Experiences of Social Isolation and College Student Mental Health and Suicidality

by

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DISSERTATION ABSTRACT

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Title: Experiences of Social Isolation and College Student Mental Health and Suicidality

The United States is facing an epidemic of loneliness that disproportionately impacts college age adults (ages 18-24 years old) due to a host of developmental and contextual factors. As social beings, social isolation is a threat to survival for humans and is associated with numerous adverse outcomes including poor physical health, dementia, depression, anxiety, and premature death. Despite college age adults reporting higher rates of loneliness and mental health concerns than any other age group, extant literature on the impact of social isolation has largely focused on older adults. This study sought to add the voices of college age adults to extant literature on social isolation through qualitative inquiry into the personal experiences with social isolation and mental health challenges and suicidality of college age adults. The study also explored barriers and facilitators to social connection as a protective factor against mental health challenges and suicidality.

This study draws from recorded CAMS therapy sessions and related paperwork from one mid-sized public university counseling center site of the CAMPUS Study (*N*=32), a mixed methods, multisite, sequential multiple assignment randomized trial (SMART) examining the effectiveness of hybrid delivery of adaptive treatment strategies with moderately to severely suicidal college students in emerging adulthood. Transcripts of session recordings and worksheets were coded for a priori and emergent themes using an inductive/deductive hybrid thematic analysis approach.

All participants reported experiences of social isolation relating to their suicidality in

some way. Consistent with existing literature, participants identified that both insufficient quality and quantity of social support dictated their experiences of isolation. Participants identified social isolation related to the CAMS core assessment constructs of suicidality (i.e., psychological pain, stress, agitation, hopelessness, self-hate), reasons for dying, and as a precipitant to suicidal behavior. Conversely, participants endorsed social connection as protective against suicidal behavior, citing positive social relationships as reasons for living, a source of mental health support, and an interference to suicidal behavior. Novel findings included participants positive responses to interventions focused on increasing emotional vulnerability, values clarification, self-compassion, and increasing access to avenues for genuine connection. Additionally, participant insights into perceived burdensomeness and thwarted belongingness made a case for increased opportunity for students to practice building social connection.

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DEDICATION

To those who have struggled or are struggling to find reasons for living.

You are so incredibly important to this world.

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CHAPTER I

INTRODUCTION

My first clinical practicum experience as a counseling psychology doctoral student was providing therapy for undergraduate and graduate students at a mid-sized public university's counseling center in Fall term, 2021. At the time, University Counseling Centers (UCCs) were facing unprecedented demand for services, as university students were reporting increased psychological distress in the wake of the COVID-19 pandemic (Zarowski et al., 2024). The university, like many universities, had pivoted to mostly remote classes the academic year prior, so many first- and second-year students were adjusting to university campus life for the first time (Acton & Cook, 2025). When I met them for therapy, student after student reported loneliness as a significant factor of their psychological distress. Students explained the impact of leaving for college without attending their senior prom, celebrating their graduation, or seeing their friends and classmates before moving away to college. Others expressed difficulty feeling a sense of belonging with other first-year students in 2020, due to roommates choosing to not move to campus given remote options for classes, and strict policies aimed to limit the spread of COVID-19 such as prohibiting students from gathering in certain-sized groups or entering each other's dorm rooms. I realized how uniquely adversely impacted this generation of students was, due to the timing of the pandemic in relation to their social and academic lives. I was struck by how an experience could be so universal and simultaneously siloing. This phenomenon felt urgent, and unprecedented.

There is a current crisis of loneliness and social isolation in the United States that is disproportionately impacting late adolescent or college-age adults (Cigna, 2020; Murthy, 2023). Humans are a social species; we form relationships with other humans to help us survive as

individuals and as a population (Cacioppo et al., 2011). Humans depend on other humans for reproduction, resource-sharing, and safety from predators through group protection (Cacioppo et al., 2015). Additionally, since human offspring are dependent on caregiver support for longer than most other species, humans are particularly vulnerable to threats to survival when lacking group protection even for short periods of time (Quadt et al., 2020). Because social connection is vital to survival, humans have developed cellular, neural, hormonal, genetic, and behavioral mechanisms that encourage social connection (Cacioppo et al., 2011). As a result, when humans experience poverty of social connection, even briefly, there can be profound consequences (Cacioppo et al., 2011; Quadt et al., 2020). Poverty of social connection is often identified in research as "social isolation" (Cacioppo et al., 2011; Smith et al., 2021). A systematic overview of forty narrative reviews and meta-analyses (Leigh-Hunt et al., 2017) found significant associations between social isolation and increased likelihood of all-cause mortality, poor physical health outcomes (e.g., increased cardiovascular disease), poor health behaviors (e.g., increased tobacco use, low levels of physical activity, decreased adherence to physical health treatment), and mental illness (e.g., depression, suicide, dementia).

Social Isolation and Loneliness

Broadly, social support scholars define social isolation as a lack of social contact or support (Gardiner et al., 2018; Nicholson, 2012; Poscia et al., 2018; Ronzi et al., 2018; Shvedko et al., 2018). Of note, much of existing research uses the terms "social isolation" and "loneliness" interchangeably. When they are used differentially, there is not a consensus regarding how they differ. This paper follows the differentiation provided by social psychologists Peplau and Perlman (1979). Per their definition, loneliness is an emotional response to the behavior of social isolation, which can be both active (i.e., intentionally avoiding

social connection, for example, cutting family and close friends out of one's life) and passive (i.e., an unintentional absence of social connection, for example, a person who might not have family and close friend support, but not by choice). Also of note, this paper uses social isolation to mean an absence of satisfying social support. When an individual also experiences satisfying social connection, solitude is not inherently harmful and does not cause the same physiological and psychological response (Peplau & Perlman, 1979).

Nicholson (2012) defines social isolation as "a state in which the individual lacks a sense of belonging socially, lacks engagement with others, has a minimal number of social contacts, and they are deficient in fulfilling and quality relationships" (p. 138). Cacioppo and colleagues (2011) note that quantifying time or number of relationships is insufficient in measuring loneliness without also accounting for the individual's experience. They argue that reporting definitions must consider "social isolation due, in part, to the discrepancy between an individual's desired and actual relationships" (p. 407). Per these definitions, social isolation may refer to a deficiency in quantity of social connection (e.g., an absence of friends, infrequent contact), as well as quality of social connections (e.g., feeling understood, relationships feel meaningful, the presence of trust; Hawkley et al., 2008; Smith et al., 2021). Research also indicates consequences of social isolation can occur from objective as well as perceived social isolation (Cacioppo et al., 2011). Social threat (e.g., social connections that are harmful or abusive) and social rejection (e.g., loss of a previous source of social support), perceived or actual, can also lead to social isolation (Cacioppo et al., 2011). Thus, the presence of social isolation is substantially dependent on the experience of the individual.

Evolutionary Theory of Loneliness (ETL)

The Cacioppo Evolutionary Theory of Loneliness (Cacioppo & Cacioppo, 2018; Goossens, 2018) pioneered the concept of loneliness as an adaptive mechanism to encourage human connection, as opposed to a maladaptive experience. According to this theory, social connection is a basic need for survival, and loneliness indicates to the individual that social connection is poor quality, under threat, or absent, and motivates them to engage in repair or development of social connection. The subsequent reduction of loneliness provides relief, which acts as negative reinforcement and increases the person's engagement in social connection.

Acute loneliness, however, can sometimes interfere with an individual's motivation to socially connect, instead of increasing motivation (Goossens, 2018). When an individual perceives social isolation as a survival threat, they are more likely to focus on their short-term preservation. While this can lead to hypervigilance for social opportunity that leads to social reconnection, it can also lead to hypervigilance of social threat. Instead of perceiving people as solutions to social isolation, the isolated individual may become distrustful of others. The combination of focus on short-term preservation of self along with the perception that others may pose a social threat can cause further self-isolation. Chronic social isolation can then reinforce the belief that avoidance of social connection is necessary for self-preservation, thus exacerbating the social isolation (Goossens, 2018).

College-Age Adults

The current generation of college-age adults (often referred to as "Generation Z" or "Gen Z"), make up approximately 9.4% of the US population (Blakeslee et al., 2023). According to a recent poll, 79% of college-age adults (ages 18-24 years old) report feeling lonely; a rate higher than any other age group (Cigna, 2020). Despite existing research on loneliness and social isolation predominantly focusing on older adults (Gardiner et al., 2018; Nicholson, 2012; Poscia

et al., 2018; Ronzi et al., 2018; Shvedko et al., 2018), loneliness of college-age adults was reported at nearly twice the frequency of other age groups, including seniors aged 66 and older (41%; Cigna, 2020). College-age adults reported high rates of social isolation due to quantity of social interaction, endorsing the statement they "always feel alone," as well as high rates of social isolation due to quality of social interaction, reporting "no one really understands them well" (Cigna, 2020).

College-Age Adults and Mental Health

This prevalence of perceived social isolation coincides with high rates of poor mental health and high stress. The American Psychological Association's [APA] 2023 Annual Stress in America Report found that college-age adults also reported higher levels of stress than any other age group. Forty-six percent of people under age 35 reported stress levels that severely impaired daily functioning and over 50% reported their stress to be completely overwhelming (Shaik et al., 2023). The most reported significant source of stress by this age group was mental health (72%). Generation Z young adults reported poorer mental health than any other age group, especially due to anxiety and depression (Shaik et al., 2023). Not only did college-age adults report the highest rates of stress related to mental health concerns and highest rates of loneliness, but they are also the least likely to seek social support to help manage their stress (APA, 2023).

College-Age Adults and Suicidality

In addition to increasing mental health concerns among college students today, researchers are also seeing an increase in suicidal ideation and behavior in this population (Shaik et al., 2023). The 2022 National Survey on Drug Use and Health reported that 5.2% of adults had serious thoughts of suicide in the past year. Adults between the ages of 18-25 reported the highest rates of suicidality of any age group, with 13.6% reporting serious thoughts of suicide in

the past year (Substance Abuse and Mental Health Services Administration, 2023). Data from the Centers for Disease Control and Prevention (CDC, 2024) reported an increase in adolescents seriously considering suicide within the past year from 16% in 2011 to 22% in 2021. There was also an increase in the percentage of students who reported having made a suicide plan (13% in 2011 and 18% in 2021) and had a past suicide attempt (8% in 2011 and 10% in 2021) (Akkas, 2023). Suicidal behaviors are high in this population as well. Suicide is the 3rd leading cause of death for college-age adults (CDC, 2024).

The Interpersonal Theory of Suicide (IPTS) conceptualizes risk of death by suicide as a combination of desire to die by suicide and ability to engage in suicidal behavior (Shaik et al., 2023; Van Orden et al., 2010). Desire for suicide is connected to thwarted belongingness (i.e., loneliness and the absence of caring relationships) and perceived burdensomeness (i.e., perceived liability and self-hate; Van Orden et al., 2010). Thus, social isolation and loneliness among college students are significant risk factors for death by suicide.

Chronosystemic Factors

Bronfenbrenner's Ecological Systems Theory views individuals' experiences as heavily influenced by a complex network of relationships and systems that interact with one another and the individual (Bronfenbrenner, 1979). The chronosystem refers to sociohistorical events and contexts that occur over the lifespan that impact an individual (Bronfenbrenner, 1979). The intersection between developmental stage and historic events makes each generation's experience unique. Generation Z has seen significant changes in technology, lifestyle, and public health issues during pivotal developmental stages for social development. This intersection has significantly impacted Generation Z's experiences of social connectedness and social isolation in a way that is unique to their generation (Cauberghe et al., 2021).

Social Media

The current generation of college-age adults is the first generation to grow up as "digital natives" with access to smartphones and social media from a young age (Serbanescu, 2022). For college-age adults, social media (e.g., Snapchat, Instagram, TikTok) has become a primary means of social connection (Smith et al., 2021). Smith and colleagues (2021) found that at least 95% of adolescents in the United States use social media daily in 2019. Young adults, age 18-29, report higher rates of social media usage than any other age group (Tankovska, 2024).

Due to college-age adults reporting both higher incidence of social media usage and higher rates of social isolation compared to other generations, researchers have examined how social media functions as a facilitator and barrier to social connection. Research has found social media increases the quantity of social interaction but not the quality (Smith et al., 2021). Social media additionally increases accessibility of social connection, allowing individuals to expand the frequency and reach of their communication and grow their social networks (Smith et al., 2021). The ability to access less proximally available social groups can also allow individuals to connect with social groups more aligned with their identities and values that may not be locally available and, thus, provide individuals with a sense of belonging and meaning.

Despite the advantage of increasing access to social groups, studies show that the type of communication available through social media is unable to replace the depth and quality of in-person social interaction. Because of this, social connection through social media can leave individuals feeling less fulfilled or even more socially isolated (Smith et al., 2021). Cauberghe and colleagues (2021), in their analysis of over 2,000 adolescents, found that while social connection through social media increased adolescents' ability to self-regulate their anxiety, social media had a negative relationship with adolescents' feelings of happiness and ability to

cope with a lack of in-person social interaction. While social media allowed for increased social connection for adolescents, in some cases, it made them feel lonelier.

The COVID-19 Pandemic

Despite research demonstrating social media use in place of in-person social interaction may increase feelings of loneliness and social isolation, the COVID-19 pandemic decimated opportunities for in-person interaction for many, forcing virtual connection as the only means of social support over a prolonged period (Cauberghe et al., 2021). Due to decreased access to in-person social connection during the lockdown of the COVID-19 pandemic, college-age adults reported increasing their social media use (Cauberghe et al., 2021). For college-age adults, COVID-19 lockdowns occurred during a peak developmental stage for social development, thus exacerbating the impact of their social loss on wellbeing (Cauberghe et al., 2021).

Late adolescence (i.e., high school and college age) marks a time of multiple changes that impact social needs and perceptions of social isolation (Laursen & Hartl, 2013). During this time, adolescents often experience a shift in their social group as they spend less time with family members and seek connections with peers as a more dominant source of social support. Adolescence is also a time of increased autonomy and individuation, meaning adolescents seek independence from parental monitoring (Laursen & Hartl, 2013). As adolescents shift their time and reliance away from family members, they become more reliant on peers (Goossens, 2018; Laursen & Hartl, 2013). The pursuit of individuation that occurs during adolescence coincides with identity exploration, as adolescents seek to determine who they are and want to be, independent from their family unit. For many, this identity is discovered and defined through membership in peer social groups (Laursen & Hartl, 2013). The COVID-19 pandemic forced many adolescents out of school and social activities as lockdowns were instituted to minimize

spread of the virus. This forced adolescents back into their family units to engage in remote learning thus disrupting an important process of social development.

While the sudden shift in access to in-person peer support impacted experiences of social isolation across the lifespan, adolescents may have been uniquely vulnerable to its effects, as adolescence is also a time when individuals are at heightened risk of perceived social isolation (Laursen & Hartl, 2013). One study of adolescents found no correlation between time spent alone and feelings of loneliness, but that there was a correlation between when participants spent time alone (specifically if they were alone on Friday and Saturday nights) and perceptions of loneliness (Laursen & Hartl, 2013). This indicates that adolescents' expectations of how they "should" be engaging socially significantly impacts their experience of social isolation. Research found that adolescents reported more concerns about social isolation than safety from COVID-19 during the COVID-19 lockdowns (Cauberghe et al., 2021).

Remote Work

Since the 1980's, the number of employees in the US who work from home has steadily increased from about 2.2 million people in 1980 to over 11 million people in 2020 (Silver, 2023). Those numbers spiked further during the lockdown due to COVID-19, which sent employers scrambling to pivot to remote work and keep businesses open. By 2021, approximately 17.9% of the labor force, or 27.9 million people, worked primarily from home (Silver, 2023). While many businesses have since returned to the office, remote work continues at a higher rate than before the pandemic. This means college-age adults are entering a work force with more remote opportunities than any prior generation.

Prior research on remote work has shown that working remotely is moderately associated with loneliness and lack of coworker and supervisor support (Miyake et al., 2021). Research also

indicates remote workers are at higher risk of experiencing loneliness, anxiety, and overall reduced wellbeing (Becker et al., 2022). While the recency of forced remote work conditions due to COVID-19 makes studying this new work environment independently from the impact of the COVID-19 pandemic difficult, research has found that a majority of Generation Z college-age adults prefer in-person work to working remotely (Becker, 2021).

Evolutionary Theory of Loneliness and College-Age Adults Today

Prior to 2018, the Cacioppo Evolutionary Theory of Loneliness (ETL) was primarily applied to adults, but Goossens (2018) explored how ETL might be applied to adolescents given their stage of development. Goossens (2018) posits that adolescents are already primed for feelings of loneliness due to the developmental shift from family-focused social support to peer-focused social support and the process of individuation and identity exploration. Adolescents are also already hypervigilant to social threat, and therefore more likely to interpret ambiguous social cues as social rejection. As a result, adolescents are more likely to respond to loneliness through social avoidance, as opposed to feeling motivated to repair and develop social connection (Goossens, 2018). This puts adolescents at increased risk of adverse biological, cognitive, and social mechanisms and outcomes related to social isolation.

Nexus: Social Isolation and Mental Health and Suicidality in College-Age Adults Today

Social isolation has been found to have an overall negative impact on college age adults' mental health, especially in the wake of the COVID-19 pandemic. A longitudinal study of college age adults spanning from May 2019 to May 2020 found that the only factor associated with increased psychological distress during the pandemic was increased social isolation (Hamza et al., 2021). A cross-sectional study of 7,012 college students in the United States in June 2020 during the COVID-19 pandemic conducted by Giovenco and colleagues (2022) found that

students who reported self-isolating some of the time were 1.78 times more likely to report clinically significant depressive symptoms, students who reported self-isolating most of the time were 2.12 times more likely to report clinically significant depressive symptoms, and, lastly, students who reported self-isolating all of the time were 2.27 times more likely to report clinically significant depressive symptoms, compared to students who were not self-isolating. The association between social isolation and depressive symptoms in college students predates the pandemic as well. A 2019 longitudinal study of 741 college students by Liu and colleagues found that social isolation and loneliness significantly predicted increased depressive symptoms in female college students, and social isolation, but not loneliness, predicted increased depressive symptoms in male college students.

Unsurprisingly, social isolation is also strongly associated with social anxiety disorder. A systematic review and meta-analysis by Teo and colleagues (2013) found that in all of the 34 studies included in the review, social isolation and social anxiety were consistently and strongly associated. However, only one study, (i.e., Hayward et al.,1998), was able to shed light on a causal relationship. Hayward and colleagues conducted a longitudinal study, following 2,242 high school students over four years. They found social isolation in childhood predicted social anxiety in adolescence. A cross-sectional study of college students conducted around the same time (Mick & Telch, 1998) found that social anxiety but not generalized anxiety is associated with social isolation.

