

Spring 5-4-2021

Facing A New Normal: Uncovering the Psychological Effects of Loneliness on Student Mental Health

Courtney Thoreson
jg3157iq@go.minnstate.edu

Follow this and additional works at: <https://openriver.winona.edu/counseloreducationcapstones>



Part of the [Adult and Continuing Education Commons](#), [Counselor Education Commons](#), and the [Higher Education Commons](#)

Recommended Citation

Thoreson, Courtney, "Facing A New Normal: Uncovering the Psychological Effects of Loneliness on Student Mental Health" (2021). *Counselor Education Capstones*. 147.
<https://openriver.winona.edu/counseloreducationcapstones/147>

This Capstone Paper is brought to you for free and open access by the Counselor Education - Graduate Studies at OpenRiver. It has been accepted for inclusion in Counselor Education Capstones by an authorized administrator of OpenRiver. For more information, please contact klarson@winona.edu.

**Facing A New Normal: Uncovering the Psychological Effects of
Loneliness on Student Mental Health**

Courtney Thoreson

A Capstone Project submitted in partial fulfillment of the requirements for the
Master of Science Degree in Counselor Education at

Winona State University

Spring 2021

Winona State University
College of Education
Counselor Education Department

CERTIFICATE OF APPROVAL

CAPSTONE PROJECT

Facing A New Normal: Uncovering the Psychological Effects of
Loneliness on Student Mental Health

This is to certify that the Capstone Project of

Courtney Thoreson

Has been approved by the faculty advisor and the CE 695 – Capstone Project

Course Instructor in partial fulfillment of the requirements for the

Master of Science Degree in

Counselor Education

Capstone Project Supervisor: Anquetta V. Calhoun, Ph.D.

Anquetta V. Calhoun

Signature

Approval Date: 30 April 2021

Abstract

In anticipation of the burden loneliness will have in combination with distressing psychological and emotional burdens carried over from the COVID-19 prevention strategies (i.e., social distancing, quarantine measures, and lockdowns) colleges and universities are facing a broad spectrum of challenges as they shift to adapt to a new normal. Besides the physical health impact of COVID-19, this global pandemic has unleashed a psychological toll on society that has yet to be fully realized for its potential long-lasting effects. As campuses navigate the broader impacts of COVID-19, understanding the psychological effects of loneliness will be a primary focus in understanding its exacerbating effect on student mental health as the connection between loneliness and mental health outcomes are especially relevant among college students, a high-risk population for developing mental health conditions.

Table of Contents

Introduction	5
Historical Foundations	6
Predictive Factor for Loneliness	7
Impact of Loneliness on University Students	9
Mental Health and Loneliness	11
COVID-19: Effect on Mental Health & Loneliness	11
Effects of COVID-19 on Mental Health	13
Effects of COVID-19 on Loneliness	14
Risk Factors and Predictors for Loneliness	17
Interventions for Loneliness	19
Discussion.....	22
References	24

Facing A New Normal: Uncovering the Psychological Effects of Loneliness on Student Mental Health

Colleges and universities are facing a broad spectrum of challenges as they shift to adapt to a new normal. Besides the physical health impact of COVID-19, this global pandemic has unleashed a psychological toll on society that has yet to be fully realized. As campuses navigate the broader impacts of COVID-19, understanding the psychological effects of loneliness will be a primary focus in understanding its exacerbating effect on student mental health. A psychologically aversive and highly subjective experience, loneliness occurs when social relationships and interactions do not meet perceived expectations of quantity and quality desired (Weiss, 1973; Peplau & Perlman, 1982). A condition that historically has been associated with the older generation, higher rates of loneliness are now most often reported in young adults and adolescents (Beam & Kim, 2020; Williams & Braun, 2019, Xiao et al., 2017). As a predictor for mental distress (Wang et al. 2020), the connection between loneliness and mental health outcomes are especially relevant among college students as research has shown that young adults are at a high risk for developing mental health conditions (Beam et al., 2020; McIntyre et al., 2017). While loneliness has been a topic of research for many years, its focus within higher education has been limited (Diehl et al., 2018; Mann et al., 2017). Recent research has shown that college age students are disproportionately at risk for developing mental health conditions (Batra et al., 2021) and that new reports indicate that young adults are most affected by loneliness (Beam et al., 2020; Cigna, 2018). Awareness of new and rising challenges facing students is of critical importance to colleges and universities as these challenges often affect the success of students and campuses alike (Sneyers & De Witte, 2018). Recognizing that the mental health consequences of COVID-19 may have long-lasting effects, finding ways to address high

