

EXPLORING RELATIONSHIPS AMONG PERCEIVED STIGMA, SELF-DISCLOSURE, SOCIAL SUPPORT, & HELP-SEEKING BEHAVIOR IN THE CONTEXT OF COLLEGE STUDENTS' INTERPERSONAL MENTAL HEALTH COMMUNICATION: A SEQUENTIAL MULTI-METHODOLOGICAL APPROACH

by

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Exploring Relationships among Perceived Stigma, Self-Disclosure, Social Support, &
Help-Seeking Behavior in the Context of College Students' Interpersonal Mental Health
Communication: A Sequential Multi-methodological Approach

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DEDICATION

This dissertation is dedicated to my friends and family, and to my parents, Mike Kueppers & Deb Behan. Their support helped me throughout my doctoral work and ultimately enabled me to pursue this research.

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LIST OF ABBREVIATIONS

National Communication Association	NCA
United States	US
World Health Organization.....	WHO
American College Health Association.....	ACHA
Theory of Planned Behavior	TPB
Theory of Reasoned Action	TRA
Communication Privacy Management.....	CPM
Weak/Tie Network Support	WTNS
Communication Apprehension	CA
Institutional Review Board	IRB
Critical Incident Technique.....	CIT

ABSTRACT

EXPLORING RELATIONSHIPS AMONG PERCEIVED STIGMA, SELF-DISCLOSURE, SOCIAL SUPPORT, & HELP-SEEKING BEHAVIOR IN THE CONTEXT OF COLLEGE STUDENTS' INTERPERSONAL MENTAL HEALTH COMMUNICATION: A SEQUENTIAL MULTI-METHODOLOGICAL APPROACH

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College students in the United States experience threats to mental health and wellness at heightened rates, yet seldom seek help. Previous research identifies perceived stigma as a substantial barrier to help-seeking, but also social support as a potential path to circumvent such stigma. Nevertheless, multi-methodological research exploring the key interpersonal communication processes that may serve to promote or constrain help-seeking behavior is limited. This research seeks to identify practical insights for promoting college students' mental health help-seeking intention and to advance theory building in the area of interpersonal health communication by employing a sequential exploratory multi-methodological research design (Creswell & Clark, 2017). The overall goal of this exploratory research is to investigate communication processes involving the diffusion of mental health stigma, its influence on college students' willingness to disclose mental health issues in their interpersonal networks, and the seeking of both

social support as well as appropriate healthcare for mental health challenges. Study 1 utilizes data yielded from online, open-ended surveys of college students ($N = 51$) using the Critical Incident Technique (CIT) to identify key issues students face in communicating interpersonally about mental health. Study 2 builds upon findings from Study 1 through qualitative in-depth interviews with undergraduate and graduate students ($N = 17$) to develop a deeper understanding of the potential relationships among the identified critical communication constructs of perceived stigma, social support seeking, self-disclosure, and help-seeking intention. Study 3 incorporates findings from Study 2 to adapt measures for the context of college students' interpersonal mental health communication in a quantitative survey of graduate and undergraduate students ($N = 1030$). Findings from Study 2 also guided hypotheses in Study 3 for relationships among operationalized constructs, including bivariate correlations as well as mediation and moderation models. Findings from each study are discussed along with practical applications, theoretical implications, methodological and conceptual limitations, as well as directions and considerations for future research.

Keywords: mental health communication; college students; stigma; social support; disclosure; help-seeking

CHAPTER ONE: INTRODUCTION

Poor mental health has become an epidemic on college campuses in the United States. (Carney, Castonguay, Hayes, Janis, Locke, Xiao, & Youn, 2017; Kraus, Luo, McKinley, & Wright, 2015; Conway, Mansolf, & Reise, 2019; James, Sullivan, Dumeny, Lindsey, Cheong, Nicolette, 2018). Schiavo (2018) writes, “Mental health is at the core of physical health and social well-being. Good mental health allows people to take care of themselves and each other” (p. 1). While even the term mental health is used to refer to a broad range of mental, emotional, and psychological conditions, it also represents a spectrum of psychological well-being states along which every person will move throughout their lives when experiencing stress and hardship (Keyes, 2002). Although many stressful life events pose uniquely heightened risks for mental health, Goldman (2018) points out the transition to adulthood, developing and maintaining social networks, and balancing academics and finances make college students uniquely vulnerable to both poor overall mental health (psychological well-being) as well as susceptible to mental health conditions such as anxiety, depression, and psychological and emotional stress.

Maintaining optimal mental health continues to pose a serious risk for students on college campuses in the United States. Data from the Spring 2018 National College Health Assessment—the largest nation-wide survey of college health—reveals 42 percent of students reported that they “felt so depressed that it was difficult to function” and more than 63 percent “felt overwhelming anxiety” within the last twelve months (ACHA,

2018). The term mental health has been used to describe a variety of acute and chronic psychological and emotional health issues. Despite increasing evidence linking mental health to broader physical health, these mental health issues are often lumped together as distinct from other biomedical or physiological health issues both from the standpoint of treatment and social perception. As a result, the seeking and attainment of help and social support for mental health issues can be uniquely challenging given that societal perceptions of these issues often cast a negative light on those attempting to navigate them.

While arguably everyone undergoes threats to mental health throughout life, college students are uniquely at risk for a variety of reasons. The World Health Organization's (WHO) World Mental Health International College Student (WMH-ICS) Initiative rationalizes that not only do college years represent a difficult transition to adulthood, but also that, "75 percent of all lifetime mental disorders have their onsets prior to the age of 24, and these early onset cases are related to poorer clinical and functional outcomes than later-onset cases" (WHO, 2018, p.11). Moreover, college is also a sensitive time in which many also engage in risky health behaviors that can exacerbate poor mental health such as substance abuse and sleep deprivation. While college students are less likely to be considerate of their overall health, the social stigma surrounding mental health is one of many reasons that so few students seek help or treatment for these disproportionately prevalent issues (Rudick & Dannels, 2018). All of these mental health challenges culminate in the fact that the second leading cause of

death among college students is suicide (Turner, Leno, & Keller, 2013), making mental health a top priority for college administrators and public health advocates.

Despite a growing body of scholarly research in sociology, psychology, and health communication devoted to identifying barriers to mental health help- and treatment-seeking among college students, understanding the communication processes that contribute to this college mental health crisis remains a relatively novel endeavor. Smith and Applegate (2018) point out that stigma remains a pressing issue for health communication scholars, since stigma is both constructed and deconstructed through social networks through processes of communication. Smith's (2007) Model of Stigma Communication (MSC) seeks to help explain this process, noting that stigma messages contain distinct attributes which reinforce beliefs about stigmatized populations. Subsequent testing in health communication contexts highlight the dMSC's usefulness in predicting how and why stigma spreads (Smith, 2012; Smith, 2014; Smith, 2019), but applying the MSC theory to understand the ways college students' communicate about mental health influences their perceptions about mental health stigma and, consequently, help-seeking, is still needed.

Moreover, while understanding how stigma is constructed may lead to pathways for its deconstruction, the MSC theory fails to address the types of communication that stigmatized populations engage in as a response to stigma. Meisenbach's (2010) Stigma Management Communication (SMC) typology helps to do just that, also acknowledging that a perception of an attribute as generally stigmatized conflicts with the potential for a person experiencing that attribute to have a different stigma perception. As such,

understanding how college students not only perceive mental health stigma but also how they engage in strategies to navigate that stigma is also crucial to identifying pathways to encouraging help-seeking behavior.

Although mental health stigma communication is a critical issue to understand to encourage help-seeking, it's also important to acknowledge the role that individuals' interpersonal networks play in both influencing stigma perceptions and, potentially, serving as a pathway to help-seeking itself. Sociologists and psychologists have documented the importance of an individual's social networks in their overall health and well-being (for a review, see Uchino, 2009), and a broad body of communication research and theory seeks to explain the interpersonal communication processes that influence health outcomes (Kreps, 1988; Kreps, 2001; Duggan & Street, 2015). However, research exploring the relationship between social support communication, mental health stigma communication, and mental health help-seeking behavior is still needed. Since stigma diffuses through social networks, interventions targeting peer support among college students for stigmatized health issues may promote help-seeking while also reducing stigma beliefs (Collings-Eaglin, Fournier, Nazione, & Pace, 2018).

However, social support through peer networks can also take shape in a variety of types of relationships, which can influence the experience, perception of communication interactions, and health outcomes related to that support. Weak Tie Network Support Preference theory (WTN) argues individuals' willingness to communicate about personal issues functions differently for weak-tie relationships (categorized by having less frequent communication and being less familiar) than strong-tie relationships (Wright &

Rains, 2013). According to the WTN theory, individuals will seek social support from either socially close or socially distant peers in interpersonal networks depending on their perception both of the relationship and of the issue requiring social support. We may feel safer seeking support about embarrassing problems we face (such as mental health problems) from weak ties than from strong ties, since the weak ties do not know us as well as strong ties do, and we do not have to interact with the weak ties as frequently as with strong ties. In this way, WTN theory builds upon Communication Privacy Management theory (CPM, Petronio, 1991), which describes the conditions under which people decide to either reveal or conceal private information. Widely applied in a variety of contexts, CPM is also useful in explaining the ways people navigate self-disclosure about personal health issues. Considering that mental health represents a potentially stigmatized health issue which individuals may be hesitant to disclose, understanding how perceptions of stigma and perceptions of stigma influence an individual's willingness to disclose, communicate about, and seek support for their mental health is also crucial.

The phenomena of conscious and subconscious decision making about when, where, and with whom to communicate is also well researched. A person's hesitance to disclose personal information about a health issue can also be conceptualized as an individual's Willingness to Communicate (WTC), as Communication Apprehension (CA), or perceived Receiver Apprehension (RA) (McCroskey, 1977; McCroskey, 1998). CA refers to an individual's perceived stress and anxiety associated with either real or anticipated communication. CA explains that hesitance in communication can vary

depending on the individual themselves (trait CA) or the context of communication (state CA), and also relates to an individual's perception of reticence in the person or people they are or may be communicating with (Receiver Apprehension, RA) (Barker, Fitch-Hauser, & Hughes, 1990). Willingness to Communicate is a construct widely used in language acquisition, but has also been studied as a trait and state phenomena describing where individuals fall in their perceived comfort communicating about a given subject, in a given context, or with a given audience (McCroskey & Baer, 1985), and has also been validated in health contexts with the construct Willingness to Communicate About Health (Frey, Sopory, Wright, 2007).

All of these constructs that seek to explain how and why an individual might choose to communicate or not communicate are useful not only as outcomes related to perceived stigma and perceived social support, but also as avenues for further help-seeking behavior. In the context of mental health communication, perceived stigma has the potential to stifle a person's willingness to disclose struggles with mental health. But with a strong enough social support network, the influence of stigma may be overcome, at which point the act of self-disclosing and communicating about one's mental health issues both solicit social support and influence the stigma beliefs of those providing support since someone in their network helps humanize the issue (Van Gorp & Vyncke, 2018). Meanwhile, the perception of the experience of communicating about mental health as a means to manage stigma can consequently influence an individual's future willingness to communicate, seek social support, and seek help more broadly (Xu & Yang, 2018).

Clearly, the constructs of stigma, social support, self-disclosure, and help-seeking behavior represent key areas for communication research aimed at addressing the growing college student mental health crisis. This research seeks to advance both scholarly insight and practical knowledge in this context by offering a sequential exploratory multi-methodological research design (Creswell & Clark, 2017). Study 1 seeks to offer an exploratory study to answer key research questions related to these constructs in the context of college student mental health through an open-ended online critical incident analysis survey questionnaire of college students at a large, public, mid-Atlantic university. Study 2 seeks to provide an even richer description of these phenomena as they impact college students through semi-structured in-depth interviews. Study 3 seeks to build support for the relationships among these constructs through quantitative experiments measuring key relevant variables in a population of college undergraduates, ultimately seeking to determine the efficacy of different approaches to encouraging peer-to-peer support and help-seeking for mental health challenges.

CHAPTER TWO: STUDY 1 LITERATURE REVIEW

Understanding the complex processes by which health-related stigma negatively impacts health, alongside the equally complex processes by which stigmatized individuals make decisions about disclosing a stigmatized health issue and seeking support for it, requires careful attention to previous research. As a result, this literature review pays special attention to explicating the construct of mental health in the context of communication and identifying relevant communication theory and research used to investigate surrounding phenomena. Given the focus of this research is on understanding mental health beliefs and behavior in interpersonal contexts, research in the areas of stigma, social support, interpersonal self-disclosure, and help-seeking behavior all represent critical scholarly intersections. However, before understanding these specific intersections, due to the complex, broad nature of the term mental health and its ubiquitous use across a variety of academic disciplines, it is first necessary to explicate this construct and clarify its meaning for the present research.

What is Mental Health?

Researching mental health communication at the intersections of stigma, social support, disclosure, and help seeking requires a clear understanding of what is meant by the phrase, mental health. A great deal of research uses the term mental health as an

extremely broad construct, while others narrow mental health to more specific health conditions. Smith and Applegate (2018) explain that mental health is a catch-all term that refers to psychological and emotional disorders as well as general psychological and emotional well-being.

From a psychological perspective, the term mental disorder is used in the Diagnostic and Statistical Manual 5th edition (DSM 5, American Psychiatric Association, 2013) and defined as “a syndrome characterized by clinical significant disturbance in an individual’s cognition, emotional regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental function” (p. 20). The National Collaborating Centre for Mental Health (NCCMH, 2011) describes the most common mental disorders (otherwise known as mental illnesses) as Generalized Anxiety Disorder and Panic Disorder, depression, post-traumatic stress disorder, obsessive-compulsive disorder, self-harm, and suicidal ideation. More nuanced mental illnesses include schizophrenia, bipolar disorder, borderline personality disorder, eating disorders, and substance abuse and addiction.

Understanding the implications of lumping all of these various psychological and emotional disorders into one label is crucial for researching mental health stigma perceptions: although each disorder represents unique symptoms and impacts on daily functioning for affected individuals, societal perceptions of mental illness (and subsequent stigma) often treat any one disorder as interchangeable with the rest (Boyle, 2018). While some studies of mental health stigma focus on a specific disorder or collection of disorders, others study broad perceptions about mental illness in general.

This delineation is important to know for this research because an equally important goal of mental health explication is understanding whether perceptions of specific mental illnesses are in fact different than perceptions of mental illness in general. Research on mental health communication among college students then should focus on understanding awareness and perceptions of mental illness as well as mental illnesses.

It's important to note that while some research also includes neurodiversity or cognitive disorders such as attention deficit-hyperactivity disorder (ADHD) and autism as fitting in the umbrella of mental health, Grierson and Scott (1995) explain psychological and emotional disorders are distinct from cognitive disorders in both their impact on individuals and in public perception of the disorders. For this reason, this research will focus on mental illnesses that are psychological and emotional in nature (depression, anxiety, PTSD) rather than cognitive (ASD, ADHD). While researching stigmas associated with cognitive disorders—especially in educational contexts—is an equally important endeavor, clarifying this in research procedures is crucial to examining mental health in its most prevalent forms among college students: psychological and emotional disorders lead to the greatest risk of suicide and other health consequences which plague this population at heightened rates (Hamza & Willoughby, 2018).

Lastly, Kline and Lemish (2008) assert that specific mental illnesses and disorders are only one component of the umbrella term, mental health. Keyes' (2002) model explains mental health issues on two continua, one which measures the existence of specific mental illnesses and disorders (from none to many) while the other measures mental well-being in general from no or poor mental health to abundant or excellent

mental health. The WHO (2017) recognizes the equal importance of the latter to the former, noting mental health is a “state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community ... ultimately enabling their full active participation in society” (p. 6). Under this definition, all individuals experience variance in their mental, psychological, and emotional well-being, and the absence of specific diagnosed mental illnesses does not mean individuals are mentally healthy.

This is also important for researching college students’ mental health, since although specific illnesses such as depression and anxiety are very common, many students may not have the awareness or medical support to identify as struggling with mental health (Buizza, Ghilardi, Olivetti, & Costa, 2019), but may be experiencing those issues all the same. Similarly, one of the most prevalent mental health problems for college students, stress, does not constitute a specific mental illness yet represents a critical component of mental well-being, fitting under Keyes’ (2002) second continuum of mental health.

Understanding these various definitions of mental health and the way they are or are not lumped together through different labels is critical to researching how college students perceive mental health and mental health stigma, and the way they attempt to navigate that stigma to disclose mental health struggles, seek support for them within their social circles, and ultimately obtain professional psychological and medical help for them. Given that the focus on this research is identifying interpersonal pathways to

improving mental health awareness, literacy, and help-seeking behaviors among college students, the current studies will rely on a definition of mental health which includes both general mental well-being as well as the prevalence of psychological disorders, but does not include other mental or cognitive disorders. Provided this clarity, it is also necessary to further understand how communication researchers have investigated and continue to investigate the construct of mental health.

Mental Health and Communication

While the term mental health clearly represents an influential construct in academic and clinical research, it is crucial to evaluate communication approaches to researching mental health more broadly. Doing so will enable us better assess the literature on stigma's influence on mental health communication in interpersonal contexts. Although mental health in the context of communication is among the most expansive bodies of research of these constructs, this review will focus on communication approaches to mental health that emphasize the processes of identifying with mental health challenges and seeking help, as stigma is most likely to influence mental health outcomes dependent on public and/or social contexts.

As discussed previously, perhaps most importantly, health communication researchers have sought to clarify what is meant by the term "mental health" particularly as it relates to processes of communication. Keyes' (2002) dual-continua model offers a bifurcation of the dimensions of mental health both existing on a continuum. First, individuals can range from either no mental health (unhealthiness) to abundant mental

health. Additionally, they can range from zero mental health issues to numerous mental health issues. This is a critical delineation as mental health advocates often fail to clarify the difference between poor mental health in general and experiencing mental health issues and disorders specifically, from depression and anxiety to bipolar disorder or schizophrenia. Mental health, broadly, refers to a general state of emotional and psychological well-being, which, as the World Health Organization (WHO, 2017) explains, in itself is crucial in determining individual's ability "to build social relationships, and the ability to learn and acquire an education, ultimately enabling their full active participation in society" (p. 6). Because the state of mental health in general can, by itself, influence communication in interpersonal contexts, examining mental health through a communication lens is uniquely complex.

Seeking to advance knowledge in mental health communication, researchers have primarily focused on identifying and describing barriers to mental health help-seeking behaviors. The role of communication as a potential tool to overcome such barriers has remained a focus given that a significant portion of those with poor mental health or those experiencing mental health issues never seek--let alone obtain--proper healthcare (for a review, see Schiavo, 2018). As a result, research examining the process of encouraging help-seeking behavior for those with poor mental health has been a key focus through a variety of channels including social media (Quintero, Yilmaz, & Najarian, 2017), interpersonal and family contexts (Greenwell, 2019), and through social networks (Moore, 2018). Findings from these and a multitude of other studies (for a review, see Smith & Applegate, 2018) offer aggregate support for the general notion that

communication surrounding mental health can have significant influences on mental health outcomes. However, despite the pertinence of stigma in a widely misunderstood health context such as mental health, few studies have explored the influence of stigma on communication surrounding mental health. Rather, much of this research is correlational and descriptive in nature, offering statistical evidence for the relationship between communicative phenomena (trivialization, avoidance, etc.) and mental health in general (Jao, Robinson, Kelly, Ciercierski, & Hitsman, 2018; Celik, Ceylan, Unsal, Cagan, 2018; Downs, Boucher, Campbell, & Polyakov, 2017). Given that stigma is clearly an influential construct in both the experience of living with mental health issues or managing poor mental health as well as the avenues by which such individuals seek to improve or treat their mental health conditions, this review will lastly turn to assess the existing literature at the intersection of mental health, stigma, and communication altogether.