Cognitive appraisal, the subjective interpretation of a person's response to an event or situation, may influence the association between social isolation and mental health. A study by Catterson and Hunter (2010) of children aged 8 to 12 years found some types of cognitive appraisal impacted the stress of psychological adjustment to social isolation, thus impacting the

detrimental impact of loneliness on mental health. Perceived control over social interactions was found to partially mediate the psychological effects of isolation or negative peer relationships on participants. Self-blame and social threat were not found to significantly mediate the psychological impact of social isolation or poor social support (Catterson & Hunter, 2010). Further research is needed to examine how cognitive appraisal mediates the relationship between social isolation and mental health outcomes in adulthood.

Measuring Social Isolation

Despite the critical role social connection plays in human survival, measures assessing social isolation are often missing from surveys examining human wellbeing and health outcomes (Zavaleta et al., 2017). Indeed, the operationalization of social isolation is challenging. As noted by Cacioppo and colleagues (2011), social isolation comprises objective components (i.e., the number and frequency of social contacts) as well as subjective (i.e., an individual's appraisal of their social connectedness). Because there is no consistent relationship between these objective and subjective factors, an accurate capture of social isolation must be multidimensional (Zavaleta et al, 2017).

Zavaleta and colleagues (2017) conducted a review of previously tested measures of social isolation across disciplines to compile a multidimensional, internationally applicable assessment of objective and subjective indicators of social isolation. They identified three primary domains through which to measure social isolation: relevant relationship types, external experiences of social isolation, and internal experiences of social isolation.

Relevant relationship types included intimate relationships, family relationships, friendships, and community. Presence and quality of intimate relationships, particularly marriage, is often identified as a predictor of social isolation (Pantell et al., 2013). Zavaleta and

colleagues identified relevant factors of intimate relationships, including satisfaction with partner, self-report of happiness within partnership, and time spent with partner. Similarly, the impact of family relationships on social isolation was operationalized as time spent with family, satisfaction with family relationships, and satisfaction with family wellbeing. Relevant dimensions of friendship included time spent with friends, satisfaction with friend relationships, satisfaction with overall social life, methods of communication with friends, and intensity of social networking. Relevant dimensions of community relationships included trust, feelings of belongingness within community, participation in group activity, mixing socially with a diverse group of people in diverse settings, satisfaction with other social group relationships (i.e., coworkers), and perception of dynamics between groups within community (i.e., professor-student dynamics).

External experiences of social isolation refer to more objectively measurable types and frequency of social interaction and included frequency of social contact, social network support, presence of a discussion partner, and reciprocity and volunteering. Frequency of contact included social connection across relationship types, based on indication in prior research that some frequency of social connection of any kind is strongly linked to individual wellbeing (Zavaleta et al., 2017). Social network support referred to the presence of some type of value within that social contact; either intrinsic, such as emotional support or companionship, or extrinsic, such as informational or instrumental support. Presence of a discussion partner referred to the availability of a close friend, family member, or partner, with whom participants can process important matters. Reciprocity and volunteering referred to opportunity for participant-provided support. This dimension is important because it has been found to contribute to feelings of helpfulness and reduced sense of burdensomeness (Zavaleta et al., 2017).

Internal experiences of social isolation refer to more subjective experiences of social isolation and include satisfaction with social relationships, need for relatedness, feelings of belonging, loneliness, and trust. Satisfaction with social relationships is consistent with prior research that has indicated that the impact of social isolation is significantly influenced by an individual's experience of loneliness (Cacioppo et al., 2011). Relatedness refers to the experience of frequent, pleasant social connections with consistent people with mutual investment in one another's welfare (Baumeister & Leary, 1995). Feeling of belonging refers to a sense of self in relation to one's social community. Loneliness refers to one's emotional response and perception of their level of social connection. Trust refers to both trust in the people that comprise their social network and reliability of social relationships.

The Interpersonal Theory of Suicide identified perceived burdensomeness and thwarted belonging as two additional internal experiences of social isolation that are particularly relevant when studying social isolation in relation to suicidality (Van Orden et al., 2010). Perceived burdensomeness arose from Sabbath's 1969 conceptualization of family systems theory of adolescent suicidal behavior. This theory posits that suicidal adolescents often see themselves as expendable members of their family. This, combined with internal and external factors of distress (i.e., depressive symptoms, poor academic performance) contributes to the belief that the individual is a burden, and their family would be better off if the adolescent were dead. A sense of thwarted belongingness develops when an individual seeks social connection and either perceives or is actually denied social connection. This risk factor for suicide is particularly prevalent in late adolescence and early adulthood, a developmental stage marked by increased risk of perceived social rejection (Laursen & Hartl, 2013).

Critical Gaps in the Current Evidence Base

Given the prevalence of social isolation in this generation of college-age adults and their particular vulnerability to adverse responses to social isolation, further exploration of mechanisms and outcomes of social isolation in this population is warranted to identify protective factors and opportunities for intervention. However, despite college-age adults reporting social isolation at nearly twice the rate of older adults, previous research on social isolation has predominantly centered on older adult experiences, thus losing contextual factors specifically impacting younger generations, such as those noted above (Gardiner et al., 2018; Nicholson, 2012; Poscia et al., 2018; Qualter et al., 2025; Ronzi et al., 2018; Shvedko et al., 2018).

Emerging research that does attempt to explore the social isolation experiences of college students are often wide scoping, with mental health considered as one of many outcomes. The result is a superficial understanding of the impact of social isolation on college student mental health and suicidality. Furthermore, emerging research is almost exclusively quantitative, thus losing the richness of perspective possible with qualitative participant report.

The importance of capturing a nuanced and subjective perspective when studying social isolation makes it particularly well-suited for qualitative inquiry. As such this qualitative study will explore:

RQ 1. How do social isolation and loneliness come up in conversations about mental health challenges and suicidality with college-age adults?

RQ 1a. What barriers and facilitators emerge to social connection as a protective factor against mental health challenges and suicidality?

Informed by the Cacioppo Theory of Loneliness' thesis that social isolation is a threat to survival and acts as a motivating mechanism to encourage social connection, this study strives to

engage in a holistic and multi-systemic interrogation of the mechanisms and outcomes of social isolation. The study has implications for future research and opportunities to target interventions to increase social connection in college-age adults.

CHAPTER II

METHOD

Context

Qualitative data for this study were collected from the CAMPUS study, a mixed methods, multisite, sequential multiple assignment randomized trial (SMART) examining the effectiveness of hybrid delivery of adaptive treatment strategies with moderately to severely suicidal college students in emerging adulthood (ages 18-25). Student participants were recruited after seeking services at a University Counseling Center (UCC) at one of four college campuses across the United States and were randomized to 4-6 weeks of Collaborative Assessment and Management of Suicidality (CAMS; a suicide-focused treatment developed for students in a UCC setting) or Treatment as Usual (TAU). Student participants were then either identified as responders to Stage 1 of treatment or rerandomized to 1-8 weeks of CAMS or Dialectical Behavioral Therapy (DBT; a multimodal therapeutic approach designed for highly distressing mental health presentations and adapted for college campuses for the purpose of this study).

Interventions were administered by counselor participants, who were either licensed mental health providers or counseling trainees. Counselor participants were trained in DBT and CAMS prior to participation in the CAMPUS study. Counselor participants were periodically monitored for adherence to CAMS and DBT and monitored for treatment contamination for TAU. Counselor participants received weekly individual supervision as well as group supervision and consultation specific to each intervention condition.

Student participants assigned to TAU received treatment as is customary in a UCC setting (individual therapy of varied intensity and using varied interventions based on clinician training and discretion) with the exclusion of DBT. Student participants assigned to CAMS

received weekly 50-60 minute CAMS sessions, which included use of CAMS SSF-5 first session, interim sessions, and outcome/disposition final session forms, the Stabilization Plan (comparable to a safety plan), and other worksheets based on the therapist's clinical judgement. CAMS is a framework designed to be administered in conjunction with interventions, so student participants assigned to CAMS also received varied interventions based on clinician training and discretion, similar to TAU participants. CAMS and TAU sessions were checked for contamination by DBT language or interventions. Student participants assigned to DBT received weekly 50-60 minute individual therapy, participated weekly in either a skills group or individual skills training, and had access to phone coaching as needed. Student participants could receive services in person or via telehealth.

Overview of Qualitative Research Design for Current Study

The current study used qualitative data collected from CAMS therapy sessions conducted in Stage 1 and 2 of the CAMPUS study at one university site, recorded via Zoom and transcribed, with supplemental CAMS worksheets and therapist notes as available. Only interviews of student participants who were randomized into the CAMS condition in Stage One and were not assigned to me as their study therapist were used in the present study ($N = 32$ students). Transcripts were coded using Dedoose qualitative coding software (v. 10.0.59; 2026) for a combination of *a priori* codes derived from existing literature on suicidality and emergent codes by two coders concurrently in Analysis Phase 1 and a new set of emergent codes consecutively with a meeting to discuss and resolve discrepancies in Analysis Phase 2.

Researcher Description

In qualitative research, positionality of the researcher is inextricably linked to interpretation of findings (Beals et al., 2020). If qualitative research is a process of storytelling,

the perspective from which the story is told is the researcher (Beals et al., 2020). Thus, the researcher's relationship to the study and to the participants of the study, as well as the researcher's own identities and biases, color what and how findings emerge (Beals et al., 2020). Historically, the positionality of the researcher has been viewed from a binary perspective (Beals et al., 2020). Pike (1954) developed the concept of etic and emic approaches to qualitative research, with etic referring to outsider observation of human behavior, and emic referring to an insider's exploration of nuances of human behavior within a cultural group. Etic research risks the researcher's outsider identity leading to misinterpretation and bias, resulting in a discrepancy between the story being told by participants and its interpretation in the subsequent research (Beals et al., 2020). This is particularly harmful when systems of power and privilege privileging the researcher are present, risking that etic research can hold a colonizing lens and perpetuate systems of oppression (Beals et al., 2020). However, insider emic perspectives can lack the grounding in scientific language and process needed to gain foothold in academia (Beals et al., 2020). Beals and colleagues (2020) argue that there is space between these two groups, called edgewalking, for people who have some inside knowledge of participant experiences as well as inclusion in academia. This middle space allows for a bridging of the two perspectives and reduces risk of misinterpretation (Beals et al., 2020).

I worked as a counselor for one year of the CAMPUS study and the conceptualization of this study emerged from that firsthand experience. As I listened to student participants as a therapist, I was alarmed by the frequency with which my clients were not only reporting distressing experiences of social isolation and loneliness but citing these experiences as reasons for dying. Social isolation presented a frequent challenge for safety planning and was often cited in relation to suicidal thoughts, behaviors, and non-suicidal self-injury. Similar themes related to

social isolation came up among colleagues in group supervision and consultation groups. Understanding the intersection between social isolation and suicidality and other mental health challenges was not a study aim of the CAMPUS study. However, given the emergence of this theme and the concerning impact social isolation appeared to have on student safety and wellbeing, I wanted to better understand how social isolation and loneliness are present in conversations about mental health challenges and suicidality, as well as what barriers and facilitators of social connection emerged. As mentioned earlier, the sample excluded any of my student clients, however I heard about some of the participants through group supervision and case consultation. Most of the participants in the study were unfamiliar to me.

Participants

Interviews of 32 students (as described above) were used in the present study. The participant ages ranged from 18-24 years old with a mean age of 19.5 (*SD* = 1.6). First year students were most represented in the study (34.4%), followed by sophomores (31.3%), juniors (28.1%), then seniors (6.3%). Transfer students represented 15.6% of the sample. Self-reported ethnic or racial identities were representative of the larger campus population, with 68.8% of participants identifying as White, 18.8% as Hispanic/Latinx, 3.1% as Black, and 9.4% as multi-racial (University of Oregon Office of the Registrar, 2024). Participants identified as a range of gender identities, including cisgender women (37.5%), cisgender men (21.9%), non-binary (9.4%), transgender women (6.3%), transgender men (3.1%), genderqueer (3.1%), genderfluid (3.1%), multiple identities (12.5%), and not reported (3.1%). With respect to sexual orientation, the majority of the sample identified as LGBTQIA2S+ (68.9%) with 18.8% identifying as bisexual, 12.5% pansexual, 18.8% multiple identities, 6.3% Queer, and 12.5% lesbian. Roughly

a third of the sample (31.3%) identified as heterosexual. Only one student (3.1%) reported being an international student. Participant demographics are presented in Table 1.

Table 1

Participant-Reported Demographics

Variable ($N = 32$)	*M (SD)*	%
Age	19.5 (1.6)	
Race and/or Ethnicity		
White		68.8
Hispanic/Latinx		18.8
Black		3.1
Multi-Racial		9.4
Gender		
Cisgender Woman		37.5
Cisgender Man		21.9
Non-binary		9.4
Transgender Woman		6.3
Transgender Man		3.1
Genderqueer		3.1
Genderfluid		3.1
Multiple Identities		12.5
Not Reported		3.1
Sexual Orientation		
Heterosexual		31.3
Bisexual		18.8
Pansexual		12.5
Lesbian		12.5
Queer		6.3
Multiple Orientations		18.8
Class Year		

Freshman	34.4
Sophomore	31.3
Junior	28.1
Senior	6.3
International Student	3.1
Transfer Student	15.6

Participants were asked about their current social environments, including relationship status, who lives with them in their current household, and frequency of participation in organized extra-curricular activities (e.g., sports, clubs, student government). Almost half of participants reported being in a serious dating or committed relationship (43.8%), and the other half identified as single (56.3%). Other response options included "civil union, domestic partnership, or equivalent," "married," "divorced," "separated," or "widowed". Most participants reported living with one or more roommates (78.1%), 12.5% of participants reported living alone, 6.3% lived with one or more parents or guardians, and 3.1% lived with children. Participants' reports about frequency of participation in organized extra-curricular activities varied, with 31.3% reporting no participation, 18.8% reporting rare participation, 28.1% occasional participation, 18.8% regular participation, and 3.1% not reporting. Participant social environments are presented in Table 2.

Table 2

Participant-Reported Social Environments

Variable ($N = 32$)	%
Relationship Status	
Serious/Committed Relationship	43.8
Single	56.3

Household Composition	
Roommates	78.1
Alone	12.5
Parent/Guardian	6.3
Children	3.1
Extra-Curricular Participation	
None	31.3
Rarely	18.8
Occasional	28.1
Regularly	18.8
Not Reported	3.1

Data Collection

All therapy sessions were recorded via Zoom, a secure videoconferencing platform. For student participants randomized to CAMS, counselors also uploaded Suicide Status Forms (SSF) for every session and the Stabilization Plan. Forms that were administered at the counselor's discretion, including the Therapeutic Worksheet, and the Mental Time Travel for Self-Hatred worksheet were not consistently uploaded for data analysis, even when administered (see Appendix; Jobes, 2023). The SSF included prompts for student participants to rate and describe their experience of CAMS core assessment constructs, list reasons for living and dying, factors that would reduce suicidality, report on history of suicidality and other relevant risk factors, and identify treatment goals. The CAMS core assessment constructs are psychological pain, stress, agitation, hopelessness, and self-hate. 'Psychological pain,' 'stress,' and 'agitation' are derived from Edwin Shneidman's (1993) cubic model of psychic pain and integral to his conceptualization of suicidality (Santel et al., 2020). The 'hopelessness' construct was identified by Aaron Beck's (1989) conceptualization of suicide prediction and 'self-hate' from

Baumeister's (1993) formulation of suicidality as a means of escape (Santel et al., 2020). The Stabilization Plan was designed to help student participants develop a plan to respond to suicidal crisis, including identifying social supports. The Therapeutic Worksheet included prompts asking student participants to identify direct and indirect drivers of suicidality. The Mental Time Travel for Self-Hatred worksheet helped student participants chronologize a narrative of their experience of self-hatred.

Video recordings of the first CAMS session of all participants were transcribed verbatim using Otter.ai, a web-based transcription generation service, and each transcript was de-identified and reviewed against the original recording for transcription errors by a member of the research team. Finalized transcripts were compiled into Dedoose Version 10.0.59 (2026), a web-based qualitative analysis program, for coding. CAMS SSF-5 forms were also uploaded for one missing full session recording and one missing partial session recording. Other CAMS SSF-5 forms were reviewed for supplemental clarity only and were not coded.

Data Analysis

Analyses were conducted using qualitative secondary data analysis, meaning the qualitative data being analyzed was not collected with the present study's aims in mind (Ruggiano & Perry, 2019). Secondary data analysis can have benefits, especially in qualitative research. Student participants of the CAMPUS study, moderately to severely suicidal college students, are a vulnerable population. Using secondary data analysis allows researchers to gain useful additional insight into student participant experiences that can inform resource allocation and intervention design without further taxing student participants (Ruggiano & Perry, 2019). Secondary data analysis of constructs not explicitly asked about allows for analysis of spontaneous utterances. The prevalence of spontaneous reference to social isolation and

loneliness provides useful insight into the impact of these experiences on the lives and wellbeing of student participants. For this study, participants were uniformly explicitly asked in their first CAMS session how their suicidality is related to thoughts and feelings about others and about relationship problems, significant loss, and if they feel like a burden to others. They were also asked to identify people they could call for help or to decrease their isolation in their stabilization plan. Otherwise, all discussion about social support and social isolation was at the discretion of the student participant or study therapist.