risk-factors such as loneliness will become increasingly important for student health and academic success (Ettman et al., 2020). Colleges and universities should anticipate the burden loneliness will have in combination with distressing psychological and emotional burdens carried over from COVID-19 prevention strategies (i.e., social distancing, quarantine measures, and lockdowns). Research suggests that addressing loneliness may help in reducing symptoms of mental health disorders (Käll et al., 2020). Further exploring the multi-dimensional phenomenon that is loneliness and identifying efficacious interventions for students with mental health problems are critical next steps in affecting positive intervention strategies for the mental health and wellness of college students.

Historical Foundations

Seminal to understanding loneliness, theories developed by Peplau & Perlman (1982) and Weiss (1973) provide a historic foundation for the characterization of loneliness and the distinctions between social and emotional loneliness. A psychologically aversive state, Weiss (1973) characterized loneliness as a multidimensional phenomenon that can vary by circumstance and intensity relative to the individual. Weiss (1973) was revolutionary in his hypothesis that loneliness could be defined into two distinct types: *emotional loneliness* which he characterized as the feelings of anxiety and self-isolation due to the absence of intimate attachments and *social loneliness* which he proposed as the absence of social attachments. Further theorizing that these two types of loneliness were the result of a deficit in meeting or satisfying an individual's perceived interpersonal needs and that these deficits could be engaged in focused interventions to alleviate loneliness (Weiss, 1973). Peplau and Perlman's (1982) cognitive discrepancy model defines loneliness as a subjective and unwelcome feeling due to a lack of or loss of companionship. They theorized that loneliness as a subjective experience of

emotional distress that is derived from the discrepancy between one's desire for social connection and the reality of one's social attachments. Their findings determined that it is the disparity between desired quantity and quality in social relationships which predicts loneliness, not necessarily the quantity of social contact (Peplau & Perlman, 1982). A revolutionary discovery, Peplau and Perlman (1982) resolved that loneliness is not synonymous with objective social isolation, being surrounded by people does not necessarily alleviate loneliness while solitude does not necessarily predict loneliness. This discovery of how loneliness can remain present and troublesome for highly social students, provides a new perspective when attempting to understand and alleviate loneliness on college campuses (Peplau & Perlman, 1982).

Predictive Factors for Loneliness

Decades of research has helped to shape our understanding of loneliness, its characteristics, triggers, risk factors, and the negative results chronic loneliness has on health and wellbeing. Research into predictive factors of loneliness has identified maladaptive cognitive, perceptual, and behavioral abnormalities as factors for heightened and sustained levels of loneliness (Mann et al., 2017; Qualter et al., 2015, Masi et al., 2011). In a meta-analysis Masi, Chen, Hawkey, and Cacioppo (2011) compiled a selection of empirically based interventions which they identified as effective forms of treatment for the prevention or alleviation of loneliness. The leading interventions have focused on correcting deficits in social skills, maladaptive social cognitions, social support, and social engagement (Masi et.al., 2011). Interventions targeting maladaptive social cognitions—patterns of negative thinking relating to personal self-worth and self-perception by others that lead to perceived social threats—were determined to be most effective (Masi et.al., 2011). Four key strategies were identified in this meta-analysis (1) improving social skills; (2) enhancing existing social support; (3) increasing

opportunities for new social contact; and (4) addressing maladaptive social cognitions (Masi et al., 2011, as cited in Mann et al., 2017, p. 629). Research has indicated that efforts taken to reduce loneliness by addressing maladaptive social cognitions through the use of social skills trainings and social supports can effect changes in participants levels of loneliness (Masi et al., 2011). Interventions that show an ability to mitigated loneliness by targeting certain predictors or risk factors for loneliness present colleges and universities with an opportunity to take action for the psychological, emotional and social benefit of their students (Batra et al., 2021). Besides having a direct impact on student health, utilizing evidence-based campus interventions to support students suffering with feelings of loneliness can alleviate its impact on academic functioning, decreasing risk for drop out due to adjustment difficulties (Conley et al., 2017). Where loneliness is a concern, students who find recourse in trainings and interventions that provide opportunities for growth in areas of social skill development, social support, and developing coping strategies for resilience and self-efficacy, may reduce symptoms of mental distress and the development of mental health disorders (Käll et al., 2020; Mann et al., 2017).