Mental Health Communication & Stigma

The concept of stigma represents a critical area of study in health communication research. Communication-based theories of stigma, such as the model of stigma communication (MSC; Smith, 2007), operate from assumptions of stigma being based in social--or interpersonal--interaction (Goffman, 1963). Smith (2014) notes the nature of stigma as socially constructed lends itself to being studied through the lens of communication because the construction, deconstruction, and reconstruction of stigma occurs through processes of communication. More specifically, health communication

research has benefited from the application of theories of stigma, as many if not all health issues--and, subsequently, health outcomes--are subject to social perception and influence. Although health communication research has rigorously explored the role of stigma in a variety of health contexts such as infectious diseases (Smith, 2012), cancer prevention (Bachman et al., 2018), body image and eating disorders (Anderson & Bresnahan, 2013), and many more, understanding the influence of stigma on mental health communication remains a relatively new endeavor (Kreps, 2019).

Nevertheless, mental health disorders and the pursuit of addressing them represent many challenges uniquely relevant to stigma communication theory and research. Given that mental health issues are stigmatized largely because they are widely misunderstood, Smith and Applegate (2018) argue communication and education are in a unique position “to create new stigmas, bolster existing ones, or help eliminate them or reduce their power” (p. 384). Considering that existing stigmas surrounding mental health represent a complex barrier to help-seeking behavior for those suffering from mental health issues, and considering that a great deal of emphasis in mental health research more broadly has been placed on identifying and diagnosing such barriers, health communication scholars must continue to examine the role of stigma in obstructing access to mental health treatment. Given that the current study seeks to offer an exploratory probe into the relationship between interpersonal mental health communication and help-seeking behavior, and that stigma surrounding mental health has strong potential to influence both of these constructs, it is also necessary to review literature on stigma and its role in health contexts.

Stigma & Health

Theories of stigma abound in sociology and social psychology. Perhaps the earliest, most widely known research comes from sociologist Erving Goffman, whose 1963 book on stigma, *Notes on the Management of Spoiled Identity*, laid a foundation for understanding the concept as a phenomenon constructed, maintained, and deconstructed primarily through processes of socialization. Goffman (1963) defines social stigma as an “attribute that is deeply discrediting.” This understanding of stigma is influential both in the intentional vagueness of what constitutes an attribute, and the essentiality of stigma as an action (i.e., to discredit), whether it is intentional or unintentional, direct or indirect. Uncovering the depths of to what stigma is attributable and the nature of stigma as resulting from social processes has remained a worthy scholarly endeavor for researchers following in the footsteps of Goffman for decades.

Further conceptualizing stigma, research and theory in sociology and psychology clarifies both the many forms stigma can take and its impact on stigmatized groups. Clair (2018) argues for the importance of explicating stigma, because of both its complexity and its ubiquitous use as research concept. Offering clarity in this context, researchers have taken four approaches to understand stigma at three different levels of analysis. Stigma has been explored for its causes (why it occurs), contexts (where or how it occurs), consequences (negative effects on stigmatized groups or individuals), and responses (overcoming, deconstructing, or managing stigma). These four approaches have focused in psychology at the micro level, and in sociology and cultural studies and

the meso- and macro-societal levels (Clair 2018). Along these lines, researchers have also differentiated stigma at two levels of analysis through public (Rusch, Angermeyer, & Corrigan, 2005) and internalized stigma (Rusch et al., 2005). Public stigma refers to stigma at the macro-societal level, including the spread of stereotypes and the normalization of stigmatic beliefs, whereas internalized stigma refers to the psychological impact of social stigma at the micro-level on a stigmatized person's sense of identity.

Both of these forms of stigma are critical to understand in the context of health. Coinciding with Clair's (2018) analysis of the approaches to stigma research, researchers have focused on identifying the ways in which health issues elicit stigma (causes), where stigma exists or occurs as a result of health issues (contexts), the negative impacts of stigma on health outcomes for stigmatized groups (consequences), and the most effective ways to combat health stigmas at the societal, interpersonal, and intrapersonal levels.

Ahmedani (2010) finds that health issues are particularly prone to stigma because of the potential for healthy individuals to perceive unhealthy individuals as a threat to their own health through contagion. Even non-infectious health issues such as cancer or mental health have the potential to elicit perceived threats in healthy individuals, if not for the risk of "catching" the health issue, but rather simply for the emotional or psychological impact of either seeing the physical impact of a health issue or interacting with a person living with one (Ahmedani, 2010). In reference to examining the contexts in which stigma results from health challenges, Lee and An (2016) explain that though stigmatic beliefs result from psychological processes, their manifestation in social

contexts and interactions are critical to the perpetuation and diffusion of those beliefs across society.

A great deal of research has focused on describing the negative consequences of socially diffuse health stigma on health outcomes such as inhibiting coping strategies (Zhu, Smith, & Parrot, 2017), exacerbating stress and other physical health issues (Boyle & Fearon, 2018), and, of course, obstructing help- and treatment-seeking behaviors (Payan et al., 2019). However, while researchers have also made progress in identifying pathways to deconstructing stigmatic health beliefs, mitigating the consequences of stigma in health contexts, and managing internalized stigma for those living with health challenges, more work is still needed. Moreover, as a great deal of mental health communication research among college students seeks to identify trends quantitatively, greater attention is needed to understand and describe the experiences of college students first hand.

Overall, stigma clearly represents a critical construct in the context of interpersonal mental health communication and help-seeking behaviors. A wealth of previous research seeks to describe the prevalence of mental health stigma among college students, and ways in which communication can be used as a tool to reduce such stigma. However, less attention has been paid to describing these phenomena from the experiences and perspectives of college students themselves. Doing so offers the potential to understand how and why students might choose to communicate about their mental health in their interpersonal support networks, what those communication interactions actually feel like, and the effects they have on students' attitudes toward their

own mental health, mental health in general, and their potential to seek professional help they likely need.

As such, the primary research objective for Study 1 is to offer an exploratory probe into the phenomena of interpersonal mental health communication among college students and identify key themes, relevant social scientific constructs, and communication processes that might inhibit or promote help-seeking behaviors and campus resource utilization. Given the apparent lack of qualitative research examining identifying how college students perceive their experiences communicating about mental health in their interpersonal networks, the following research questions were used to guide Study 1. Study 1 utilized open-ended online surveys to allow students to describe their experiences communicating about their mental health in their interpersonal networks, without fear of judgment or stigmatization in the research interview process.

RQ₁: How do college students perceive their experiences communicating with others about their personal mental health?

RQ₂: What are the characteristics of college students' experiences communicating about their personal mental health that led to intensely positive or intensely negative feelings toward the experience?

RQ₃: How do college students perceive communicating about their personal mental health with certain people in their networks as opposed to others?

CHAPTER THREE: STUDY 1 METHODOLOGY

The first phase of this research is designed as an exploratory study, in which college students can respond to questions in an open-ended online survey that ask about experiences communicating about mental health within their social networks in the face of perceptions of stigma, and how these experiences influenced their own perceptions of stigma, mental health communication, and help-seeking. This research utilized the Critical Incident Technique (CIT, Kreps, 2017; Flanagan, 1954), a widely used methodology for gathering data from participants regarding their perceptions of a particular program or experience. This approach was particularly relevant for studying interpersonal mental health communication as conversations and interactions surrounding stigmatized health topics may result in strong reactions and subsequent behavior (Albrecht & Goldsmith, 2003). CIT research attempts to gather perceptions from participants based on critical incidents, or extremely positive or extremely negative experiences with a certain product, service, or context.

Participants

To investigate the above research questions, this study recruited participants (N = 51) from the Basic Communication Course at a large, public, mid-Atlantic university during the spring and fall semesters of 2019. Despite being comprised primarily of underclassmen, students in the Basic Course represents an ideal college population from

which to recruit diverse samples of students because, as a required course for all majors, it is also made up of students from all disciplines.

In the current sample, Participants in this sample ($N = 51$) were undergraduate and graduate students at a large, public, mid-Atlantic university who completed open-ended surveys during the Spring 2019 and Fall 2019 semesters. In addition to responding to open-ended questions about their experiences communicating about mental health, data was also collected regarding the participants' age, gender, race, sexuality, and current treatment-seeking behavior. Of the 351 students who completed the survey, 37.3% ($N = 19$) were between the ages of 18-20 ($M = 22$; $SD = 2.3$). In terms of gender, 50.1% ($N = 26$) were female, 41.1% ($N = 21$) were male, and 7.8% ($N = 4$) were nonbinary or preferred not to disclose their gender. 49% of participants ($N = 25$) identified as white, 11.8% ($N = 6$) identified as black or African American, 9.8% ($N = 5$) identified as Hispanic or Latinx, 9.8% ($N = 5$) identified as South Asian or Indian, with 19.6% identifying as other races or ethnicities. 60.1% of the participants ($N = 31$) also identified as straight, 17.6% ($N = 9$) identified as gay or lesbian, 9.8% ($N = 5$) identified as bisexual, with 11.7% ($N = 6$) identifying with other sexualities or preferring not to disclose their sexuality. In terms of current treatment, 19.6% ($N = 10$) reported currently receiving professional treatment or counseling for mental health issues.

Procedures & Instruments

Participants who could think of an experience communicating about their personal mental health with another or others in the last year were invited to complete an open-

ended, online questionnaire about their experiences. Participants had to read and agree to an informed consent form in order to participate, and this consent form and all research procedures were approved by the Institutional Review Board (IRB) at George Mason University. The survey offered a series of questions based on the Critical Incident Technique. For this research, the CIT was used as a form of stimulated recall, asking students to reflect on experiences communicating about mental health which they perceived to be intensely positive or intensely negative, with follow-up questions designed to identify the conditions under which these experiences took place.

Specifically, the survey prompted individuals to, “Think of a memorable time when you spoke to another person or a group of people about your personal mental health (e.g., anxiety, depression, stress, etc) that led to an intensely negative experience. Who were you speaking to? What prompted you to discuss your mental health? How did you feel while you were talking to this person or group? What was their reaction to your disclosure? How did you feel about the interaction after it was over? To what extent (if at all) did this experience impact your perception of your mental health? To what extent (if at all) did it impact your feelings about discussing your mental health with others in the future? To what extent (if at all) did it impact your perception about seeking help or treatment for your mental health?” After this, participants were similarly asked to recall a similar experience but that instead led to intensely positive reactions. Finally, participants reported background and demographic information including their age, gender, race/ethnicity, religious affiliation, and major. See Appendix 1 for the questionnaire used in Phase 1.

After participating, students were provided with information on resources for coping with mental health issues in the event that describing their experiences communicating about mental health caused any psychological discomfort. Students who were recruited through the basic course were also provided with the name of the researcher to verify their participation for course credit.

CHAPTER FOUR: STUDY 1 RESULTS

The first phase of this research utilized exploratory qualitative methods to investigate students' experiences communicating about mental health. The key findings from the online open-ended survey will now be summarized as they relate to communication phenomena that may serve to promote or constrain help-seeking behaviors.

Mental Health Communication Hesitancy

A thematic analysis of qualitative, text-based responses also suggests many college students experience a strong hesitancy or selectiveness when it comes to communicating about their personal mental health with others. A number of participants expressed sentiments that they would not ordinarily communicate about their personal mental health unless they felt they truly needed to, either because of the severity of the mental health issue with which they are dealing or because of the level of trust and comfort they have in their relevant relationships. When it came to discussing mental health issues with others beyond those they had already communicated with, one participant wrote:

“I don't want to make other people feel like they need to make me feel less stressed.”

-Female respondent, age 19

Another expressed:

“I have a select few that I usually open up to about problems. I feel like mental health is a personal topic and the whole campus doesn’t need to know about when I have an anxiety attack.”

-Male respondent, age 18

In this way, it would seem that college students feel that whether communicating about one’s personal mental health is appropriate depends highly on the context. This finding means that college students perceive at least some degree of discomfort discussing mental health in their social networks, and as a result, navigate the process of doing so in a strategic manner.

Reflections on Positive Experiences

Given that college students report caution in their experiences communicating about mental health, they also characterize their perceptions in positive communication interactions as the result of a relevant social peer identifying their mental health issue even when they themselves are not fully aware. One participant wrote:

“My best friend had been trying to get in touch with me for about a week, and I was in a state of mind where I just didn't want to talk to her. I was depressed and not interested in sharing that with her, and she knows me well enough to tell (even over the phone) if something's wrong. When I finally did decide to pick up the phone, I initially felt myself getting agitated and defensive when she asked where

I've been. We had enough back and forth on the subject that I realized it was easier to just fill her in on how I'd been feeling. I told her that I was depressed and was surprised by how supportive and understanding she was. She doesn't deal with mental health issue herself (at least depression and anxiety) so she could support me in a relatable way. But she made it very clear that she was available to talk to at any time."

-Female participant, age 32

Another participant describes a friend helping cope with anxiety attacks:

"I had a panic attack in front of a friend because I was extremely stressed when preparing for an exam, especially since it was a challenging course - given what individuals had said about it. I am also not ashamed of my mental health struggles and experiences, but I do not openly share it with everyone, as not everyone is understanding. This disclosing was extremely positive, because not only was she understanding of my situation, she also suffered from anxiety and taught me tips her therapist taught her."

-Female participant, age 21

These characterizations highlight an important concept in the process of mental health help-seeking: the process of self-awareness in dealing with mental health issues. College students have varying levels of awareness and education about mental health, which means they themselves may or may not be aware of experiencing mental health

issues. When they are, it would seem that students can benefit from close social peers identifying behavior and providing mental health support that is unexpected from the sufferer. In these instances, participants frequently characterize the outcome of these communication interactions as positive or beneficial in some way.

This theme also runs contrary to, but also helps explain the previous theme: participants feel they should not initiate mental health conversations since they feel this would burden their social peers, but when a social peer initiates the conversation it both overrides this feeling and leads to positive perceptions. Many participants are aware of their own reluctance to communicate about mental health issues or personal problems, so they express an appreciation for social peers who help them. Another participant crystalizes this theme, writing:

“When I get “full” emotionally, my husband is usually the first one to notice, so he sits me down and starts asking questions. Sometimes it's hard to let things out, because I'm a private person, but over the years, I've learned that I can trust him with things I don't want to share but can't keep bottled anymore.”

-Female participant, age 39

Mental Health in Higher Education

Many of these experiences reflect that while in undergraduate or graduate education, students experiencing mental health issues continually rely on trusted others in their social networks as sources of support and help for these issues. The social experience of an undergraduate education, in particular, can emphasize the importance of

having trusted others with whom you can discuss mental and emotional problems. One participant wrote:

“I had an issue with loneliness. My parents put me in a dorm freshman year of college, thinking it would be good to put me in a social environment. I met with friends that I am close to today. I talked to them about my loneliness issue as it dissipated throughout my relationship with them. Becoming comfortable in a social setting allowed me to come out more and share more about myself to others.”

-Female participant, age 19

A number of respondents reported stress related to their academics or the experience of college life as a precipitator for communicating about mental health. Students reported stress from text anxiety, lack of sleep, the transition to adulthood including managing finances, and changes in lifestyle and social environments as affecting their mental health, noting that often the best audience to communicate about these challenges is others in their social networks whom they feel can relate to or will understand their problems—often times meaning other students.

Identifying Trusted Audiences

Ultimately, it appears college students characterize their experiences communicating about mental health as critical moments of uncertainty that result from necessity or a high degree of trust and comfort with those with whom they are

communicating. Regarding the second research question for Study 1, experiences are characterized as positive when it occurs with a trusted other who provides them with the proper response indicating emotional support and, if necessary, informational support needed to seek professional help. Experiences are characterized as negative when met with judgment, a lack of understanding, or general unwillingness to listen or communicate about the topic.

Intensely positive feelings stem from when feelings of uncertainty regarding a mental health communication interaction are met with an unexpectedly supportive response from those on the receiving end of the disclosure. Similarly, intensely negative feelings result from interactions where support was anticipated but not received. This indicates that students make substantive assessments of prospective audiences when it comes to communicating about their personal mental health. Both the expectation of an experience and its outcome can influence decisions to communicate further with one individual or with new individuals, which also leads to the third research question.

The third research question for Study 1 dealt with the circumstances under which individuals did choose to communicate about their personal mental health, including their audiences and contexts of communication interactions. As mentioned previously, students frequently report caution in disclosing personal mental health problems. The decision to communicate openly about mental health requires a high degree of comfort and confidence which was rare in the sample. More common was students disclosing mental health issues with carefully selected, trusted others with whom they feel comfortable discussing personal problems. For this reason, most positive mental health

communication interactions occurred with a “close friend” or “close friends,” a significant other, a “close relative,” or a trusted confidant in the form of an authority figure such as a mentor, teacher, or professor.

Assessing Overall Contributions

Overall, the findings from Study 1 add support to previous research surrounding stigma communication and management, as well as and social support and help-seeking behavior for health issues. Individuals do perceive mental health to be stigmatized, navigate that stigma strategically through intentional communication interactions with desired and expected outcomes, and utilize social peers with whom they have strong ties as important sources of emotional and informational support. However, the exact nature of the ways in which these phenomena play out remains unclear, which guides the methodology of Study 2 to probe further into these gray areas in the perceptions and experiences of college students. Specifically, through targeted open-ended questioning through qualitative research interviews, the exact nature of “closeness” in relationships deemed appropriate for mental health communication interactions can be further discerned.

Moreover, identifying the process of self-awareness, identification with a need for help or social support, and the decisions made about mental health communication with relevant others can also be clarified. For this reason, Study 2, which is designed to offer a more targeted qualitative probe of relevant communication phenomena apparent in the experiences and perceptions of college students, should focus on identifying relationships

between the constructs of perceived mental health stigma, perceived social support for mental health, mental health social support-seeking behaviors, mental health disclosure, and mental health help-seeking behavioral intention. Given these findings and their guidance for Study 2, a more targeted review of the relevant theory and research in these areas will now be provided.

CHAPTER FIVE: STUDY 2 LITERATURE REVIEW

The topics of stigma, health communication, and mental health as areas of scholarly inquiry are as broad as they are complex. Simple searches in various academic databases for the specific constructs of stigma, social support perception and seeking, identification and disclosure, and help-seeking behavior in the context of mental health can result in hundreds and even thousands of papers and studies. As a result, it is necessary to first consider the intersections of each of these critical constructs before understanding the ways in which theories and research involving mental health communication and help-seeking have been applied to interpersonal contexts. To do so, this literature review for Study 2 seeks to narrow these broad topics by summarizing key knowledge at the intersections of stigma and communication, stigma and mental health, social support and health communication, social support for mental health, and stigma and social support with an emphasis on online support networks, which have particular relevance for interpersonal mental health communication among college students.

Stigma and Communication

Stigma and communication are tightly interwoven concepts. As Goffman (1963) describes stigma as a quality that causes individuals or groups to be deeply discredited, this process of discrediting or devaluation--widely known as the act of *stigmatization*--occurs through communicative processes. In many ways, it is impossible to understand stigma from a functional perspective without examining the mechanisms that enable its

spread: stigmatic beliefs do not become stigma until they are communicated and normalized. Smith and Applegate (2018) offer:

“Stigmas are socially constructed: through mediated and interpersonal communication, personal prejudices become social entities ... that can influence people’s actions. People perform stigmatization (devaluation and ostracism) through communication, and those experiencing stigmatization use communication to avoid or cope with future caustic experiences. Communication campaigns are also a potential vehicle for eliminating existing stigmas, but existing strategies have yielded limited success and sometimes unintended, negative consequences (Corrigan & Fong, 2014).”

Given the pertinence of studying stigma as both a precedent and antecedent of communication, utilizing the communication perspective to motivate stigma theory has remained a key goal. Pioneering such a theoretical foundation, Smith’s (2007) explication of stigma communication identifies the model of stigma communication (MSC), which seeks to delineate the forms of stigma and the communicative mechanisms through which it manifests. Supported by subsequent empirical testing (Smith, 2012; Smith, 2014), this model posits that the social diffusion of stigma stems from its reinforcement by non-stigmatized populations through four key communication processes: mark, label, responsibility, and peril. Marks refer to readily visible features associated with a stigmatized group; labels are the names we give to such groups; responsibility is the attribution of blame from non-stigmatized populations that

stigmatized groups are the cause (or are responsible) for their stigma; and peril refers to the extent to which individuals perceive a threat from a stigmatized other. First supported through an application to stigmas associated with infectious diseases (Smith, 2012), MSC offers clarity regarding the function of communication in stigma and has helped researchers especially in health contexts understand the causes and mechanics of stigma.