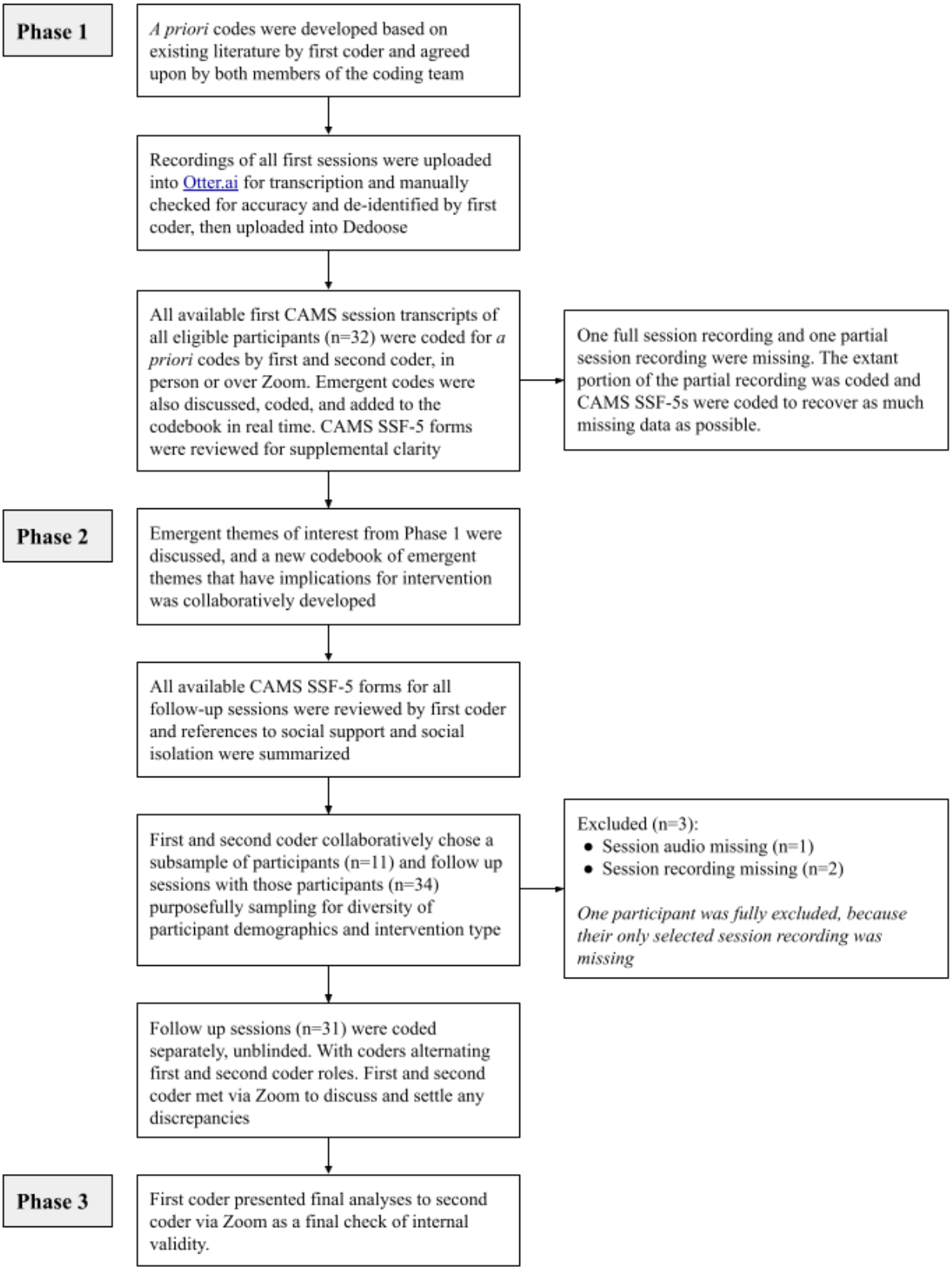
Determining the source of qualitative codes, from emergent codes which derive themes from student participant data directly to *a priori* codes which map student participant data onto pre-existing theory, is highly dependent on study aim (Elliott, 2018). This study emerged from student participant reports of social isolation during my participation in the CAMPUS study. Subsequent exploration of social isolation literature confirmed a potential critical relationship between social isolation and substantial mental distress, as well as provided a framework to conduct a systematic analysis of the data. This helped to better understand the prevalence of and make meaning of the reports shared with me during my time as a counselor. Because this study's intention was to gain insight into student participants' social isolation experiences based on spontaneous utterances alone and my dual role as a counselor and researcher, a more structured coding strategy primarily based in *a priori* codes was employed. However, even when using *a priori* codes, it is recommended that researchers remain open to emergent codes to maintain fidelity to representing participant voices (Creswell, 2013; Creswell & Poth, 2018). As such, emergent codes were also incorporated into this study's codebook as coding progresses. This approach is termed by Stein and Tuval-Mashiach (2015) as "phenomenological experience fishing," as it finds a middle ground between "too-broad" and "too-narrow" models of

understanding by using an *a priori* coding framework to help operationalize explicit and implicit reflections on social isolation and loneliness while letting participant statement define the contents of those experiences.

Analyses were conducted in three phases, which included two phases of coding by myself and a second coder not previously affiliated with the CAMPUS study and a final analysis. Phase 1 consisted of *a priori* and emergent theme codes. Phase 2 consisted of a new set of emergent theme codes that arose from analysis of Phase 1. Phase 3 reviewed final analyses to check internal validity of analyses. Figure 1 outlines the analysis process.

Figure 1

Analysis Process



Coding Phase 1

A codebook was developed including *a priori* codes based on existing literature on social isolation and loneliness and interventions for suicidality, including CAMS, which were presented to the research team for agreement. Coders used thematic analysis to identify emergent codes derived from the data, which were added to the codebook for Phase 1. The Phase 1 coding framework is outlined in Table 3.

Table 3

Phase 1 Code Map

Relationship type	Family relationships • *Parent* • *Sibling (older, younger)* • *Extended family* Intimate relationships • *Current partner* • *Former partner* • *Long-distance partner* Friendships Peers • *Coworker* • *Roommate* Pet Community • *Interest/identity group/club* Everyone/General
Social isolation	External barriers • *Barriers to access* • *Behaviors (co-dependency*, impulsivity*, lack of causal social contact*, people pleasing/pressure from others*, self-protective behaviors, substance use)* • *CAMS Core Assessment constructs (agitation, hopelessness, psychological pain, self-hatred, stress)* • *Negative social support experiences (bullying, discrimination/microaggressions, exposure to suicidality/mental health challenges*, ostracization/exile, rejection*, trauma)* • *Proximity to childhood community* Internal barriers • *Basic needs/personal hygiene*

	• *Emotional experience (anger*, apathy/numbness*, fear/anxiety*, grief, jealousy*, loneliness, unhappiness*, overwhelm*, regret*, worthlessness*, shame/guilt*)* • *Feeling different from others* • *Mental health (ADHD, ASD, anxiety, BPD, depression, panic, social anxiety, trauma, stigma)* • *Personality (empathy, social aversiveness)* • *Physical health* • *Relationship dissatisfaction (distrust, feeling unimportant/insignificant*, insufficient quantity/quality/frequency, lack of belonging to group, lack of closeness/superficial social contact*, lack of feeling understood/taken seriously, perceived burdensomeness, unavailability*)*
	Reason for dying
Social support	Aspirational
	Quality • *Negative/not helpful, Positive/helpful*
	Support area • *Belonging/presence of network support* • *Casual social contact* • *Mental health/suicidality (interference with suicidal behaviors, part of safety plan/coping strategy, reason for living, talk about mental health, talk about suicidality)* • *Participant-provided support* • *Trust*
	Loneliness
	Trust

**Emergent codes*

All transcripts were coded using "pair-coding," concurrently by both members of the research team in person or over Zoom. Pair-coding is an approach that emerged from software development programming and has been adapted for qualitative research to increase intercoder reliability by having consensus-building occur concurrently throughout the coding process instead of having a discrete phase of discrepancy resolution (Paul et al., 2021). In pair-coding, the first coder highlights and assigns codes to the text, while the second coder observes and guides the first coder (Paul et al., 2021). Especially given the goal of incorporating phenomenological emergent codes to existing *a priori* codes, this method was particularly well-

suited for this study's design, as it allowed emergent codes to be discussed, coded, and added to the codebook in real time. For the purpose of this study, I served as the first coder and a counseling psychology doctoral student who had not been previously involved in the CAMPUS study served as second coder. Given the goal of edgewalking with this study, engaging in pair coding allowed continuous explicit discussion about the intersection of etic and emic perspectives and improved bracketing and enhanced understanding of the data (Paul et al., 2021). I also attempted to reduce risk of power imbalances impacting intercoder reliability by recruiting a second coder with a comparable level of training and academic status. We had explicit conversations about our intentions for the research team to be collaborative and non-hierarchical and a contingency plan of deferring to a senior qualitative methodologist for arbitration if consensus could not be reached.

Coding Phase 2

Emergent themes of interest from Phase 1 were discussed, and a new codebook of emergent themes that have implications for intervention was collaboratively developed. The Phase 2 coding framework is outlined in Table 4.

Table 4

Phase 2 Code Map

Interventions and treatment progress	Interventions • *Social skills training* • *Peer counseling training* • *Participant provided support* • *Neutral peer support* • *Exposure* • *Grief and loss skills training/processing* • *Values clarification* Barriers to engagement/implementation • *Allostatic load* Facilitators to engagement/implementation
Barriers to protective effects of social	Self-hate

support	Perceived burdensomeness Focus on receiving support from an unavailable party • *Long-distance relationship* • *Break up* • *Death* • *Ended friendship*
Individual factors	Belonging/lack of belonging based on individual factors • *Race/ethnicity* • *Trauma history* • *LGBTQIA2s+* • *Neurodivergence* • *Emotional vulnerability* • *Socially aversiveness* • *Feeling different*
Empathy	Empathy as a risk factor Empathy as a protective factor

All available CAMS SSF-5 and supplemental worksheets for all follow up sessions were reviewed by one member of the research team and references to social support and social isolation were extracted and summarized. Because social isolation was consistently reported across participants, the research team then collaboratively identified a subsample of 34 sessions across 11 participants, purposefully sampling based on heterogeneity for diversity of participant demographics and interventions used. One participant was fully excluded from this round because their only selected session was missing. Another two sessions were also excluded for a missing session recording and missing session audio. The final subsample for Phase 2 included 31 sessions from 10 participants. Participant demographics for Phase 2 are presented in Table 5.

Table 5

Phase 2 Demographics

Variable (N = 10)	M (SD)	%
Age	19.2 (0.8)	
Race and/or Ethnicity		
White		60

Hispanic/Latinx	30
Multi-Racial	10
Gender	
Cisgender Woman	30
Cisgender Man	40
Transgender Woman	10
Transgender Man	10
Genderfluid	10
Sexual Orientation	
Heterosexual	40
Bisexual	10
Pansexual	10
Lesbian	20
Multiple Orientations	20
Class Year	
Freshman	20
Sophomore	60
Junior	20
International Student	10

Session recordings from the selected sessions were then transcribed and coded consecutively, unblinded, with coders alternating first and second coder roles. The research team met via Zoom to discuss and collaboratively resolve any discrepancies.

Analysis Phase 3

To increase intercoder reliability of Phase 2, given the absence of concurrent pair coding, the research team met a final time after all coding and analyses were completed. I presented the outline for my findings and discussion to check my interpretation and any gaps in my analysis

with the team. The final findings and discussion presented in this paper include the edits and additions that resulted from that meeting.

CHAPTER III

FINDINGS

The aims of this study were to (1) explore college student perspectives on social isolation and loneliness as it relates to their mental health and suicidality and (2) identify barriers and facilitators to social connection as a protective factor against suicidality. Participants completed CAMS SSF forms corresponding with their stage of treatment and completed or reviewed their Stabilization Plan (comparable to a safety plan) each session. Otherwise, participants and therapists collaboratively structured treatment based on the participant's individual needs, with the only criteria that suicidality be the primary focus of treatment. Consequently, participants were only uniformly explicitly prompted to connect social factors to suicidality in their first CAMS session when asked to rate "how much is being suicidal related to thoughts and feelings about others." They were also asked to endorse and describe, if applicable, relationship problems, significant losses, and feelings of burdensomeness to others. Participants were also prompted to identify support people for their Stabilization Plan. Any other discussion of social isolation and social support was either a spontaneous utterance from the participant or prompted by the therapist based on what they determined to be clinically relevant to the participant's suicidality. Despite this, social isolation and loneliness came up throughout the first CAMS session and subsequent sessions with all participants, not just when prompted through study protocol. Research findings seek to summarize and categorize experiences reported by participants related to social isolation and suicidality. Quotations are presented with discourse and hesitation markers removed for clarity. Larger omissions were only removed if deemed to not alter the meaning of the quotation and are marked with ellipses as an omission marker. Bracketed words have been added for clarity or to redact potentially identifying information. All

quotations are from participants. If a therapist response is needed for clarity, they are bracketed, italicized, and labeled as such.

Experiences of Social Isolation and Loneliness: Insufficient Quantity or Quality

All participants described themes of social isolation in some way in their first CAMS session, with many identifying social isolation and loneliness as related to their treatment goals or a common theme relevant to suicidality in subsequent CAMS sessions. Social isolation and loneliness presented as insufficient quantity or quality of social support, infrequent social support, or social support that was unsatisfying in some way. With respect to insufficient quantity, participants discussed a lack of availability of social support due to the absence of people who fill certain social roles in their life. Other participants reported positive social relationships, but insufficient access to them due to change in proximity, relationship rupture, or death of the support person, which led to social isolation or loneliness. Participants also described social isolation due to lack of a sense of belonging within a geographic or identity-based community. For insufficient quality of social support, participants identified frequent or easy access to social relationships, but dissatisfaction with those relationships in some way (e.g., feeling misunderstood, superficiality, feeling unimportant, general distrust) led to social isolation. Perceived insufficient quantity or quality of social support due to social comparison was also an emerging theme, with participants reporting experiences of social isolation due to perceiving their peers to be better socially connected than they were.

Insufficient Quantity: Unavailability

Participants discussed social isolation due to unavailability of social support due to temporary lack of access to previous specific support or permanent loss. Participants also talked about lack of belonging to community, either proximal community or identity-based community.

Loss of Previous Support Relationships. In some cases, participants identified loneliness due to loss of social support that they previously had and lost due to moving out of their community to attend school, a relationship rupture, or death of an important person. Participants described how missing a specific connection they already had due to decreased or loss of access to these supports exacerbated their feelings of isolation.

Lack of Proximity to Previously Supportive Relationship. Multiple participants described how being far away from romantic relationships, family, and friends made social support from those relationships less readily available and less effective. One participant discussed how being physically absent from his family increased his loneliness: "I can't really, yeah, decrease my feelings of isolation…I'm from [cross-country], so my mom does live in [state cross-country]. So as far as, like, physical isolation goes, not really going to fix anything." Another participant agreed on the importance of physical proximity to family, discussing the protective effect of going back home: "Just because I've been back home and…that's like, when I did the baseline assessment too, like I had just gone home, so I was in like, a really good mood, I was like I'm not super sad right now." The same participant noticed an increase in suicidality within a day of leaving home, reporting about their suicidal ideation "yeah, I feel like, not super strongly [suicidal], the past week, but I feel like, since I've been back…meaning like yesterday, today, I could kind of like feel it may be coming up again." For these participants, family support significantly impacted their experience of loneliness, and a change in access was an exacerbating factor for both loneliness and, in some cases, suicidality.

Similarly, participants expressed social isolation due to lack of proximity to previous friendships. One participant shared feeling a loss of friendship connection due to not having his best friend at college with him: "my best friend moved to Arizona last year, so he's no longer in

the state with me. So, I wish he could be because I remember we were always talking about going to college together." Another participant shared social isolation due to a long-distance friendship:

> My best friend…who it also kind of sucks because I met her in…the year in a few months that I was living at home in the restaurant that I worked in, um, but she doesn't live in [home state] anymore…because she moved…Okay, so it's like this whole summer was so great and so good because she was there…but now she's not there.

One participant listed a long-distance best friend as part of her safety plan, indicating the friendship was a protective factor against suicidal behavior despite the distance, but noted some difficulty because she needed to reach out to the friend via phone and they are currently living in different time zones. Participants whose hometowns were close by, or whose friends moved to college with them, described those friends as protective factors against suicidality, with one participant listing two of his friends who came to college with him from his hometown as a reason for living.

Long-distance romantic partners were often mentioned as part of a larger support system. One participant shared that she both felt bad about and supported when relying on her out-of-state boyfriend, "he's been so supportive. Like I called him at 3am which I felt so bad about, like he stayed on the phone with me for two hours just to make sure I fell asleep." Another participant listed her long-distance boyfriend as her only source of support on her safety plan but shared that when he is not available it can be a risk factor: "[when he is not available] I just don't feel good. It usually sets my night up to be awful. I'm up until, like, 2, 3 [o'clock], more or less, yeah, so super late." The same participant reflected about how proximity to her long-distance

boyfriend would impact her suicidality, “if he was out here, a lot of these problems would not be happening. My general happiness would be a lot higher.”

Despite the importance of physical proximity to social supports, efforts to close the distance can exacerbate feelings of guilt and perceived burdensomeness. One participant shared how, while they benefit from their mom’s support, it also feeds into one of their drivers of suicidality,

> Right now, my mom is so concerned about my hopelessness and stuff that she has decided she's going to come down every weekend for the rest of this term, which is objectively a good thing, because when she comes down, she helps me do my laundry and stuff. But like…also stuff like that. People take care of me. I require resources to sustain.

Efforts of social supports to create connection long-distance can also just be less effective and can degrade the relationship over time. One participant reflected on how ineffective long-distance social support both caused supports to stop reaching out and the participant to self-isolate from those supports:

> I just went through a really hard time, and I was just making really bad decisions, and I was just pretty heavy into drinking, a lot, and I had...all of my hometown friends would reach out to me, and just be like, you're not okay. And eventually I lost, like, all of them, and we're friends again now, but they were like, we're not gonna be friends with you, when you're acting like this, like you like, it's really embarrassing. And my mom too, at the time, would call me, like, five times a day and be like, What are you doing? You're embarrassing yourself. And to the point where I just like, kind of stopped responding to her.

Notably, many of these participants endorsed these support figures as primary and important sources of support or protective factors, but due to distance, the protective effects of those relationships were limited, and in some cases could even exacerbate risk.

Absence of Previously Supportive Relationships. Participants also described the loss of pre-existing social support due to death of a loved one or some other rupture. Multiple participants reflected on the difficulty of life after the death of a loved one and missing social support that they once had. One participant reflected, "I've just had people close to me pass away, and it's been really hard to navigate life like without them." She identified both wanting to be with her loved ones and not wanting to live in a world without them as contributors to her suicidality. Another participant reflected on her anticipatory experiences of grief from losing her father: "and then reasons for dying. Well, I feel like the big one is the future seems…unbearable…my dad has terminal cancer…and my dad's probably my most important person in my life, so that's a really big thing for me."

Multiple participants discussed how the loss of one relationship (through death or a separation) impacted other relationships. One participant described compounding isolation when she experienced rupture in relationships when seeking social connection in the aftermath of the death of two close friends:

> My bestest friends in high school…and…They were killed instantly, like, on the scene…One of them had a younger brother who was really good friends with me, who I then, like, felt like I had to kind of take care of, like, I assume his responsibility. I planned, like I maybe gave myself two days to cry about it, and then I felt like very stuck, and I planned their entire memorial at our high school. I like communicated a lot with their family, but then this one girl who was the girlfriend of one of the guys shamed me

> for talking about it a lot, or like being active about it, and I felt very like shunned socially because of it, and she turned a lot of my friends against me, and then they were all gone, and I didn't get a chance to, like, rekindle a lot of stuff with them.