In studying the reciprocal effects of social interaction quality and affect, Hawkley, Preacher, and Cacioppo (2007) conducted a research study of 134 undergraduates. Results from this study determined that loneliness affected the thoughts, behaviors, and environmental perceptions of lonely undergraduate students causing changes in their abilities to engage in social situations. As such, the greatest average efficacy rates for measuring a decrease in loneliness came from targeting maladaptive cognitions, suggesting a direct way to address loneliness (Hawkley et al., 2007). Research has continued to show loneliness to be a complex multidimensional construct (Weiss, 1973). As a result, finding concrete ways to address

loneliness has been an on-going process (Käll et al., 2020; Diehl et al., 2018; Conley et al., 2017).

Impact of Loneliness on University Students

Loneliness is a common occurrence across the lifespan; however, it exists on a continuum of intensity and stems from a variety of triggers that are subjective to the individual (Weiss, 1973). Feeling heightened levels of loneliness has been found to be either a predictor for the development of mental health conditions or strongly associated with the severity of their experience of loneliness (Chirikov et al., 2020; Richardson et al., 2017; Xiao et al., 2017). As a predictor for mental distress, the connection between loneliness and mental health outcomes are especially relevant among university students as research has shown that young adults are at a high risk for developing mental health conditions (McIntyre et al., 2017). Within higher education, campuses have long been invested in determining positive and negative factors that are a part of the collegiate experience, particularly as they relate to student development, learning, and retention (Sneyers & De Witte, 2018). However, loneliness is a factor in higher education that has largely been neglected as an indicator for student success (Richardson et al., 2017). Awareness of new and rising challenges facing students is of critical importance to colleges and universities as these challenges often have a cascading effect on the success of students and campuses alike (Sneyers & De Witte, 2018). As loneliness manifests differently and at varying levels of intensity depending on the individual's perceived notion that their social and emotional connection has been met, supporting students in this area can be somewhat elusive. In addition to providing students with access to mental health counseling services, it will be important to address the psychological toll COVID-19 has had on this population group when designing and implementing interventions strategies to alleviate loneliness in order to affect

positive psychological health and wellbeing of college students (Batra et al., 2021). Studies involving university students have shown that it is more common for students to experience emotional loneliness than social loneliness (Diehl et al., 2018). Campuses that provide many social opportunities, may not be providing students with the level of emotional connection needed to alleviate feelings of loneliness (Peplau & Perlman, 1982). Given that student retention continues to be a persistent challenge for colleges and universities, finding ways to identify, understand, and address challenges associated with student success remains forefront in institutional research (Cobo-Rendón et al., 2020).

In a study by McIntyre et al., (2017), university students in northern England were surveyed to identify key social determinants as predictors for mental distress. The survey measured social connectedness and mental health symptoms which were studied alongside academic and non-academic stressors in order to determine causal relationships between variables (McIntyre et al., 2017). Results indicated that mental distress was most strongly predicted by loneliness while social-identity affected loneliness rather than vice versa (McIntyre et al., 2017). These results underscore the need for targeted intervention development as campuses provide an ideal setting for leading prevention efforts in responding to the psychological effects loneliness may have on a population burdened with an alarmingly high number of mental health issues (Batra et al., 2021; Diehl et al., 2018; Xiao et al., 2017). Following the COVID-19 pandemic, students may experience worsening level of loneliness in which prevention efforts should seek to increase social support by focusing on both individual and group connections to deepen relationship building for more meaningful connections (Beam et al., 2020).

Mental Health & Loneliness

Mental health is an increasing concern in higher education as there has been an increase in the number students coming to campus with diagnosed mental health conditions over the past decade (Conley et al., 2017; Xiao et al., 2017). Finding ways to reduce mental health symptoms has become increasingly important as research has shown that traditional college age students (18-22) are at a higher risk for developing mental health conditions (Batra et al., 2021; Richardson et al., 2017; McIntyre et al., 2017). *Insider Higher Ed's 2020 Survey of College and University Student Affairs Offices (2020)* indicated that 78% of campus leaders surveyed have noted a significant rise in the number of mental health visits by students in the past five years. This can be correlated with the Student Experience in the Research University Consortium (2020) report which consisted of 30,725 undergraduate students and 15,346 graduate and professional students from nine different universities who were screened for depression and anxiety. The study indicated a significant increase between screenings from 2019 to 2020. For major depressive disorder, 35% of undergraduates and 32% of graduate/professional students screened positive (twice the level indicated in 2019. 39% of all screened participants) screened positive for generalized anxiety disorder (1.5 times the level documented in 2019) (Chirikov et al., 2020). This growing concern for college students only continues as studies assess the impact COVID-19 has had in exacerbating mental health issues due to associated stress from the pandemic (Batra et al., 2021).

