cope with mindfulness techniques instead.” Both Sarah and Jennifer view antidepressants as a last-resort course of action rather than an immediate solution for psychological suffering. They both noted that antidepressants can be highly effective for some individuals, but do not work for everyone, and they both stressed the importance of mental health literacy and psychotherapy before deciding to begin medications.

Alina was slightly more optimistic on the subject of psychopharmaceuticals, as she understands that “there’s an increase in students, not just here but nationally, where they are coming to college with a pre-existing condition or have been to therapy before or were on medication prior.” She recognizes the ever-growing prevalence of antidepressants in society, and the fact that people are beginning to use them at younger ages. When asked if she ever recommends psychopharmaceuticals, Alina answered “Yeah, definitely. There are certain students that based on what they’re describing and particularly length of time they’ve been struggling, I recommend

medication from time to time. I recommend it often for students who have tried therapy already, tried all the things I'm going to recommend ... I've definitely seen lots of students who have come back and we've been like 'oh god, this is what you needed,' but then others that it doesn't work for at all." Alina said that she sometimes recommends medications in addition to therapy rather than as a last-resort-only approach. She said, "If they come to me and immediately want to try it in conjunction with therapy, I'm okay with that." She is also slightly less cautious about the potential side effects of medications than the other two counselors and would not try to steer a student away from SSRIs who was interested in trying them. The counselors are aware that large numbers of college students choose to use antidepressants to manage anxiety, but their levels of concern about the social and individual impact of psychopharmaceuticals were varied. In summary, the counselors do not take medications lightly and do not believe they are the right choice for everyone struggling with anxiety. They focus on client education first. This is important in light of the survey finding that many SU students were unable to identify or categorize their own medications. In a time where SSRIs and SNRIs are being prescribed more commonly and casually than ever, more education about their potential risks and side effects is needed.

The counselors were also asked for their opinions on the practice of self-medicating for anxiety using either alcohol, marijuana, or other non-prescription substances. All of them were cautious in their approach to the subject, understanding the fine line that young people often cross between self-medication and addiction. They also demonstrated awareness that the opioid crisis in New York has affected many Syracuse University students, directly and indirectly. Jennifer takes a case-by-case approach to all her clients, including the subject of non-prescribed or illegal drugs. She said, "some students who use marijuana to cope with anxiety enjoy it, but others realize that it actually increases their anxiety or gives them difficulty concentrating. Everyone has a different

response to substances.” Like the other counselors, Jennifer’s first priority is making sure that students are able to understand and reflect upon their own choices. She continued, “I talk with them. I want to know, are you using substances because you want to celebrate, because you want to self-medicate, or because you’re bored?” These three things, she stated, are the primary motivations for students to use marijuana (and other mind-altering substances). Jennifer also addressed the question of whether students choose marijuana and other substances to cope with anxiety to avoid the stigma of antidepressants. She said, “I find that interesting because if you’re on an SSRI, the purpose is to affect your neurochemistry, which is the same thing weed does. But I think still there’s a lot more social stigma with SSRIs.” In effect, she has pointed out that the stigma associated with prescription antidepressants is really a stigma associated with a medicalized concept of mental illness and not the pills themselves. Many students would choose self-help over psychiatry for personal or cultural reasons, even if it involves the risk of addiction. Alina also offered insight into the reasons students choose to self-medicate rather than take antidepressants. According to Alina, it may have more to do with the perception of intrapersonal control (or lack thereof) than social stigma. Here, I use the phrase intrapersonal control to describe one’s sense of both physical and psychological self-determination and self-reliance. She said, “What I see more often than fear of a diagnosis or a sense that there’s something wrong with them is, people say ‘I don’t want to *have* to put something in my body that’s going to make me better, I don’t want to *have* to rely on a certain pill ... I want to manage it on my own.’” Her idea complicates the previous discussion of fear and stigma surrounding psychiatric diagnosis as a primary motivation for self-medicating. Of course, these motivations are not mutually exclusive: both the sociocultural stigma and a fear of losing intrapersonal control play a role in the choice to self-medicate.