The same participant also described how a breakup caused loss of friendships in addition to loss of the partner: "when I broke up with him, he…posted a lot about it on his social media pages of how awful I was, turning a lot of my friends against me, that I was the one who, like, introduced him to." Another participant talked about how losing friends from a shared identity group caused her to lose any connection to people of that identity on campus: "I lost all my friends, and they were like…Also connect to every other [identity] person on campus, because they run all the [identity] groups."

For participants who discussed previously supportive relationships there were either less available or absent, there seemed to be a compounding effect: the pain of social isolation was exacerbated by knowledge of what that previous support felt like. This comparison to what support could have been seemed to increase participant distress.

Lack of Community or Belonging. Participants talked about feeling isolated in their community because they had not found a community in their current setting, did not feel like they belonged within their existing community, or had felt rejected from their community.

Multiple participants talked about seeking a community at college and the difficulty establishing a sense of belonging at school. One participant shared that he doesn't "really have community." Another participant identified a lack of engagement in extracurricular activities contributed to his lack of community at college:

> I haven't really joined any clubs, or, like, any sort of extracurricular stuff around campus, so I guess, yeah, I guess just be more social and come out of my shell more because,

> yeah, like, lately, it's really just been I come to campus for class, and then I leave campus right after class, and then I'll either just go home or go to work.

While the previous participant identified ways to build community, another participant described hopelessness about finding community in college: “I feel like I've like, kind of like, given up, like, just like, finding my place here. Like, I feel like I kind of just want to, like, do school and get it over with, and then leave.” Two participants identified a lack of belonging in subcommunities on campus, with one participant identifying a lack of belonging with his roommates, expressing uncertainty that his roommates would notice if he died by suicide:

> My roommates, I'm not like, close with them. So that's kind of what I think about, too, is like, who would find me… because I don't, I don't talk to my roommates hardly ever like, I don't think like, they would probably it would be a while before they noticed anything like that.

One participant identified a lack of sense of belonging within an identity group due to differences: “I don't fit in with a lot of [racial identity] students because I have very weird and different interests, so I've had to, like, learn how to how people work my whole life...It's mostly with [racial identity] students.” The same participant identified social isolation due to rejection from their community and its connections with other communities on campus:

> I lost all my friends because of something I did - I don't know what I did honestly. It's like I lost all my friends, and they were like, the only [racial identity] people I was connected to on campus. Also connect to every other [racial identity] person on campus, because they run all the [racial identity] groups. I'm just trying to get through it.

This participant’s experience of loss of community was exacerbated by limited access to people with their shared racial identity.

Insufficient Quality: Relationship Dissatisfaction

Participants also described social isolation due to an insufficient quality of social support. In these situations, participants endorsed access to social contacts, but relationship dissatisfaction due to feeling misunderstood, feeling unimportant, distrust in relationships, or superficiality of connection.

Feeling Misunderstood. Participants reported feeling misunderstood due to miscommunication, feeling like people don't understand what they need, or feeling like who they are or their mental health are misunderstood by their social support system. One participant reported his struggles with communication cause him to feel misunderstood, leading to feeling "a lack of ability… I guess that would tie into like, feeling accomplished socially." Specifically, he noted that "there's definitely feelings of being like misunderstood in terms of…not being able to communicate… my emotions… I would say…I'm feeling…alienated from others." Another participant described not feeling like her friends understood her needs related to her mental health:

> I have [best friend] and my other friend [name], who are good at sitting and listening to me, but they don't know what to say. They think that all I need is to have someone to listen to me. But look, it's gotten to the point where I'm like…I need solutions, of like, how to make myself feel better, because talking about it isn't making me feel better.

The same participant also expressed feeling like her friends generally misunderstood her mental health: "my friends were like this, you're not you're not depressed. Like, I was like, going into this whole spiral that I was depressed. And I think it, like, brought a lot more back up. Then I let on." Another participant also expressed feeling like her mental health was misunderstood, but by her family. She said, "it's hard for them to know, and also this is not their home

country…So…there's also that barrier of…the stigma around mental illness in [their country's] culture and… when I got my diagnosis for anxiety…my mom…didn't know what to do." Another participant expressed feeling misunderstood about who they are and recounted how their family's perspective on autism spectrum disorder (ASD) inhibited their ability to understand themself: "as a kid…the therapist was like, you need to get your child assessed for autism. My parents were like, no …they…don't believe in autism." The same participant shared "I feel like I'm ashamed of being really weird and being different but having no explanation for it." Another participant identified with feeling different, stating "I just, I don't feel like I connect with almost everyone."

Feeling Unimportant. Participants also expressed feeling unimportant to family, friends, and just generally. One participant talked about feeling like she needed to be in leadership and organizing roles for clubs and events in high school, because "if I don't do this, then…nobody will put an effort into, like, hanging out with me." She tries not to do that as much now and shared that now "I've…just…been tagging along…no one's ever directly reached out to me being like…we want you to come to…so I feel very self-conscious."

Two participants reported feeling unimportant to their parents. One participant said, "I was neglected by my parents… so…I've always kind of had that mindset that like, if they couldn't give me attention, then that means I'm not deserving of attention, and that sits very heavily with me." Another participant reported hesitation using his mom as a person to call in his Stabilization Plan, stating, "there is my mom, but my mom's kind of like indifferent to it a lot of the time." Another participant also expressed feeling like people generally didn't care about his suicidality, stating "people don't usually care to reach out." Participants relayed not only feeling

unimportant in significant social support relationships in their life, but that feeling unimportant at times connected to perceptions of people caring about their suicidality.

Superficiality or Lack of Closeness in Relationships. Several participants expressed feelings of loneliness due to superficiality or a lack of closeness in their current relationships. One participant reported uncertainty about how to get close to others, endorsing "feeling like socially…disconnected from other people," for example, "sometimes I feel kind of confused about…what certain relationships I can foster with my parents as an adult." Another participant described social isolation due to an avoidance of closeness: "I've met people in class who were like, we should do something outside of school…And then they actually text me and ask, and…I'll push it off and push it off…or even…I won't respond to a text." One participant disclosed feeling lonely despite regular contact with many people, including close friends. They said,

> I have two friends that are or have fairly strong relationships, we make a ritual of going to talks after dark or watching a movie every weekend, and that's basically all we do. And I go to the running club. I try to go to that like four to five times a week, but I don't really hang out with anyone there. And then my ex and I remained friends after breaking up, and I know we hang out sometimes.

Despite the quantity and quality of this participant's relationships, they listed "loneliness" as one of their reasons for dying, as "having strong relationships that I could rely on in college" as the one thing that would make them no longer suicidal.

Distrust in relationships. Reports of distrust in relationships impacted the reliability of social supports as protective factors for participants. For example, one participant listed their mother on their Stabilization Plan "if she's sober, which is difficult, because…I have no way of

predicting if she is or isn't." Another participant expressed resistance to limiting access to considered means for suicide (e.g., prescription medication) out of concern for her friend, who might be tempted to steal and use them: "I usually keep them in my pill box in my car…like a five minute walk from me, but I have a friend who's prone to prescription drugs…So I keep them…hidden by my bed because I get scared…he'll get them."

Some participants reported distrust of other people after past breaches of trust. One participant reported difficulty being around people after being drugged at a party, "I'm like, scared to go anywhere…I don't like being around as much people." Another reflected on the impact of a harmful past relationship on her current relationship: "I got into a new relationship…and he's just everything I've ever wanted in a boyfriend…It is crazy because I every time I hear like he'll…compliment me I don't believe him because of my past relationship. It was so bad." One participant reflected on how grief from the death of her sister and boyfriend has impacted her trust in relationships:

> I've kind of realized lately that I'm just very used to always having somebody in my life living with my sister…I grew up like with just somebody by my side all the time, and so after she passed away...I stayed in pretty long term relationships, but after my boyfriend passed away, I just haven't been able. I'll still keep doing that habit of trying to start new relationships, but I just can't make it last, and I have a lot of trust issues.

Some participants reported self-hate caused distrust in relationships when people's view of them is incongruent with their view of themselves. One participant discussed how the incongruence between their self-hatred and other people's kindness towards them operates as a risk factor for self-harm: "I kind of always had a hatred there, that never goes away….Even if…someone compliments me, or whatever, sometimes it's way worse than others. And that's

when I, like, resort to cutting." Another participant also recognized an incongruity between their rating of their self-hate and others' views of them: "[the self-hate rating] should be lower, because there are outside opinions that try to convince me that should be lower, but…I can't trust that they're telling me the truth." One participant reported distrust of themselves caused distrust in relationships. They reflected on their distrust of their social standing with others: "having to do with other people… if I'm like, worried about something I said that might hurt them…or someone's mad at me, or ignoring me… I feel like I need to know…it can't wait until I fix it." These participants identified distrust in relationships as a risk factor for suicidality and a barrier to the benefits of social connection.

Social Comparison

Some participants' experiences of social isolation due to insufficient quality or quantity of social support seemed to be compounded by social comparison. When participants perceived that peers or their own social supports were better socially connected than they were, it increased feelings of loneliness, self-criticism, and inhibited social support seeking behavior. For example, one participant compared her friendships to her sisters' friendships:

> I'm always comparing myself to my older sister, who is...always with all these wonderful, great friends and...nobody actually wants to be friends with me outside of, like, clubs and things that I'm involved with them, that I've been slacking here and there because I'm choosing to deal with mental health stuff, that I'm feel Like, oh, I should be prioritizing more of my work over myself as a lot of other things like that, I would say that's kind of the capstone of that…it's a lot of comparison.

In a later session, she said again:

> Getting into the whole comparison thing…my younger sister has this friend that she's been very close with. They talk once a week since freshman year of high school… And then...my older sister, she has two friends that she's known since middle school, and they get together, like, seriously, once a month, even though they live in different states, they're married to different people, have totally different lives and jobs, like, career goals, everything...And like, I always find myself just wanting to be friends with them...I'm like, Oh, why don't I have those friends?

The participant talked about the impact of that comparison on her mental health:

> I think I always put myself up against...someone else as a form of trying to get myself motivated. But I feel like it's not, it's not as fulfilling, and it's not as like, pushing me anymore. It's more of, like, bringing me down...it's leading to some more kind of pain...The reason that I was suggested this study...is because...when I'm feeling at my lowest of lows, I have thoughts of suicide.

She also noticed that comparison to her sisters' friendships has caused her to shift her metric for relationship success to her sister's friendships instead of friendships the participant finds fulfilling:

> I'm always waiting for a friend that she wants to hang around with...to know that I found a good friend, like my sisters, would be like, Oh, these are cool people, because I trust their judgment a lot more than mine at this point, and so it's, like, always waiting for, like, them to approve of my friends.

For this participant, her social comparison both contributed to suicidality and inhibited her support-seeking behavior by disempowering her.

Other participants talked about social comparison with roommates. One participant talked about his roommates' pre-existing friendships with one another exacerbating his loneliness:

> My house is a part of it too...my living situation is weird right now, because I have the roommates, but I'm not very close with them, but they all knew each other and went to high school together, so they're all best friends...which, of course, I get...it's nothing personal against me...but it's still just a weird dynamic...I don't really talk...I've been living with them now for like, eight, nine months, something like that, and we barely talk...I just learned one of their names...a couple of months ago...it's like sharing my apartment with strangers, basically.

Another participant also expressed increased loneliness due to pre-existing friendships between her roommates, adding that fear of missing out on connecting with them inhibits other social support seeking behavior:

> I live with two girls who were...best friends last year…so it's just the three of us. So...whenever...I'm at home, I'm like...I can't go out and do this, because then they're just gonna get closer and forget about me and I might as well not even try to be friends with them or have relationship with them, because it's not even gonna work.

Both participants reported exclusion from friendships between roommates, causing a negative social support experience and even potential negatively impacting one participant's ability to seek more affirming social supports elsewhere.

Sometimes social comparison was less directed at specific relationships and more a perception that surrounding peers were better socially connected. For example, one participant shared her experience of her classmates:

> In my last class right before I came here, I was just dissociating the whole time and being like, well… I feel like everyone's talking to each other, and like everyone knows each other, but I don't…I feel like I compare myself to everyone I see, like on campus, and I'm always like, Oh, well, they all have it figured out, or like they have their friends, or whatever. And I feel like I just have to try so hard to do that, or I have to try so hard to, like, feel okay, here.

The same participant shared the perception that everyone on campus had existing friendships:

> I don't know...I am jealous, and I feel like everyone has that friend group except for me...or has that place or has that community.

Participants who perceived peers in their environment to be better socially connected than they are reported self-judgement, hopelessness, and inhibited support-seeking behavior.

Social Isolation and Suicidality

While social isolation and loneliness came up frequently in therapy sessions focused on suicidality, participants also explicitly connected the two. Participants repeatedly cited social isolation and loneliness as contributors to the core assessment constructs of suicidal ideation, reasons for dying, and precipitating factors for suicidal behavior.

Social Isolation as a Core Assessment Construct of Suicidal Ideation

Participant transcripts were coded for mentions of social support or isolation related to the CAMS core assessment constructs behind suicidal thoughts (i.e., psychological pain, stress, agitation, hopelessness, self-hate). CAMS describes psychological pain to participants as "hurt, anguish, or misery in your mind, **not** stress, **not** physical pain," stress as "your general feeling of being pressured or overwhelmed," agitation as "emotional urgency; feeling that you need to take action; **not** irritation; **not** annoyance," hopelessness as "your expectation that things will not get

better no matter what you do," and self-hate as "your general feeling of disliking yourself; having no self-esteem; having no self-respect" (Jobes, 2023).

Psychological Pain. Participants identified psychological pain associated with social isolation due to grief and loss, relational trauma and harm, and overall loneliness and lack of social support. Multiple participants discussed psychological pain related to grief and loss. One participant talked about pain from the death of her boyfriend and sister. Another related pain with the anticipated death of her father. Both participants identified that the prospect of a future without those significant people in their lives felt "unbearable" and "painful." Other participants identified grieving the death of pets. Other participants reported psychological pain because of past or current social harms or traumatic experiences. One participant described how her past traumatic experiences continue to feel painful,

> I've just had, like, a lot of traumatic events happen to me, and they'll come back a lot of the time, just as like intrusive thoughts, and it kind of will just, I kind of just always feel like a baseline level, just like, Yeah, mostly in my heart, but like in my mind.

Another participant discussed the lingering impact of a challenging romantic relationship, "I had a pretty chaotic breakup…with my ex-boyfriend…And we were kind of on and off for a while. So it just, it was hard, and I didn't really, I feel like I fully didn't heal after that." Another participant also expressed difficulty moving past lingering pain: "I have in the back of my mind like some comments that were made about me that I can't really let go, and it hurts my heart to have them in there." Other participants discussed ongoing social harm leading to psychological pain. One participant discussed the impact of navigating harmful dynamics within her family currently: "there's a lot of stuff going with my going on with my mom, so I guess that and protecting my little sister and stuff."

For several participants, psychological pain from social isolation was related to more general social dissatisfaction or dissatisfaction with aspects of relationships, rather than specific painful experiences. One participant described social relationships overall as psychologically painful. Another participant described the absence of social connection, "feeling lonely," as painful. Other participants specified the absence of types of relationships or aspects within relationships as psychologically painful. One participant described the state of his love life as the primary source for his psychological pain. Another described their empathy for others as acutely painful, reporting "constantly I am like, fetal position in my bed sobbing because of someone else's feelings or something I don't know."

Stress. Participants identified experiences of social isolation related to stress as: stress from isolation generally, stress from social uncertainty or interpersonal ineffectiveness, stress of responsibility to others, and stress due to empathy for others. One participant reflected stress from social isolation over last spring break:

> The idea of nothing over spring break, not necessarily doing nothing, but I know what I did last spring break, and it was totally not leave my dorm for six days. So that was not, or like, five days. And so that was not cool...It's a little stressful because I'd like not to do that.

Another reflected on how stress combined with social isolation intensifies suicidality, stating the "feeling is more intense when I'm more stressed or when I'm more alone." Another participant cited social supports as the source of their stress: "I also just have so much stress and worry in my mind about just a friend of mine. But…I've been worried about them since I met them, but especially as of like yesterday and this past week." For this participant, despite having social

connection through this friendship, their care and concern for their friend was isolating and stressful.

Two participants expressed stress from having to tolerate uncertainty in social situations in isolation. One participant referenced such stress related to a roommate conflict they were anticipating needing to address. The same participant expressed stress due to uncertainty of their relationship status with a romantic partner. Another participant described stress his own perceived self-efficacy in social situations, leading to him feeling misunderstood:

> Maybe something I wanted to say to someone that I didn't end up saying or not communicating the best with, knowing, getting across, I guess, what I meant to others, necessarily, and having that kind of be that gives me, like, a lot of anxiety and stress, and brings about those things, because I feel a lack of ability.

These participants either expressed stress from pervasive social isolation or isolation in navigating stressors within social relationships.

Other participants expressed a sense of responsibility to others led to financial, logistical, academic, or work stress, which participants were then unsupported in managing. One participant shared the stress of managing multiple logistical challenges in different relationships in her life:

> There was no, like, clear trigger to it. But I think I was kind of stressed, because I was getting ready to, like, I was trying to find a storage unit for me and my roommates for the summer, and I was trying to figure out the logistics of getting home and moving out of my dorm by myself, because I was just driving home with my boyfriend's roommate, and I didn't know like to do with all my stuff, yeah, and trying to do stuff with school and planning a long like trip that I went on last summer.

Two participants discussed financial stress in their family becoming a source of stress for them. One participant explained taking on the stress of her mom's reduced income due to needing to go on disability. Another discussed the stress of needing to find a job to become more financially independent from their parents:

> I've anticipated stress…because…I grew up in a middle class family, and so we have enough to support our family well, but there's only so much my parents can do to support me, especially if I'm in college, and there's only so much they could give, and at some point I'm gonna have to support myself. And then the prospect of getting a job and how much wages are, that tends to stress me out, just because I overthink that kind of thing.

Other participants reported stress from not feeling like they meet others' expectations of them. Sometimes because of overt pressures, sometimes despite overt efforts to not pressure participants. For example, one participant said of her parents' expectations of her schooling:

> Yeah, my parents…always tell me, Oh, you don't have to go to school if you don't want to. But I also I feel this pressure, like, like, they want me to keep going. They want me to achieve…Because I'm the first, I'm the first child in our family to go to college.