Building upon a theoretical understanding of stigma as communication, researchers continue to identify the ways communication can also serve to deconstruct stigmas. Smith, Zhu, and Fink (2019) point out that while MSC describes the ways and reasons stigma is communicated interpersonally and through mediated channels, it offers little insight into the types of stigmatizing messages that result in further transmission of those messages. In other words, the communication processes that cause people to spread stigma is still being understood. Offering a revision of the model, they argue that exposure to stigma messages result in a “person-oriented danger appraisal” that then implants stigma beliefs and leads to further stigmatization. Findings from an experimental study confirm this model, supporting the notion that a fundamental process in predicting the forward transmission of stigma messages is the extent to which the messages communicate an immediate, dangerous threat, re-establishing the importance of the dimension of *peril* from the earlier model (Smith, Zhu, and Fink, 2019). Considering these advancements in stigma communication theory, crafting messages in public health education campaigns that reduce the perceived danger of the stigmatized population could yield reductions in perceived threat and subsequent drops in the spread of health-

based stigmas. However, given that the complexity of the perceived threat is often based on the nature of the particular health issue, the development of anti-stigma messages to combat mental health stigma remains a challenging pursuit.

Mental Health and Stigma

After reviewing the relevant research explicating stigma and its influence in health contexts, examining the communication processes underlying stigma, and identifying the roles and functions of communication specifically in the context of mental health, it is clear that stigma has profound potential to exacerbate mental health issues, amplify consequent physical health problems, and ultimately worsen the quality of life of those living with them. As such, it is critical to examine and evaluate the relatively small yet growing body of research at this specific intersection. Operating from a definition of mental health stigma as “profoundly negative stereotypes about people living with mental disorders” (p. 385; which includes poor mental health, as they later note), Smith and Applegate (2012) argue for the potential to use communication as a tool to educate and correct these stereotypes, which has remained an important goal for empirical message-testing research. Corrigan, Morris, Michaels, Rafacz, & Rusch (2012) differentiate strategic efforts to reduce mental health stigma into three unique approaches, which include protest, education, and contact. Protest refers to the process of essentially shaming audiences into dismissing their own stigmatic beliefs, which has proved to be an ineffective strategy due to the potential for boomerang effects and the unintentional spread of stigma stereotypes. In other words, “It can be a recipe for disaster” (Smith and

Applegate, 2012; p. 390). Education refers to the process of providing audiences with factual information relevant to the dismissal of stigmatic beliefs such as correcting inaccurate stereotypes about those experiencing mental health issues. Contact approaches, which are less abundant in mental health stigma research, refer to combating stigma by creating interpersonal contact between stigmatized and non-stigmatized populations, and have been found to elicit the most significant positive effects on reducing mental health stigma beliefs (Corrigan, Michaels, & Morris, 2015). However, because the contact approach requires a person with a mental disorder to disclose their experience, maintaining this approach has the potential to violate ethical research practices by doing harm to the subjects of such interventions. Nevertheless, utilizing communication research to identify avenues for deconstructing stigma remains a critical endeavor for scholars focusing on this specific but important intersection. As a result, it is critical to assess the stigma perceptions of college students, so the following research questions are proposed:

RQ_{4a}: How do college students perceive mental health stigma?

RQ_{4b}: How do college students perceive peers who experience mental health issues?

RQ₅: How do college students attempt to manage stigma associated with mental health?

Social Support and Health Communication

Social support represents one of the most critical and widely studied interpersonal phenomena in health communication research. Broadly defined as a communication construct, social support is communication which serves to reinforce social connections through the provision of some form of aid or assistance (Moore, 2018). This communicative process of providing support to those in our social networks becomes increasingly important in the face of adverse health. Health challenges can present significant and complex burdens both physically and emotionally, can significantly hinder a person's ability to function independently, and in some cases can even deter or inhibit their ability to form or maintain social connections. It is in these moments of health adversity that social support becomes increasingly important, highlighting the need for continued research exploring the role and function of communication within social support networks in the face of health challenges.

While research and theory has well established the potential for social support to positively influence health outcomes, the exact communicative mechanisms by which that impact occurs is still being discovered (Eichhorn, 2008; Jang & Ki, 2018; Boehmer, Fewins-Bliss, Lauckner, Li, & Oh, 2013). Moreover, while theories of social support have been widely studied and applied to a variety of health contexts, many contexts remain understudied. One growing area of research involves the impact of technological advancements in communication on the development of social support networks, and the potential impacts of providing and receiving social support through computer mediated communication (CMC) on health outcomes. In his book, *Coping with Illness Digitally*, Rains (2018) argues for the usefulness of digital networks in promoting social support for

health issues, particularly for health challenges that may contain some degree of social stigma (Wright & Rains, 2013).

Although many health issues bear stigma, a growing body of research has focused on the relationship between stigma and mental health communication, an intersection which is uniquely relevant for inquiries into interpersonal support networks. Because the nature of mental health challenges has the potential to inhibit social relationships due to both its direct impact on social functioning and its connotation of social stigma, studying communication which functions for the pursuit, attainment, and maintenance of social support for mental health challenges through interpersonal channels is a crucial scholarly endeavor. Toward that end, this section of this literature review seeks both to assess the current interpersonal communication literature at the intersections of mental health, social support, and digital networks, as well as to propose a new research study examining these contexts. Given the relevance of the potential affordances provided by online support networks in mental health communication, special attention will be paid to examining which affordances are particularly useful in seeking and obtaining social support in the face of mental health challenges.

The constructs of social support, mental health, and CMC are broad as well as complex, so this review will focus on clarifying the constructs themselves and identifying theory and research relevant to their intersection. As such, this literature review will proceed by explicating research at two intersections relevant to stigma and mental health communication: social support, and online networks.

Social Support and Mental Health

A wealth of research is dedicated to understanding the relationship between social support and health. As a communication construct, social support refers to the communicative process by which individuals seek and provide support to relevant others in their social networks (Albrecht & Goldsmith, 2003). A number of theoretical foundations have helped explain the potential health benefits of social support, with the most influential advancements stemming from the buffering model (Cohen & Wills, 1985) the main effect model (Uchino, 2006) and Optimal Match Theory (Cutrona & Russel, 1990). Cohen and Wills (1985) explain that social support can influence health outcomes either by acting as a cushion, enabling an individual to more be more successful between experiencing a stressful life event and responding to it (the buffering hypothesis), or by improving their overall well-being to the point where they are better suited to manage stress in general.

While these models of social support and health help explain relationships between general phenomena, Uchino's (2006) main effect model takes a clearer, physiological approach. Building upon seminal research linking social relationships to decreased mortality, this model argues for social support's impact on physical health. Uchino (2009) posits that social support impacts disease morbidity (susceptibility to disease) and disease mortality (death from disease) directly and indirectly through behavior, psychological well-being, and, in turn, through biological processes such as cardiovascular, neuroendocrine, and/or immune system functioning. This model helps explain the specific mechanisms at the aggregate level of a person's overall health by

which social support can and does influence physical health, by including physiological, sociological, and psychological perspectives (commonly referred to as the biopsychosocial model of health; Schwartz, 1982) in one theoretical framework. However, understanding the exact communicative forms and functions of social support that can ultimately influence physical health stems from another line of theorizing.

Optimal Match Theory (OMT, Cutrona & Russel, 1990) helps explain the different dimensions or forms of social support that are exchanged through communicative processes. Cutrona and Russel (1990) explain that the dimensionality of social support can be understood through five basic forms: emotional support, or offering psychological comfort; network support, or the reinforcement of feelings of belonging and security within one's social network; esteem support, which refers to increasing confidence in one's ability to manage a stressor; tangible support, or the provision of resources or instrumental assistance; and informational support, or support in the form of sharing information, education, or perspective relevant to the circumstance causing stress.

OMT also argues that based on these five dimensions of social support, some dimensions are more effective in aiding a person depending on the type of stressor they are experiencing. For example, a person diagnosed with terminal cancer may be in need of emotional and network support, whereas a person diagnosed with treatable cancer may be in need of esteem support, tangible support, and informational support. Research has shown that particularly in health contexts, OMT can predict the types of support sought based on parameters of the health issue. Eichorn (2008) found that messages in an online support network for people with eating disorders most commonly exchanged

informational support, consistent with predictions based on the assumed nature of eating disorders as a “controllable” health condition. Based on this understanding, optimal match theory can also be used to explain the types of support needed for individuals experiencing mental health disorders or a lack of general mental health and well-being. However, given the nature of mental health as potentially stigmatizing, accessing social support in a person’s typical social network may be difficult or even impossible. As a result, it is also important to consider the usefulness of online networks in seeking and obtaining social support in the face of adverse mental health.

Stigma & Social Support

While it is clear social support has the potential to profoundly influence health in general and mental health specifically, the stigma associated with mental health issues may make accessing social support difficult. Consequently, digital networks represent opportunities for those struggling with poor mental health to circumvent stigma by engaging in social support online. Rains, Peterson, and Wright (2015) argue, “The central role that social support can play in coping with illness and the significant number of people seeking support online make it essential for scholars to develop a complete understanding of computer-mediated support processes” (p. 404). Their meta-analytic review of support messages exchanged in online networks confirmed that because of the lack of nonverbal cues in text-based online interactions, the specific health condition is most apt in predicting the types of support messages exchanged. They found that with health issues that are more likely to impact a person’s personal relationships, nurturant

support messages (emotional, network, esteem) were more common, and with health issues that are more controllable, action-facilitating support messages (informational, tangible) were more common.

Consistent with these findings, researchers have continued to examine optimal match theory in online networks for stigmatized health contexts such as HIV (e.g., Maestre, Herring, Min, Connely, & Shih, 2018), cancer (e.g., Rising, Bol, Burke-Garcia, Rains, & Wright, 2017), and mental health (e.g., Ki & Jang, 2018). Moreover, Oh, Lauckner, Boehmer, Fewins-Bliss, & Li (2013) found that while having health concern negatively influences health self-efficacy directly, those with health concerns who sought and received social support actually had higher levels of health efficacy, substantiating the idea that the pursuit of social support online has the potential to create a cycle by which individuals feel empowered and able to manage their health conditions--a critical point for health issues like mental health that are perceived as "controllable." However, as mental health challenges are both controllable and potentially influential over a person's personal relationships, additional theoretical perspectives are needed to understand how communication serves to exchange social support to cope with mental illness.

Building upon both conceptualizations of the dimensionality of social support and the communicative processes that can encourage or obstruct the exchange of social support in online networks, social support scholars have continued to advance knowledge on the reasons and benefits for utilizing online support networks to cope with illness. Rains (2018) explains that online support networks are utilized to manage health

challenges because of the benefits they provide to users which are exclusive to digital communication channels (these benefits are referred to by Rains (2018) as *affordances* of online support networks). Digital channels *afford* users four essential benefits: control, or the ability to manage the interaction in accordance with a user's preference; visibility, or the ability to make oneself known to others in regards to their illness; availability, or the ability to access support through the online network when it is convenient or relevant for users to do so; and reach, which refers to the potential to find similar others for social support. Each of these affordances are important to understanding the utility of online support networks, but as Rains (2018) also notes, some of the affordances are more important or relevant to some health issues than others.

While these affordances have been explored in a variety of health contexts, exploring their usefulness for understanding mental health communication is a relatively recent endeavor. DeAndrea (2015) tested the extent to which mental health help-seeking behaviors are reflective of the theorized affordances of online support seeking. Findings from this study confirm not only the purported positive association between perceived stigma and likelihood of seeking social support online, but also that seeking support online could be predicted by other logistical barriers to treatment seeking, which confirms other behavioral models such as the Theory of Reasoned Action (TRA, Azjen & Fishbein, 1975), the Theory of Planned Behavior (TPB, Azjen, 1985), Social Cognitive Theory (SCT, Bandura, 1986), and the Health Belief Model (HBM, Becker, 1974; Rosenstock, 1990).

Aside from logistical constraints, DeAndrea (2015) found fear of others finding out about treatment or support seeking, worry that their community would form a negative opinion of them, and a constructed measure of social stigma were the only significant predictors of seeking online support as opposed to traditional treatment or in-person support groups. These findings add evidence to the notion that individuals seeking social support online for their mental health issues likely do so at least in part due to the affordances of online support networks regarding the circumvention of mental health stigma. Specifically, the affordances of control and reach appear to play a significant role in motivating online support network participation for mental health patients. Because these patients fear that others would find out about their mental health issues and subsequently form negative opinions about them, they seek help through online forums in which they *control* the interaction and, if desired, can conceal part or all of their identity. The ability to do so allows users to avoid the unwanted external association between them and their illness, and the subsequent discrimination that may result from that association.

Additionally, mental health patients who fear social stigma are likely drawn to online support networks because of the ease of connecting with similar others, otherwise known as the affordance of reach. If individuals in a community or within a social network all possess fear of mental health stigmatization, they may never know who within their existing networks also identifies with mental health challenges--they are out of reach from one another as sharing experiences with a health issue. Online support networks allow users to reach others who share their struggles, creating access to social

support as well as a form of *network support* in itself: the discovery of an online community of similar others who also struggle with mental health can afford a sense of belonging and enable users to overcome the sense of isolation that can come with experiencing a stigmatized illness such as struggles with mental health.

However, while the affordances of anonymity and reach are uniquely relevant to mental health communication, it is possible that the other affordances play an important role as well. For example, even if an individual is not fearful of stigma or social judgment of their struggles with mental health, the affordance of visibility works in conjunction with the affordance of control. Visibility refers to offering users of online networks the ability to inform or communicate about their illness with others in their existing social networks--to become visible as individuals struggling with a particular illness. While they may be hesitant to do so in face to face contexts due to the sensitive nature of mental illnesses, CMC affords users more control over their interactions: they can communicate with people in direct messaging or group chat services to avoid public scrutiny. As Rains (2018) notes, “the asynchronous nature of these technologies gives patients the potential to revise their messages prior to sharing. Particularly given the intimate nature of illnesses, patients may be wary of sharing their thoughts and experiences” (p. 16).

This asynchronous nature of CMC is also relevant to the affordance of availability. In accordance with reach, being able to overcome time and space to access social support from relevant others is crucial to incentivizing the participation in and subsequent achievement of social support within the community. Support communities

for mental health challenges within a specific geographic context are limited in the size of membership in said community, whereas online support networks surmount this limitation increasing the potential size of the community as well as the sense of belonging and likelihood of receiving the type of support needed. Being able to interact with this larger prospect of relevant others asynchronously without needing to be present at the same time also makes it easier to participate regardless of individuals' daily routines or even time zones. While not any more relevant in the context of mental health than other health contexts, this affordance does encourage the ability to maintain membership in a support community, and considering general mental health requires ongoing maintenance, the availability of online support networks can also help those struggling with mental health issues get the support they want and/or need.

Overall, the intersections of mental health communication, CMC, and social support represent critical areas of study for the advancement of knowledge on mental health processes as well as the contribution of research to improving mental health outcomes through evidence-based practice. However, given the potential for interpersonal networks to help mitigate the negative impact of stigma on mental health help-seeking behavior among college students, the following research questions are proposed;

RQ₆: How do college students characterize experiences seeking and receiving support for mental health issues in their social networks?

RQ_{7a}: How do college students characterize their experiences seeking help for mental health issues in general?

RQ_{7b}: What barriers do college students perceive in obtaining help for mental health issues?

Gaps in Current Literature

Ultimately, the state of communication research investigating the role and process of communication in seeking and obtaining social support through digital channels in the face of mental health challenges is strong. A wealth of research employing a diverse range of methodologies has allowed scholars to uncover knowledge in these areas of study across a broad spectrum of subtopics and at the depth necessary for theoretical advancement and practical application.

However, while breadth and depth is important for a field of study, limitations do exist. Wright and Rains (2013) assert that much of the research examining use of online support networks has been descriptive and correlational in nature, rather than employing experimental approaches to further test the pathways from experiences with illness, participation in online support networks, the attainment of adequate support, and subsequent influences on biopsychosocial health and well-being more broadly. Only through experimental approaches can arguments be made for causality in the relationships among these phenomena, so experimental or quasi-experimental designs are still needed to advance knowledge at the intersection of interpersonal social support, CMC, and specific health contexts such as mental health.

Moreover, Wright (2005) pointed out that recruiting a reliable sample of participants from users of online social networks can prove challenging, which can limit

research findings in a number of ways. DeAndrea (2015) furthers, “Often there is not a registry of users from which to sample. Even if a list of members can be obtained, individuals self-select into online groups in a way that limits the generalizability of any findings. Exacerbating self-selection biases, heightened participation in an online community/group may increase the likelihood or willingness to respond to survey invitations, whereas less participatory respondents are harder to enlist in a research study” (DeAndrea, 2015). If efforts to summate the experiences of users of online support networks at an aggregate level through quantitative approaches seems limiting, perhaps more qualitative research is needed to uncover a more nuanced depiction of the process of seeking social support online.

In addition, while a wealth of research seeks to understand the constructs of stigma and social support in health contexts, the research conducted concerning college students’ experiences with stigma and communicating about mental health issues specifically is limited. Understanding the ways in which college students’ communicate about mental health issues in the face of wider public stigma, and the ways their social networks both in person and online serve to constrain that communication and inhibit help-seeking more broadly is critical. This is both because of the heightened risks associated with college student populations as well a scholarly need to understand the relationships among these constructs in a specific context in which they theoretically bear significant influence.

Lastly, a lack of clarity and consistency in the explication and operationalization of key constructs in mental health communication research in particular means that more

research is needed to determine reliable measures for complex constructs such as mental health help-seeking behavior, including social support seeking-behavior and traditional treatment-seeking behavior. To address these limitations, these concepts can be explored through qualitative research to understand the role of self-disclosure, willingness to communicate, communication apprehension, and receiver apprehension in influencing help- and social support-seeking communication behaviors. As such, the following research question is proposed:

RQ 8: Under what circumstances do college students feel comfortable disclosing and discussing personal mental health issues?

CHAPTER SIX: STUDY 2 METHODOLOGY

Study 2 seeks to offer a targeted probe of college student experiences with interpersonal mental health communication with careful attention to the of stigma, social support, self-disclosure, and help-seeking behavior. The primary objective of Study 2 is to determine the extent to which these constructs as explicated in communication research are reflected in the actual lived experiences and perceptions of college students in terms of their communication in their interpersonal networks and their beliefs, attitudes, and behavior surrounding mental health. This phase of research incorporated findings from Study 1 to develop a semi-structured interview protocol. This protocol sought to bring to the forefront the aforementioned communication constructs as they relate to one another in the observed experiences of communicating interpersonally about mental health with specific others in their social networks. This methodological approach is particularly relevant for theory-building research, and findings will be analyzed utilizing a grounded theory approach to facilitate greater understanding for the relationships between relevant communication constructs and mental health help-seeking behavior among college students.

Participants

To investigate the above research questions, this study recruited participants ($N = 17$) from the Basic Communication Course and Communication major email listserv at a large, public, mid-Atlantic university between January and March of 2020. Despite being

comprised primarily of underclassmen, students in the Basic Course represents an ideal college population from which to recruit diverse samples of students because, as a required course for all majors, it is also made up of students from all disciplines.

Participants in Study 2 were 58.8% female ($N = 10$) and 41.2% male ($N = 7$). In terms of race, 47% of participants identified as white or Caucasian ($N = 8$), 23.5% identified as black or African American ($N = 4$), 17.6% identified as Hispanic or latinx ($N = 3$), and 11.8% identified as Asian ($N = 2$).

Procedures

Participants were recruited to participate in either semi-structured in-depth interviews (IDIs) of roughly 30 minutes. After agreeing to participate, students were scheduled for interviews based on convenience for the participant as well as the researcher. At the beginning of the interview, all participants are provided with an informed consent form and must agree to continue participating. This consent form as well as all research procedures were approved by the Institutional Review Board (IRB) at George Mason University. Interviews were recorded for audio and transcribed. Some interviews were conducted over the phone for convenience as well, which were also recorded for audio and transcribed, and these participants provided informed consent by signing and returning the form via email or fax. While in-person interviews were preferred because of the ability to track nonverbal behavior during the interview in the

researcher's interview notes, filling an adequate sample required allowing students who were unable to be physically present for interviews to still participate.