On the subject of the opioid crisis, Jennifer said “Of course it’s problematic. And it doesn’t have to be Xanax. With what’s going on nationally with the opioid epidemic, it’s a real problem. People are overdosing and dying, and it has happened on this campus, too.” Jennifer is aware of, and empathetic toward students’ tendency to self-medicate, but simultaneously cautious about use of unprescribed benzodiazepines and narcotics. Sarah says that she meets with students who self-medicate on a daily basis because of her area of specialization. In reply to my question about coping strategies, she said “Because of the realm I’m in, I’m presented more with students who are using alcohol or drugs as a coping mechanism. One or the other, or both. So, I educate them on lessening that because anything that alters your mood can make you emotionally unstable.” Sarah echoes Jennifer’s take on marijuana as self-medication for anxiety. She says, “There is a perception that recreational marijuana lessens anxiety, but it can actually make it worse over time. It can make you less resilient to your own anxiety.” As a result of her counseling experience, she has come to believe that all non-prescription mind-altering substances (and even many prescribed ones) are counterproductive for anxiety. She expressed that she believes they interfere with holistic coping mechanisms for clients with moderate to severe anxiety, such as meditation, exercise, and reflective writing. Sarah has worked with students who are reliant on benzodiazepines or other narcotics, both prescribed and non-prescribed, and she perceives them as destructive regardless of their mode of acquisition. What can be learned from the counselors on this subject is that there are a variety of reasons students choose to self-medicate, ranging from mistrust of medical authorities and social stigma about antidepressants to a desire to feel more in control of one’s own body.

The interviews concluded with questions about the primary causes of anxiety among millennial college students. Each counselor was asked what separates millennials, culturally or otherwise, from older generations that might be the causing an epidemic of self-reported anxiety.

The first answer that all three of them jumped to was consistent with the topics the survey investigated – namely, the psychological effects social media and the socially mandated behaviors of instant communication. In different verbiage, each of them described from personal experience how drastically the collective psyche has changed with the emergence of the new technopanopticon. Their input on this topic was extremely valuable, as all three of them are old enough to remember life before cell phones, yet still young enough to identify with current college students. Two of the counselors also provided a vital insight into millennial culture that was beyond the scope of the survey. They addressed the way millennials as a generation were raised by their parents, and how the parenting styles of generation X might have fostered such a wave of psychological distress. Both Sarah and Alina hypothesized that generation X (people aged 40-53 as of 2018) and the youngest of the “Baby Boomer” generation developed new social norms of parenting whose consequences have been psychologically harmful to millennials in the long term. They described the culture using labels such as “over-protective” and “helicopter parenting.” In essence, they said, the social norm for our parents was to shield us as much as possible from the dangers, disappointments, and harsh realities of the world.

Jennifer blames social media and instant communication for increased anxiety among millennials compared to other generations. She said, “I think social media is a huge part of it. We’re always connected to everything and we have easy access to things... you have to post everything, and everything is instant where before it wasn’t like that. When I was in high school email had just been invented. We had dial-up. I think that because of this instant access to information, it can actually create stress and anxiety, because you’re always *on*. Always connected to something. But it can also create disconnect.” She elaborated on this “disconnect,” saying that “it can create anxiety when you have to analyze everything For instance, pictures on Facebook

and Instagram and Snapchat.” In this statement, she alludes to the concept of being “wired in” at all times to the techno-sphere. Jennifer pointed out that in the age of social media, people are also looking more broadly at events in the world, and that increased collective awareness can also be a source of anxiety. She says that students often struggle to have conversations about the ways social media affects their mental health, as they can scarcely remember life without it.

Alina’s statements about anxiety’s cultural relationship to technology were remarkably similar to Jennifer’s. In response to my question about what separates millennials culturally, she said “I think technology is a huge piece of it. I graduated from college and I had just gotten a cell phone, but it was a Motorola with an antenna. Social media didn’t exist for me until I was finishing graduate school. The idea of students just having so much connectedness and so much visibility and so much pressure to portray themselves in certain ways feels very ... pressure-y.” Here, she addresses the invisible fallout of the techno-panopticon. The pressure to portray oneself as popular, successful, beautiful, or otherwise is not without psychological consequence. In the same vein, Sarah pointed to social media as the primary culprit for millennial psychological turmoil. She responded, “I didn’t have my brick phone until after I learned to drive. I do think that part of it comes from this like... an internet persona. You have to maintain it, and while you can put filters on your internet persona, make it look like everything is perfect, that’s not necessarily true if you look at that person in real life. You look at a Facebook feed and you see that this person is in France and you’re just at home in your sweats. Social media creates this perception that you are less than.” It is clear from her description that Sarah understands how deliberately compelling the culture of social media is, and the illusion of choice when it comes to participation in it. According to Sarah, social media is a game of feeling “less than”, and subsequently trying harder to

compensate for that feeling of being lesser – a cycle that would logically produce collective anxiety for our generation.

Based on their statements, it appears that all of the counselors interviewed would attribute students' increase in general and social anxiety primarily social media use behaviors. Students' survey responses indicated that they believe fear about future achievement is the primary cause of anxiety. These two findings are not unrelated; in fact, fear about future achievement may be in many ways an extension of the anxiety caused by social media. Social media engenders fear about future success when we try hard to portray ourselves as successful, and at the same time we are exposed to all the achievements of our peers. It is often through social media that we measure ourselves against our peers and find either pride or disappointment in our work.