One participant shared that by juggling work and school they were often not meeting expectations of one because of the other. Another participant shared stress of being singular responsible for managing the finances of her club:

> A club where I'm the treasurer, and I help a lot with that kind of stuff. And it's just been like, because we've been trying to plan this trip lately, and don't really have the money for it, and I'm the treasurer. So, it's a lot of people just asking me, where's money? And I'm like, so that's been stressful.

While many of the stressors discussed by participants were less frequently linked to feelings of loneliness, participants often indicated lack of support in managing specific stressors or interpersonal stressors that caused social isolation through relationship rupture or strain.

Agitation. Participants connected feelings of agitation related to social isolation due to social comparison, lacking self-efficacy in social situations, and pressure to act in social situations. Two participants expressed feelings of agitation due to comparing themselves with others their age. Another participant shared feeling agitation comparing herself with "everyone" when out in public. For one participant, the relationship between social comparison and agitation was related to perceived helplessness in social situations. She described feeling both agitation and paralysis when it comes to building social connection due to the simultaneous fears of social isolation and being left out by her roommates (who had a prior close friendship) if she leaves her dorm room:

> I feel like a lot of times it stops me from going and doing what I want to do. So, I guess it's taking action in that way of…I need to stay home, because what if they do something...or what if something happens and…or what if they just think in their head, well, she's never here anyway. So… why would I like include her.

Another participant described feelings of agitation stemming from social helplessness in a romantic relationship that feels unstable:

> With the relationship stuff…I just drive an hour when I really feel agitated…it's just like, a really confusing thing, because we're not, like, it's hard to explain. We're not like, dating, but it's like, weird, I don't know, but I feel like we need to, like, make a bunch of decisions all the time about it and like I'm confused about it.

Socially related calls to action leading to agitation was a theme reported by several participants. For some participants, these calls to action were to respond to specific interpersonal conflicts. For example, one participant described feeling agitation about having a "necessary talk with all my roommates. There's just some miscommunication, and I need to talk to her about it so it doesn't spiral." Another participant identified a pattern of feeling agitation when:

> I'm like, worried about like something I said that like might hurt them, or like something like or like someone's mad at me, or like ignoring me, or like doesn't want, like I feel like I need to know, you know what I mean, like, like, it can't wait until I, like, fix it or something.

One participant reported agitation related to needing to address their social isolation: "I'm doing, like, online classes, and I've kind of just been home a little bit more than usual…just like at home alone, and I feel like I need, like that social…yeah, I need to be social." Agitation related to social isolation appeared to have potential as a protective factor, compelling participants to seek social connection, or as a risk factor, compelling participants to withdraw including through suicidality.

Hopelessness. The connection between hopelessness and social isolation that participants described tended to be related to participants' aspirational and current social connections, hopelessness about improved interpersonal functioning, and isolation due to participants feeling like their mental health was misunderstood.

Some participants expressed feelings of hopelessness about meeting their social goals. For two participants, this was specific to romantic relationships. One participant shared general hopelessness about meeting a romantic partner: "I am most hopeless about again, my love life,

feeling right now, connection." Another participant reported wanting a family but feeling hopelessness about achieving that goal:

> It's always has been a big dream to, like, have kids one day…And I've been thinking about that a lot too lately, is that, like that I feel like that's a part of where some, uh, like, the hopelessness with, like, my goals in life is just that, like, I don't really know, like, what my dream is or what I want to do… I wanted, yeah, like, a, like, a nice, happy, beautiful, like, loving, like complete family that wasn't like, maybe just because of how I kind of grew up, like, my dad wasn't really around much as a kid. So now I want kids that have, like, a super involved dad, so but that's always been like, the only like, I guess, dream that is, like, stuck around like forever. I want to have like, a family and a nice, big house with a backyard where like, or like, yeah, taking, like, my son to baseball practices, or like, coaching his baseball that was like that. That's like a dream.

For this participant, a reason for living became a risk factor, due to hopelessness around achieving his desired family. Another participant expressed similar hopelessness about finding a desired community at school, noting she had "given up." For these participants, social hopelessness was tied to absence of specific desired relationships.

Some participants endorsed hopelessness related to aspects of interpersonal functioning, rather than specific relationships. One participant reported hopelessness about their ability to "sort through relationship issues." Another shared that they did not think they were a good person due to their interpersonal functioning, but expressed hopelessness about change:

> I just feel like I'm like not a good person, just in general, like how I am around other people, or how I talk to people, I just don't feel good about myself and kind of like that,

> same with the hopelessness, like I want to change, or I don't even know if like other people see it that way in their head, but it's just how I see it.

This participant identified that their perception of their interpersonal functioning was not necessarily reflective of how other people saw them, and uncertainty about how to change their interpersonal functioning or their perception of their interpersonal functioning.

Several participants attributed their feelings of hopelessness to dealing with mental health challenges related to interpersonal trauma or feeling misunderstood due to their mental health. One participant shared feeling hopeless about healing from trauma, which they identified elsewhere as a result of childhood abuse, and related social isolation: “like healing from trauma, dealing with psychology symptoms and isolation. Or that even if I was less isolated.” Another participant identified social isolation as a product of their mental health, and expressed hopelessness about change: “I had, like, a pretty intense, like, depressive episode, and I was really alone, and I kind of refused, like, help…but like, I just sometimes feel like nothing is going to help so I like, don't even try.” While this participant identified hopelessness related to how their mental health caused them to self-isolate, another participant reported that her family’s misunderstanding of her mental health causes her family to not effectively provide support, causing experiences of social isolation:

> my family doesn't quite understand my diagnosis with depression and anxiety, so they don't really know how it affects me. And, I mean, they just don't know how to help, so it's kind of hard to know what to do. yeah, I kind of feel like I'm on my own with this type of thing, even though I know I'm not like, that's kind of how I feel.

Unlike agitation, hopelessness appeared to only function as a risk factor for social isolation, by decreasing motivation or perceived self-efficacy around building or benefiting from social connection.

Self-Hate. Participants connected self-hate to social isolation through perceiving themselves as socially aversive, due to their personality, their mental health, or their behavior. Self-hate appeared to function as a cause and effect for social isolation. For some participants, their self-hate contributed to a lack of sense of deserving of social connection. Participants also reported perceived interpersonal ineffectiveness as a source of self-hate.

Multiple participants described themselves as generally unlikable. One participant expressed self-hate due to their:

> Inability to change for the sake of social validation… It's hard to put into words the things that I tend to hate the most about myself…I'm not the type of person that is generally well liked…So it's kind of ingrained to not like the parts that I know others wouldn't care for.

Another participant described self-hate self-talk: "just a lot of that self-hate stuff, everybody hates you, and you're alone, and nobody would miss you, and a lot of very discouraging thoughts." Two participants reflected on how general self-hate impacted their ability to connect socially. One participant described how pickup basketball games were an easier way to have a friendly social interaction than building friendships, reflecting "like, how am I gonna try and pitch myself to be a friend to somebody else if I don't like myself?" Another participant shared that their self-hate interfered with the positive impact of social support, stating "just looking the way I look, and just being like me, I don't know, just I don't like having to make people like deal with me, and it makes me like feel bad for them."

Several participants more specifically centered their self-hate on their mental health and emotionality, and how that impacted social relationships. One participant shared how their self-hate was fueled by their perception of the impact of their borderline personality disorder diagnosis on other people:

> Usually the thoughts I have, it's like, I need to be gone, because it would save everyone else around me, it is like a little bit about people, but it's more just this intense self-hate and this inability to like, get myself out of the thought that everything around me is my fault and I am destroying the world around me.

A different participant identified self-hate related to their difficulty regulating their anger:

> I hate how I approach like, bad situations or like, I guess like when relationships like, I can act very like, like, I'm like, I'm very quick to, like, blow up and act out of emotion and like, uh, so I guess even that can be a part of self-control. Like, I have a hard time controlling my emotions. I have a hard time controlling my mouth when it's with other people.

Another participant also described their emotionality as an impediment to social connection:

> relationship problems with other people… how I see myself, and then just how other people see me, and just thinking about everything that people say, especially specific people...you could say self-hatred…It's just like my personality and how my emotions often get in the way… how sad I am, and how it affects other people as well. So, like, that's like internally, but of course, then there's the external disliking.

For the second of these participants, their appraisal of how they relate to others was at least partially impacted by others' reactions to them. However, it was unclear for all three participants how accurate their appraisal of others' experiences of them were.

One participant identified a disconnect between her self-hate and other people's experience of her, identifying self-hate due to perceiving herself as socially aversive due to her behavior. She shared how self-hatred presents in important relationships in her life:

> I am constantly feeling like I'm a terrible roommate and terrible friend and terrible girlfriend and terrible daughter, and just generally, even though other people don't bring this up to me. I feel like I am not holding up…my end of any relationship I'm in.

She also identified self-hatred related to perceived social aversiveness is present in one-time interactions as well:

> I feel like with a lot of things that I'll do, I will hate myself for doing those things...Like, sometimes it's like, really. Little things. So, oh, like, I asked after class, I, like, asked my professor a question, and then like, right at the end, when he was like, oh, okay, like, thanks for asking me the question. I just, like, left, but I didn't, like, say anything, and I thought about that for a really long time, and I, like, really disliked how I handled that, yeah, but, you know, I just didn't like so that was something small about something happened that today.

Despite identifying these interactions as "really little things," they play an influential role in her self-concept.

Several participants also tied their self-hatred to judgement about social behavior related to interpersonal ineffectiveness. One participant expressed feeling unable to meet social objectives: "it's a self-hatred/worthlessness combination that comes from...lack of ability to accomplish. And then, yeah, come also feeling like misunderstood. So, okay, I guess that would tie into like, feeling accomplished socially." Another participant noted their self-hated related to

perceived interpersonal ineffectiveness was unrelated to the reality of how social interactions unfolded:

> I feel a lot of shame around I think just I'll feel a lot of like guilt and embarrassment, like at the end of the day, I feel like, no matter what I do and just how I interact with other people, even if it's a good interaction, I'll just feel embarrassed and a lot of, I guess, self-hate of you did this wrong, you can do better, or feeling shame about not doing enough and just comparing myself to other people, well, you could have done that better and done this better and just a lot of like, reflection and over analyzing, I think about my behavior and stuff.

Notably, in many of these examples, self-hate appeared to function as a barrier to benefits of social connection because participants' appraisal of their role in those interactions was negative even if the interaction was positive.

The trend of self-hate acting as a barrier to social connection was particularly evident for participants who reported self-hate related to perceived deservingness of social connection. When asked about thoughts related to self-hate, one participant shared "I don't deserve to have friends or be happy or, like, be alive." Another said, "I'm not worth living." A third participant relayed their self-hate self-talk: "Usually it's just like you don't deserve. You know you don't deserve the people in your life. You don't deserve to keep living like you deserve pain, just like a lot of deserving of bad things." They explicitly identified their self-hate as a barrier to experiencing social support as a protective factor, sharing their self-hatred compels them to engage in self-harm when someone compliments them. Unlike stress, agitation, and hopelessness, self-hate not only impeded participants' opportunities for social connection, but also the benefits of the social connection they did receive.

Social Isolation as a Reason for Dying

Participants were asked to list reasons for dying connected to their suicidality. Several participants endorsed "loneliness" or "social isolation" generally as reasons for dying. One participant said, "I guess it's like, I feel really alone." Another specified feeling alone despite the appearance of a big support network with her family:

> I would say loneliness…yeah, even though, I mean, we have a huge family, but again...I feel like there's a lack of connection because of my, like, disorders and whatnot that they just don't quite understand…So I kind of feel like I'm on my own.

Others specified hopelessness about potential for change with their loneliness. One participant said,

> Just it's kind of like, too late, you know? I just kind of wasted too much time...I just feel different from, like most people. So… just kind of like social isolation and then just not doing things that I should have. So…just...it's not going to get better. Because I feel like, growing up and college, you know, I just feel like it's supposed to be the easier times. So, I'm just kind of worried about after college.

Another expressed hopelessness specifically due to loneliness from lack of a romantic relationship, endorsing "not being able to imagine another relationship" as a reason for dying.

For some participants, loss or anticipated loss of socially supportive relationships factored into their reasons for dying. One participant, who experienced the death of her boyfriend and her sister, said,

> I've just had people close to me pass away, and it's been really hard to navigate life like without them. So, I just want to, like, a lot of times when I'm thinking about suicidality,

like I'm just thinking of wanting to go back and being with those people, wanting to not be in this world anymore where they're not there.

Another participant discussed anticipating the loss of her father:

> And then reasons for dying. Well, I feel like the big one is...future, like, I'm gonna use the word unbearable, I guess, like psychological pain… my dad has terminal cancer, and my dad's probably my most important person in my life, so that's a really big thing for me.

Other participants cited loss of primary social support due to termination of romantic relationships. One participant drew a direct connection between their breakup and an increase in suicidality: "it just it feels like it's got so much worse [*Therapist: since the breakup*] yeah, it's like my brain will pick whatever is going wrong with my life, and just the suicidal thoughts will just latch onto that." Another participant distinguished between friendship and romantic partnership social support, identifying dysregulation from heartbreak in romantic relationships contributes to their reasons for dying: "What about coping with emotions, or heartbreak and stuff like that…that's more down my alley, like I make friends easy, but more like, I can't really control my emotions that easily. Can't really cope with heartbreak that easily."

Some participants focused on their impact on other people as reasons for dying, sharing beliefs that "other people would be better off without me" and expressing perceived burdensomeness on others. For one participant, they attributed their perceived burdensomeness to things they have done to others:

> I've hurt a lot of people, and I don't want to keep hurting them. I have made many, many mistakes that I can't go back on or fix. Yeah, there are definitely times where I don't believe it'll ever get better. I'll just be like, miserable my whole life.

For some participants, they attributed their burdensomeness to who they are: “feeling like I'm too over the top and, like, outlandish, I guess, like, in terms of my personality,” “people don't deserve to have to deal with me,” “feeling that I'm an annoyance, I guess…to probably just anyone,” “just like being too much with people around me.” To these participants, changes in reasons for dying would require changing their personality, how they interact with people across relationships, or what they need from others.

Getting their needs met by others factored into the reasons for dying of some participants. They talked about suicide as communicating their pain to others or learning how others truly care about them. One participant challenged their own thinking patterns, but shared, “I don't know, because I'll think of, I'll think of like things like wanting to show my pain to others, but that's not really how I feel about it. It's a lot of, like, just internal stuff.” One participant shared hope that they could see others’ care for them because of their suicidality, “another reason for this would be that people would acknowledge me more, or that maybe I would get a lot of the reciprocated, like care. Finally, if this happened.” Another participant described wanting to share their pain with those who caused it, saying, “like the people who have done me wrong, who I thought were my friends and I want to traumatize them…yeah, I want to cause them pain the way that I feel every day.” Each of these participants, in different ways, identified suicidality as a communication tool, to express the extent of their suffering and need for care.

Need for care to foster a sense of mattering was identified as a reason for dying for participants who expressed a lack of relationships that could provide such care. Multiple participants identified feeling like they don’t matter to others and as a result, that death by suicide would be of little consequence. One participant posited that people would likely move on quickly from their suicide “I don’t think the world other than people posting would be like,

massive…" before trailing off. Another said, "I don't really impact anyone. I feel like I'm really easy to, like, forget, but it also might get better." Another participant also reported feeling forgettable, citing a "tendency to be forgotten" as evidence that their death would be inconsequential because "no one wants me to really stay." Sometimes the feeling of not mattering was connected to a more specific relationship or event. One participant reflected on the impact of one relationship on her self-worth:

> Yeah, self-worth, is the best way to describe it…from my past relationship, I kind of got the sense of like, I wasn't, like, I wasn't exactly what the person wanted. And I kind of felt like, not worthless, but I felt…Like, every time I would try to do my best, they would always, like, bring me back down and everything. And it was kind of frustrating, because I was like, I'm trying to do everything I can to keep things going and that they're giving me every reason to stop, in a way. So, it was kind of frustrating. I just felt like I wasn't enough. And I feel like I've struggled with that for quite some time, though, because even I mean, that relationship definitely escalated things, yeah, but I I've always had, like, just my past relationships in general, I kind of got that sense of like, oh, I wasn't really, I didn't feel like I meant much to them.

For this participant, the feelings of worthlessness they experienced in this relationship confirmed their beliefs about their mattering in other relationships and provided evidence of their worthlessness as a reason for dying.

In addition to participants pointing to low self-worth related to relationships generally factoring into reasons for dying, multiple participants pointed directly to ways they did not feel like they were meeting others' expectations, impacting self-worth and contributing to reasons for

dying. For example, one participant shared how his expectations of himself and the expectations from others contributed to his reasons for dying:

> It's feeling worthless…not feeling like I have a future…I guess, sort of like exterior expectations, like, expectations that come from others, And then I have, like, self-expectations as well, I guess, by not meeting the two of them, that kind of…I'd say that kind of rounds it out.

Another participant expressed desire to no longer feel like he was not meeting the expectations of others and identified death by suicide as a relief from that:

> Just like, I guess the relief of responsibility, I guess…like all, like, I don't have to go to work anymore. I don't have to go to school anymore. Don't have to worry about, like, people at work getting mad because I'm late from school or missing out on school because I'm stuck at work, like stuff like that.

Both participants directly connected not meeting others' expectations to their reasons for dying.

Participants explicitly linked social isolation, due to loneliness or lack of satisfying support in social relationships repeatedly in their reasons for dying. They described general feelings of loneliness and loss of specific social supports due to death or relationships ending. They described feelings of a lack of mattering in social relationships and feeling unsupported in social relationships. Both of these contributed to feelings of worthlessness due to who they are or their accomplishments and performance.

Social Isolation as a Precipitating Factor for Suicidal Behavior

While there is ample evidence of the connection between social isolation and suicidality, including reasons for dying, a few participants explicitly connected experiences of social isolation to past suicidal behavior. Participants described conflict and relationship ruptures with

significant social support people, including two breakups, as precipitating factors for past suicidal behavior. One participant reported attempting suicide after going through a breakup they described as traumatic. Another participant shared a similar experience, and reflected on a pattern of romantic ruptures as risk factors for suicidal behavior:

> So the first time I attempted it was because a girlfriend I had seen for about a year cheated on me, and it broke me to like my very core. And it's these attachments I get to people I'm romantically involved with, it just destroys me and breaks me if I'm not getting that same attention or that same understanding. And I think it is what makes me so insecure, because I feel like I can never be good enough in a romantic relationship. And then this past week or so, or the past two weeks, I had kind of been talking to a girl, and then things ended very suddenly, and that's what kind of pushed me to get therapy, because I was like, there is no reason I should feel this way about someone I did not know very well. I still feel so insecure and suicidal and like the world is ending around me. It just is. Romance pushes me to, like, some of, like, my most insecure points, because I get so attached.