COVID-19: Effect on Mental Health & Loneliness

The study of loneliness remains essential as research continues to show the negative impact it has on mental, emotional, and physical health. The social isolation from COVID-19 may have an exacerbating effect on a population already struggling with loneliness and is likely

to continue to affect individuals and likely to a larger extent, future social practices (González-Sanguino et al. 2020). Loneliness has a strong impact on humans because of our innate need for social interaction (von Soest et al. 2020; Peplau & Perlman, 1982). Theorists have postulated that this quintessential need to belong is fundamental to our emotional and physical wellbeing that drives emotional, cognitive, and interpersonal behavior (Baumeister & Leary, 1995). Mellor et al. (2008) in studying the effect of loneliness in relation to the need to belong and satisfaction of relationships, discovered that lonely people have an unmet need to belong and that the degree in which belongingness is satisfied is a crucial variable in measuring the level of loneliness. Their result supports the belongingness hypothesis by Baumeister and Leary (1995) who proposed that “human beings have a pervasive drive to form and maintain at least a minimum quantity of lasting, positive, and significant interpersonal relationships” (Baumeister and Leary, 1995, p. 497). Difficulties in establishing satisfactory relationships to support belongingness may lead to feelings of social isolation and loneliness (Mellor et al., 2008). Deprived of meaningful connections, individuals are more likely to experience feelings of loneliness which can lead to or intensify mental health conditions (Diehl et al., 2018; Richardson et al., 2017).

The COVID-19 pandemic and resulting halt in normal functioning of everyday life due to lockdowns and social distancing has taken a heavy toll on mental health and well-being (Batra et al. 2021; Chirikov et al. 2020). While loneliness and social isolation were common pre-pandemic, the lockdown measures taken at the start of the COVID-19 pandemic brought social exposure to a halt worldwide. While research studying the mental distress and loneliness affected by COVID-19 is ongoing, the immediate effects have been observed through preliminary studies (Ettman et al. 2020; Twenge & Joiner, 2020; González-Sanguino et al. 2020; Palgi et al. 2020; van der Velden et al., 2021) The psychological impact of the pandemic is still unfolding, but

recent research is indicating there has been a significantly negative effect on mental health which has been particularly challenging for those experiencing mental health conditions pre-pandemic (Batra et al. 2021; Chirikov et al. 2020; Ettman et al. 2020; van der Velden et al., 2021).

Effects of COVID-19 on Mental Health

The first large scale study of mental health in response to COVID-19 has found that the number of adults in the U.S. experiencing depression has tripled since the onset of the COVID-19 pandemic (Ettman et al. 2020). A study was conducted using the 2017–2018 National Health and Nutrition Examination Survey as a baseline measurement and comparison rate of pre-pandemic levels of depression rates and the Patient Health Questionnaire-9 (PHQ-9) to measure depression symptoms (Ettman et al. 2020). The results from this study suggest that depression symptoms stemming from COVID-19 disproportionately affects at risk individuals: those with lower income levels, pre-existing mental health conditions, and exposure to stressors associated with developing depression symptoms (Ettman et al. 2020). This data is relevant to colleges and universities as many students fall into one or more of these categories (Ettman et al., 2020; Richardson et al., 2017). Reports such as this one, are becoming more prevalent as researchers are studying COVID-19 in an attempting to grasp the psychological repercussions of COVID-19. In a study documenting the impact on mental health from the COVID-19 pandemic, researchers compared a nationally representative sample of U.S. adults in April 2020 to the 2018 National Health Interview Survey (Twenge & Joiner, 2020). The study found that adults in the U.S. were eight times more likely to fit the criteria for mental distress and significant increases in younger populations ages 18-29 and 30-44 for serious distress (Twenge & Joiner, 2020). Both studies utilized the Kessler-6 scale, a screening tool to measure the mental distress of participants in the last 30 days (Twenge & Joiner, 2020). While a reputable screening measure, the data from the

K6 is limited in its ability to determine how these results will affect long-term mental health issues (Twenge & Joiner, 2020). However, the research does provide an early indication of the level of distress U.S. adults are experiencing, paving the way for future research into the continuing state of mental health conditions (Twenge & Joiner, 2020).