After speaking about culture and communication technologies, Alina and Sarah both mentioned that there may be a relationship between the parenting styles of generation X and the high anxiety levels of young millennials. Alina summarized this phenomenon, saying “There are certain trends in parenting style [of generation X]. What research shows is that parents of millennials were grazing kids in a more you-are-special mentality versus emphasizing hard work ... and sometimes not preparing their kids for disappointment.” In her view, the anxiety-prone college students she counsels have been unknowingly conditioned by their parents to panic when faced with the challenges of adulthood. She continued, “Even if you work really hard you still might not be the best at things, and that gets really disappointing for students ... and there’s a lot of parental protection happening in this generation. I think what that’s doing is preventing kids from learning how to manage emotions. For instance, kid forgets textbook at home in high school so mom just brings it up to them. It seems really small, but in college if they make mistakes or they don’t do something well, there’s been a lack of exposure to how to deal with that. A lot of

students just don't know how to tolerate negative feelings ... That's a lot of what I deal with." To be clear, she is referring to the culture of anxiety in the current collegiate generation as opposed to DSM anxiety disorders. The relationship of parenting style to the emergence of diagnosed anxiety disorders in children and teenagers is not a subject for this project. Alina is suggesting, however, that parents of millennials are partially to blame for the record numbers of college students seeking counseling for excessive, although not necessarily disordered anxiety.

Sarah also had much to say about the collateral damage of "helicopter parenting." She previously worked as a high school counselor, where she described the parents she met as extremely protective of their kids. She said, "They were like 'I'm not gonna let my kid play in the dirt and you have to wash your hands all the time' and they also have this like, everyone-gets-a-trophy attitude. Sarah believes this mode of parenting poses a serious problem for current college students. She stated, "I think its seriously damaging. I think everyone here expects to be the best, and not everyone can be the best. One person is the best, and everyone else just has to try as hard as they can... A lot of students don't know how to navigate not being externally validated. They don't know how to praise themselves. It has to be like, because of somebody else or because of a good grade or because of the money it will make them. She concluded, "That sounds really corny, but there's a lot of value to accepting yourself as you are." Millennials have been, in her estimation, underprepared for disappointment and failure, and simultaneously showered with an excess of unearned praise. They are very prone to anxiety and panic because they are experiencing in college, for the first time, life without emotional shelter. If what these counselors say is true, then they (and the University system) act as catchers in the rye for a generation that is walking precariously on the edge between illusion and reality.

Chapter 9: Conclusions and Policy Recommendations

The relationship between the social behaviors arising from new communication technologies and heightened anxiety levels is complex and multi-faceted. In many ways, communication technology can benefit students with social and general anxiety, helping them to reach out and build new connections. However, the data from this survey and the opinions of the professional counselors reveal that social media conditions young people toward a set of behaviors which promote anxiety. Students participate in a new techno-panopticon that is both intrusive and addictive. Social media demands heavy time commitment and behavioral conformity. As the counselors described, it has the potential to damage self-esteem through negative re-enforcement. The survey reveals that the large majority of Syracuse students only receive news through social media, which works to inspire fear through its new quick-digest journalism. The survey data also implies that spending more hours online per day and using more social media platforms both correlate with higher levels of anxiety. Synthesizing the findings of this study, we can begin to understand how being “wired in” to a socially mandated network over the course of many years causes psychological stress.

The data from this study reveal several important demographic trends. Nearly 80% of survey respondents were female, a statistic which reveals that not only are women more likely to experience anxiety disorders (as we can learn from previous literature), they are also more willing to address the topic of anxiety disorders, as revealed by their self-selection for participation in this project. The counselors were able to confirm this finding from experience. Male college students who experience anxiety or anxiety disorders are socially conditioned to avoid confessions of, or conversations about it. Regarding the question of academic division and anxiety levels, it is interesting that there is little (if any) correlation. As the counselors confirmed from years of

observation, no single academic division or major reports higher mean frequencies of anxiety or anxiety disorders. In their opinion, this is because the expression of anxiety is largely independent from difficulty or volume of academic work. Rather, anxiety is more often a circumstance of the culture that students are immersed in and psychological pressure that is applied interpersonally or intrapersonally. This pressure is often mediated by technology use behaviors. Furthermore, survey participants reported in an unprecedented majority that fear of the future is the number one cause of their anxiety. Although volume and difficulty of academic work was a close second, students often reported that it a socially enacted fear of future success that drives their anxiety.