Participants were posed with open-ended questions about their experiences with mental health, stigma, social support, and self-disclosure. After participating, students were provided with information for campus resources on mental health should they have been impacted by discussing these issues during the research process. Participants were recruited and interviews were conducted until data saturation had been reached, meaning no new themes and categories emerged from new interviews. Audio recordings of interviews were then transcribed and analyzed utilizing a grounded theory approach to identify themes and suggest hypotheses for proposed relationships among variables in Study 3.

Instruments

In-depth interviews utilized semi-structured, open-ended questionnaires. IDIs sought to address research questions regarding help-seeking behavior, perceptions of stigma, self-disclosure of mental health issues, and social support-seeking behavior. Focus group questionnaires focused primarily on perceptions of stigma and other perceived barriers to mental health help seeking and attainment. Given the potential discomfort and reticence to discuss personal mental health issues, participants were posed with questions that sought to probe their perceptions in a hypothetical context to avoid the potential to feel stigmatized during their participation.

IDIs began with open ended questions about social support for health within their interpersonal networks, then answered questions about self-disclosure of mental health (e.g., “If you were experiencing an issue with mental health, how would you feel about discussing it with friends? Family? Other peers?”), and mental health help-seeking more broadly (e.g., “If you were experiencing an issue with mental health, how would you go about trying to deal with it?”), followed by questions about perceptions of stigma (e.g., “How do you feel about mental health issues as a college student?” “How do you feel about peers who experience mental health issues?”).

All questions were designed to be open ended and coded alongside answers in relation to their sub-topic and research question. IDIs followed the questionnaire as a guide but would probe for further information with follow up questions or new questions in response to discussions that are relevant to the topics being studied. IDI instruments were also revised in an ongoing process based on the effectiveness in previous interviews. See Appendix 2 for the interview guide used in Study 2.

CHAPTER SEVEN: STUDY 2 FINDINGS

The primary research objectives of Study 2 were to 1) determine the extent to which previously theorized aspects of stigma, social support, disclosure, and help-seeking behavior are reflected in the experiences of college students' communication surrounding mental health and 2) to determine the nature of the relationships (if any) among these relationships as captured by the experiences and perceptions of college students themselves. In pursuit of these objectives, a number of important themes emerged based on a thematic analysis employing a grounded-theory approach.

Perceived Mental Health Stigma

Arguably among the most prominent themes emergent from the qualitative data surrounded college student perceptions of mental health stigma. Research Question 4a and 4b dealt with identifying how college students perceive mental health stigma and how they perceive peers who experience mental health issues. Many participants possessed an awareness of mental health stigma but were divided on the extent to which that stigma played a role in their views of their own mental health or the mental health of others.

“I definitely think there is a growing awareness about mental health, but to me I still see a lot of stigma around [mental health issues], like emotional issues. For me, personally, I don't really let the stigma affect me, or make me feel like less of a person because I'm aware of it. I'm aware that the stigma is something that comes from misunderstanding. I might worry what other people think about me,

but I wouldn't look at a friend or a coworker differently if I knew they were going through some depression or something like that.”

-Graduate Student, Male

Meanwhile, other participants also noted a growing awareness of mental health stigma, but felt the awareness still polarizes those with a more stigmatized view of mental health, which in turn might cause some students to feel less in control when dealing with mental health challenges.

“It's hard for me because I do think more people are talking about mental health, but there are still people, like, in my friend group or family who make fun of it and don't take it seriously. It's almost like, the more support there is, the more some people push back, which makes it hard if you're going through something and want to talk to someone because it's harder to know where people really stand.”

-Undergraduate Student, Female

Based on these findings, it appears college students have a somewhat mixed perception of mental health stigma—providing partial clarity for RQ_{4a}. While students do perceive that mental health stigma exists and that it has substantial potential to influence the communication behaviors of those dealing with mental health challenges, they also perceive that this stigma is on the downfall. Despite this optimistic view of the power of mental health stigma, students did not present any uniform strategies for coping

with the issue of stigma. This finding indicates that perceptions of societal stigma of mental health may actually have little impact on the perceived self-stigma or anticipated stigma. Nevertheless, most participants reported they wouldn't feel negatively toward others with mental health issues, answering RQ_{4b}. At the same time, most of the stigma management techniques identified by participants do, in fact, revolve around strategic communication in their social circles, which provides clarity on RQ₅. This also reinforces that a conscious strategic approach to utilizing communication to manage mental health stigma is necessary for students navigating complex social dynamics, so we will next turn to those processes dealing with interpersonal mental health communication in the face of mental health stigma.

Stigma, Self-Disclosure, Social Support

As previously mentioned, stigma clearly has a pronounced potential to influence the communication behaviors of college students dealing with mental health challenges. Most notably, participants reported stigma as having a strong bearing on their decision about 1) whether or not to seek support in their social circles and of 2) from whom they should try and seek support.

“I feel like because I’ve dealt with different mental health issues, I’ve made it a point to try and figure out who would be supportive and who probably wouldn’t be. I have family members that think mental health isn’t real, so I’m obviously not going to go and open up to them about my anxiety issues.”

-Undergraduate Student, Female

Similarly, multiple participants reported that because of the difficulty in assessing the potential outcome of an anticipated experience in seeking social support in the face of prevalent of mental health stigma, it was easier to rely on only one or two friends for support.

“When you’re not really sure who you can trust, but you still feel like you need to talk to someone, I usually just go back to the same really close friends that I have because they’ve been there for me in the past, so I know they won’t judge me. Having that one or two people who can help makes you feel like you’re not alone.”

-Undergraduate Student, Male

While participants highlighted the importance of having social support for mental health issues, another clear aspect in the relationship between stigma and social support is that of self-disclosure. Many participants spoke about the first interactions they had with someone to mention they were dealing with mental health challenges, noting that the decision to even mention it caused a considerable amount of discomfort. For this reason, in regard to RQ₈, it seems there is a very specific context for seeking social support for mental health issues: college students are wary of stigma, so they identify one or two closely trusted others in their social networks and rely on those individuals to provide that support. While it appears, this is a positive aspect of these processes—some support is better than no support—it is complicated by the fact that many participants also reported

a reluctance to seek social support because they did not want to overly burden their friends with mental health issues, which most feel carry a serious weight in terms of the support needed.

“I really only talk about it with my friends or family if I feel it’s getting really serious, to a point where it’s affecting me or my relationships. If it’s something smaller or I don’t feel is that serious, I’ll usually just try and handle it myself because I don’t want to make my friends feel like they’re responsible for dealing with my mental health problems.”

-Graduate Student, Male

In this way, with regard to RQ₆, college students seem to characterize their experiences seeking and receiving social support with a great deal of hesitancy. However, in identifying those from whom they can seek support, it is clear that getting that social support has a tremendously positive impact on those seeking it. At the same time, if individuals do not feel they have anyone they can turn to in their social circles, this process can serve to further isolate individuals and prevent them from feeling they can or even should seek more professional help. It is also important to note that student experiences with social support seeking for mental health do reflect previously established theorizing, in that students reported most commonly seeking emotional, esteem, and network support, but to a much lesser extent reported seeking informational and tangible support. This suggests that while college students may feel they need to be comforted when navigating mental health issues, they don’t necessarily expect their peers

to be able to help them address more concrete challenges associated with seeking and obtaining help for those issues. Similarly, participants overwhelmingly delineated between their perception of the supportiveness of their social networks and the actual likelihood of seeking out social support. This aspect is important to consider for the measurement of social support, despite the fact that based on the analysis of these themes in the data, there is also overwhelming support that these two phenomena are closely interrelated. However, it is also critical to determine how the relationships among stigma, self-disclosure, perceived social support, and social support seeking, intersect to influence the most important outcome, mental health help-seeking behaviors.

Mental Health Help-Seeking

Previously outlined themes paint a clear picture of interpersonal mental health communication among college students: stigma—both self and anticipated—affects the perception of social support for mental health, the willingness to disclose personal mental health information, and the motivation to seek out support for mental health challenges within an individual’s social network. In line with these findings, participants also reported these processes of communication can have a strong bearing on their decision to seek help not just among their social circles but among professionals as well.

“I feel really lucky, because right now I don’t think I’d be where I am if it weren’t for having really supportive, understanding parents and friends when it comes to mental health. If it weren’t for them pushing me, I might have never opened up about what I was going through, and I might have never seen a therapist. But I

also feel bad, because even though they were supportive of this stuff, I didn't take start the conversations—they did. At first that made me feel like I was being punished, but eventually I realized they just care and want me to be happy. I worry about people like me who don't have the same people in their lives to help figure out this kind of stuff.”

-Graduate Student, Female

In this way, the process of seeking mental health almost *depends* on the supportiveness of those in individuals' social networks. Another interesting finding based on this theme is also a lack of clarity in whose responsibility it is to deal with mental health challenges. In some ways, social others represent potential safeguards for mental health breakdowns insofar as they are able to identify, initiate, and address the mental health issues of those they care about. However, most participants did not feel they had someone in their social networks that could do this for them. For this reason, many participants described their experiences seeking help for mental health issues as inherently isolating.

“Even if I did talk to my friends or my parents about the things I was going through, I still feel like seeing my therapist or going to group is personal—it's just me and my life. At the same time, having people who I can even just casually bring up the fact that I do see a therapist with helps me remember that this is

completely normal, and that even if it is stigmatized that doesn't have to stop me from doing what I have to do. My close friends are a big part of that."

-Undergraduate Student, Male

Clearly, stigma, perceived social support, social support seeking, and self-disclosure all play a pivotal role in determining the likelihood that a student not only seeks professional help for mental health challenges, but also remains committed to that professional help in an ongoing basis. As such, students seem to characterize their experiences seeking help for mental health as complicated at best, and downright stressful at worst, providing clarity for RQ_{7a}. The causes for these stressors, as identified in the responses of participants, represent a number of substantial barriers to help seeking in the context of higher education. Stigma represents a clear barrier, in that it has the potential to prevent students from feeling supported and/or seeking support in the social networks, which in turn has the potential to inhibit further help-seeking. Other commonly cited barriers reflect those identified by previous research, namely costs associated with professional help including time and money, information and awareness of the processes by which individual can and do obtain professional help (i.e., most students knew there was a counseling center on campus, but few knew what services they provide, how to set up an appointment, or even where exactly it was located), and, perhaps most intriguingly, the confidence or self-efficacy to initiate and navigate communication interactions surrounding mental health. These interactions include social

support seeking and self-disclosure, but also include circumventing stigma to obtain information on how to also overcome other more tangible barriers.

Overall, many of the reported experiences do reflect previously established theorizing on the constructs of stigma, social support, self-disclosure, and help-seeking, with some important caveats and additions based on the context of college student mental health. Moreover, based on associating emergent themes, stigma appears to have the potential to negatively affect perceived social support, self-disclosure, and help-seeking, but social support seeking or received social support may actually have the potential to reduce both self-stigma and anticipated stigma. Lastly, in bridging previous research in these areas to behavioral models such as the TPB and SCT, a key additional finding from Study 2 is the importance of self-efficacy—or one’s confidence in their own abilities—for communicating about mental health in ways that will enable the obtainment of social support and professional help.

As such, Study 3 sought to test these relationships as predicted based on findings from Study 1 and Study 2, and to develop a new key construct: mental health communication self-efficacy, or the confidence in one’s ability to initiate and navigate communication interactions in the seeking, provision, and obtainment of social support. For a more in-depth look at these phenomena, this paper will now turn to another brief review of literature for the operationalization of each relevant construct and a determination of its measurement in Study 3.

CHAPTER EIGHT: STUDY 3 LITERATURE REVIEW

Based on the findings from Study 2, a greater understanding of the potential relationships between the phenomena of mental health stigma, social support, self-disclosure, and help-seeking behavior has been gained. To determine the strength of these identified relationships, it is important to identify the operationalization and effective measurement of each construct to utilize for Study 3. Study 3 seeks to offer empirical evidence for the strength and nature of the relationships among these constructs in the context of college student mental health, and ultimately offer support for the utility of improving mental health help seeking and reducing mental health stigma by targeting interpersonal communication processes and increasing mental health communication self-efficacy. This literature review will outline each construct and its relevant measurement before suggesting hypotheses based on established theory, previous research, and the findings from the first two phases of research in this study.

Perceived Stigma

Stigma can have a deleterious effect on seeking help and social support to cope with mental health issues. One important reason is that stigma can make it more uncomfortable for individuals to discuss their own struggles. As previously mentioned, stigma is conceptualized as “an attribute that is deeply discrediting” (Goffman, 1963). As a communicative process, stigma is often thought to function both internally and externally (Rusch et al., 2005; Rusch, Angemeyer, & Corrigan, 2005). For this reason,

Study 3 relied on an operationalization of stigma that measured individuals' perception of the extent to which mental health stigma applies to them and the extent to which they feel mental health issues would illicit stigmatized views from others.

Study 3 adapted a stigma scale from Teh, King, Watson, and Liu's (2014) Self and Anticipated Stigma Scale. This scale operationalizes the dimensions of internal stigma as self and anticipated stigma. Self-stigma refers to self-perceptions resulting from a stigmatized attribute, whereas anticipated stigma refers to how others perceive a person who possesses a particular stigmatized attribute (Teh, King, Watson, & Liu, 2014). Both subscales utilized hypothetical frames for statements to capture stigma at an aggregate level rather than simply among those who actually do or do not possess the attribute under study, in this case mental health challenges.

In the context of interpersonal communication about mental health as a precursor to help-seeking, several other measures were important to consider as a consequence or moderator of stigma's influence on help-seeking as well. Calling on those in their social networks who, also because of stigma, may be uncomfortable (or, worse, judgmental or dismissive) in trying to provide support, this process also has to do with previously discussed concepts of social support seeking and self-disclosure, in addition to the primary dependent variable of mental health help-seeking. A wealth of literature helps explain the communication processes that influence these constructs, as well as useful insights for their operationalization and measurement.

Social Support – Perceived vs. Seeking

As discussed previously, social support represents one of the most critical and widely studied interpersonal phenomena in health communication research. Broadly defined as a communication construct, social support is communication which serves to reinforce social connections through the provision of some form of aid or assistance (Moore, 2018). This communicative process of providing support to those in our social networks becomes increasingly important in the face of adverse health. Health challenges can present significant and complex burdens both physically and emotionally, can significantly hinder a person's ability to function independently, and in some cases can even deter or inhibit their ability to form or maintain social connections. It is in these moments of health adversity that social support becomes increasingly important, highlighting the need for continued research exploring the role and function of communication within social support networks in the face of health challenges.

While research and theory has well established the potential for social support to positively influence health outcomes, the exact communicative mechanisms by which that impact occurs is still being discovered (Eichhorn, 2008; Jang & Ki, 2018; Boehmer, Fewins-Bliss, Lauckner, Li, & Oh, 2013). Moreover, while theories of social support have been widely explicated, many different approaches have been taken to study social support as a social science construct. One key difference relevant to mental health communication is the distinction between *perceived* social support and social support *seeking*. Perceived social support refers to the extent to which individuals believe they have a social network which is able and willing to provide support when needed (Cutrona

& Russel, 1990). Social support seeking refers to the extent to which individuals actively utilize their social networks for support, and the extent to which they feel comfortable doing so (Teh, King, Watson, & Liu, 2014). While these two distinct conceptualizations of social support as a functional process of communication are interrelated (Boehmer, Fewins-Bliss, Lauckner, Li, & Oh, 2013), two different scales were used to measure each.

Perceived social support was operationalized along five dimensions of social support. Cutrona and Russel (1990) identify the key dimensions of social support as emotional, informational, tangible, esteem, and network support. Cutrona and Russel (1990) explain that the dimensionality of social support can be understood through five basic forms: emotional support, or offering psychological comfort; network support, or the reinforcement of feelings of belonging and security within one's social network; esteem support, which refers to increasing confidence in one's ability to manage a stressor; tangible support, or the provision of resources or instrumental assistance; and informational support, or support in the form of sharing information, education, or perspective relevant to the circumstance causing stress.

These five dimensions of social support were operationalized and adapted to be relevant to mental health communication for Study 3. Study 3 utilized Schwarzer and Schulz's (2003) social support scale and Zimet, Zimet, Dahlem, and Farley's (1988) multidimensional scale of perceived social support.

As discussed above, given that stigma has the potential to influence an individuals' comfort in communicating about their mental health, the following hypothesis was proposed:

H_{1a}: There will be a significant negative relationship between perceived stigma and social support seeking.

Weak-Tie Network Support Theory

Another construct relevant to interpersonal communication and mental health, particularly as it relates to the influence of stigma on help-seeking behavior, is the extent to which individuals might choose to communicate about mental health with others *outside* of their social support networks. Weak-Tie Network (WTN) theory, otherwise known as weak-tie network support preference theory (Granovetter, 1973; Granovetter, 1982; Wright & Rains, 2013), seeks to explain the relational circumstances under which individuals choose to engage in support-seeking. According to this theory, people feel a greater level of comfort communicating about personal issues with people to whom they have weaker social ties. In other words, this theory of social support that posits individuals' willingness to communicate about personal issues functions differently for weak-tie relationships (categorized by infrequent communication, a perception as less personal, but also greater willingness to disclose certain information) than strong-tie relationships. Wright, Frey, and Sopory (2007) explain people may be more likely to discuss private information such as a stigmatized health issue with weaker ties due to

lower risks of potential judgment and the access to new information and viewpoints. This framework can be tested in the context of mental health self-disclosure to help determine how perceptions of strength in social ties can influence the seeking of support, as well as the types of support sought. For example, perhaps weaker ties within social networks are sought for informational and tangible support, while closer ties are sought for emotional and network support.

In Study 3, this construct was operationalized using Wright's (2010) Weak-Tie/Strong-Tie Network Preference scale, which asks individuals to respond to statements measuring their perceptions about the relevant risks and rewards associated with communicating about personal issues with those typically considered to be strong ties (friends, family, etc.) versus those typically considered to be weak ties (acquaintances, strangers, etc.). The scale was also adapted to be relevant to mental health communication by framing questions around a hypothetical scenario in which participants are facing mental health problems themselves (e.g., "Imagine you were dealing with a mental health issue..."), as opposed to communicating more generally about mental health as a topic. Given that mental health represents a potentially stigmatized topic for communication interactions, it is likely that individuals may choose to seek different forms of support from different sources. However, it is unclear as to whether seeking support from these two sources is mutually exclusive: if an individual prefers to seek support for mental health from weak ties, it could mean they are generally more comfortable seeking help from any source meaning they would also seek more social support from their stronger ties. Conversely, if an individual prefers to seek

support from weak ties, perhaps it is because they do not feel they can do so in their typical networks. Moreover, individuals are likely to seek different types of support from different sources, leaning on strong ties for everything while utilizing weak ties primarily for informational support. The directionality and dimensionality of the relationship aside, it is likely there is a strong relationship between the two regardless. As such, the following hypotheses were proposed for Study 3:

H₅: There will be a significant relationship between mental health social support seeking and weak-tie network preference.

H₆: College students will prefer strong-tie relationships for seeking emotional, tangible, informational, esteem, and network support.

H₇: College students will prefer weak-tie relationships for seeking informational support.

This perspective is also helpful in understanding the role of another relevant area of communication theorizing: self-disclosure.

Self-Disclosure

Another important conceptualization of the extent to which an individual may choose to communicate or not communicate about their mental health, and the extent to which that choice might consequently influence their likelihood to seek help, is the construct of self-disclosure. Several theories are useful for conceptualizing the process of

choosing to communicate or not communicate about certain topics, with certain individuals, under certain circumstances, and in certain contexts. Among those that are particularly relevant for explaining and even potentially mediating the deleterious effects of mental health stigma on help-seeking are the theoretical perspectives of communication privacy management, communication apprehension, and willingness to communicate.