Another participant described the loss of a potential romantic partner precipitating suicidal behavior, sharing he "walked to the…bridge for a bit, and kind of just sat there and debated with myself. So, I…went there originally to…feel like jumping off, but I kind of just sat down and debated myself there for like an hour" after a "really horrible emotional moment" with someone he wanted to be his romantic partner. Another participant reported suicidal behavior after conflict with their parents, reporting "my relationship with my mom mostly was, like, really bad" and that immediately prior to the suicidal behavior, the participant felt judged and lectured at by their parents: "you don't understand, you're not letting me like – it's not my fault. I'm sorry." The

participant had previously identified their family as a reason for living, and expressed this event occurred during a period of frequent fighting between the participant and their mom.

Social Connection and Suicidality

While social isolation continually presented as a risk factor for suicidality, social support (received, perceived, and aspirational) often emerged as a protective factor. Participants identified social support as a reason for living, a protective factor for suicidal ideation, and something that directly interfered with suicidal behavior.

Social Support as a Reason for Living

All participants listed at least one social support person or people generally as a reason for living. Participants listed family: parents, mothers, fathers, sisters, brothers, grandparents, nieces, and nephews. One participant said, “my mom has always been like my number one reason for living.” Participants placed importance on their families’ emotional states, citing: “mother’s happiness,” “I don’t want to make my mom sad,” “my mom would be upset,” “family pain…Mom, dad, brother”, and “I would feel so bad for like the others, like I would feel so bad for like my parents.” Participants expressed protectiveness of younger siblings: “I want to specify, my younger sister…is my best friend and I wouldn't want to leave her” from one participant and “I have a younger sister, so sometimes I'll think about her, and that'll stop me” from another. One participant said of her younger sister, “right now my family situation is pretty bad, and I just don't want to leave her like that. I don't feel I don't feel okay dying while she's going through the stuff she has to go through.” Another participant said of her younger brother “I couldn't do that to him. That'd be horrible.” One participant expressed her love for her family: “family,…my two sisters, my mom and dad and my mom's parents, my I love my grandparents. I had like, the greatest childhood growing up.” Multiple participants referenced pets in their life as

reasons for living. Dogs, cats, fish, and geckos all made participants' lists. Some participants shared a sense of responsibility for their pets. One participant said, "one thing that always comes to mind is my dog, like…what would happen to him…Where would he go?" Multiple participants endorsed pets as sources of emotional support. One participant shared "honestly, a lot of the time, my dogs get me going." Another shared "my cat…she has helped me a lot."

Many participants listed friends as reasons for living. Some listed their friend group generally, and others cited specific meaningful friendships. Some participants discussed the quality of the friendship, the love they felt for their friends or the importance of those friends to them, as a reason for living. One participant shared: "I would say my best friend, he's been super supportive lately." Other participants talked about shared activities with friends as reasons for living. One participant talked about playing ultimate frisbee with her team. Another reported looking forward to attending a music festival with friends. Participants also cited romantic partners as reasons for living. One participant said "if my boyfriend is alive, then I won't kill myself, even if I really really want to. I 've gotten really close… and then that stopped me multiple times, so…I'm super confident."

In addition to naming specific people or relationships as reasons for living, some participants cited the impact their death would have on people generally as a reason for living. Multiple participants said they are living for other people not for themselves. One participant explained their reason for living: "so I don't hurt other people… It's mostly just about other people…There aren't a ton of reasons I want to be here for myself. It's mostly just so I don't destroy the lives of like my loved ones." Another participant also identified living for other people as a coping strategy while she doesn't want to live for herself: "I got depressed to the point where I was like I don't really care if I die soon, so it's like I have to prioritize the people

around me." Another participant self-identified as a "people-pleaser," but identified that helps keep them alive:

> Listing off these reasons for living, thinking about how it would impact these people… I feel bad for these people, and…I don't like to be like this, because I don't like to see how it affects other people…I'm way too much of a people pleaser.

While some of these interpersonal dynamics, like people pleasing, may act as barriers to social connection in other areas of participants' lives, in this application they are serving as a protective factor against suicidality.

Social Support as Mental Health Support

Participants frequently cited talking to socially supportive individuals about their mental health or suicidality outside of a suicidal crisis as a protective factor against escalating suicidal ideation or suicidal behavior. These conversations normalized and validated participant experiences. One participant shared "I've talked to a lot of other people who sort of, like, felt the same thing." Another participant said a friend shared a grounding exercise they use when she was experiencing dissociative symptoms. Conversations about mental health and suicidality with social supports also built trust that those supports are available to participants when needed. One participant said about talking to her dad, "I call him a lot like he's the person I've always talked to…whenever I have had these issues." Another participant shared that she knows she can call her boyfriend anytime when she's in crisis, even in the middle of the night. Another participant talked about how her sister offered support when the participant shared about her history of suicidal ideation with her: "I finally told my family…I had suicidal thoughts….And my oldest sister was like, you need to get help. Go get help. Even if you haven't tried anything, don't try anything. And…reach out to me." Some conversations led to facilitating mental health care. The

previous participant shared her sister called providers to help make the participant an appointment and ultimately directed her to reaching out to the university counseling services that led the participant to the CAMPUS study. Another participant shared that telling their mom about their mental health led to them getting reconnected with a previous therapist: “I had a phone call with my old therapist, just because I had been talking to my mom and saying, Hey, I'm not doing well…But hearing it from him was good, and it helped.”

Participants also identified protective effects of talking to social supports about other topics as a source of distraction. As one participant shared, suicidal thoughts for some participants were most prevalent when they were alone: “I'll end up getting distracted by doing something or have to go talk to somebody, and then…I'll stop thinking about it…They come mostly when I'm by myself.” One participant said about talking about his suicidal ideation with his mom: “my mom doesn't know about it, so I might not talk through it specifically, but my mom would probably be a source of distraction.” Another participant reflected that pickup basketball games allow for positive effects of both low-pressure social interaction and exercise:

> I'm not necessarily as social as I used to be. But it's easy to be more social in basketball, because...people ask you to play with them...or be on their team for a pickup game...and then...there's no awkward introducing yourself...So it's been...fun, because...just the exercise has felt good, I feel a little bit better about myself when I leave.

Another participant also benefited from distraction by doing something enjoyable with other people, adding playing video games with friends to their Stabilization Plan.

Shared Experience. Participants identified beneficial experiences receiving support from people who had shared experiences of mental health challenges or suicidality. These social

supports either served as wake-up calls to the reality of suicide or provided understanding and support in the moment.

Two participants talked about experience with people who had engaged in suicidal behavior in the past who provided important perspective on the harm of suicidality. One participant shared a memory of a neighbor who "actually did go and carry out a whole thing and failed." The participant said she compares herself to that neighbor, which reminds her "I'm not as active in those thoughts, in that plan." Another participant considered the result of knowing someone who overdosed on Xanax. She said she told the person who had previously overdosed that she had thought about but never purchased Xanax as a result of their experience.

Two participants reported feeling understood by family because of their shared experience. One participant said of their mom, "I've been keeping close in contact with her, knowing that she's sober, trying to encourage her, and she's been encouraging me, because we actually struggle with a lot of the same things. They just manifest in different ways." Another participant described the benefit of his sister's investment in her mental health: "my little sister…I talked to her a lot about…because…she just started going to therapy…a couple of months ago. So, she's…a little farther along this than I am, but…she's just always been the one person I could say anything to." Based on participant reports, social support from people who had shared experiences of mental health challenges or suicidality appeared to be positive regardless of the social support person's current state of wellbeing. However, some harmful coping strategies exhibited by those social support people seemed to increase participants' distress or made those social supports less reliably available.

Participant-Provided Support. Participant-provided support emerged as a facilitator of social connection. Participants reported providing support to family, romantic partners, and pets.

They also discussed meaningful types of provided support, including supporting shared-identity group members, supporting the mental wellbeing of others, and engaging in advocacy work. One participant described providing companionship support for their girlfriend, “I get out of class and I find her, and I walk her to her car, because she lives off campus, and then I will walk back and get ready for work,” and distress when they aren’t able to provide support, “if she tells me that she's sad, she won't let me help her. And then I get sad because she's sad.” They reflected “I just feel so bad that I can’t help.” Another participant interrupted her therapy session to provide support to her boyfriend: “I'm sorry. I just got a text - my boyfriend just passed out…I'm just going to quickly be asking if he's okay. Oh, he says he's panicking.”

Other participants discussed the impact of being responsible for the care of others. One participant described her relationship with her nieces and nephew, who are a reason for living: “ever since they were little, like newborn, I'd just taken care of them…I've been their babysitter for quite some time, but…when I turned 16, I fully took over taking care of them…So they're the main reason.” Another participant shared a sense of responsibility for her sister, also a reason for living. She said, “right now my family situation is pretty bad, and I just don't want to leave her like that, like…I don't feel okay dying while she's going through the stuff she has to go through.” Other participants identified caring for pets as a reason for living. One participant reported having a fish with him at school and additional pets at home with his parents. Another has a dog at school and reminds himself that his dog’s dependence on him is a reason for living. Another participant discussed supporting her dogs when she is feeling overwhelmed herself: “whenever I feel like really stressed and I don't know what to do, I was like, I'm gonna take the dogs out. … I like to take them out on walks.” For these participants, participant-provided support functioned as a reminder of their reasons for living or a coping strategy during times of distress.

Some participants identified the importance of participant-provided support more systemically, through supporting shared identity groups or engaging in advocacy. One participant identified wanting to stay alive because "suicide is a big problem" in the trans community. Another participant reported getting meaning from being in leadership in an LGBTQ+ organization on campus. Other participants sought meaning from advocacy work. A participant who had been drugged at a party, reported focusing her energy on "really trying to spread the word about the whole thing, like I have been doing, I've been like, posting on social media and like, talking with a lot of people." Another participant identified participating in the CAMPUS study as a way of providing supports, saying that they "might as well" try the CAMPUS study "because I am contributing to something too." A different participant endorsed the importance to them of "having a social impact on the world" generally, leading them to pursue studying architecture.

Social Support Interfering with Suicidal Behavior

Participants recounted multiple ways social supports interfered with suicidal behavior. In some instances, the interference was active, intentional acts, while in others, just the existence of that person or their relationship with the participant provided interference with suicidal behavior. Social supports provided interference with access to means, intent to engage in suicidal behavior, and in some cases interrupting during an attempt to die by suicide. In some situations, the interference was welcome at the time, in others it was not.

Interfering with Access to Means. Discussion of interference of access to means included participant-sought intervention and intervention initiated by the social support person. One participant discussed their suicidality with their roommates and requested their roommates hold onto any potential means if they experienced increased suicidality. They said "I…talked to

my roommates. I was like…if I'm feeling really suicidal…I'm gonna give these to you." They later noted that they followed up and handed over potential means to their roommates: "I don't have access I gave a lot of my stuff to my roommates, my bottle of Advil." While this participant sought out interference from their roommates, two other participants described interference with means by their families that were not solicited by participants. One participant shared "my old bedroom, I could take the screen off and go on top of my roof. I still want to do that. Sometimes my family's just like, I can't." Another participant said of a knife they previously used to injure themself: "it's been the knife I would have used from fifth grade through sophomore year when my parents got rid of it." Participants also frequently suggested turning over potential means to friends, family, roommates, and romantic partners when completing their CAMS Stabilization Plans.

Interfering with Intent to Engage in Suicidal Behavior. Participants also described social supports interfering with suicidal behavior when the participant intended to engage in suicidal behavior. This interference was both active, in which the participant sought out support or the social support interfered. Participants also described more passive interference, when the participant's awareness of the impact of suicidal behavior on their social supports stopped them from engaging in behavior. Participants identified empathy, describing awareness of suicide as "selfish" or burdensome to others, as protective against engaging in suicidal behavior. They said this awareness caused them to feel guilty or pressure to stay alive. One participant shared "the older I am, the more people I know…the more agreements I've made." Some participants endorsed thinking about the impact their death would have on loved ones, including parents, siblings, friends, and romantic partners. One participant said, "I have a younger sister, so sometimes I'll think about her, and that'll stop me." Another expressed confidence that they

would not die by suicide as long as their boyfriend is alive. Another participant reflected on a conversation he had with his friend about the impact his death by suicide would have:

> I would hate to burden someone and…I know who would be the first person to know…one of my best friends…I put him down as my emergency contact and he would know right away…Yesterday, he told me that I'm ever about to kill myself I promise to call him because if he didn't have the chance to try to stop me, he wouldn't be able to live with himself.

The participant shared that he "just couldn't do that" to his friend, and the knowledge of that impact deters him from engaging in suicidal behavior.

Several participants shared others' reliance on them as a deterrent for engaging in suicidal behavior. One participant shared how he reminds himself of his responsibility to his dog:

> I leave his leash out on the balcony…there's been times where, I've come home from…a really shitty shift, and…I've looked over the balcony, and then I've looked at his leash right next to the balcony, and I'll be like, okay, I'm being ridiculous. And…I just go inside.

Another participant identified the importance of protecting her sister from harmful dynamics with their mom as a reason for living and a deterrent of suicidal behavior.

Participants identified that their empathy for others came to mind in moments of suicidal crisis. Multiple participants reported not using certain means because of concern that the people in their life would have to find them. One participant shared their consideration for the impact on their roommate:

> I thought about it for a while, and I'm just like, I should just try it one night…I kind of want to, like, see how it was, to try to hang myself…with my with my belt, but I kind of

felt bad because, like, I didn't want my roommate walking in. Yeah, that's not that's not cool.

The participant said, because of that, he never tried to hang himself. Another participant shared concerns about her roommates having to "deal with" her suicide, causing her considered means to be harder to act on impulsively due to requiring travel. Another participant agreed that they would never consider suicide "in a place where just like one of my roommates or family members would just find me like I would never do that." Some participants were deterred by the potential impact of anyone finding them after death. One participant said, "the times I do try to think of a way to kill myself, it doesn't get very far, because…I don't want to leave something gruesome for someone to clean up…And it's just easier to keep living."

Other participants shared more actively engaging with social supports when they intended suicide. One participant sought interference with suicidal behavior by calling his social supports when in a tall building, because he has considered that as means previously: "if I'm like…right there…in a building…I'd call my mom or a friend…I'm not…standing next to tall buildings a lot, but I'd probably call them because it immediately has to pull my attention." Two other participants reported asking their roommate to drive their car when they're experiencing intent. One shared, "anytime I feel like driving my car into a wall, I'm like [roommate], can you drive me home? Or like [roommate] can you take the car I don't want to drive right now." The other said she had given her keys to her roommate, "so then it would be having to check in with somebody else, and having them, like, see where I'm at, because usually it's pretty clear." Another participant shared that their mom visits them every weekend because she is concerned about the severity of their suicidality.

Interfering with Engaging in Suicidal Behavior. Multiple participants described situations in which social supports interfered, knowingly and unknowingly, while a participant was engaging in suicidal behavior.

Two participants described family members unknowingly interrupted suicidal behavior. One participant said they attempted to die by asphyxiation at home: “my parents were there, but I was alone in my room, so they couldn't see me or anything. It was a good thing that they were there, though.” The participant said they “got to the point of where it became a little bit difficult to breathe, And once I reached that point, I bailed.” The participant said their mom then checked on them: “she didn't know anything was happening, but she would regularly check on me if I was home with her, anyhow…she probably took in more knowing that I had been feeling like that.” The participant did not resume suicidal behavior after their mom checked in. Another participant described their brother interfering when they attempted to die by hanging in their basement:

> My little brother came downstairs and said, “Hey, are you okay? How are you doing? Is everything fine?” And I just, in that moment, just snapped out of I was like, “Oh my gosh, I can't do this.” But if he hadn't, I probably, I think I would have, there's no way to know.

Both participants discussed interference from important people in their life. The first participant’s mother was listed as one of their reasons for living, and the second participant has their brother listed on their CAMS Stabilization Plan as a source of support. One participant recounted helpful interference when they received a call from their therapist’s office: “funnily enough I got a phone call from my therapist’s office. They were asking me to schedule more appointments. I was like, oh shit, that's right…they called me after I taken two sertraline no

three." The participant said they chose to take the phone call and scheduled more therapy sessions.

Other participants described social supports identifying suicidal behavior in participants and interfering. One participant relayed an experience when they were 13 and their mom knocked on the bathroom when they were engaging in suicidal behavior, "I think it was with the knife. Yeah, because she asked me how I cut my neck." Another also described a parent interrupting suicidal behavior:

> I got really, really close to trying to kill myself, and then my dad stopped me…I was just going to overdose. Yeah…He came into my room because he heard me crying, and he, you know, took the pills, and took me to the emergency room.

Two other participants shared similar experiences with romantic partners. One participant credited her girlfriend walking in while she was engaging in self-harm as the reason she did not die by suicide:

> I was having… a really bad depressive episode…And if my girlfriend wasn't there, I would have probably killed myself, just because she came back in, like, into the room and saw myself hurt like self-harming, and she had to, like, calm me down, and I kept, like, screaming…cutting and biting.

Another relayed that her boyfriend found suicide notes she had written: "my boyfriend found it and was like can we burn this? And I was like okay." One participant reported an impactful experience after seeking help from a roommate during suicidal behavior: "I was gonna go drive my car into a ditch, and I took a bunch of Benadryl…I told…my roommate…He was like, No, don't die. Then we sat there and cried and then got ice cream." The success of interference with suicidal behavior was multi-faceted. Some participants described that interference from a loved

one gave the participant insight into a reason for living, or the impact their death would have. Other interferences provided tangible support and potential hope, such as hospitalization or scheduling therapy appointments. Still other social supports helped the participant through the suicidal crisis until the urge passed.

Aspirational Social Support

Social isolation frequently presented as a risk factor for suicidality, but many participants also expressed hopefulness that their social context would change. One participant summed it up: "I don't really impact anyone. I feel like I'm really easy to, like, forget too, but it also might get better." Some participants identified types of social roles they would like to have filled in their life. One participant expressed desire for more friendships: "I'm lonely. So, I guess the one thing that would help me no longer, like, feel suicidal, I guess would just be like, I don't know, maybe like some friends or something like that." Two participants listed romantic relationships as aspirational types of social support. Two participants expressed desire to have a family and kids. One participant identified how a pet could reduce their suicidality: "I wanted one of the emotional support animals… the reason I wanted, was like if I have to take care of an animal…So it would instantly add another reason to live but like." For these participants, the absence of social support in certain roles in their life had a significant impact.