34.9% of students surveyed self-identify as having disordered anxiety, and 23.1% of them were are actively taking an antidepressant to treat the anxiety. The stigma surrounding antidepressants has lessened to the point where many students take them for mild, non-disordered anxiety and may even be using them simply to level out mood swings and help cope with hard work in general. For most students, the antidepressants are at least somewhat effective. However, the participants revealed through their written comments a surprising lack of knowledge regarding which category of medication(s) they are taking. Nine different survey participants mislabeled, or did not know at all, which category of antidepressant they were taking (e.g. SSRI, SNRI, benzodiazepine). This finding - the fact that so many students take prescribed psychopharmaceuticals without prior research - speaks to a broad ethos of trust in the pharmaceutical industry and psychiatry to provide a fix for symptoms of anxiety. The discussion questions whether this trust is warranted given the fact that, as many participants mentioned, their medications do have adverse side effects. The counselors had conflicting opinions on whether antidepressants are practical and safe for use outside of severe anxiety disorders and major

depression. In short, psychopharmaceuticals have become commonplace, trusted, and often depended on to maintain the balance of life in college.

Rather than uncovering one single root cause of anxiety among college students, this research sheds a light on many overlapping cultural roots that make young millennials distinct in their crisis of mental health. Firstly, as SU students attest, the pressure to succeed at the college level and beyond is so great that fear of the future is the number one cause of anxiety and psychological stress. I relate this fear to the ways we use social media and other technologies to inform a new wave of social anxiety. Additionally, I argue that the channels through which this generation receives information and news (primarily social media) have created a deliberate paradigm of manufactured panic. Finally, as the counselors described, the parents of young millennials may have engendered some general anxiety and panic in college through a social custom of “helicopter parenting.” These elements combined may be partially or wholly responsible for the record high numbers of students seeking counseling for anxiety and panic.

As levels of both general and disordered anxiety rise among college students, the counseling center at Syracuse University as well as universities across the United States are experiencing high demand on their resources. After synthesizing the data from this research, listening to the comments of participants and counselors, and analyzing the cultural factors that inform anxiety, I make several policy recommendations to the University that will help address this issue and increase the comfort level of current students. Firstly, several students mentioned that their anxiety is provoked by a prevailing lack of privacy, especially in dormitories and other shared housing. I recommend establishing more private and noise-protected spaces, especially within dorm complexes, where individuals can go to study, make phone calls, or otherwise relax without interruption. Currently, there are no such spaces where for undergraduates who are sharing

open dorm rooms with one or multiple roommates. I also recommend reserving dorm rooms as singles that are not to be shared for those students who prefer to live alone due to an anxiety disorder or other mental health issue.

Several students also mentioned that certain class requirements have been harmful to their grades because their anxiety prevented them from meeting the requirements. The most common complaints among survey participants were public presentations and high attendance quotas. One student brought up that it is not explicitly clear whether a diagnosed anxiety disorder might warrant special academic accommodations through the Office of Disability Services. I recommend that if a student provides the proper documentation of an anxiety disorder from a counselor or psychiatrist, he or she should be excused from public presentation requirements given that they pose an unnecessary burden. I also recommend that the maximum number of missed classes be increased from two to three, or more than three with proper documentation of a mental health issue that would hinder a student's ability to attend classes. Attending class is undoubtedly critical to the learning process of students, however, the current policy of removing a letter grade for each missed lecture beyond two is excessive, especially during the winter season in Syracuse when many students contract viruses. For students facing mental health crises, the two-class policy creates an academic barrier that can be difficult to surmount and often results in a permanently damaged GPA.

My final recommendation is to better communicate the mental health resources that are already in place. The SU Counseling Center employs many skilled and dedicated counselors whose concern for the rise in mental health issues among undergraduates is genuine. To the Counseling Center, my only suggestion would be to consider making an additional male counselor available so that male students who would be more comfortable with a therapist of the same gender will can

be accommodated. As men are statistically less likely to seek counseling for mental health issues, it is essential that they not feel deterred from making use of available campus resources. Unfortunately, 49.9% of survey participants answered that they were not aware of what resources the university has made available for those struggling with overwhelming anxiety. Some students fear that they will have trouble obtaining an appointment, or that their concerns will not be taken seriously. I recommend a renewed effort to communicate to undergraduates what resources are available for depression and anxiety support, including professional counseling, support groups, resource centers, and, if necessary, the Office of Disability Services. I believe the knowledge that Syracuse University has established a mental health crisis support system, and the knowledge of how to access it, will be greatly helpful to the many students who have not been reached.

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Appendix

IRB Exemption/Participant Recruitment Information:

Statement for online survey recruitment via social media

Hello members of (Title of Organization),

For my Capstone Project, I am conducting research on anxiety and panic disorders among SU undergraduates. The purpose of the study is to learn more about how college students experience anxiety, how it affects our academic and social lives, and how students choose to cope with it and treat it. Part of my project is this online survey for undergraduates (**Link to Survey**). Please consider taking 10 minutes to fill out my survey. This survey is completely voluntary, totally anonymous, and will be used for research purposes only. Thank you!