Communication Privacy Management

Generally, the decisions that individuals make to either self-disclose or not self-disclose certain personal information can be thought of as the management of private information. This judgment process that individuals engage in is explained by Communication Privacy Management Theory (CPM) developed by Petronio (1991). Communication Privacy Management is a robust communication theory that describes the conditions under which people decide to either reveal or conceal private information. Widely applied in a variety of contexts, CPM is also useful in explaining the ways people navigate disclosure about stigmatized health issues among social circles, since the management of that private information must be done collectively through communication (Petronio & Venetis, 2017). CPM is critical in this research as it poses important questions for seeking social support for mental health issues in the face of mental health stigma.

Understanding CPM in the context of mental health self-disclosure necessitates investigating the circumstances under which college students feel comfortable revealing

their private mental health issues, including the extent to which they feel mental health issues do in fact represent private information. Additionally, this research seeks to understand how perceived reactions to mental health self-disclosure affect further privacy management strategies, perceptions about stigma, and help-seeking behavior more broadly. However, CPM classifies disclosure as dependent on context (with whom one is communicating; *state*) as much as individual comfort or willingness in general (*trait*). These classifications are further explained by another common communication construct: communication apprehension (CA), introduced by McCroskey (1977; 1978).

Communication Apprehension

One of the earliest conceptualizations of self-disclosure as a communication construct is that of communication apprehension (McCroskey, 2009). Communication apprehension (CA) explains that individuals experience anxiety at real and anticipated communication interactions in a variety of contexts. Perrault (2017) explains communication apprehension can be viewed as a state variable, where people's levels of apprehension are dependent on the context (e.g., interpersonal, small group, large group, public speaking), or as a trait variable, where apprehension is dependent on the individual themselves regardless of context. This distinction is helpful for the context of interpersonal mental health communication in that it allows communication constraints to be either internal or external. In Study 3, this variable was operationalized as self-disclosure using McCroskey's 2009 Personal Report of Communication Apprehension

(PRCM-20), adapted to be relevant to the communication of mental health communication.

Understanding how college students navigate the decision-making process about to whom they can disclose mental health issues and seek support, particularly during a time when social circles and networks are developing and shifting, is crucial to mitigating the harmful effects of mental health stigma on student help-seeking as well as their overall health and well-being. However, McCroskey also pioneered another conceptualization of self-disclosure relevant to this context, that is particularly useful in considering its potential to mediate or moderate the relationships between stigma and help seeking as well as social support seeking and help seeking, and willingness to communicate.

Willingness to Communicate

Since disclosure and social support seeking for mental health issues can be dependent on trait and state, McCroskey's (1992) explication of willingness to communicate (WTC) emphasizes the importance of both, noting that the decision to disclose private information is made strategically based on simultaneous, interactive perceptions of the receiver of that information (state) and perceptions of the sensitivity of the disclosure. In Study 3, self-disclosure as it relates to the constructs of stigma, social support seeking, and help seeking, was operationalized based on other mental health context-related scales. Baker and Watson's (2015) mental health disclosure scale and Teh, King, Watson, and Liu's (2014) mental health willingness to disclose scale. These

scales emphasized an individual's willingness and comfort to disclose mental health issues with any audience. However, to also capture the role that distinct relational contexts might play in influencing an individual's decision to either disclose or not disclose mental health challenges, Study 3 also adapted McCroskey's (1992) willingness to communicate (WTC) scale. This adapted scale measures individuals' self-perceived likelihood of communicating about mental health with audiences of varying relational closeness and sizes (e.g., a small group of friends, a large group of strangers, an acquaintance standing in line, etc.). As previously discussed, there are likely to be strong relationships between mental health stigma, social support, self-disclosure, and help-seeking, so the following hypotheses were proposed for self-disclosure:

H_{1b}: There will be a significant negative relationship between perceived stigma and self-disclosure.

H_{2a}: There will be a significant positive relationship between perceived social support and self-disclosure.

Mental Health Help-Seeking Intention

Arguably the most important construct measured in Study 3 is our central outcome variable, mental health help seeking. There are several theories that generally help to explain decisions to engage in behaviors, such as the Isaac and Azjen's (1991) Theory of Planned Behavior and Bandura's (1996) Social Cognitive Theory. These theories conceptualize behavior as dependent on attitudes, norms, and self-efficacy.

Developing a more nuanced model of predicting communication behavior as dependent on perceptions of stigma, social norms, and context, though, also requires conceptualizing behavior as the intention to engage in behavior rather than attempting to measure actual behavior. For this reason, mental health help-seeking was conceptualized as mental health help-seeking behavioral intention. Given that help-seeking could be conceptualized to include social support seeking as well as self-disclosure, this behavioral intention had to be specific to seeking more formal forms of health. This outcome is crucial as obtaining help from a professional is the only universally agreed upon form of help that can be considered treatment for mental health challenges. To ensure the measured behavioral intention was relevant to mental health help-seeking, this outcome variable was measured in Study 3 using Elhai, Schweinle, and Anderson's (2008) Attitudes Toward Seeking Psychological Help Scale, which measure's individuals' attitudes, beliefs, and overall likelihood to seek professional help for mental health issues. Given that each of the previously discussed concepts has the potential to influence behavior (Isaac & Azjen, 1992; Bandura, 1996), several hypotheses were proposed for directional, mediating, and moderating relationships with help-seeking behavioral intention as the outcome variable.

H_{1c}: There will be a significant negative relationship between perceived stigma and help-seeking.

H_{2b}: There will be a significant positive relationship between perceived social support and help-seeking.

H_{2c}: There will be a significant positive relationship between self-disclosure and help-seeking.

H_{3a}: Social support partially mediates the relationship between perceived stigma and help seeking.

H_{3b}: Social support partially mediates the relationship between self-disclosure and help seeking.

H_{3c}: Social support moderates the relationship between perceived stigma and help seeking.

H_{4a}: Self-disclosure partially mediates the relationship between perceived stigma and help-seeking.

H_{4b}: Self-disclosure partially mediates the relationship between perceived social support and help-seeking.

H_{4c}: Self-disclosure moderates the relationship between perceived stigma and help seeking.

Figure 1 presents these hypotheses in a full theoretical model of bivariate relationships, along with relevant hypotheses. Hypotheses H_{1a}-H_{1c} deal with stigma's effects on social support seeking, self-disclosure, and help-seeking intention. Hypotheses H_{2a} and H_{2b} deal with social support's relationship with self-disclosure and its effects on help-seeking. Hypothesis H₃ deals with self-disclosure's relationship with help-seeking intention. Figures 2-Hypothesis H_{4a}, H_{4b}, H_{5a}, and H_{5b} deal with mediation models to help seeking from stigma through social support and through disclosure, to help seeking

from self-disclosure through social support, to help seeking from social support through self-disclosure. Hypothesis H_{4c} deals with a moderation model in which social support seeking moderates the relationship between stigma and help seeking: when individuals possess a low level of social support seeking, stigma's negative effect on help seeking will remain, but when they possess a high level of social support seeking, the negative effects of stigma on help-seeking will no longer be significant.

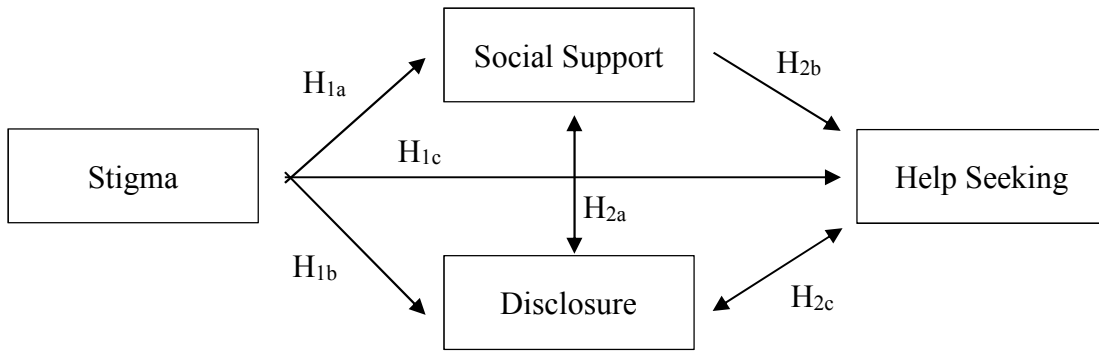


Figure 1. Full Theoretical Model of Hypothesized Bivariate Relationships

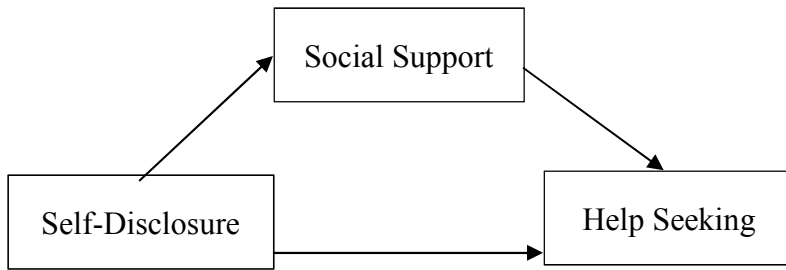


Figure 2. Hypothesized Mediation Model – Hypothesis H_{3a}

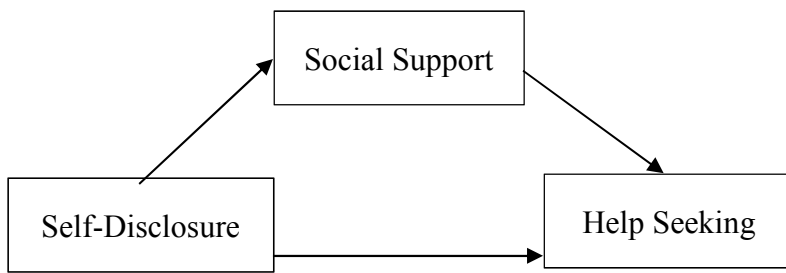


Figure 3. Hypothesized Mediation Model – Hypothesis H_{3b}

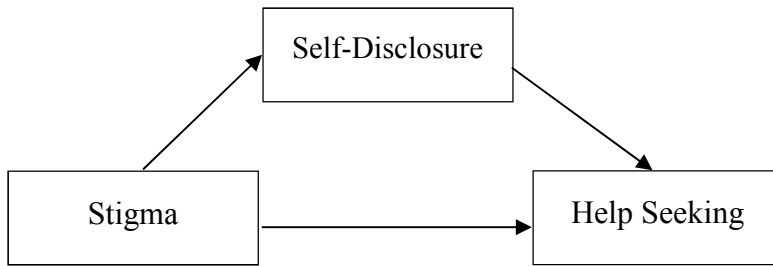


Figure 4. Hypothesized Mediation Model – Hypothesis H_{4a}

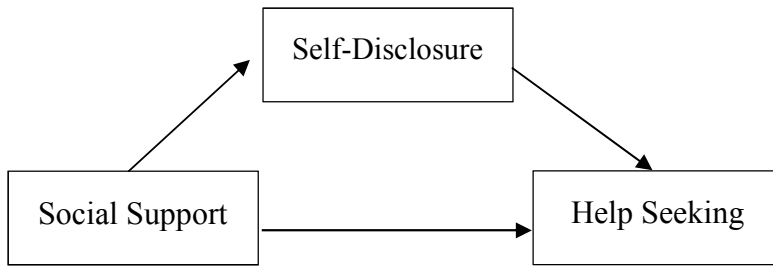


Figure 5. Hypothesized Mediation Model – Hypothesis H_{4b}

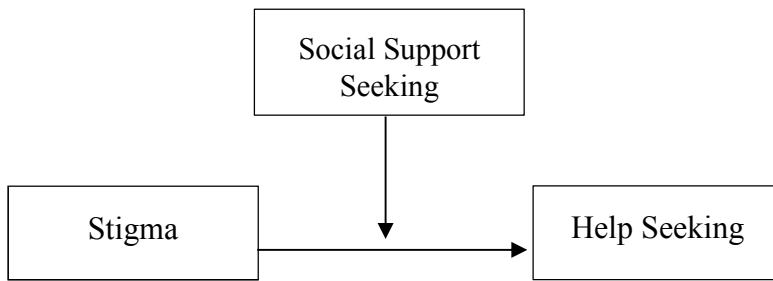


Figure 6. Hypothesized Moderation Model – Hypothesis H_{3c}

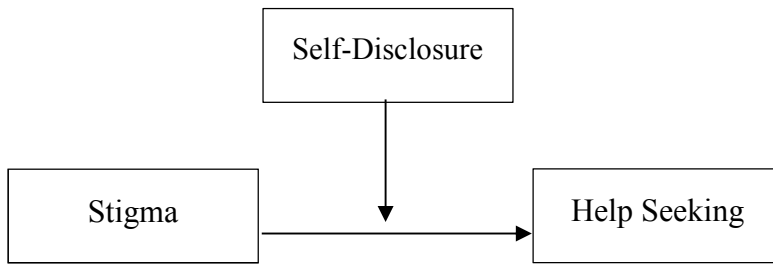


Figure 7. Hypothesized Moderation Model – Hypothesis H_{4c}

CHAPTER NINE: STUDY 3 METHODOLOGY

Building upon findings from the first two phases of research, Study 3 sought to clarify operationalizations of key measurements and test relationships among them. A close-ended quantitative online questionnaire-based survey was administered to college students measuring their perceptions about mental health, stigma, social support, self-disclosure, help-seeking behavior, and self-efficacy. This phase of the research seeks to affirm operationalization through confirmatory factor analysis and provide support for a full statistical model of relevant constructs by examining correlations as well as testing for mediation and moderation models.

Participants

Participants ($N = 1030$) were college students recruited at a large, public, mid-Atlantic university recruited during the Spring semester (February through May) of 2020 ($N = 567$), as well as participants provided by Qualtrics that met the criteria of being undergraduate or graduate students enrolled full time at an accredited college or university during the Spring 2020 semester ($N = 463$). In addition to answering questions about mental health communication, they were also asked to respond to demographic questions about their age, gender, year in school, race, sexuality, and religion. The mean age for the sample was 21.25 ($SD = 4.76$), with 30.9% freshman ($N = 319$), 27.9% sophomore ($N = 288$), 21.1% junior ($N = 217$), 13.3% senior ($N = 138$), and 6.6% graduate students ($N = 68$). Additionally, 40.4% of participants were male ($N = 417$),

56.9% were female ($N = 587$), 1.7% ($N = 17$) were non-binary or gender fluid, and 0.8% ($N = 9$) opted not to disclose their gender. In terms of race, 38.6% of participants self-identified as white ($N = 398$), 15.9% were black ($N = 164$), 14.6% were Hispanic or Latinx ($N = 151$), 14.3% were Asian ($N = 147$), with 13.4% representing other races ($N = 138$) and 3.1% ($N = 32$) opting not to disclose their race. For sexuality, 76.1% identified as straight ($N = 784$), 16.4% identified as gay or lesbian ($N = 169$), 3% identified as bi- or pan-sexual ($N = 31$), 0.3% identified as asexual ($N = 4$), and 4.1% ($N = 42$) preferred not to disclose.

In addition to descriptive demographic indicators, participants were also asked to indicate their personal experiences with mental health to assess the prevalence of mental health concerns among this college student sample. 67.4% of students surveyed indicated that they had experienced or were currently experiencing a mental health issue ($N = 694$). Among those who self-identified this way, 46.3% indicated they had experienced depression ($N = 321$) and 58% reported having dealt with anxiety ($N = 403$). Among more serious disorders, 4.8% indicated living with PTSD, 2.9% indicated experiences with OCD, 1.2% indicated experiences with bipolar disorder, 0.8% indicated experiences with Schizophrenia, 2.4% indicated experiencing other mood or psychotic disorders, and 23.2% indicated experiencing issues with disordered eating. Participants were also surveyed for their exposure to mental health, with 87.8% indicating that they currently know someone who has experienced a mental health issue, illness, or disorder.

Procedure

Participants were recruited via a convenience sample through both the Basic Communication Course and Communication major email listserv at the large mid-Atlantic public university and other universities through Qualtrics. Despite being comprised primarily of underclassmen, students in the Basic Course represent an ideal college population from which to recruit diverse samples of students because, as a required course for all majors, it is also made up of students from all disciplines. Participants were provided with an informed consent form and had to agree to the terms of the study to participate. This consent form as well as all research procedures were approved by the Institutional Review Board (IRB) at George Mason University. Participation involved completing a close-ended survey questionnaire designed to measure students perceptions mental health, stigma, social support, self-disclosure, and help-seeking behavior.

Given the length of the survey, participants were also provided with attention-check questions that asked participants to select a certain option to verify they were paying close attention and reading each question rather than simply answering randomly as quickly as possible. After completing the survey, participants were provided with information on mental health resources in the event their participation caused any psychological discomfort. Students who were recruited through the Basic Course were provided with the name of the researcher to verify their participation for course credit.

Instruments

This quantitative phase of the study used several adapted instruments designed to measure students' perceptions about mental health stigma, social support seeking and attainment, self-disclosure, and help-seeking behavior. This survey also measured demographic variables including age, race, gender, religion, sexual preference, and year in school.

Perceived Mental Health Stigma

Perceived mental health stigma was measured using scales of Self-Stigma (SSTIG) and Anticipated Stigma (ASTIG). These scales were created for this study and adapted from Teh et al. (2014). Like Teh et al. (2014), items were generated based on themes identified in mental health and stress literature. Six original items were created for each scale and measured along seven-point Likert scales from “strongly disagree” to “strongly agree.” Examples for self-stigma include “I believe that if I were struggling with mental health, I would be weak”; “I believe that if I were struggling with mental health it would make me useless.” Examples for anticipated stigma include “If others knew I were struggling with mental health they would think it was my fault”, “If others knew I were struggling with mental health, they would think I was mentally unstable”, and “If others knew I were struggling with mental health, they would think less of me.”

Perceived Social Support

Perceived social support was conceptualized as a latent variable with five distinguishable dimensions based on Cutrona and Russel's (1990) Optimal Match Theory. Emotional support was measured with four items. The first two items were adopted from Schwarzer and Schulz's (2003) Berlin social support scales, and the other two items were adopted from Zimet, Dahlem, Zimet, and Farley's (1988) multidimensional scale of perceived social support. Sample items include "Whenever I am sad, my friends and family cheer me up" and "I get the emotional help and support I need from my friends and family." Informational support was measured with one item adopted from VanYperen (1998) and two items from Madjar (2008). Sample items included "My friends and family seldom offer information and alternatives for solving problems" (reverse-coded) and "I receive useful information from my friends and family when I am in need." Tangible support was measured with three items adopted from Cohen and Hoberman's (1983) tangible support scale. A sample item was "If I needed a ride to the airport very early in the morning, I would have a hard time finding a friend or family member who can give me a ride" (reverse-coded). Esteem support was measured with three items adopted from Cohen and Hoberman's (1983) self-esteem support scale. Sample items included "My friends and family take pride in my accomplishments" and "My friends and family think highly of me." Network support was measured with three items adopted from Cohen and Hoberman's (1983) belonging support scale. A sample item included "I feel like I'm not always included by the circle of my friends and family" (reverse-coded).

Social Support Seeking

Social support seeking refers to the extent to which individuals feel comfortable seeking support from those in their social networks, as a means to capture their likelihood to actually seek support (Teh, King, Watson, & Liu, 2014). Unlike perceived social support, social support seeking refers to the extent to which individuals perceive themselves to actively engage in communication within their close social circles (e.g., friends, family members, intimate partners) to get support for personal issues such as dealing with mental health challenges. This construct was measured using Teh, King, Watson, & Liu's (2014) mental health support seeking scale. This scale asks participants to respond to the prompt, "If you were having a personal or emotional problem, how likely is it that you would seek help from the following people," along a 7-point Likert scale from "Extremely unlikely," to "Extremely likely," for the relational response options for "intimate partner," "friend (not related to you)," and "parent."