Effects of COVID-19 on Loneliness

In comparison to pre-COVID-19 levels, studies have shown an increase in loneliness for those with diagnosed mental health conditions (González-Sanguino et al. 2020; Palgi et al. 2020; van der Velden et al., 2021). While it is difficult to assess how loneliness might impact students' post-pandemic, from the data compiled thus far, campuses can expect that students diagnosed with mental health disorders and those who previously struggled with loneliness will likely experience more severe levels of loneliness (Batra et al. 2021; Chirikov et al. 2020; Ettman et al. 2020; van der Velden et al., 2021). Addressing loneliness as a causative factor for mental health conditions could see positive results in student mental and emotional health (Wang et al. 2020; Moeller & Seehuus, 2019). In a study measuring college student health, the American College Health Association (ACHA) (2019) provides higher education with comprehensive data sets illustrating loneliness as a significant student issue. The study surveyed nearly 70,000 students; 58% of male students and 68% of female students surveyed indicated that they had felt "very lonely" within the last 12 months (ACHA, 2019). A 65% cumulative response for loneliness is a significant issue for students, one that seems to be developing into a defining feature in their college experience (ACHA, 2019). This study concludes that loneliness is a problem for college students and may require additional support outside of campus mental health counseling services (ACHA, 2019). The critical impact that loneliness has on students' mental health and wellbeing should be used to inform relevant campus-based intervention strategies with primary focus

directed towards the alleviation and prevention of loneliness (Batra et al., 2021; Conley et al., 2017; Richardson et al., 2017).

In a national survey report, global health company Cigna (2018) utilizing the UCLA Loneliness Scale found that nearly 50% of their 20,000 participants indicated that they struggle with loneliness. The study found participants most affected by loneliness were of the younger generation (Cigna, 2018). The most lonely—Generation Z (18-22) as defined in this survey—scored the highest at 48.3 overall. Following closely behind are Millennials (45.3), Gen Xers (45.1), Baby Boomers (42.4), and the Greatest Generation (38.6) (Cigna, 2018). The potential for long-term consequences of the physical and emotional toll of persistent stressors and social isolation created by the pandemic may be especially troublesome for younger populations and subsequently colleges and universities serving this population (Batra et al., 2021; Beam et al., 2020; Ettman et al., 2020; Conley et al., 2017; Xiao et al., 2017). Prior to COVID-19, research has shown that loneliness can exacerbate pre-existing mental health conditions with strong correlations with conditions such as anxiety and depression, which are common diagnosis among college students (Wang et al. 2020; Richardson et al., 2017; Conley et al., 2017; Xiao et al., 2017). The combination of prolonged stress and uncertainty from COVID-19 along with mandated social isolation may be especially challenging for college students who fall into high-risk categories: pre-existing mental health conditions and low-income rates, as these factors have been shown to trigger higher levels of mental health distress (Batra et al., 2021; Beam et al., 2020; Ettman et al., 2020). Given the pre-pandemic rise in rates of mental health conditions, especially among young adult populations, mental health was already a topic of critical concern that has only intensified since the onset of the COVID-19 pandemic (Ettman et al. 2020; Twenge & Joiner, 2020). Colleges and universities will need to consider the social ramifications COVID-

19 has had on their student populations and the levels of responsibility in which they will attempt to develop interventions for addressing student loneliness and continued need for mental health resources (Moeller & Seehuus, 2019; Mann et al., 2017). The data from these national studies can be used to inform campus policy and grow campus supports through the commission of campus services and programming. To maximize the social value of designing campus response services to students experiencing loneliness, the use of evidence-based practices will be essential to the success of implementing campus interventions to alleviate further social isolation and prevention of chronic loneliness.