Some participants viewed aspirational social support as ways they would like to be provided support. For two participants, that was increased companionship, with one participant hoping for "more good social situations," and another aspiring to rent an apartment with friends. Other participants expressed wanting validation from others, with one participant expressing wanting demonstrations of care from others: "people would acknowledge me more, or that maybe I would get a lot of the reciprocated, like care. Finally, if this happened." Another

expressed desire for “probably just reassurance from people around me…that I'm not annoying or messing everything up.” Three participants expressed desire for help from others, with their mental or physical health. One participant said help with her mental health meant someone to talk to: “maybe just talk it out with someone, just whoever it is, just like someone, because I tend to just keep it to myself.” Another sought guidance about her mental health: “those really low times where I wish that I had somebody to help me and saying, like, Don't do this. Don't do this for you right now.” One participant identified wanting support in managing her diabetes: “I feel like [girlfriend] lately has been asking me a lot about how to manage my…so maybe explain to her how to help me if my glucose does go really low.” For this participant, her girlfriend has already expressed desire to serve in that social support role.

For one participant, her aspiration for social support was focused on shifting how she viewed herself socially, rather than any changes in quantity or quality of social support. She identified wanting to practice more self-compassion in how she viewed herself socially: “that I will be more self-respectful in the way of like, how I view myself with social roles, how I view myself in comparison to other people.” Participants shared their aspirations for social support, including types of relationships they would like to have, how they would like to receive support, and how they would like to view themselves socially. Notably, several of the aspirational social support did not require a change in quantity or quality of social support at all, as they were focused on a shift in perspective or accepting support that had already been offered.

Goals for Treatment

Several participants identified aspirational social support as a goal for treatment. Participants’ goals for treatment focused on skills development, behavior change, increasing insight, and changing perspective. One participant identified skills deficits that they wanted to

address in therapy. They expressed desire to "learn how to be more realistic about people and how to work with them…improve communication skills" noting a desired outcome to "be able to effectively communicate and engage with others." Two participants expressed desire for behavior change, with one participant identifying opportunities for social connection that he has not been acting on, expressing a goal to "I guess just be more social and come out of my shell more." Another participant expressed behavior change as a goal for therapy focused on increasing vulnerability in relationships: "navigating relationship problems, understanding how to open up a little bit more about my suicidal thoughts without feeling like a burden…take those feelings and put them somewhere else, reapply them to a more positive, interconnected." For one participant, their goal for therapy was to shift their perspective and experience of their social relationships, expressing desire for "learning to stay in the moment, and then probably worrying less about what other people think of me, because I don't have any control over it." Another participant identified how increasing insight into past and current relationships could change how he relates to people in the present: "having a better understanding of what my relationship is with, like family and friends…because sometimes I feel kind of confused about what exactly that is …especially with family history and childhood trauma… given those sorts of things…Yeah, building connections for sure." For the CAMPUS study, goals for treatment were focused on suicidality, so participants identifying aspirational social support as goals for treatment were identifying changes in social support as a key component to their experience of suicidality.

Facilitators to Social Connection

In interim sessions, facilitators to social connection were explored through interventions intended to improve emotion regulation, decrease avoidance, clarify relationship values, and increase self-compassion. Interim sessions also explored avenues for increased access to social

connection, including therapeutic group spaces, seeking connection with people with shared experiences, and increasing participant-provided support. Because CAMS allows for flexible interventions within the CAMS framework, only limited participant reports on their experience of each intervention are available, as interventions were introduced based on the clinical judgement of study therapists.

Emotional Vulnerability and Regulation

Multiple participants reported limited emotional vulnerability with social supports contributing to feelings of disconnection and isolation. Some participants cited distrust in their emotion regulation skills as a barrier to emotional vulnerability. Interim CAMS sessions with multiple participants both explored emotion regulation skills and reality-tested risks of practicing emotional vulnerability. One participant identified the importance of improving emotion regulation skills in building social connection. He shared a goal of "having more of that moderation of emotions, where I'm able to feel all of them…but…keep them manageable." He expressed aspiration that increased emotion regulation will increase social connection, sharing, "for the longest time I was very cut off emotionally and just didn't really express much of anything. But now I feel like being more open with people when I care about them and same with feeling loved." Another participant shared the goal of increased emotional vulnerability: "I want to be more okay about sharing…I feel like I'm very open and I don't really have a problem sharing stuff. But sometimes…I'll be like…not that big of a deal, even though it's like, the biggest deal ever." The participant also shared that sharing more meant "not feeling weird about crying." Another participant discussed the consequences of not being emotionally vulnerable in his friendships, sharing about his best friend "we're not anywhere near as close as we used to be." Now, he said, when he thinks about being emotionally vulnerable with his best friend, he

would “feel bad doing it because we're not as close. It feels more like a burden. I feel more like, like a random person.” Difficulty with emotional vulnerability came up in several contexts, including self-hate. One participant described how his self-hate was linked to his body image and experience of his weight in high school. He noted that he felt comfortable sharing that experience *because* the emotional vulnerability was not current: “I guess I've never had a problem telling people I was fat in high school because I'm thinner now, so it's almost like something to be proud of.”

Emotion regulation came up for multiple participants as an important counterbalance to emotional vulnerability. When participants were not able to regulate their own emotions, their dysregulation appeared to act as a barrier to social connection in moments of emotional vulnerability. One participant relayed multiple examples when reactionary and emotionally dysregulated behavior caused social disconnection in important relationships. He reflected on one of those moments when he quit the sports team he was on in a moment of dysregulation: “this wasn't my proudest moment…kind of what was that buildup of anger, and…then senior night was the big blow up.” He talked about the impact of that and other dysregulated behaviors on his relationships and then his mental health: “so I wasn't doing super hot mentally. Then that's kind of what kicked off the poor feelings and…the awkwardness of my friends and the fighting with the girlfriend all the time. That's sort of when, I started feeling suicidal.” The participant reflected that emotional vulnerability before reaching the point of dysregulation could have provided an opportunity for social support and connection “I wish I went about it differently, because I was close enough to…the coach to sit down and be like…what's the problem?” This participant reflected that his distrust of his emotion regulation causes him to distrust himself in relationships, voicing concern that he will “blow up” or “be super awful in relationships.” He

also identified emotion regulation tools, like walking away and giving himself time to regulate fosters social connection: “I would walk away and say like we'll talk about this in a couple hours…that's kind of really all that's worked efficiently…I just kind of got to walk away and cool off first.” Other participants reported empathy for others made them feel like their emotion dysregulation was burdensome, which caused social disconnection. One participant expressed concern about relying solely on his boyfriend when he is in crisis. He said, “I feel like, if I always, when I get like that, I only rely on my boyfriend, that's not a sustainable relationship dynamic.” Another participant talked about not telling her partner about engaging in self-harm, because she did not want her partner to feel responsible.

Exposure

Multiple participants engaged in some exposure by increasing outreach for social connection or increasing emotional vulnerability in their social relationships. One participant explicitly practiced exposure therapy to increase social connectedness, using greeting classmates in class as a between-session practice. The participant observed decreased rumination and increased ability to challenge cognitive distortions as his exposure practice progressed. He also endorsed increased perceived self-efficacy which allowed him to engage with a classmate he didn’t know as well, which he described as a “bigger barrier in my mind.” He described positive reinforcement from feeling accomplished and feeling like he knows his classmates better. After several sessions, his therapist inquired if his decreased report of hopelessness was related to increased social connection, he said “I think that could be…part of it, yeah, just more direction.” Despite this participant reporting positive outcomes from the interactions with his peers, positive peer responses were not necessary for the participant to decreased social isolation. He expressed importance of being able to feel comfortable “initiating interactions” with new social supports

and communicating his wants and needs assertively, allowing him to trust his ability to connect socially when he wants to. The importance of this was tested in one of his exposure activities, when he greeted a classmate and they did not respond. Despite not receiving positive reinforcement from their response, he noted "I greeted them, but they did not respond to me. They did look at me when I said it…maybe not as rewarding. But like, well, I did that."

Values Clarification

Multiple participants engaged in values clarification work through their course of therapy. One participant, who identified feeling "alienated from others" and "disconnected" as two main drivers for suicide and resultingly a primary focus of treatment, identified solitude as one of his most important values. The participant explained that living a life aligned with valuing his solitude does not detract from his socializing. "Earlier in this year…it was either like, I felt really shitty alone, or I was with friends a lot, and there wasn't much balance, really, of being able to have that solitude." He also identified relational values, including helpfulness, and individual values, including genuineness and self-acceptance, and reflected how living aligned with these values could facilitate social connection:

> Genuineness, just to be true to myself…acceptance, to be accepted as I am and…accept myself as what I am. Because sometimes I think I get too worked up with…what I think other people want with me. I kind of mix what their values are with mine, maybe. So, I think this is more about kind of keeping mine aligned, keeping what's important to me… I feel like I…learned a lot about what was important to me from doing this activity.

Not only did values clarification help this participant identify facilitators to meaningful social connection for him, but he also reflected on what types of social support matter to him: "it wasn't important for a long time, but I feel like now it's become more important for me, which is like

friendship with more close and supportive friends." Another participant reflected on how social connections impacted her relationship with her values, both noticing how conversations with her boyfriend helped remind her to navigate challenges through the lens of her values and through shifting from letting her decisions be guided by other people's values to letting them be guided by her own: "just kind of challenging other people's opinions too. Yeah, it's kind of like, okay, I understand you, but that's not necessarily what works for me." Another participant reflected on the consequences of relationships that did not encourage values-alignment: "I've sacrificed a lot of things in every relationship I've ever been in…I don't really know how to not…and that's something I feel like I should learn before I jump into something…just like not following my values…you know." Participants identified how social supports could encourage or discourage values-alignment, as well as how awareness of participants' values could help guide them towards meaningful social connection.

Self-Compassion

Self-hate was commonly reported by participants as a precipitating factor for both social isolation and suicidality. Multiple participants explored increasing self-compassion as a response to self-hate. One participant reflected on how compassion for his partner has made him more open to self-compassion, but self-compassion feeling accurate is still challenging for him. "I should be self-compassionate, but in my head, I can come up with a bunch of reasons why I shouldn't feel compassionate about myself. And I know…that self is not actually accurate, but I don't feel it." Other participants echoed that moving from self-hate to self-compassion was a challenging process. Another participant reflected on how negative social support experiences increased her self-hate and decreased self-compassion. Through work in therapy, she reported

moving away from self-hate language to practicing more acceptance and commitment as a way to increase self-compassion:

> I feel like I've just been hating on myself less…if I've been acting incorrectly towards one of my friends…Like, what have I been doing that's making her feel that way? And then I've not been feeling sorry, but being like, okay, how can we move on? How can we, like, move forward from that? And then, like, I've been trying to feel make myself feel better about that.

Another participant reflected on how social connection was a facilitator for self-compassion, noticing that commiserating with a friend after a hard exam allowed him to feel self-compassion, when previously he would have felt self-criticism: "my friend and I talked about…the exam after, and it was validating… we're like, it's okay to be upset about it…a few months ago…I probably would have…been more critical specifically.." Another participant reflected on how his experience in therapy changed how he talked to himself: "from talking in here and stuff, I know that when I get in…that funk of extra self-hatred, I could be almost mean to myself and that can…make it worse…But then …this week…I didn't call myself names...like I normally would." Through exploration with his therapist, he posited how he could talk to himself with more self-compassion and affirmation, not just reduced self-hate: "I guess, just reminding myself of the stuff I am…doing good…I pay for my entire life myself…I'm able to be responsible and take care of a dog, which is, like, a cool thing too." Self-compassion was most frequently brought up by therapists in interim CAMS sessions, not participants. Participants reported using practices like acceptance and self-affirmation to combat self-hate but might need additional support to integrate self-compassion into their lives.

Avenues for Increased Access

In addition to improving social connection through intervention aimed at improving social skills and decreasing individual-level barriers to connection, participant-therapist dyads explored opportunities to increase access to opportunities for social connection. For some participants, this meant shifting focus to supports already available to them. For others, participants and therapists identified opportunities to gain new community that may have therapeutic benefit.

Focus on Available Supports. Multiple participants explored the impact of seeking support from unavailable social supports in their life. One participant discussed how living away from the social support of his family during his last year of high school was a risk factor for suicidality when he experienced rupture in the support he was receiving from his romantic relationship:

> I had a girlfriend...But we were constantly fighting, and this was a day where it was really bad, and we even broke up, and then I went home, and that's when I sat there with the pills...I missed my family. I felt...like this was a time where I needed to...cry to my mom and she wasn't living here…I just felt…lost and didn't have anybody to reach out to at the time.

This participant acknowledged that he had other available supports, noting he "loved" his friend's mom, who he was living with, but focusing on the unavailable social support of his mom caused him to feel isolated. Another participant talked about how when his closest friend was unavailable he experienced an increase in suicidality, which decreased when the friend was more available again. He reported the friend's own depressive symptoms impacted their ability to be reliably available, but after spending the past two days together, "I did have some suicidal thoughts and whatnot, but very recently, everything has been very much on the upswing. The

past like two-ish to three-ish days." He reflected on the impact of his time with his friend on his mental health: "we spent the past two days together…It was just a very good time…They're very nice, affirming…and that's just been really great for me." One participant reflected on the positive impact of letting go of an unavailable social support on their mental health:

> It's funny now that I don't hang out with [recent ex]…I like, rarely think about [previous ex], and I don't worry about him…it was, like, one of the hardest moments of my life, like when we broke up, and the months after that... but I feel like I'm finally…almost at the end of the tunnel, I can see a little bit ahead of me. It's not just dark and cold, which is nice and it gives me hope.

Participants who identified focusing on unavailable social supports reported social isolation, despite availability of other social supports in their life. Being able to shift attention to available social supports appeared to have a positive impact.

Group Therapy. Participants identified support and therapy groups as access points for community, support from people with shared experiences, and an acceptable place for emotional vulnerability. One participant mulled over the possibility of engaging in a peer support group for people struggling with substance misuse:

> I think it would be cool. I think it would be beneficial to…hear about…people that have dealt with the same thing, especially…because…the idea of me being 19 and abusing the alcohol as much as I did, that seems unheard of. So, I guess if there are other people my age…it would be good…to just hear those stories too.

Other participants expressed interest in attending a therapy group with peers with shared identities. One participant said she wanted to explore group therapy after seeing a flyer for it:

> There's other people that are dealing with the same thing that I am… we all kind of feel isolated, even though we know that there's other people out there, but it's like not being able to see them…so it kind of feels like, Oh, I'm the only person dealing with even though it's not the case.

Notably, none of the participants who expressed interest in attending support or therapy groups reported attending a group during therapy, which indicates potential barriers to engagement, despite interest, in groups. One participant shared after reporting relief from discovering he was re-randomized to CAMS instead of DBT, which has a group component: "being in a group…it was a little intimidating, I suppose, I don't know what to expect from that."

Participant-Provided Support. Mentioned also in initial CAMS sessions, multiple participants identified participant-provided support to friends, partners, and family as a protective factor for suicidality. Additionally, one participant explored the impact of formalized participant-provided support when they started working at a crisis hotline while participating in the CAMPUS study. They identified that being able to support someone else felt impactful:

> It feels really good to be able to at least talk to somebody, and maybe I only help them for that hour we talk, but it's like…you see a difference in how…they respond to you after a while, and well, actually, maybe this person's life a little bit better right now.

The participant reflected on the balance of it being challenging to not be able to fix another person's distress and the positive experience of feeling helpful. They identified possible risk engaging with other people in crisis while they were experiencing their own suicidality, noting that their psychiatrist discouraged them from beginning work at the crisis hotline. However, they also identified significant benefit to seeing their experience mirrored in the people seeking support:

> I talk to these people and they're saying all the same stuff that I felt. And then I'm able to offer them some sort of peace, and it gives me peace too. And it's like, I don't know, it's so easy to tell other people that they're important and you know that they deserve relief. It's another thing to say to yourself, but it's almost like I'm talking to myself. When I talk to these people, it's really nice.

They go on to reflect on how they're able to receive their own tangible support through their provision of support to others:

> It's just like they say the exact same stuff that I've said to myself for years, and then I'm…able to offer them some kind of relief…or at least point them in the direction so they can find their own relief on their own. And then it just reminds me of all the stuff that I can do to find relief and…these little like blips in my mood where I feel awful or whatever…they're just like little crises it's not my life. It's not all the time.

The participant identified multiple facilitators to this experience being a positive one for them. They underwent training, were provided clear boundaries on how and what support they could offer, and had an available supervisor to provide guidance during and after hotline shifts. The participant also noted that providing hotline support via text was helpful because it allowed a slower pacing of conversation and allowed the participant to think about and compose their response.

CHAPTER IV

DISCUSSION

The epidemic of loneliness due to social isolation in the United States is disproportionately impacting college-age adults (Cigna, 2020; Murthy, 2023). In addition to higher rates of loneliness, college-age adults are also reporting poorer mental health and higher rates of suicidal ideation than any other age group (Akkas, 2023; CDC, 2024). Despite the prevalence of loneliness in the college-age population, additional contextual risk factors, and significant endorsement of mental illness and suicidality, the impact of social isolation on this population is under-studied (Gardiner et al., 2018; Nicholson, 2012; Poscia et al., 2018; Qualter et al., 2025; Ronzi et al., 2018; Shvedko et al., 2018). This study synthesizes existing literature on mental health and suicidality of college-age adults and existing literature on the adverse effects of social isolation through lived-experience perspectives, adding depth and nuance to our understanding of the intersection of social isolation and suicidality for this population.

The present study used qualitative data from the CAMPUS study, a SMART study examining the effectiveness of hybrid delivery of adaptive treatment strategies with moderately-to-severely suicidal college students in emerging adulthood (ages 18-25). Qualitative data included transcriptions of therapy sessions for participants at one university counseling center site who were randomized to the Collaborative Assessment and Management of Suicidality (CAMS) treatment conditions and supplemental CAMS SSF-5 forms and other worksheets, as available. Sessions from 32 participants were analyzed, including all available initial CAMS sessions (n=31) and selected interim and dispositions CAMS sessions (n=31) from a subsample of participants (n=10) identified collaboratively by both coders in the research team using purposeful sampling to diversify participant demographics and intervention type.