Statement for online survey recruitment via email to the members of the Honors Program

Dear fellow members of the SU Honors Program,

My name is Lauren Hannah and I am a Junior majoring in Sociology. For my Honors Capstone Project, I am conducting research on anxiety and panic disorders among SU undergraduates. The purpose of the study is to learn more about how college students experience anxiety, how it affects our academic and social lives, and how students choose to cope with it and treat it. Part of my project is this online survey for undergraduates (**Link to Survey**). Please consider taking 10 minutes to fill out my survey. This survey is completely voluntary, totally anonymous, and will be used for research purposes only. The more respondents I get, the more statistically significant the results will be, and the more the project can help serve students suffering from chronic anxiety. Your participation is greatly appreciated.

If you have any questions, comments, or concerns, please reach me at lhannah@syr.edu or Professor Jaqueline Orr at (redacted). You can also contact the Office of Research Integrity and Protections at orip@syr.edu.

Statement for recruitment of SU counselors to participate in interviews

Dear (Name of Syracuse University Counselor),

My name is Lauren Hannah and I am a Junior in the Honors Program majoring in Sociology. For my Senior Capstone Project, I am conducting research on anxiety and panic disorders among SU undergraduates. The purpose of the study is to learn more about how college students experience anxiety, how it affects our academic and social lives, and how students choose to cope with it and treat it. I hope that the information I gather through this research will ultimately benefit Syracuse students suffering from chronic anxiety and panic disorders.

I am very interested in conducting interviews with staff of the SU Counseling Center to hear the perspectives of professional psychologists, counselors, and social workers on anxiety in Syracuse students. Please consider allowing me to conduct a short interview with you in the counseling center at your convenience. The interviews will take 20-30 minutes and no identifying information about interviewees will be published. The interview consists of about 10 general questions, and no questions about individual clients will be asked. This research project has been reviewed and deemed exempt from full-board IRB authorization by the Office of Research Integrity and Protections. If you have any additional questions or concerns about this research, please contact (redacted) or the Office of Research Integrity and Protections at orip@syr.edu.

Counselor Interview Questions:

1. How long have you been a counselor at Syracuse University?
2. Do you specialize in counseling for any specific type of problem?
3. Do you often interact with students who report chronic anxiety or panic disorders?
4. What percentage of your clients would you estimate are struggling with anxiety problems?
5. Do you notice any demographic patterns in particular among clients who have chronic anxiety? Such as race, gender, or field of study?
6. What are the most common mental and physical symptoms of anxiety that your clients report are affecting them?
7. Of your clients who report anxiety or panic problems, how many would you say have been formally diagnosed with an anxiety or panic disorder by a psychiatrist?
8. Do you perceive that the frequency of anxiety and panic disorders in college students has increased, decreased, or stayed the same over the past few years?
9. What kinds of strategies do you usually recommend to students for coping with anxiety or panic disorders?
10. Do **you** personally believe that medications such as SSRIs are the most effective (or an effective) method for treating anxiety or panic disorders in college students?
11. What method would you say college students **most often** end up choosing to cope with anxiety and panic problems?
12. There is a large body of literature suggesting that millennial college students have extraordinarily high levels of chronic anxiety. Do you have any opinion on why that might be the case?
13. Do you think there might be any relationship between technology/social media use and anxiety levels in millennials?

Student Survey Questions:

Disclaimer/Agreement (Mandatory):

DISCLAIMER STATEMENT:

This is an anonymous survey being conducted for research purposes only. It is completely voluntary. It is for an undergraduate Capstone project studying anxiety and panic disorders among college students to benefit mental health research and the SU counseling center. The survey consists of 30 questions, mostly multiple choice, and participation is completely voluntary. You may stop taking the survey at any time and your responses will not be recorded. Whenever one works with email or the internet there is always the risk of compromising privacy, confidentiality, and/or anonymity. Your confidentiality will be maintained to the degree permitted by the technology you are using. No guarantees can be made regarding the interception of data sent via the internet by third parties. If you have any questions or concerns about this research, please contact Lauren Hannah at lhannah@syr.edu or Dr. Jacqueline Orr at jtorr@maxwell.syr.edu.

☐ I have read and understand this statement, proceed with the survey

1. Please indicate your age
2. Please indicate your gender
3. What year are you in at SU?
4. Which college are you in at SU?
5. Are you a part of any of the following campus organizations?