Mental Health Self-Disclosure

Mental health self-disclosure was measured through willingness to communicate about a stigmatized topic. This scale was created for this study based on other context willingness to communicate scales done by Baker & Watson (2015) and Teh et al. (2014). Seventeen original items were created for this scale. Examples include "I am willing to talk about mental health"; "I believe that communicating about mental health would benefit me"; and "I am willing to talk about my feelings and emotions". Some items were reverse coded as well, such as "It would take a lot to get me to open up about

mental health”. Higher scores indicate more willingness to disclose mental health issues. Disclosure was also measured through a general measure of comfort in disclosing mental health issues. This was measured using the established scale by McCroskey (1992). The scale consists of 12, Likert 1-7 items, anchored with “never” to “always”. The instructions read: “Below are twenty situations in which a person might choose to communicate or not to communicate about mental health. Presume you have completely free choice and indicate how often you would choose to communicate.”

Mental Health Help-Seeking

Mental health help-seeking is a critical dependent variable operationalized as intention to seek professional help for mental health issues. Intention to seek help was measured using the Attitudes Toward Seeking Professional Psychological Help Scale–Short Form (Elhai, Schweinle, & Anderson, 2008). This scale was composed of three 7-point Likert items ranging from strongly agree to strongly disagree, including “I would obtain professional help if experiencing high levels of depression,” “Talking about psychological problems is a poor way to solve emotional problems,” (reverse-coded), and “I might want counseling in the future.”

Weak-Tie/Strong-Tie Network Preference

Weak-tie/strong-tie network preference was conceptualized as perceptions of the strength of a relationship and frequency of communication. This was measured using Wright's (2010) Weak-Tie/Strong-Tie Network Preference scale, which asks participants to rate their agreement with 10 statements along 7-point Likert scales. Example statements include, "It is less risky to discuss my problems with people who are not as intimate with me as a close friends and family members," "My family and close friends often tend to judge me when I discuss my problems with them," and "My close friends and family are able to offer objective advise despite their strong feelings about me."

CHAPTER TEN: STUDY 3 FINDINGS

Data Cleaning

Prior to conducting any scale, correlational, mediation, or moderation analyses, responses were examined to ensure the value of data in the sample. Three attention checks were placed approximately one-third, half-way, and two-thirds through the survey asking respondents to select a specific option to ensure they were reading the questions. Any responses that did not select the correct option for any of the three attention checks was presumed not to be paying full attention and thus removed from the sample. Initially, $N = 1174$ responses were collected. After data cleaning, $N = 1030$ responses remained, representing the sample of college students used for statistical analyses in Study 3.

Factor Analysis & Scale Reliabilities

Prior to conducting statistical tests for bivariate correlations, mediation, and moderation models, each scale was tested for reliability and to confirm previously theorized dimensionality where appropriate. Perceived stigma (PS) was conceptualized along two dimensions, self-stigma and anticipated stigma. Using Cronbach's alpha, a scale is generally considered adequately reliable with an alpha value of 0.7 or above.

Reliability for the full scale was good, $\alpha = .86$, along with adequate reliabilities for the subscales of self-stigma, $\alpha = .92$, and anticipated stigma, $\alpha = .81$. Perceived social support (PSS) was conceptualized five dimensions. Reliability for the full scale was

good, $\alpha = .96$, as well as the reliability for the subscales of emotional support, $\alpha = .94$, informational support, $\alpha = .93$, tangible support, $\alpha = .91$, network support, $\alpha = .88$, and esteem support, $\alpha = .89$. Social support seeking (SSS) was a unidimensional scale with strong reliability, $\alpha = .92$. Self-disclosure (SD) was conceptualized through the constructs of communication apprehension and willingness to communicate, but only willingness to communicate was used as the self-disclosure variable in Study 3. This scale had good reliability, $\alpha = .85$. Help-seeking intention (HSI) was conceptualized using a unidimensional scale which also had good reliability, $\alpha = .85$. Weak-Tie Network Preference (WTNP) was also a unidimensional scale that had adequate reliability, $\alpha = .89$. A full table of means, standard deviations, and correlations among variables can be seen in Table 1.

Hypothesis Testing: Bivariate Correlations

All hypotheses tested in Study 3 were designed to determine correlations among the five key variables of perceived stigma (PS), social support seeking (SSS), self-disclosure (SD), weak-tie network preference (WTNP), and help-seeking intention (HSI) in the context of interpersonal mental health communication among college students. Additional hypotheses were tested in relation to the extent to which SSS and SD mediate relationships between PS and HSI, between SSS and HSI, and between SD and HSI.

Perceived Stigma

Three central hypotheses were tested in regard to perceived stigma (PS). Hypothesis H_{1a} predicted there would be a significant negative relationship between perceived stigma and social support seeking. A significant negative correlation was found between the variables, $r = -.18, p < .05$, confirming hypothesis H_{1a}. Correlations were also calculated to test the relationships between PS and SD as well as between PS and HSI. Bivariate correlations showed significant relationships between PS and SD ($r = -.21, p < .01$) as well as between PS and HSI ($r = -.27, p < .01$), confirming hypotheses H_{1b} and H_{1c}. The negative directionality of these correlations show that as perceived stigma increases, students' willingness to self-disclose mental health challenges decreases, along with their desire to seek help from those in their interpersonal networks and their drive to get help from a professional. These relationships confirm that perceptions of stigma still play a prominent role in college students' decisions about where and from whom they can seek help for mental health issues.

Social Support Seeking

Two additional hypotheses were also tested to determine relationships with social support seeking. These hypotheses predicted there would be significant correlations between social support seeking (SSS) and self-disclosure (SD) as well as a significant positive correlation between SSS and help seeking intention (HSI). Bivariate correlations showed a significant positive relationship between SSS and SD, $r = .31, p < .001$. This indicates that college students who report higher levels of mental health support seeking among their social circles also are more likely to feel comfortable disclosing mental

health challenges, confirming hypothesis H_{2a}. Bivariate correlations also showed a significant positive correlation between SSS and HSI, $r = .19, p < .01$. This relationship further shows that college students who seek more social support for mental health are also more willing to seek help from a professional, confirming hypothesis H_{2b}.

Self-Disclosure

Hypothesis H₃ predicted there would be a significant positive relationship between self-disclosure (SD) and help-seeking intention (HSI). Bivariate correlations did reveal a significant positive correlation between SD and HSI, confirming Hypothesis H_{2c}. This relationship demonstrates that, similar to those who are more comfortable seeking social support for mental health challenges, college students who are more willing to disclose these challenges more generally also more likely to seek help from a professional. Identifying that both of these relationships have significant positive associations with HSI demonstrates the potential to counteract the significant negative correlation between perceived stigma (PS) and HSI.

Weak-Tie Network Preference

Three additional hypotheses were tested that dealt with the role of a converse to seeking help for mental health among college students' close social circles—that of seeking help among weaker ties. Hypothesis H₅ predicted there would be a significant relationship between social support seeking (SSS) and weak-tie network preference (WTNP). Bivariate correlations showed a significant negative relationship between SSS

and WTNP, $r = -.17, p < .05$. This relationship shows that college students who are more comfortable seeking help among those in their close social circles are actually less likely to prefer to seek help among weaker ties, confirming hypothesis H₅.

While it was unclear what this relationship would look like, as it was possible those who seek help with friends might also be more likely to seek help among strangers, this finding suggests that for college students, these two constructs are mutually exclusive. In other words, perhaps college students who get help from their friends, family members, and significant others do not feel the need to utilize weak ties for support, causing their preference to shift away. This finding is also significant in that, at least for mental health, weak ties do not represent a good source of support—perhaps because college students feel they are better able to gauge the outcome of disclosing mental health information to those they know as opposed to those they do not know.

Hypothesis Testing: Mediation and Moderation

Mediation – Social Support Seeking

In addition to bivariate correlations, additional hypotheses were also tested to determine whether social support seeking (SSS) mediates the relationships between perceived stigma (PS) and help seeking intention (HSI), and/or the relationship between self-disclosure (SD) and HSI. In both cases, hypotheses predicted there would be partial mediation.

An analysis was conducted using Hayes' (2013) PROCESS macros to find out whether social support seeking mediated the relationship between perceived stigma and help seeking intention. Statistical analyses showed that there was a significant indirect effect for PS on HSI through SSS, $b = -0.18$, BCa CI [-0.47, -0.16]. PS negatively predicted SSS ($b = -0.43$, $t = 11.22$, $p < .001$) and SSS positively predicted HSI ($b = 0.29$, $t = 15.03$, $p = .02$). This mediation model predicted 19% of the variance in college students' mental health help seeking intention. In contrast, the direct effect of perceived stigma on help seeking intention predicted only 5% of the variance in the model, $b = -.25$, $t = -3.78$, $p < .01$. Direct and indirect effects are shown in Figure 8. Given that a direct effect was significant in this model, these findings reveal that social support seeking only partially mediates the negative effect of perceived stigma on help seeking intention, confirming Hypothesis H_{3a}.

An additional mediation analysis was conducted using Hayes' (2013) PROCESS macros to find out whether social support seeking (SSS) mediated the relationship between self-disclosure (SD) and help seeking intention (HSI). Statistical analyses showed that there was no significant indirect effect for SD on HSI through SSS, $b = 0.11$, BCa CI [-0.25, 0.19], meaning Hypothesis H_{3b} was not confirmed. Direct and indirect effects are shown in Figure 9.

Mediation – Self-Disclosure

In addition to testing mediation models for social support seeking (SSS), hypotheses H_{5a} and H_{5b} predicted that self-disclosure (SD) would have a mediating role

among these variables as well. Like SSS, hypothesis H_{5a} predicted SD would also mediate the relationship between perceived stigma (PS) and help seeking intention (HSI). Meanwhile, hypothesis H_{5b} predicted SD would mediate the relationship between SSS and HSI. Also similar to hypotheses for SSS, both SD mediation hypotheses predicted partial mediation would be present.

Hayes' (2013) PROCESS macros was again used to determine if self-disclosure mediated the relationship between perceived stigma and help seeking intention.

Statistical analyses showed that there was a significant indirect effect for PS on HSI through SD, $b = 0.44$, BCa CI [0.52, 0.23]. PS negatively predicted SD ($b = -0.61$, $t = 17.39$, $p < .001$) and SD positively predicted HSI ($b = 0.43$, $t = 9.97$, $p < .01$). This

mediation model predicted 37% of the variance in college students' mental health help seeking intention. In contrast, the direct effect of perceived stigma on help seeking intention predicted only 2% of the variance in the model, $b = -.15$, $t = -1.74$, $p = .11$.

Direct and indirect effects are shown in Figure 10. Given that there was no significant direct effect on HSI from PS, these findings reveal that self-disclosure fully mediates the negative effect of perceived stigma on help seeking intention, partially confirming Hypothesis H_{4a}.

In addition to testing the mediation effect of self-disclosure on the relationship between perceived stigma and help seeking intention, another analysis was conducted using Hayes' (2013) PROCESS macros to determine if self-disclosure (SD) mediated the relationship between social support seeking (SSS) and help seeking intention (HSI).

Statistical analyses showed that there was a significant indirect effect for SSS on HSI

through SD, $b = 0.37$, BCa CI [0.39, 0.18]. SSS negatively predicted SD ($b = -0.23$, $t = 7.78$, $p = .04$) and SD positively predicted HSI ($b = 0.54$, $t = 13.71$, $p < .01$). This mediation model predicted 26% of the variance in college students' mental health help seeking intention. In contrast, the direct effect of social support seeking on help seeking intention predicted only 4% of the variance in the model, $b = -.22$, $t = -6.83$, $p = .08$. Direct and indirect effects are shown in Figure 11. Given that there was a significant direct effect on HSI from SSS, these findings reveal that SD partially mediates the effect of perceived stigma on help seeking intention, confirming Hypothesis H_{4b}.

Moderation – Stigma & Help Seeking

In addition to mediation models, statistical tests were also conducted to determine whether either or both of the variables of social support seeking (SSS) and self-disclosure (SD) moderated the significant negative correlation between perceived stigma (PS) and help seeking intention (HSI). H_{4c} predicted SSS would moderate the relationship between PS and HSI.

A moderation analysis was conducted to find out whether social support seeking (SSS) moderates the relationship between perceived stigma (PS) and help seeking intention (HSI). The interaction effect for PS by social SSS was not significant, $b = -.11$, $t = 1.08$, $p = .28$. This finding indicated that no moderation effect was present for this moderation model, disconfirming Hypothesis H_{3c}.

An additional moderation analysis was conducted to find out whether self-disclosure (SD) moderated the relationship between perceived stigma (PS) and help

seeking intention (HSI). The interaction effect for PS by SD was significant, $b = .09$, $t = 4.95$, $p < .01$, indicating that a moderation effect is present. An analysis of the conditional effects showed that when comfort with self-disclosure is high, there is a non-significant relationship between perceived stigma and help-seeking intention, $b = -.02$, $t = -1.39$, $p > .05$. At the mean value of SD, there is a significant negative relationship between PS and HSI, $b = -.08$, $t = -4.92$, $p = .04$. At low values of callous traits, there is also a significant negative relationship between PS and HSI, $b = -.35$, $t = -9.14$, $p < .01$. This finding suggests that for college students who would feel very comfortable disclosing mental health challenges are less likely to have fears of stigma prevent them from seeking help from a professional. However, for college students at the average and low levels of comfort with mental health self-disclosure, perceived stigma's significant negative effect on help seeking intention remains. These findings demonstrate that comfort with self-disclosure of mental health challenges represents a critical communication construct in mitigating mental health stigma, confirming hypothesis H_{4c}.

Table 1. Means, Standard Deviations, and Correlations Among Variable

Variable	M	SD	1	2	3	4	5	6
1. Perceived Stigma	4.68	1.96	-	-	-	-	-	-
2. Perceived Social Support	4.97	2.14	-.12*	-	-	-	-	-
3. Social Support Seeking	5.14	1.41	-.18*	.41***	-	-	-	-
4. Self-Disclosure	4.12	1.05	-.21**	.16*	.31**	-	-	-
5. Help-Seeking Intention	4.77	1.56	-.27**	.09	.19**	.38***	-	-
6. Weak-Tie Network Preference	3.95	2.54	-.03	-.07*	-.17**	.06	.03	-

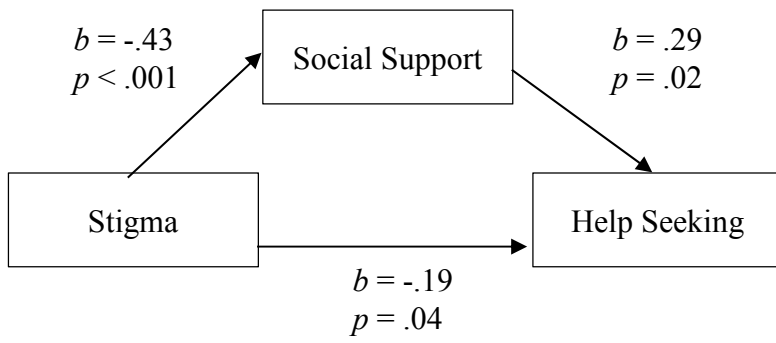
Correlations calculated using Pearson's R.

* = $p < .05$

** = $p < .01$

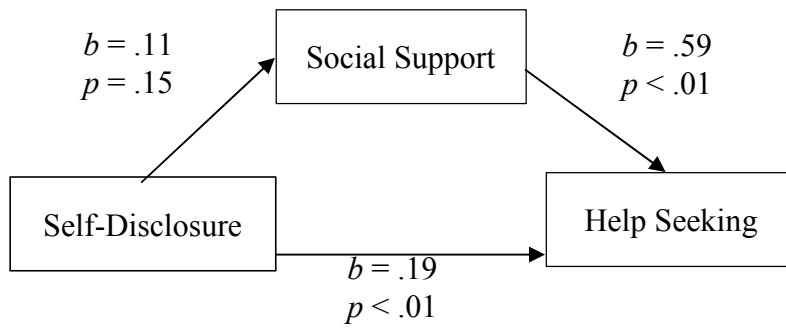
*** = $p < .001$

Table 1.



Indirect effect: $b = -.18$, $p = .02$
Direct effect: $b = -.25$, $p < .01$

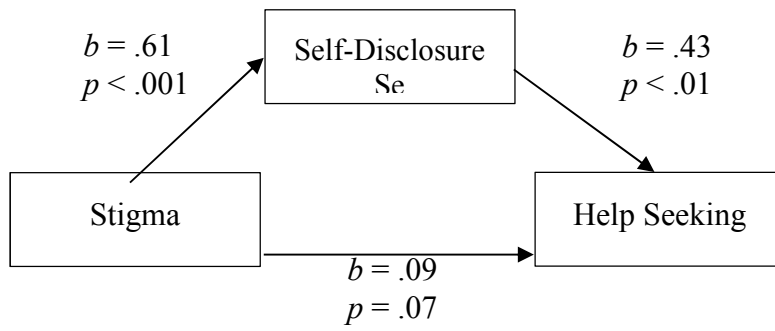
Figure 8. Model Summary – Hypothesis H_{3a}



Indirect effect: $b = .07$, $p = .28$

Direct effect: $b = .31$, $p < .01$

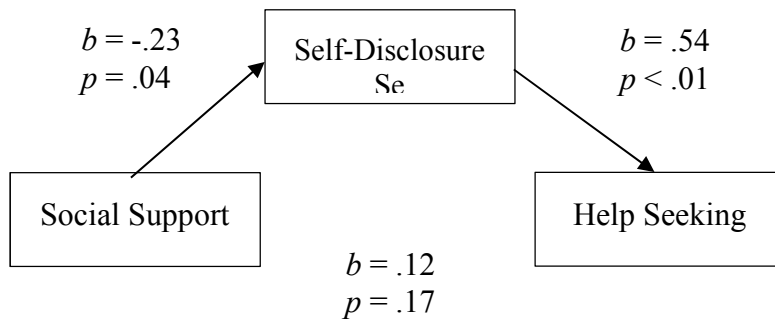
Figure 9. Model Summary – Hypothesis H_{3b}



Indirect effect: $b = .44, p < .01$

Direct effect: $b = -.15, p = .11$

Figure 10. Model Summary – Hypothesis H_{4a}



Indirect effect: b = .37, p = .04

Direct effect: b = -.22, p = .08

Figure 11. Model Summary – Hypothesis H_{4b}

CHAPTER ELEVEN: DISCUSSION

Communication researchers should be actively pursuing the advancement of knowledge regarding the influence of stigma, social support, and self-disclosure on mental health communication and help-seeking. While college student mental health, especially related to help-seeking behaviors, represents a field of study with considerable breadth and depth, this research offers the first empirical investigation into how aspects of communication are central to the behavior and decision-making processes of college students. Moreover, this is the first program of research that demonstrates how seeking help is not a static decision that is either made or not made, but rather a continuous process in which students constantly evaluate and re-evaluate their experiences communicating about mental health and in which those experiences influence future decisions about disclosure and ultimately help-seeking.

The ultimate purpose of this multi-study research project was to identify and analyze key interpersonal communication processes that influence college student mental health help seeking behavior. Study 1 contributed to achieving this goal by assessing the current state of interpersonal mental health communication literature and conducting an exploratory probe to identify and confirm the relevance of key interpersonal communication constructs to the context of increasing help seeking behavioral intention. Study 2 built upon findings from Study 1 by organizing identified communication constructs and examining relationships among them from the perceptions of college

students themselves. Study 3 tested and confirmed those relationships through statistical analysis.

The primary research objective in Study 1 was to offer a preliminary probe into the ways college students perceive and characterize their experiences communicating interpersonally about mental health. Utilizing the Critical Incident Technique (CIT), students were primed to consider positive and negative experiences, and then pushed to reflect on aspects of communication related to those experiences. One key finding from this phase of research that builds upon previous research highlights the importance of the relational context for communication interactions involving mental health disclosure. Many of the participants framed their experience as either negative or positive being dependent on the person they were communicating with, further demonstrating the strategic decision-making that occurs when it comes to communicating about mental health in interpersonal contexts.