Social isolation is a threat to survival for humans, and even brief experiences of poverty of social connection are associated with a host of adverse consequences, including increased risk of mental illness and suicidality (Cacioppo et al., 2011; Quadt et al., 2020; Smith et al., 2021). Participant reflections echoed and expounded on findings in previous literature. Consistent with existing literature, the present study found social isolation to be pervasive and substantially negatively impactful for the studied population of college students. Participants endorsed severe adverse mental health consequences, including suicidality, after even brief periods of separation from sources of social support, such as the one participant who reported suicidality within a day of returning from a visit home to their family. Consistent with Cacioppo and colleagues' (2011) definition of social isolation, participants described social isolation with both objective (e.g., number and frequency of social contacts) and subjective (e.g., the participant's social satisfaction) measures. Social isolation can be due to perceived or actual lack of access to sufficient quality or quantity of social support (Hawkley et al., 2008; Smith et al., 2021). Participants identified absence of types of relationships (e.g., lack of romantic partner), external experiences of isolation (e.g., social rejection), and internal experiences of isolation (e.g., lack of sense of belonging) as contributors to overall experiences of social isolation and loneliness, as outlined by Zavaleta and colleagues (2017). As posited by the Cacioppo Evolutionary Theory of Loneliness (2018), some participants expressed that feelings of loneliness motivated seeking social connection, while for others it appeared to function as a barrier, contributing to social distrust and avoidance.

Participants identified experiences of social isolation and loneliness generally, attributed to both insufficient quantity and insufficient quality of social connection. With respect to insufficient quantity, participants reported loneliness due to the absence of people in certain roles

in their life (e.g., a romantic partner, friends). They also cited a lack of community belonging as a contributor to social isolation due to difficulty establishing community in the college environment, a lack of access to shared-identity community, a lack of feeling like they belong in their existing community, or a rejection from their community. Participants also described decreased or lack of access or time with support people due to geographic distance (e.g., moving away for college), the ending of a relationship, or death of a previous support person. These reports added new insights into developmental-stage-specific experiences of social isolation. For example, participants reported disruptive shifts in proximity to entire social support networks that are common at college age but otherwise unusual. Additionally, developmental stage impacted participants' experience of relationship loss, as multiple participants reported limited or first-time experiences navigating relationship dissolution and death. Participants also endorsed experiences of social isolation and loneliness due to insufficient quality of social connection, that is, dissatisfaction in their existing relationships. Some participants reported feeling misunderstood by or unimportant to the social supports in their life. Others shared experiencing superficiality and lack of closeness in social relationships contributed to feelings of isolation. Distrust in relationships, specifically distrust that social supports would be reliably available or capable of providing support, also contributed to experiences of social isolation. Though not explicitly explored by participants, the frequency of reports of superficiality of relationships and distrust of relationships as reliable sources of support raises new questions about the impact of the recent pandemic or the uptick in social media use on social support quality for individuals in this developmental stage

As the literature suggests, perception of social isolation mattered too (Cacioppo et al., 2011). Participants identified feelings of loneliness due to social comparison, and the perception

that peers were more socially connected. This finding expands on previous research findings that adolescents are hypervigilant to social threat and thus more likely to appraise their social dynamics as negative (Goossens, 2018). Focusing on an unavailable party as a desired source of support also contributed to feelings of loneliness, regardless of availability of other social support relationships. This illuminates another potential indicator of hypervigilance to social threat, as participants demonstrated difficulty overcoming relationships in which they experienced social rejection (Goossens, 2018). As research has found, college-age adults today are particularly vulnerable to loneliness due to a confluence of contextual factors including the rise of social media usage, the COVID-19 pandemic, and the shift to increased remote work during a crucial social developmental stage of their life (Becker, 2021; Cauberghe et al., 2021; Goossens, 2018; Hamza et al., 2021; Laursen & Hartl, 2013; Smith et al., 2021). Participants connected loneliness to their developmental stage: some participants reported decreased reliance on parents as primary social supports compared to friends and partners. Participants also endorsed first-time experiences of separation from family and childhood friends due to moving away to attend college. Surprisingly, few participants mentioned social media, the COVID-19 pandemic, or remote work as contributing to their loneliness or suicidality.

Consistent with and expanding on Joiner's Interpersonal Theory of Suicide (IPTS), the interconnection between social isolation and suicidality was pervasive in participant CAMS sessions (Van Orden et al., 2010). Participants explicitly connected social isolation to experiences of suicidality. Participants were directly asked about the core assessment constructs behind suicidal thoughts (e.g., psychological pain, stress, agitation, hopelessness, self-hate). Participants connected all these constructs to social isolation. Participants related experiences of psychological pain to loneliness, a lack of social support, grief and loss, and relational harm.

Stress resulted from social isolation generally, social uncertainty, perceived social deficits, and responsibility to and concern for others. Participants described agitation due to perceived social deficits, social comparison, and pressure to act in specific social situations. Hopelessness was related to participants' aspirational and current social connections, including hopelessness about improved social performance or feeling misunderstood socially. Participants identified self-hate due to perceiving themselves as socially aversive. Self-hate also contributed to participants' receptiveness to the protective effects of social connection. These findings add new depth to our understanding of the CAMS core assessment constructs behind suicidal thoughts, by adding insight into how social isolation impacts each construct.

Social isolation was also a frequent theme when participants listed reasons for dying, providing a new, nuanced understanding of participants' appraisal of social isolation as a risk factor for suicide. They described feelings of loneliness, hopelessness about social connection, and loss or anticipated loss of specific social supports. Other participants cited their perceived negative impact on other people or feeling like they simply do not matter enough to others as a reason for dying. Others described suicidality as a tool to seek social connection from others and communicate the magnitude of participants' suffering. Some participants explicitly identified social isolation as a precipitating factor for suicidal behavior. Participants identified relational harm through conflict and relationship ruptures, such as breakups, as precipitating factors for engaging in suicidal behavior.

Conversely, participants frequently identified social connection as a protective factor against suicidality. Participants listed family members, partners, and friends as reasons for living, citing love for them and protectiveness of them. Some participants acknowledged the negative impact of suicide on others generally as a reason for living. Participants also identified social

support as an important source of mental health support. Notably, participants identified those with shared experience related to mental health or suicidality and being able to provide support to others as significant protective factors. Participants also described social supports interfering with suicidal behavior. Social support individuals interfered with access to means, impacted intent to engage in suicidal behavior, and even interfered, both knowingly and unknowingly, with suicidal behavior. These findings offer new insight into opportunities for intervention and bolstering protective factors against suicidal behavior.

Aspirational social support functioned as a source of hope and was frequently centered in treatment goals of participants. Participants described the kinds of social support roles they would like in their lives, such as friends, romantic partners, and pets. Some participants identified ways they would like to be provided social support. Others identified ways they would like to see themselves differently in their social relationships. Participants' goals related to social connection were focused on skills development, behavior change, increasing insight, and changing their perspective on themselves and their relationships. Aspirational social support, particularly in the context of treatment goals, illuminated participant perspectives on how improvements to social connection might reduce suicidality for them.

Joiner's Interpersonal Theory of Suicide (IPTS) posits a direct and influential connection between social isolation and suicidality (Van Orden et al., 2010). IPTS appraises risk of death by suicide by measuring desire to die combined with acquired capability to do so (Van Orden et al., 2010). Desire to die, according to Joiner, is heavily grounded in social context through thwarted belongingness, which is the belief that the person is alone due to loneliness and the absence of caring relationships, and perceived burdensomeness, which comprises perceived liability and self-hate (Van Orden et al., 2010). Participant reports also identified thwarted belongingness and

perceived burdensomeness as relevant factors impacting suicidality. Their reflections on these themes deepen understanding of Joiner's Interpersonal Theory of Suicide, opportunities for intervention, and increased nuance around when perceived burdensomeness can be protective.

Thwarted Belongingness and Barriers to Building Social Connection

Thwarted belongingness results from the experience of isolation and disconnection, regardless of quantifiable sources of social support (Van Orden et al., 2010). In many cases, participants reported thwarted belongingness because of lack of sufficient quantity of social support. However, participants repeatedly identified thwarted belongingness *despite* sufficient quantity of social support when they were focused on unavailable sources of support or experienced an absence of genuine closeness in existing support relationships. These themes highlight opportunity for intervention, as they serve as barriers to participants receiving protective benefits of social support.

Participants focused on receiving support from an unavailable party when grieving the loss of a support relationship due to death, relationship rupture, distance, unrequited desire, or a negative support relationship. These participants endorsed focusing on relationships that were either completely unavailable to them, or not available to meet their needs (e.g., the person was only available virtually or limited hours due to distance, or interaction with the person was hurtful due to a negative relationship). Participants who endorsed focusing on unavailable support described distress from longing for the relationship exacerbated feelings of loneliness and disconnection. These unavailable relationships often also provided distraction from building new relationships or benefiting from other existing support. In interim CAMS sessions, participants processed grief and practiced acceptance related to unavailable social support. For participants with negative support relationships or unrequited desire, letting go of the

relationship sometimes meant terminating contact or creating distance in the relationship. These practices allowed participants to be more receptive to support elsewhere.

Participants also reported feelings of loneliness and disconnection despite sufficient quantity of social support due to absence of genuine closeness in relationships. Some participants described artificial closeness at the expense of genuineness. For example, one participant's location-sharing with friends made her feel unable to pursue other support relationships without causing conflict and jealousy. Another participant shared questioning genuineness in her friends' care about her due to identity differences, noticing that they are less inclusive of her girlfriend than other friends' boyfriends. Multiple participants described exchanging apologies with social supports at the expense of genuine conflict resolution. Through therapy, some of these participants identified lack of genuineness as a sign of focusing on unavailable support, and chose to pursue other, more fulfilling relationships. Others focused on improving genuineness in relationships through boundary-setting and assertive communication.

Participants also identified a lack of genuine closeness in relationships due to a lack of emotional vulnerability. Participants described distrust of their ability to regulate their emotions and distrust of others' willingness to receive their emotions. As a result, several participants identified prioritizing efforts to be low maintenance and not burdensome, resulting in relationships that lacked emotional closeness. One participant described attempts to suppress his emotions led to explosive or dismissive behavior, causing others to withdraw. Another participant identified that creating space for his boyfriend to be more emotionally vulnerable helped the participant trust his own emotional vulnerability too. Exposure exercises to test assumptions about emotional vulnerability and emotion regulation skill-building helped participants increase emotional closeness in relationships.

Perceived Burdensomeness and the Impact of Empathy

Perceived burdensomeness is often a risk factor present in conceptualizations of suicidal risk, including IPTS. According to Joiner and colleagues' Eusocial Theory of Suicide (2016), which expands on the IPTS, suicidality may come from a prosocial and adaptive desire to self-sacrifice in protection of others that is a profound misappraisal of burdensomeness on kin. In this conceptualization, the intentions of suicide are deeply altruistic. This study similarly found participants frequently listed perceived burdensomeness as a factor in their reasons for dying, sharing that their mental health, personality, or what they need from others compared to what they are able to provide made them a burden. Participants shared beliefs that specific people or even the general population would be better off without them. These reasons for dying were built off empathy but distorted by factors including self-hate. Self-hate acted as not only a risk factor of suicide, but it was also a barrier to the benefits of intervention and positive social support. For some participants, self-hate appeared to inhibit the positive effects of increased social connection, because increased social connection also led to increased dissonance between their sense of self and how they were treated by others. This provided an additional barrier to accurate empathy for others' experience of their life and death. The intersection of perceived burdensomeness and empathy also provided insight into possible intervention for perceived burdensomeness and when perceived burdensomeness might actually function as a protective factor. In this study, when that misappraisal of empathy was absent and participants were able to empathize accurately with loved ones, they identified that their death by suicide, not their life, would be most burdensome. Some participants were able to reflect on the harm that their death would cause family, friends, and partners, and identified this harm as a reason for living. Others identified how traumatic witnessing suicide could be to loved ones or first responders. Some of

these participants identified this as a reason for living, others identified it as a barrier to means (e.g., they would have to find a way to die that would ensure a loved one did not come across them after they were deceased).

Implications for Practice and Future Research

Participant confirmation of the benefits of social connection outlined in existing literature combined with new findings, provide helpful perspectives for University Counseling Centers seeking to increase social connectedness of students experiencing suicidal ideation. The findings point to important clinical considerations when working with individuals presenting with different concerns related to suicidality as well as possible opportunities for intervention. Some considerations include clinical focus on building accurate empathy to enable perceived burdensomeness to function as a protective factor against suicidal risk, increasing opportunities for exposure to emotional vulnerability and genuine social connection, and increasing self-compassion. Process group therapy provides a small-group experiential intervention setting in which participants can explore their emotions, interpersonal dynamics, and social patterns in a safe and facilitated interpersonal environment that encourages peer feedback (Cohen & Epstein, 1981). These groups offer a unique blend of a peer group environment, encouragement of emotional vulnerability, and feedback from peers that has been found to positively impact empathy development and self-compassion (Cohen & Epstein, 1981; Jannazzo, 2009). Process groups' ability to facilitate introspection into interpersonal dynamics and social patterns could also facilitate increased insight into social support relationships that are causing relational harm or serve as insufficient sources of support, which can increase experiences of loneliness. Furthermore, process group therapy could provide participants with an opportunity to experience

participant-provided support, which was found to be beneficial to participants through mirror perspective-taking and increasing their reasons for living.

Some participants had access to quantity and quality social connection, but their focus on unavailable social support inhibited their ability to receive social connection elsewhere. Research indicates that romantic distress and relationship rupture significantly increase vulnerability so suicidality, however suicide prevention interventions rarely center relationship distress in interventions (Nawreen, 2026). Interventions that improve relationship and emotion regulation skills, attend to attachment, and support processing relationship loss could support students in increasing social connection in available social support relationships and facilitate moving on from unavailable social support relationships, allowing increased receptivity to more fulfilling connections (Nawreen, 2026).

This study adds nuance to the growing body of research seeking to increase insight into the intersection of social isolation and suicidality as it impacts college-age adults by highlighting lived-experience perspectives. It also challenged some previous findings related to perceived burdensomeness functioning exclusively as a risk factor. Additional research into the nuanced relationship of perceived burdensomeness and empathy could further elucidate these discrepancies. Additionally, due to the small sample size and time-limited nature of intervention sessions, this research could be further bolstered by inquiry into the effectiveness of identified interventions both in a larger sample and longitudinally. This study also found almost no mention of contextual factors such as the COVID-19 pandemic, social media use, and a shift to more remote, virtual educational and work formats as they impacted social isolation and suicidality in this population. However, prior research indicates these factors contribute to social isolation in this population (Cauberghe et al., 2021; Miyake et al., 2021; Smith et al., 2021).

Therefore, the lack of mention could be due to the absence of explicit prompting or the pervasiveness of these experiences leading to diminished awareness. More focused inquiry into these factors is warranted.

Study Limitations

While this study provides new insights, there are some limitations that should be noted. One issue is related to how the data were collected and what information was available for analysis. First, student participants were not asked explicitly about social isolation and loneliness. While this allowed for spontaneous utterance and thus insight into the importance of these experiences for student participants, it also means we may not have gotten the depth of participants' perspectives as we would have if we had asked directly. Secondly, data created as part of the CAMPUS study (i.e., Therapist's clinical notes, additional intervention materials, CAMS Therapeutic Worksheet, the Mental Time Travel for Self-Hatred worksheet) were not collected for analysis and could have provided additional rich qualitative information for this study. Additionally, because of the time-limited nature of intervention stages, and because participants were sometimes randomized to an intervention other than CAMS for their second stage of treatment, information about effectiveness of interventions was limited.

Another major limitation of the study is related to qualitative research and its reliance on the validity of reporting and interpretation (Maxwell, 2013). There is a risk that participant responses were influenced by social desirability which may have impacted the accuracy of their reporting (Maxwell, 2013). However, one of the benefits of gathering student participant perspectives through therapy sessions instead of interviews conducted by researchers was that there was an opportunity for more rapport development between the student participant and

counselor participant. This might have yielded an increased comfort with disclosure, although not necessarily.

Transcripts not only had participant reports, but they also contained therapist reflections and appraisals of participants' statements. While in some cases this may have enhanced understanding, therapist perspectives also hold biases, and the presence of these perspectives may have biased coder interpretation of participant statements (Maxwell, 2013). Having an outside second coder, providing the second coder with only student participant reports, comparing session recordings to CAMS worksheets, and/or coding counselor participant comments were used to decrease the risk of interpretation bias through such triangulation -- a strategy of increasing internal validity by relying on multiple methods, data sources, researchers, or theoretical foundations (Maxwell, 2013; Merriam, 2009).

Finally, external validity was limited, given that this subsample was recruited from one university (Merriam, 2009). However, one of the aims of this study was to provide insight into the experiences of students at one university to adapt and target interventions and resources to better suit their needs. As such, limited external validity was compatible with the rationale of the study. While findings may not be generalizable to other universities, they may provide a foundation for hypotheses to guide future research.

Conclusion

The current generation of college students are facing unprecedented rates of social isolation and mental health concerns, including suicidality, and these rates are continuing to rise. They are reporting loneliness at rates higher than any other age group, with most of the young adult population in the US reporting feeling alone and misunderstood nearly all of the time (Cigna, 2020). Humans rely on social networks for survival and thus are evolutionarily designed

to need social connection on a biological level. Social isolation puts people at staggeringly increased risk of mortality, at rates comparable to obesity, sedentary lifestyle, and smoking. One of these threats to survival is suicide. Thwarted belonging, or the absence of mutually caring relationships, is a core precipitant of suicidal ideation to suicidal behavior.

College age adults have an additional developmental vulnerability to social isolation. College age – late adolescence and early adulthood – is a time of individuation and identity exploration. This developmental stage also marks a shift in support system, from family-focused social support to peer-focused social support. If an individual is attending college, this creates an additional social environment shift. Not only are college-age adults vulnerable to social isolation due to this shift of social need, but research also indicates that adolescents are already hypervigilant to social threat, and more likely to interpret ambiguous social cues as rejection. Adolescents are also more likely to respond to loneliness with social avoidance instead of social connection-seeking.

Developmental stage has a clear and significant impact on individual experiences of social isolation. However, prior research has mostly focused on older adults. This study sought to elucidate the connection between social isolation and suicidality in college students, with the hope of providing insight into barriers and facilitators of social connection. Such information can then be used to leverage resources and develop interventions to decrease this threat to student safety and wellbeing. Findings highlight the importance of increased opportunity for genuine, vulnerable social connections for this generation's college students. Increasing therapeutic, experiential access to social connection through interpersonal process groups and treating relationship distress and rupture as a significant risk factor for suicide worthy of intervention

focus could significantly improve effectiveness of therapy in supporting social connectedness of college-age adults.

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