6. How often do you feel nervous or anxious?
7. Do you have trouble managing feelings of anxiety or nervousness?
8. Do you suffer from any of the following? (GAD, PD, Social Anxiety, Other Chronic Anxiety, NOTA)
9. Do you have other friends at SU who suffer from anxiety disorders?
10. Those with anxiety disorders ONLY: How long have you been suffering from this disorder?
11. How often, if ever, do you experience panic attacks?
12. Those with anxiety disorders ONLY: Has your disorder been diagnosed by a counselor, psychologist, or other medical professional?
13. Are you currently seeking or receiving help to cope with chronic anxiety or an anxiety disorder?
14. IF YES to q13, is this help from a Syracuse University affiliate or counselor?
15. Are you familiar with the resources SU offers for students struggling with anxiety?
16. Do you ever use non-prescribed drugs or alcohol to cope with anxiety?
17. Those with anxiety disorders ONLY: Are you currently taking any medications to help with anxiety? If yes, please indicate which medication.
18. Those taking medications ONLY: How long have you been taking this medication?
19. Those taking medications ONLY: How much has this medication helped with your anxiety?
20. Matrix Questions:

Please indicate how much stress or anxiety each of the following categories currently causes you.

	Extreme stress	A lot of stress	A moderate amount	Relatively little	None or almost none
Exams or presentations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Volume of academic work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Job or internship	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Family problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fear about future achievement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relationship problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social interaction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Illness or medical condition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Does chronic anxiety or panic negatively impact any of the following in your academic career? (Check all that apply)

- ☐ Face-to-face interactions with professors or TA's
- ☐ Ability to study for exams/quizzes
- ☐ Ability to sit for exams/quizzes
- ☐ Ability to concentrate for prolonged periods
- ☐ Ability to complete homework on time
- ☐ Ability to attend your classes
- ☐ Ability to meet the full time credit requirement
- ☐ Ability to participate in class discussions
- ☐ Ability to give class presentations
- ☐ ☒ None of the above

Does anxiety negatively impact any of the following in your daily life? (Check all that apply)

- ☐ Ability to get up in the morning
- ☐ Ability to socialize with other students
- ☐ Ability to make healthy nutritional choices
- ☐ Connection with friends or family
- ☐ Intimate relationships
- ☐ Ability to communicate effectively
- ☐ Ability to drive a vehicle
- ☐ Ability to fall asleep at night
- ☒ None of the above

Does your chronic anxiety or panic disorder include any of the following physical manifestations? (Check all that apply)

- ☐ Nausea
- ☐ Dizziness
- ☐ Fatigue/Drowsiness
- ☐ Heart Palpitations
- ☐ Sweating
- ☐ Shaking or trembling
- ☐ Insomnia
- ☐ Shortness of breath
- ☐ Feeling of suffocation or chest pain
- ☐ Gastrointestinal problems
- ☐ Feeling of detachment
- ☐ Sense of danger
- ☒ None of the above

24. How does the college environment affect you in terms of anxiety level?

25. What forms of social media do you use?

26. Where do you get most of your news and media?

27. Approximately how many hours per day do you spend online or on social media?

28. How often do you check your phone?

29. How many different people do you usually text in a given day?

30. How quickly do you usually respond to texts?

31. Please enter any additional comments, questions, concerns, or input you would like to share regarding this research (Text box)

Supplemental Figures

		Do you suffer from any of the following? (Check all that apply)					Total
		General Anxiety Disorder	Social Anxiety	Panic Disorder	Other chronic anxiety	None of the above	
Approximately how many hours per day do you spend online or on social media?	0-.5	3	3	2	0	5	10
	.5-1	8	3	3	4	29	41
	1-2	41	27	13	10	66	125
	3-4	50	30	11	6	78	139
	4-5	18	9	8	3	16	41
	5+	12	7	2	2	21	37
	Total	132	79	39	25	215	393

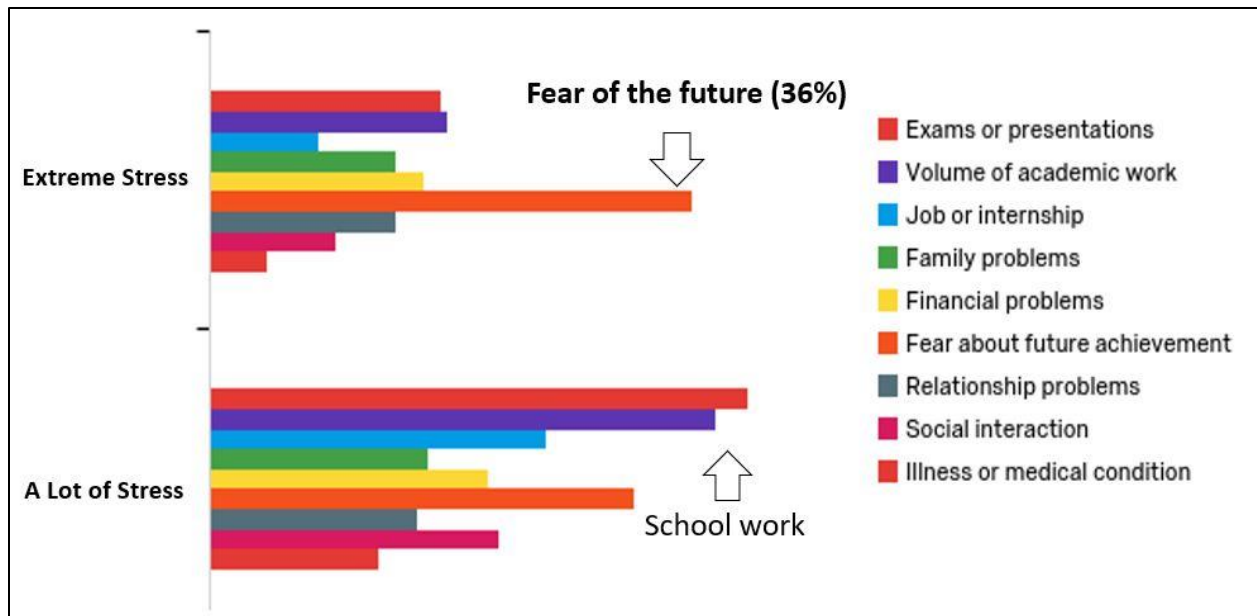
		Do you suffer from any of the following? (Check all that apply)
Approximately how many hours per day do you spend online or on social media?	Chi Square	21.60*
	Degrees of Freedom	20
	p-value	0.36