The full effect of COVID-19-related social isolation and loneliness will take continuous study to fully understand the costs of human loneliness on mental health and wellness. Accordingly, as society moves towards a new normal, students may have difficulties reconnecting and coping with the uncertainty of returning to a social lifestyle; concerns over a social recession due to the social restrictions may be profound and have long-term consequences for students and campuses (Ettman et al. 2020; Twenge & Joiner, 2020). Loneliness and social anxiety share a causal relationship where loneliness increases the likelihood for experiencing anxiety about social interactions and social interaction anxiety can subsequently increase the chance for experiencing loneliness (Lim et.al., 2016). In anticipation of the range in student comfort levels with the return to campus, campuses should look into ways for enhancing areas of student support (Conley et al., 2017). The transition from isolation and social distancing to group environments and a return to a highly social lifestyle may be cause for psychological distress after long-term social isolation and preventative action to mitigate these effects is important to recognize (Palgi et al., 2020; Ettman et al., 2020). Addressing these issues will require the exploration of evidence-based guidance for intervention strategies. Intervention approaches may

vary based on the target audience, circumstances, and intended outcomes for combatting the effects of social isolation and loneliness for students (Batra et al., 2021; Beam et al., 2020).

Risk Factors and Predictors for Loneliness

According to the Anxiety and Depression Association of America (ADAA), anxiety disorders affect 40 million adults making it the most common mental illness in the United States (ADAA, n.d.). Social Anxiety Disorder (SAD) is a distressing and persistent disorder that impacts individuals on a cognitive, emotional, and behavioral level (Asher, Hofmann, & Aderka, 2021). Similar to the experience of loneliness, social anxiety can occur on a continuum of intensity (Lim et al., 2016). Described as an intense and persistent fear of social engagement, social anxiety can lead to social avoidance as a coping strategy which can lead to feelings of loneliness and the development of other mental health conditions (Asher et al., 2021) Students who struggle with SAD may experience intrusive negative thoughts about social interactions and hyper-vigilance of self-presentation leading to avoidance behaviors and subsequent loneliness (Qualter et al. 2015).

Social isolation is an object measure of social, or lack thereof contact, a term often grouped with loneliness but which are two separate concepts (Holt-Lunstad, 2021). Social isolation can be a stressful experience that affects a person's personality and ability to form relationships, harming their ability to satisfy their need for meaningful connections (Haines et al., 1993). While social isolation can be a predictor for loneliness, studies have shown that social engagement alone does not prevent loneliness (Peplau & Perlman, 1982). Loneliness is a perceived feeling of isolation, regardless of how much social interaction one is engaged in and its severity depends on circumstance and perceived expectations whereas social isolation is an objective measure of one's contact with other people (Peplau & Perlman, 1982; Weiss, 1973).

Social isolation from COVID-19 may have an exacerbating effect on a population already struggling with loneliness (Holt-Lunstad, 2021). Those who have experienced a heightened reaction to social isolation, may also have trouble adjusting to the return to *normal life* with regular social engagement activities which may trigger a rise social anxiety (Thompson, Mancebo, & Moitra, 2021).

Research into social avoidance and its relationship with loneliness, suggests that avoidance may interfere with the ability to achieve satisfactory relationships the self-isolation (Käll et al. 2020). This avoidance of social contact further deprives individuals of the ability to receive positive contradictory information of their perceived beliefs. In a study of young adults, Watson and Nesdale (2012) found that behavioral avoidance of social situations was used to avoid possible rejection during social interactions, a maladaptive cognition that contributes to social isolation and loneliness. A negative view of self and interpersonal relationships is a cognitive distortion and a common trigger for loneliness (Watson & Nesdale, 2012). Loneliness from social anxiety and isolation may stem from these maladaptive social cognitions (Masi et al., 2011; Qualter et al., 2015) which aligns with the proposed cognitive theory of Peplau and Perlman (1982) who describe loneliness as a psychologically aversive state resulting from a cognitive discrepancy in the desired relational connection within interpersonal relationships. Masi et al. (2011) found that the most effective interventions targeted maladaptive social cognitions – patterns of negative thinking relating to personal self-worth and self-perception by others that lead to perceived social threats. Loneliness may be described from an evolutionary standpoint as a way to motivate social connections; however, loneliness can also trigger maladaptive cognitions which negatively affect the ability to connect, which in turn reinforce

loneliness and social isolation as a coping method (Qualter et al. 2015). Mitigating these social risk factors are essential for mental health and wellbeing.