While Communication Privacy Management (Petronio, 1991) explains this decision making as a deliberate process, with topics related to stigmatized health issues the findings from Study 1 suggest this process can also be highly reactive: as individuals seek to determine risks associated with managing private information, they continually test the waters which influences decisions in the future. This finding was also extremely relevant in guiding Study 2, since the establishment of relative communication constructs present in the perceptions of students in Study 1 helped shift the focus of inquiry from whether students think strategically about communicating about mental health to determining the exact ways and mechanisms by which they form that strategy and

navigate communication interactions dependent on perceptions of their audience's level of stigma, social supportiveness, and the risks of making private health information more public.

Understanding the ways each of these constructs relate to one another from the perspective of students was the primary research objective of Study 2. A key finding related to the association between stigma and social support seeking stemmed from the fact that participants had mixed perceptions about the extent to which stigma might influence their mental health communication. However, as awareness of mental health stigma increases, social desirability may have played a role for some participants who felt that having an awareness of stigma is the same as knowing how to overcome it. This reinforces previous research related to Stigma Management Communication (SMC) presented by Meisenbach (2010), which emphasizes the importance of understanding communication-based strategies for stigmatized individuals to manage how stigma affects them.

Findings from Study 2 further highlight the need for communication researchers to investigate practical recommendations around how to arm students with the tools to communicate about their mental health challenges with relevant others in the face of stigma and uncertainty of outcome. This discovery was influential in guiding Study 3 as it placed the process of feeling comfortable self-disclosing mental health challenges as a potential go-between for those who seek social support and those who seek help, which became a critical finding from that phase of research.

Lastly, while a great deal of previous correlational research has investigated barriers to college student help-seeking behavior, these findings in this research are the first to suggest that stigma's impact on help-seeking can be circumvented by strategic interpersonal communication. In other words, when individuals perceive stigma as a risk for disclosure, those who are more comfortable disclosing to any audience—best friend or stranger—are the ones that are immune to stigma's influence. For those who rely more heavily on communicating about mental health with only certain audiences, additional challenges can arise such as feelings of relational burden, another prominent finding from Study 2. Together with findings from Study 1, Study 2 helped to guide the hypothesized relationships between variables once operationalized, affirming the theorized model of relationships and identifying self-disclosure as among the most potentially significant communication constructs that offer a precursor for help-seeking.

After guidance from examining the results from Study 1 and Study 2 explicating the potential associations between relevant communication constructs, the primary objective of Study 3 was to test these theorized relationships. While a great wealth of previous research has investigated potential barriers to mental health help seeking, this study offered one of the first sequentially developed quantitative examinations of communication constructs that play a central role in decreasing or increasing help-seeking behavioral intention. As noted from guidance from previous phases of research, findings from Study 3 highlight the importance of self-disclosure as a general willingness to communicate about mental health as a significant mediator in the relationship between social support seeking and help-seeking and as a significant moderator in the relationship

between stigma and help-seeking. Findings suggest that self-disclosure helps explain the positive association between social-support seeking and help-seeking intention such that when self-disclosure is introduced it creates a fully mediated model in which that association between help-seeking and social support seeking is no longer significant. This indicates that self-disclosure accounts for a great deal of the shared variance in help-seeking intention. One possible interpretation of this finding could suggest that when individuals seek social support a great deal in their support networks but feel hesitancy in communicating for support beyond those networks, a sort of dependency is created in which individuals attempt to address their mental health needs exclusively by social support. Conversely, students who do not actively seek social support for mental health are also less likely to seek professional help because they do not feel comfortable disclosing mental health challenges to anyone. This finding further demonstrates the importance of these feelings of comfort and confidence in navigating mental health interpersonal communication interactions, which, if promoted, may offer a fruitful avenue by which the gap between mental health prevalence and mental health help-seeking can be narrowed.

Overall, this research demonstrates the significance of interpersonal communication processes among college students as a precursor to support- and help-seeking behavior for mental health challenges. If proven to be widely replicable, findings from each study in the current research program suggest that improving college students' comfort and ability to communicate about mental health challenges interpersonally may have profound influences on their drive and, consequently, their attainment of necessary

professional resources to treat those mental health challenges. The contributions of the current research can be further understood through an examination of its practical applications, its theoretical implications, its limitations at each phase of research, and its guidance in determining potentially fruitful areas for future inquiry in this area of communication scholarship.

Practical Applications

As identified previously, the disparity between mental health prevalence among college students and mental health help seeking and attainment represents a critical health crisis on college campuses in the United States. Findings from Study 3 surrounding the mediation and moderation effects of self-disclosure on help seeking intention from perceived stigma as well as social support offer evidence for the practical relevance of targeted communication training for college students. Considering the importance of self-disclosure yet the level of hesitance and discomfort that students reported experiencing in communicating about mental health interpersonally, college administrators and educational developers may improve help seeking by providing students with a communication toolset for navigating difficult decisions with relevant social others.

For example, mental health providers receive communication-based training in how to talk to new patients to make them feel comfortable discussing mental health challenges. A similar training could be implemented to help students understand the

when, where, why, how, and with whom to communicate about mental health. If greater communication self-efficacy can be achieved for disclosing mental health challenges, not only could this result in improved comfort seeking professional help, but it could also help diminish the remaining gap in awareness of mental health and the stranglehold that stigma has on making these conversations feel taboo. In other words, given that self-disclosure moderates the negative association between perceived stigma and help seeking intention such that for those with high levels of comfort and confidence communicating about mental health challenges are the most likely to seek professional help if necessary, this finding suggests that improving this comfort and confidence represents a potentially fruitful pathway to help seeking that can even circumvent the profound detriment of mental health stigma. Helping college students understand the ways in which they can talk about mental health to achieve maximum understanding in a counterpart despite the potential for stigmatizing beliefs to already be present is crucial. Knowing how to advocate for healthcare needs among important others such as parents or guardians, knowing how to overcome stigmatic objections to the relevance or prevalence of mental health needs, and even knowing how to initiate conversations with friends who students are concerned about are all potential avenues for communication training to improve mental health help-seeking behavior.

Additionally, improving willingness to self-disclose mental health challenges can also explain the positive association between social support seeking and help seeking intention. While those college students who seek and receive support for mental health challenges from those within their social circles are also more likely to seek professional

help, that relationship is partially explained by their willingness to disclose mental health challenges more broadly. In other words, social support is only useful as a pathway to help seeking because it encourages a greater level of comfort communicating about mental health more broadly.

Overall, the combination of these findings demonstrates the relevance of Bandura's (1996) Social Cognitive Theory (SCT), which further emphasizes the importance of self-efficacy as a driver of behavior. When college students communicate in their social circles to get help for mental health challenges, these findings suggest that it is possible that the process of engaging in those communication interactions actually has a ripple effect on their comfort communicating more broadly. However, these practical contributions to the battle against the college student mental health crisis are only one area of its usefulness; it is also important to consider the benefits to theorizing in the intersection of interpersonal and health communication.

Theoretical Implications

In addition to practical contributions, findings from each phase of research in the current study also adds insight to previous research and theorizing, both in regard to college students and mental health as well as interpersonal and health communication. First, as noted previously, the importance of self-disclosure introduces the relevance of a previously theorized construct, that of self-efficacy or one's confidence in the ability to successfully perform a behavior. The interaction in the moderation between stigma and help-seeking by self-disclosure is significant in that it is also associated with the desire to

consequently pursue professional treatment for those challenges. This finding suggests that college students may benefit from university resources dedicated to improving their comfort, confidence, and self-efficacy communicating about mental health interpersonally; but ultimately, that self-efficacy may lead to an overall increase in the decision to seek help through campus counseling or other professional resources. This finding bears significant weight for social-cognitive theory (Bandura, 1996) in that it further demonstrates the relationship between self-efficacy and behavior. Moreover, the relationship between social support seeking and self-disclosure reinforces the importance of social norms and their influence on behavior. Based on these findings, perceptions of social contexts are predictive of behavior, but only insofar as they are also predictive of individuals' confidence in their ability to engage in that behavior. Further research in mental health help-seeking can explore the relative predictive value of each of these constructs and seek to understand if and how the difference between internally and externally perceived stigma plays out in constraining help-seeking behavior.

Additionally, this research is the first to consider and analyze the direct effect of interpersonal communication processes regarding health issues as a precursor for help-seeking and as a direct mitigator of health-related stigma. Previous research has demonstrated that the constructs of perceived stigma and social support can both have profound effects on the seeking and attainment of care for health issues. However, associating these constructs while also identifying the significance of additional communication constructs such as self-disclosure, remains a novel endeavor. This research advances previous theorizing in the role of stigma in health communication from

the model of stigma communication (MSC) described by Smith (2014) and stigma management communication theories. Ultimately, this research helps demonstrate the utility of placing communication at the center of the processes that individuals' undergo to learn about and respond to health challenges. However, these theoretical contributions must be taken into consideration alongside a host of limitations at each phase of research in the current study.

Limitations

Despite a wealth of practical and theoretical contributions, the current research should also be considered in conjunction with its methodological and conceptual limitations. First and foremost, as identified in the literature review, the concept of "mental health" is extremely broad. To study "mental health communication," then, requires a great deal of oversimplification and the assumption that each participant recruited for the current research interprets the idea of "mental health" to mean roughly the same thing. While the current research reinforced that there is a growing portion of college students who are aware of mental health issues and their stigma, it's entirely possible that these perceptions differ among participants. Although the difference between these two areas of mental health as they are experienced by college students was not a primary consideration in the current research, future studies can explore how those respondents who have clinical mental health diagnoses and those respondents with more minor mental health challenges perceive and utilize communication to navigate challenges to help-seeking and attainment. Given the wide scope of mental health

challenges faced by college students, it is likely there are significant differences depending on the type of mental health challenge that students may experience such as anxiety, depression, obsessive compulsive disorder, bi-polar disease, schizophrenia, post-traumatic stress disorder, or one of the numerous additional diagnoses in the field of psychology. Future research should continue to tease out these differences and determine if findings based on perceptions and experiences with mental health more broadly also hold up based on more specific mental health challenges.

Additionally, the delineation between mental health issues such as anxiety and depression and mental health disorders such as bipolar disorder can cause a great deal of confusion for determining effective communication strategies for discussing each interpersonally. Undoubtedly, these two different categories of mental health affect individuals differently, such that those who experience disorders almost have no choice but to develop a lexicon for understanding and communicating about it with relevant others. For this reason, future research should examine this group as separate from those who experience more common challenges such as depression and anxiety.

While conceptual limitations exist, there are also limitations for the current research program that stem from methodological considerations. For example, a convenience sample of college students was used for each phase of research in this study. For this reason, it's possible that the population of students sampled for each phase of research are not entirely representative of a broader sample of college students nationally. This research should be replicated in additional locations with randomized sampling to ensure that findings are similar. Moreover, operationalizing some of the constructs to be

relevant for the context under study for this research may have caused distinction between the measured construct and the conceptual construct.

Based on these preliminary findings which suggest that relationships do occur, additional research should be conducted to engage in exploratory factor analysis to ensure the synchronicity between operational and conceptual definitions in variables. This limitation is also tied to a more generalized limitation of each phase of research in that all forms of data collection used in this study relied on self-report mechanisms. Asking participants to report their own experiences and perceptions can be a useful way to get a more in-depth glimpse at relevant phenomena, but it also presents limitations in the quality of data. A number of precautions were taken to ensure the value of data collected, but ultimately further inquiry is needed to confirm present findings through other forms of data that are not solely dependent on the participants' responses.

Furthermore, a structured, multi-phase approach was used to guide the different methodologies employed during each sub-study. While utilizing two different approaches to qualitative research was initially useful in that it allowed for the collection of unique data under different circumstances, there was some overlap in findings during the process of data analysis between the first two qualitative phases of research. However, methodological triangulation helped to affirm that findings present in the rich descriptions of mental health communication interactions could also be reiterated empirically through statistical analysis. While gaps may exist between the operationalization of constructs as studied qualitatively versus quantitatively, a great deal of attention was paid to ensuring constructs were well-explicated, their measurements

matched based on previous research, and that each was uniquely relevant for the context of interpersonal mental health communication.

Another limitation for the current study at each phase is the extent to which “college students” were treated as a largely homogenous population. College students do in fact undergo a host of similar experiences and many of them face the same challenges as they relate to potential threats to positive mental health, yet different college students experience these threats differently based on a number of demographic factors that also intersect such as race, gender, sexual identity, and even religion. While the current research advanced theorizing in the development of a model of interpersonal help seeking communication behavior, future research should examine the appropriateness of explaining relationships among relevant communication constructs within various different demographic groups and subgroups. Despite these limitations, methodology used in the current study allow some degree of confidence in the relevant findings for helping to address the crisis of poor mental health among college students in the United States. These findings also offer a great deal of insight into potentially fruitful avenues for future research in the scholarly intersection of mental health, interpersonal and health communication, and behavior change.

Directions for Future Research

While the concepts of stigma, health communication, and mental health respectively represent widely researched areas of study, understanding the intersections of these concepts remains a relatively recent endeavor. Researchers in psychology and

sociology remain committed to further explicating the concept of stigma, and health communication researchers have begun to examine how stigma affects health through communicative processes. Meanwhile, a wealth of mental health research is devoted to describing the nature of mental health stigma specifically and identifying the influence of stigma on mental health outcomes. As discussed previously, stigma communication theory argues for the usefulness of the communication perspective in identifying effective avenues and strategies for correcting mental health misinformation and for encouraging those struggling with mental health issues to seek and obtain help. Alongside future research dedicated to overcoming the host of limitations for the current study, findings in the current study also suggest greater attention needs to be placed on researching the process of stigmatization as communication, as well as the means by which overcoming mental health stigma through communication is possible. For this reason, while the current state of research for these areas individually is strong and growing, future studies should consider ways to research the intersection of all three concepts. As the current research was primarily descriptive, in order to determine the potential theoretical value of the proposed relationships among communication and behavioral variables future research should employ additional methodologies, namely through experimental and longitudinal design. For example, developing a communication intervention to improve college students' self-efficacy in communicating about mental health interpersonally and testing its effectiveness on disclosure, social support seeking, and help-seeking is a clear logical next step for this research endeavor. These studies should be sure to take into consideration the differences in clinical diagnoses versus self-diagnoses, as college

students' awareness of mental health issues is obfuscated by the potential spread of misinformation, whereas those with clinical diagnoses are likely to be more informed and thus better equipped to navigate communication interactions involving stigmatized health topics.

As identified in the small portion of studies that do examine stigma specifically in the context of mental health communication, stigma and health communication scholars alike are making strides in contributing knowledge in this highly specific intersection. Building upon recommendations from Smith (2014), the communication perspective can be wielded as a tool not only for deepening our understanding of stigma's influence on mental health, but also for combating the apparent consequences of stigma on mental health outcomes. Specifically, the design of message testing research that incorporates both theories of stigma and models of health education can help elucidate the potential for correcting stigmatic beliefs. Since stigma in itself represents a barrier to help seeking, qualitative research is also needed to describe mental health patients' experiences with stigma. While patient confidentiality represents a barrier to studying those who have direct experience with clinical or medical treatment for mental health challenges, the prevalence of such challenges should enable the collection of an adequate sample. While stigma may inhibit the utility of this approach, utilizing focus groups for those who deal with mental health challenges to discuss and compare communication strategies would be one potentially fruitful avenue by which to focus exclusively on those with these experiences rather than asking participants to consider their communication in a hypothetical context. Conversely, experimental designs can be used to test the relative

utility of different approaches to reducing stigmatic perceptions and improving mental health help seeking. One particularly important message to test would be centered around increasing peer-to-peer communication about mental health, as current findings suggest that may be an important pathway both to stigma reduction and to promoting help-seeking. Given the clear relevance of many of these constructs which are measured continuously, future research can also utilize a multiple regression analysis to examine whether mental health communication self-efficacy can predict a significant amount of variance in help-seeking behavioral intention above and beyond other well-established influencers of behaviors such as stigma, social support, attitudes toward mental health, and social norms.

Moreover, empirical research studies applying communication theories of stigma such as MSC and its recent revisions to the context of mental health can help advance the development of this theory and its usefulness in both describing how and why mental health stigma is attributed and predicting the means and contexts in which mental health stigma is transmitted and socially diffused. Considering that the latter insight has previously been supported by the concept of communication resulting from danger-control evaluations, and that mental health quality and challenges may not represent immediate danger to non-stigmatized others, new hypotheses are needed to identify and mitigate the causes of mental health stigma diffusion. These future directions for research can aid health communication and stigma scholars alike in both the development and advancement of communication theory and the practical application of research

findings to reduce mental health stigma and encourage help- and treatment-seeking communication behaviors.

APPENDIX 1: STUDY 1 INSTRUMENT

MENTAL HEALTH SELF-DISCLOSURE SURVEY INFORMED CONSENT FORM

RESEARCH PROCEDURE This research is being conducted to understand mental health communication. If you agree to participate, you will be prompted with a series of open-ended questions and asked to write your responses. It will take about 20 minutes to complete the survey.

RISK There is always a slight chance that someone might feel upset after completing the survey, however it is important to know that there are no expected risks or negative effects associated with your involvement. Please note that if you do feel upset and would like to speak with someone, you can contact the George Mason Counseling and Psychological Services Center (CAPS) at (703) 993-2380. Participants may skip over any questions they do not feel comfortable answering or withdraw from the study at any time. **BENEFIT** There are no benefits to participating in this research beyond advancing scholarly research on mental health communication. **CONFIDENTIALITY** The data in this study will be confidential. No individually identifiable information will be collected. In accordance with research guidelines, data from this study will be stored for 5 years on the office computer of the principal investigator, Dr. Gary Kreps, at George Mason University, and then destroyed. While it is understood that no computer transmission can be perfectly secure, reasonable efforts will be made to protect the confidentiality of your transmission. Please avoid writing the names of others or identifying information about yourself in the open-ended questions in order to help us protect your confidentiality. If identifying information is disclosed, it will be redacted as soon as possible. The de-identified data collected in this study could be used for future research without additional consent from participants. **WHEN CONFIDENTIALITY WILL NOT BE PROTECTED** If you identify yourself in any of the open-ended responses and your responses indicate intent to commit suicide, intent to kill or cause serious bodily harm to another person, and/or knowledge of past, current, or future unreported child abuse or elder abuse such responses must be reported under the Virginia Code of Law. **PARTICIPATION** Your participation is voluntary, and you may withdraw from the study at any time and for any reason. If you decide not to participate or if you withdraw from the study, there is no penalty or loss of benefits to which you are otherwise entitled. There are no costs to you or any other party. Individuals must be at 18 or older to participate. All students enrolled in COMM 100 and COMM 101 are given several assignment options for earning the "research credit" in their classes. These assignments are intended to either help students build communication skills, learn how to analyze

others' communication, or learn about the communication research process. Each semester, students are given a variety of options for earning these points. Examples of these opportunities for earning points include participating in a communication research study, attending a presentation and writing a one paragraph summary of the presentation as evidence of their attendance, or participating in a variety of other communication skills-building campus activities (such as speaking in a Toastmaster's meeting, visiting the Speech Lab, attending a campus guest lecture and writing a one paragraph summary, attending the forensics team's Tea with Stars, etc.). This research study would be one of several options that students will be given to earn these points in their class. CONTACT This research is being conducted by George Kueppers at George Mason University. He may be reached at gkuepper@gmu.edu for questions or to report a research-related problem. The faculty advisor is Dr. Gary Kreps and his office number is 703 993 1094. You may contact the George Mason University Institutional Review Board (IRB) Office at 703-993-4121 if you have questions or comments regarding your rights as a participant in the research. This research has been reviewed according to George Mason University procedures governing your participation in this research.

CONSENTI have read this form, all of my questions have been answered by the research staff, and I agree to participate in this study.

Agree (1)

Disagree (2)

End of Block: INFORMED CONSENT FORM

Start of Block: Prompt

This survey will prompt you with several open-ended questions. Please be as descriptive as possible in your responses. The questionnaire will ask you about experiences you've had communicating or talking about your own personal mental health (e.g., anxiety, depression, stress, etc.).

Please think of a memorable time when you disclosed information about your mental health to another or others.

How would you characterize your experience overall?