Supplemental Figure 1: Qualtrics cross-analysis of hours per day spend online and self-identified anxiety disorders. Note that there is no statistically significant correlation

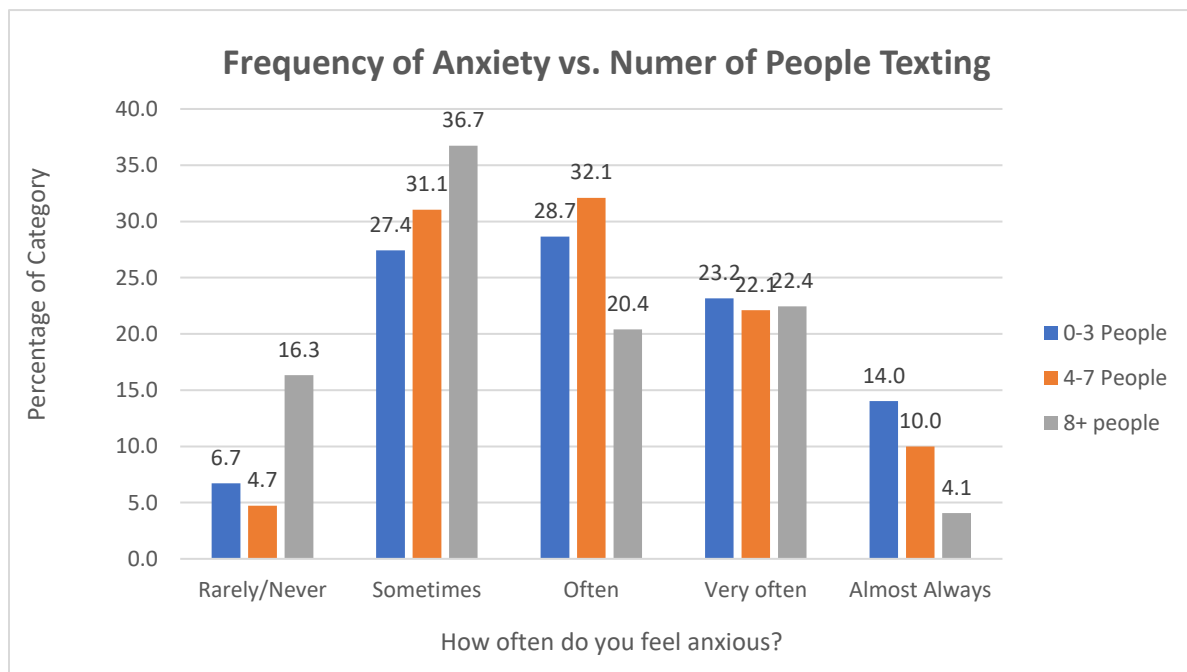
		How often do you check your phone?					Total
		Rarely	A few times a day	Hourly	Every few minutes	Whenever I get a notification	
How often do you feel nervous or anxious?	Never	0	0	1	1	1	3
	Rarely	0	0	14	5	6	25
	Sometimes	0	8	36	52	26	122
	Often	0	4	38	35	31	108
	Very often	0	1	30	39	21	91
	Almost always	0	4	12	15	13	44
Total		0	17	131	147	98	393

		How often do you check your phone?
How often do you feel nervous or anxious?	Chi Square	18.55*
	Degrees of Freedom	20
	p-value	0.55

Supplemental Figure 2: Qualtrics cross-analysis of how often students check their phones and how often they feel nervous or anxious.



Supplemental Figure 3: Causes of “Extreme Stress” and “A Lot of Stress” as identified by student participants



Supplemental Figure 4: Condensed cross analysis of anxiety level and the number of people a student texts in a given day. Note that a statistically significant correlation exists. Students who text more people have a lower mean anxiety level.