Interventions for Loneliness

When developing intervention strategies, it will be important to refer back to the theories of Peplau and Perlman (1982) and Weiss (1973). Social interactions can exacerbate or ameliorate the severity of loneliness, meaning that students can have high levels of social contact, but still experience loneliness as their expectations of emotional connections may still not be met to their desired quality (Peplau & Perlman, 1982). Intervention that enhances students' feelings of social connection can lead to an altered perception of social engagement which could improve the quality of relationships and deter feelings of loneliness (Cacioppo et al., 2006). A study by Hawkey et al. (2008) found that social network size, satisfaction with social network, and having a spousal confidant were key factors that were negatively associated with loneliness. These outcomes suggest that the degree in which one's social environment and social interactions can be improved may influence the success of loneliness reduction interventions, which links back to Peplau and Perlman's (1982) theory of quality over quantity in relationships. Loneliness manifests differently and at varying levels of intensity. For students who experience a deep sense of loneliness, this cognitive discrepancy model is particularly relevant for explaining the presence of loneliness in a busy campus environment (Peplau & Perlman, 1982; Richardson et al., 2017).

Cognitive-Related Interventions

The systematic review of intervention strategies targeting changing cognitions found cognitive behavioral therapy to be useful in interventions attempting to adjust perceptions of social relationships and changing maladaptive behaviors to increase social connections (Masi et

al., 2011). A popular theory in loneliness interventions is the attempt to shift cognitive mechanisms to address maladaptive cognitions relating to relationships and social experiences. For those experiencing loneliness, there is evidence of cognitive bias and attributional styles that subsequently affect mental states and behaviors based on how the individual processes information to form a causal judgement (Hawkley et al., 2008). Research studying this method has hypothesized that achieving a positive change in cognitive mechanisms will result in a change in social behaviors as a result of changing the way participants think about themselves and their perceptions of how others view them, thus reducing or preventing feelings of loneliness. In a randomized control trial, Chinese college students with elevated loneliness ($N = 50$, ages 17–25) were selected to participate in an 8-week mindfulness training program (Zhang et al., 2018). This study was developed to determine the feasibility and effectiveness of using Mindfulness-based cognitive therapy (MBCT) as an intervention strategy to reduce loneliness. The results of this study showed a decrease on baseline loneliness measurement compared to the control group, suggesting that mindfulness training can impact levels of loneliness (Zhang et al., 2018).

Social Skills Interventions

Interventions that focus on improving social skills oftentimes provide training for improving interpersonal communications through verbal and behavioral skill building to better equip participants in forming meaningful relationships. Social skill interventions paired with other approaches such as social identity theory, may be more effective depending on the group (Mann et al., 2017). In the study by McIntyre et al. (2017), they measured five social identity variables which accounted for 9% variance in anxiety scores and 7% of the variance in paranoia scores. The strongest independent predictor for lowered rates of anxiety and paranoia was

identified with having university friendships (McIntyre et al., 2017). This mediation in the relationship between loneliness, friendship, and mental health conditions supported their hypothesis that self-identity variables affect feelings of loneliness (McIntyre et al., 2017). This study supports the theory that improving social skills to facilitate the development of friendships will potentially have an impact on loneliness (McIntyre et al., 2017). In a more recent study, Moeller & Seehuus (2019) also found loneliness to be a mediator for college students' social skills and experiences of depression and anxiety. This study indicates that verbal social skills correlate with experiences of loneliness, depression, and anxiety which can be addressed and mediated using interventions for improving social skills (Moeller & Seehuus, 2019).

Social Support Interventions

Supported socialization is an intervention strategy aimed at developing social relationship through the support of an assigned supporter – friend, peer, professional, or family member, to assist in establishing connections (Mann et al., 2017). This type of intervention work towards specific, individualized goals with the intention that after initial support, they would be able to maintain the established relationships (Mann et al., 2017). As a COVID-19 response, the American Psychological Association (2020) has noted the importance of social support - measures. In addition to evidence-based individual interventions, group-based interventions have been proposed as a treatment recommendation to ameliorate the psychological distress and effects of prolonged social isolation and loneliness (Batra et al., 2021; Beam & Kim, 2020; Käll et al., 2020). Social support is an important loneliness intervention for college students, especially in adjusting to the transition to university life (Käll et al., 2020; Diehl et al., 2018; Conley et al., 2017; Mann et al., 2017). Results from a 9-week social support group facilitation program that focused on supporting students transition to campus, found a decrease in