- Positive (1)
- Negative (2)
- Neither positive nor negative (3)
- Both positive and negative (4)
- Unsure (5)

End of Block: Prompt

Start of Block: CIT B (Positive)

Please respond to the following prompts in your own words, being as descriptive as possible.

Think of a memorable time when you communicated about your personal mental health (e.g., anxiety, depression, stress, etc.) that led to an intensely POSITIVE experience.



What prompted you to disclose, communicate, or talk about your mental health? What was the context of the self-disclosure?

Page Break



Where (or in what channel) did the communication take place? Was it face-to-face, over the phone, via text, on social media, somewhere else? What prompted you to talk about your mental health through this channel?

Page Break



Who (a friend, neighbor, parent, social media friends/followers, etc) were you communicating with? What led you to choose this person or these people to talk with about your mental health?

Page Break _____



How did you feel before the communication took place? What emotions (if any) did you experience? Was it planned? If so, how did you plan or prepare for it? If not, how did it come up?

Page Break _____



How did you feel during the act of communicating about your mental health? What reactions did you notice? How did you respond to those reactions during the experience? What other actions did you take or strategies did you use during the experience (e.g., clarification, using humor, changing the conversation or ending the interaction, etc)? Why?



Page Break



How did you feel after the act of communicating about your mental health? What was the reaction to your self-disclosure? How did that reaction make you feel? What did you notice about your experience that sticks in your memory?

Page Break _____

Since this experience, have you communicated about your mental health with anyone else?

- Yes (1)
- No (2)
- Not sure (3)

Who (a friend, neighbor, parent, additional social media posts, etc) have you communicated with since this experience about your mental health? Why?

Why not?

End of Block: CIT B (Positive)

Start of Block: CIT A (Negative)

Please respond to the following prompts in your own words, being as descriptive as possible.

Think of a memorable time when you communicated about your personal mental health (e.g., anxiety, depression, stress, etc.) that led to an intensely NEGATIVE experience.



What prompted you to disclose, communicate, or talk about your mental health? What was the context of the self-disclosure?

Page Break



Where (or in what channel) did the communication take place? Was it face-to-face, over the phone, via text, on social media, somewhere else? What prompted you to talk about your mental health through this channel?

Page Break



Who (a friend, neighbor, parent, social media friends/followers, etc) were you communicating with? What led you to choose this person or these people to talk with about your mental health?

Page Break _____



How did you feel before the communication took place? What emotions (if any) did you experience? Was it planned? If so, how did you plan or prepare for it? If not, how did it come up?

Page Break _____



How did you feel during the act of communicating about your mental health? What reactions did you notice? How did you respond to those reactions during the experience? What other actions did you take or strategies did you use during the experience (e.g., clarification, using humor, changing the conversation or ending the interaction, etc)? Why?



Page Break



How did you feel after the act of communicating about your mental health? What was the reaction to your self-disclosure? How did that reaction make you feel? What did you notice about your experience that sticks in your memory?

Page Break

Since this experience, have you communicated about your mental health with anyone else?

- Yes (1)
- No (2)
- Not sure (3)

Who (a friend, neighbor, parent, additional social media posts, etc) have you communicated with since this experience about your mental health? Why?

Why not?

End of Block: CIT A (Negative)

Start of Block: CIT C (Neutral)

Please respond to the following prompts in your own words, being as descriptive as possible.

Think of a memorable time when you communicated about your personal mental health (e.g., anxiety, depression, stress, etc.).



What prompted you to disclose, communicate, or talk about your mental health? What was the context of the self-disclosure?

Page Break



Where (or in what channel) did the communication take place? Was it face-to-face, over the phone, via text, on social media, somewhere else? What prompted you to talk about your mental health through this channel?

Page Break



Who (a friend, neighbor, parent, social media friends/followers, etc) were you communicating with? What led you to choose this person or these people to talk with about your mental health?

Page Break _____



How did you feel before the communication took place? What emotions (if any) did you experience? Was it planned? If so, how did you plan or prepare for it? If not, how did it come up?

Page Break _____



How did you feel during the act of communicating about your mental health? What reactions did you notice? How did you respond to those reactions during the experience? What other actions did you take or strategies did you use during the experience (e.g., clarification, using humor, changing the conversation or ending the interaction, etc)? Why?



Page Break



How did you feel after the act of communicating about your mental health? What was the reaction to your self-disclosure? How did that reaction make you feel? What did you notice about your experience that sticks in your memory?

Page Break

Since this experience, have you communicated about your mental health with anyone else?

- Yes (1)
- No (2)
- Not sure (3)

Who (a friend, neighbor, parent, additional social media posts, etc) have you communicated with since this experience about your mental health? Why?

Why not?

End of Block: CIT C (Neutral)

Start of Block: Demographics



Please indicate your age in years:

What is your gender?

- Male (1)
- Female (2)
- Nonbinary (3)
- Prefer not to disclose (4)

What is your race/ethnicity (check all that apply)?

White/caucasian (1)

Black/African American (2)

Hispanic/Latinx (3)

Middle Eastern/Arabic (4)

Asian/East Asian (5)

Asian/Indian (6)

Asian/Southeast/Pacific Islander (7)

Other (please specify) (8) _____

Prefer not to disclose (9)



What is your sexual preference/orientation?

- Straight (1)
 - Lesbian (2)
 - Gay (3)
 - Bisexual (4)
 - Transgender (5)
 - Other (please specify) (6) _____
 - Prefer not to disclose (7)
-

Are you currently receiving any treatment for any mental health issues such as medication, therapy, or online support networks?

- Yes (1)
 - No (2)
 - Not sure (3)
 - Prefer not to disclose (4)
-

What treatment have you received or are you receiving?

End of Block: Demographics

APPENDIX 2: STUDY 2 INSTRUMENT

Interview Script and Question Guide

Hello, my name is George Kueppers, thank you for taking the time to participate in my research study. I'm a doctoral candidate at George Mason University, and I'm currently working on my dissertation research which focuses on mental health among college students. This is a very important topic and also one that is personal to me, since I myself have dealt with mental health issues throughout my college career

I have a number of questions for you about your own experiences with mental health, your perceptions of mental health stigma, your experiences communicating about mental health in your social circles, and your experiences seeking help for mental health issues. Our conversation should take about 30 minutes, depending on how much you choose to elaborate in your answers. Before we begin, I'd like to verify that you received and read the consent form I sent you when we discussed scheduling our conversation for today.

[If yes, proceed. If no, resend and verify again]

Wonderful. As a reminder, the consent form details the aims of our research project, and lists the benefits and risks of your participation, your rights as a participant in this study, and specific contact information. The conversation we will have today is confidential. You are not obligated to answer any question that you do not want to, and you may

withdraw your participation from the research project at any time. If you would have any follow-up questions or concerns, the information sheet has contact information for myself, my colleague, and the principle investigator on the project, as well as George Mason University's IRB Office. It also lists campus resources devoted to helping with mental health issues in the event that your participation causes any discomfort or you'd like to talk with a professional about your experiences.

With the formalities out of the way, if I may, I would like to begin recording our conversation, and once I begin recording, I would like to ask for your permission again, so that we have it for the record.

[Turn on recorder]

Do I have your permission to record our conversation today? Great, thank you!

Mental Health Stigma Perceptions

[S-1] What does mental health mean to you?

PROBE: Do you believe mental health is an important health issue?
How do you feel about people who experience mental health issues?
Do you believe mental health is a stigmatized topic? Why or why not?
If you were experiencing mental health issues, how would you try to overcome the stigma associated with these types of issues?

[S-2] What problems associated with mental health most concern you?

PROBE: How do you feel about mental health issues in general?
What kinds of conversations have you had about mental health?
If you were struggling with mental health, how comfortable would you feel talking about it or getting help on campus?
Whose responsibility is it to address mental health issues?

[S-3] In what ways do you see mental health playing a role in the college experience?

PROBE: Do you feel that college students are at risk of mental health issues?

How would you feel about someone you see utilizing mental health resources on campus?

How do you feel your peers perceive issues of mental health?

How would you feel if a friend or family member disclosed mental health challenges?

Mental Health & Social Support

[O-1] What experiences have you had seeking support for mental health issues in your social circles?

PROBE: Would you feel comfortable going to your friends or family for help with mental health issues? Why or why not?

How have your friends or family members influenced your thoughts or feelings about mental health?

[O-2] If you were struggling with mental health issues, how do you think your friends or family might be able to help?

PROBE: Would you turn to friends or family for a certain kind of help?
Have you ever sought or received support from friends or family for mental health issues? If so, what kind of support did they provide to you?

[O-3] If a friend came to you with mental health issues, how would you try to help them?

PROBE: Would you try to provide them with information?
What kind of information do you think you could provide?
How would you try to comfort them?
How would you try to help them beyond emotional support and information?

Mental Health Self Disclosure

[D-1] If you were experiencing a mental health issue, would you talk to anyone about it?

PROBE: If not, why not?

If so, who would you talk to about it?

Why would you choose this person or these people?

[D-2] If you were experiencing a mental health issue, would you feel comfortable talking about that in your everyday life?

PROBE: Would you mention it with friends?

Would you mention it with family members?

Would you feel comfortable talking about it with acquaintances or co-workers?

Would you feel comfortable disclosing it to strangers or people you're just meeting for the first time?

Mental Health Help Seeking

[H-1] Have you ever tried to seek professional help for mental health issues?

PROBE: If not, why not?

If so, how did you go about trying to do that?

What was your experience like seeking help?

[H-2] What kind of barriers do you think exist in trying to get help for mental health issues as a college student?

PROBE: Why do you think college students may or may not try and seek help for mental health issues?

What kinds of problems do you think college students might experience in getting help for mental health problems?

Additional Thoughts & Questions

[A-1] Is there anything else you'd like to discuss about your experiences with mental health?

PROBE: With mental health stigma?

With seeking social support for mental health challenges?

With disclosing mental health issues to different people?

With seeking professional help?

[A-2] Do you have any questions for me?

End Script

Thank you very much for your time.

We anticipate using this information to write one or more academic articles about how college students communicate about mental health and go about trying to get help for mental health issues. Would you be interested in seeing such an article when it is written?

APPENDIX 1: STUDY 3 INSTRUMENT

MENTAL HEALTH COMMUNICATION - INFORMED CONSENT FORM

RESEARCH PROCEDURES

This research is being conducted to understand mental health communication. If you agree to participate, you will be prompted with a series of questions and asked to indicate your responses. It will take about 20 minutes to complete the survey.

RISKS

There is always a slight chance that someone might feel upset after completing the survey, however it is important to know that there are no expected risks or negative effects associated with your involvement. Please note that if you do feel upset and would like to speak with someone, you can contact the George Mason Counseling and Psychological Services Center (CAPS) at (703) 993-2380. Participants may skip over any

questions they do not feel comfortable answering or withdraw from the study at any time.

BENEFITS

There are no benefits to participating in this research beyond advancing scholarly research on mental health communication.

CONFIDENTIALITY

The data in this study will be confidential. No individually identifiable information will be collected. In accordance with research guidelines, data from this study will be stored for 5 years on the office computer of the principal investigator, Dr. Gary Kreps, at George Mason University, and then destroyed. While it is understood that no computer transmission can be perfectly secure, reasonable efforts will be made to protect the confidentiality of your transmission. Please avoid writing the names of others or identifying information about yourself in the open-ended questions in order to help us protect your confidentiality. If identifying information is disclosed, it will be redacted as soon as possible. The de-identified data collected in this study could be used for future research without additional consent from participants.

WHEN CONFIDENTIALITY WILL NOT BE PROTECTED

If you identify yourself in any of the open-ended responses and your responses indicate intent to commit suicide, intent to kill or cause serious bodily harm to another person,

and/or knowledge of past, current, or future unreported child abuse or elder abuse such responses must be reported under the Virginia Code of Law.

PARTICIPATION

Your participation is voluntary, and you may withdraw from the study at any time and for any reason. If you decide not to participate or if you withdraw from the study, there is no penalty or loss of benefits to which you are otherwise entitled. There are no costs to you or any other party. Individuals must be at 18 or older to participate. All students enrolled in COMM 100 and COMM 101 are given several assignment options for earning the "research credit" in their classes. These assignments are intended to either help students build communication skills, learn how to analyze others' communication, or learn about the communication research process. Each semester, students are given a variety of options for earning these points. Examples of these opportunities for earning points include participating in a communication research study, attending a presentation and writing a one paragraph summary of the presentation as evidence of their attendance, or participating in a variety of other communication skills-building campus activities (such as speaking in a Toastmaster's meeting, visiting the Speech Lab, attending a campus guest lecture and writing a one paragraph summary, attending the forensics team's Tea

with Stars, etc.). This research study would be one of several options that students will be given to earn these points in their class.

CONTACT

This research is being conducted by George Kueppers at George Mason University. He may be reached at gkuepper@gmu.edu for questions or to report a research-related problem. The faculty advisor is Dr. Gary Kreps and his office number is 703 993 1094. You may contact the George Mason University Institutional Review Board (IRB) Office at 703-993-4121 if you have questions or comments regarding your rights as a participant in the research. This research has been reviewed according to George Mason University procedures governing your participation in this research.

CONSENT

I have read this form, all of my questions have been answered by the research staff, and I agree to participate in this study.

AGREE (1)

DISAGREE (2)

End of Block: Default Question Block

Start of Block: Mental Health Stigma

I believe that if I were struggling with mental health, I would be weak.

- Strongly Disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

I believe that if I were struggling with mental health it would make me useless.

- Strongly Disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

I believe that if I were struggling with mental health I would be lesser of a person.

- Strongly Disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

If others knew I were struggling with mental health they would think it was my fault

- Strongly Disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

If others knew I were struggling with mental health, they would think I was mentally unstable

- Strongly Disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

If you are reading this question, select the answer "somewhat agree."

Strongly Disagree (1)

Disagree (2)

Somewhat disagree (3)

Neither agree nor disagree (4)

Somewhat agree (5)

Agree (6)

Strongly agree (7)



If others knew I were struggling with mental health, they would think less of me

- Strongly Disagree (1)
- Disagree (2)
- Somewhat disagree (3)
- Neither agree nor disagree (4)
- Somewhat agree (5)
- Agree (6)
- Strongly agree (7)

End of Block: Mental Health Stigma

Start of Block: Mental Health Social Support

Whenever I am sad, my friends and family cheer me up.

- Strongly disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

I get the emotional help and support I need from my friends and family.

- Strongly disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

My friends and family seldom offer information and alternatives for solving problems.

- Strongly disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

I receive useful information from my friends and family when I am in need.

- Strongly disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

If I needed a ride to the airport very early in the morning, I would have a hard time finding a friend or family member who can give me a ride.

- Strongly disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

My friends and family take pride in my accomplishments.

- Strongly disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

.My friends and family think highly of me.

Strongly disagree (1)

Disagree (2)

Somewhat disagree (3)

Neither agree nor disagree (4)

Somewhat agree (5)

Agree (6)

Strongly agree (7)



I feel like I'm not always included by the circle of my friends and family.

- Strongly disagree (1)
- Disagree (2)
- Somewhat disagree (3)
- Neither agree nor disagree (4)
- Somewhat agree (5)
- Agree (6)
- Strongly agree (7)

End of Block: Mental Health Social Support

Start of Block: Mental Health Disclosure

I am willing to talk about mental health

- Strongly Agree (1)
 - Agree (2)
 - Somewhat agree (3)
 - Neither agree nor disagree (4)
 - Somewhat disagree (5)
 - Disagree (6)
 - Strongly disagree (7)
-

I am willing to talk about my feelings and emotions

- Strongly Agree (1)
 - Agree (2)
 - Somewhat agree (3)
 - Neither agree nor disagree (4)
 - Somewhat disagree (5)
 - Disagree (6)
 - Strongly disagree (7)
-

I believe that communicating about mental health would benefit me

- Strongly Agree (1)
 - Agree (2)
 - Somewhat agree (3)
 - Neither agree nor disagree (4)
 - Somewhat disagree (5)
 - Disagree (6)
 - Strongly disagree (7)
-

It would take a lot to get me to open up about mental health

- Strongly Agree (1)
 - Agree (2)
 - Somewhat agree (3)
 - Neither agree nor disagree (4)
 - Somewhat disagree (5)
 - Disagree (6)
 - Strongly disagree (7)
-

Below are twenty situations in which a person might choose to communicate or not to communicate about mental health. Presume you have completely free choice, and indicate how often you would choose to communicate about your mental health. If you

were experiencing mental health issues such as anxiety or depression, would you feel comfortable disclosing this information to...

	Never (1)	Rarely (2)	Not usually (3)	About half the time (4)	Usually (5)	Frequently (6)	Always (7)
A gas station attendant (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A physician (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A large group of strangers (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An acquaintance while standing in line (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A salesperson in a store (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

A large
gathering of
friends (6)



A police
officer (7)



A small
group of
strangers (8)



A friend
while
standing in
line (9)



A server at a
restaurant
(10)



A large
meeting of
acquaintances
(11)



A stranger

while

standing in

line (12)



A
receptionist
(13)



A small
gathering of
friends (14)



A large group
of
acquaintances
(15)



A garbage
collector (16)



A large group
of strangers
(17)



In class discussions (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A significant other (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A small group of friends (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Mental Health Disclosure

Start of Block: Mental Health WTN Preference

Please rate your level of agreement for each of the statements below.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
It is less risky to discuss my problems with people who are not as intimate with me as a close friends and family members (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I discuss my
problems
with people
who are not
close to me as

I don't have
to worry
about my
family and
close friends
finding out

(2)

People who
don't know
me very well
are less likely

to pass
judgment on
me (3)



My family
and close
friends often
tend to judge
me when I
discuss my
problems
with them (4)

People who
are not
involved with
me
emotionally
can offer me
better advice
about my
problems (5)

If you're
reading this,
select
"Neither
agree nor
disagree." (6)

I can discuss
personal
problems in
greater depth
with people I
don't know
very well
than with my
family and
close friends

(7)

I feel as though my close friends and family provide me with better advice about personal problems than people who don't know me very well (8)



I find that I
can get more
objective
information
about my
problems
from people
who are not
close friends
or family
members (9)



I get more
understanding
from people
who don't
know me
very well
than from
close friends
and family
(10)



My close
friends and
family are
able to offer
objective
advise despite
their strong
feelings about
me (11)



End of Block: Mental Health WTN Preference

Start of Block: Help-Seeking

I would obtain professional help if having a mental breakdown.

- Strongly disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

Talking about psychological problems is a poor way to solve emotional problems.

- Strongly disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

I would find relief in psychotherapy if in an emotional crisis.

- Strongly disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

A person coping with mental health struggles without professional help is admirable.

- Strongly disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

I would obtain psychological help if upset for a long time.

- Strongly disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

If you're reading this question, select "disagree."

- Strongly disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

I would want counseling in the future if I'm dealing with mental health issues.

- Strongly disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

A person with an emotional problem is likely to solve it with professional help.

- Strongly disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

Psychotherapy would not have value for me if I were struggling with mental health issues.

- Strongly disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

A person should work out their mental health problems without counseling.

- Strongly disagree (1)
 - Disagree (2)
 - Somewhat disagree (3)
 - Neither agree nor disagree (4)
 - Somewhat agree (5)
 - Agree (6)
 - Strongly agree (7)
-

Emotional problems usually resolve by themselves.

- Strongly disagree (1)
- Disagree (2)
- Somewhat disagree (3)
- Neither agree nor disagree (4)
- Somewhat agree (5)
- Agree (6)
- Strongly agree (7)

End of Block: Help-Seeking

Start of Block: Demographics

Please indicate your age in years

Please indicate your year in school

Freshman (1)

Sophomore (2)

Junior (3)

Senior (4)

Other (5)

Please indicate your race and/or ethnicity (select all that apply)

White (1)

Black or African American (2)

American Indian or Alaska Native (3)

Asian (4)

Native Hawaiian or Pacific Islander (5)

Other (6)

Please indicate your religion

Christian (1)

Jewish (2)

Hindu (3)

Buddhist (4)

Muslim (5)

Other (6)

End of Block: Demographics

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