Additional Selected Raw Data Cross-Tabs

Are you a part of any of the following on campus? (check all that apply)												
	Social Greek Organization	Professional/Service Greek Organization	Division I Sports Team	Intramural sport or dance team	Undergraduate Research	Political, activist, or campus leadership group	Religious group	Paid job on campus	SU magazine or media	Community outreach group	None of the above	Total
Never	1	1	0	1	1	1	0	1	0	1	0	3
Rarely	4	7	0	6	3	7	2	5	1	5	4	26
Sometimes	37	31	2	32	27	23	8	48	26	25	9	129
Often	31	17	1	20	24	30	8	46	25	17	8	111
Very often	26	23	0	17	27	26	2	40	17	16	13	97
Almost always	16	11	1	6	11	6	6	13	2	6	12	46
Total	115	90	4	82	93	93	26	153	71	70	46	412

Frequency of anxiety cross tab with participation in extracurricular activities

		Do you ever use drugs or alcohol to cope with anxiety or panic attacks?				Total
		Never	Occasionally	Often	Daily	
No		65	36	11	3	115
Tricyclic		1	0	0	1	2
Holistic medication		1	4	2	1	8
Prozac		4	6	1	1	12
Paxil		0	1	1	1	3
Lexapro		8	4	2	2	16
Luvox		0	1	0	1	2
Celexa		0	2	0	1	3
Zoloft		9	4	1	2	16
Xanax		5	5	0	1	11
Klonopin (Clonazepam)		3	3	0	1	7
Other SSRI (Selective Serotonin Reuptake Inhibitor)		1	5	0	2	8
Other benzodiazepine		0	2	1	2	5
Other medication		8	5	3	2	18
Total		96	69	19	8	192

Cross tab of student's prescription medications for anxiety and choice to use alcohol/drugs to cope with anxiety.

	Do you suffer from any of the following? (Check all that apply)					Total
	General Anxiety Disorder	Social Anxiety	Panic Disorder	Other chronic anxiety	None of the above	
Nausea	71	37	27	13	0	85
Dizziness	37	20	22	8	0	48
Fatigue/Drowsiness	91	45	28	16	0	108
Heart Palpitations	58	26	23	14	0	79
Sweating	68	37	27	8	0	84
Shaking or trembling	87	47	32	14	0	109
Insomnia	78	35	27	16	0	94
Shortness of breath	55	28	22	11	0	71
Feeling of suffocation or chest pain	49	27	26	15	0	69
Gastrointestinal problems	48	21	22	14	0	62
Feeling of detachment	83	50	22	17	0	110
Sense of danger	47	24	23	11	0	60
None of the above	3	3	0	0	0	6
Total	134	80	39	25	0	180

Cross tab of type of anxiety disorder and physical manifestations of the anxiety disorder

		How often do you feel nervous or anxious?						Total
		Never	Rarely	Sometimes	Often	Very often	Almost always	
Where do you get most of your news and media? (Check all that apply)	Television	0	7	39	26	26	14	112
	Social media posts	1	19	93	81	71	30	295
	Youtube	1	3	28	19	19	7	77
	Printed newspapers/magazines	0	3	15	21	8	4	51
	Online newspapers/magazines	2	20	81	90	67	31	291
	Other website	0	5	9	12	13	7	46
	Other phone app	0	6	17	16	9	7	55
Total		3	25	121	108	91	44	392

Cross tab of news/information sources and level of anxiety

		Please specify your gender			Total
		Male	Female	Other	
Are you currently seeking or receiving professional help to cope with chronic anxiety or panic di...	Currently seeking help	3	21	0	24
	Currently receiving help	10	56	2	68
	No	72	239	3	314
Total		85	316	5	406

Cross tab of gender and seeking/receiving help for chronic or disordered anxiety

		How often do you feel nervous or anxious?						Total
		Never	Rarely	Sometimes	Often	Very often	Almost always	
Which college are you in?	Arts and Sciences	2	11	54	47	48	23	185
	ISchool	0	1	5	1	4	1	12
	Maxwell	0	2	9	4	6	1	22
	Falk College	0	0	10	8	3	2	23
	Newhouse	0	3	21	22	12	2	60
	Whitman	0	6	12	11	7	3	39
	School of Architecture	0	0	2	2	2	3	9
	School of Engineering & Computer Science	1	3	9	6	6	2	27
	School of Visual and Performing Arts	0	0	4	7	7	5	23
	School of Music	0	1	0	1	0	0	2
	School of Education	0	0	6	4	2	5	17
	Total	3	27	132	113	97	47	419

Cross tab of home college at Syracuse University and level of anxiety. Note that there are no statistically significant correlations.