participants level of loneliness (Ames et al., 2011). These weekly support groups involved discussion related to new experiences and transition issues (Ames et al., 2011). This study highlighted the significant role of supporting positive attachments and building perceived social support for reducing loneliness through social support (Ames et al., 2011). Success rates of loneliness interventions are still in their infancy, along with mechanism for change and the effective influence of particular delivery modes indicating a need for further investigation of preventative approaches to lessen the burden on campus health services (Mann et al., 2017; Conley et al., 2017). Cognitive-related interventions have been found to be the most effective in comparison to other interventions strategies (Masi et al., 2011). Mann et al. (2017) in their systematic review to uncover interventions that directly target loneliness through related concepts in social relationships, have developed four categories (1) changing cognitions; (2) social skills and psychoeducation; (3) supported socialization; (4) wider community approaches (Mann et al., 2017). These categories closely align with the four key strategies identified in the meta-analysis by Masi et al. (2011) supporting the theory that the most effective interventions strategies target maladaptive social cognitions through interventions focusing on deficits in cognitive mechanisms and socialization skills.

Conclusion

While research has shown varying degrees of success within these categories of social relationship interventions. Loneliness remains a complex and highly subjective state and evidence of impact through the use of categorical interventions is still limited in their success rates and use of consistent methodology of certain mechanism for achieving a consistent level of impact (Mann et al., 2017). There still remains a shortage of empirically based interventions for the reduction of loneliness among diverse populations which limits opportunities for treatment

development and integration of loneliness interventions (Käll et al. 2020). Further implementation and research of interventions will be required to isolate effective mechanisms for the treatment and prevention of loneliness, along with transdiagnostic interventions with differentiated measurements to better show how loneliness might correlate with certain predictors, educational outputs, and demographic variables. Results from such studies could lead to more precise analysis of practical mechanisms which would be invaluable to diverse campuses. Studying loneliness among student populations is becoming a topic of research within higher education (Dagnew & Dagne, 2019; Moeller & Seehuus, 2019). With loneliness effecting younger generations at an increasing rate (Beam et al., 2020; Cigna, 2018), this will continue to impact colleges and universities as an increasing number of students are affected. Given this data, it is reasonable to anticipate that students will need increased access to social and mental health supports as they return to campus. The use of evidence-based practices to inform campus policy will be essential to the success of growing campus supports through implementation or expansion of campus interventions to alleviate further social isolation and promote student health and wellness.

References

- Ames, M., Pratt, M., Pancer, S., Wintre, M., Polivy, J., Birnie-Lefcovitch, S., & Adams, G. (2011). The moderating effects of attachment style on students' experience of a transition to university group facilitation program. *Canadian Journal of Behavioural Science, 43*(1), 1–12. <https://doi.org/10.1037/a0020648>
- American Psychological Association. (2020). *Keeping your distance to stay safe*. Retrieved from <https://www.apa.org/practice/programs/dmhi/research-information/social-distancing>
- Asher, M., Hofmann, S., & Aderka, I. (2021). I'm not feeling it: Momentary experiential avoidance and social anxiety among individuals with social anxiety disorder. *Behavior Therapy, 52*(1), 183–194. <https://doi.org/10.1016/j.beth.2020.04.001>
- Batra, K., Sharma, M., Batra, R., Singh, T., & Schvaneveldt, N. (2021). Assessing the psychological impact of COVID-19 among college students: An evidence of 15 countries. *Healthcare (Basel), 9*(2), 222. <https://doi.org/10.3390/healthcare9020222>
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*, 497–529. <http://dx.doi.org/10.1037/0033-2909.117.3.497>
- Beam, C., & Kim, A. (2020). Psychological sequelae of social isolation and loneliness might be a larger problem in young adults than older adults. *Psychological Trauma, 12*(S1), S58–S60. <https://doi.org/10.1037/tra0000774>
- Chirikov, I., Soria, K. M., Horgos, B., & Jones-White, D. (2020). Undergraduate and graduate students' mental health during the COVID-19 pandemic. SERU Consortium, University of California - Berkeley and University of Minnesota. Retrieved from the University of Minnesota Digital Conservancy, <https://hdl.handle.net/11299/215271>.

- Cigna. (2018). Cigna U.S. loneliness index. Survey of 20,000 Americans examining behaviors driving loneliness in the United States. Retrieved from https://www.multivu.com/players/English/8294451-cigna-us-loneliness-survey/docs/IndexReport_1524069371598-173525450.pdf
- Cobo-Rendón, R., Pérez-Villalobos, M., Páez-Rovira, D., & Gracia-Leiva, M. (2020). A longitudinal study: Affective wellbeing, psychological wellbeing, self-efficacy and academic performance among first-year undergraduate students. *Scandinavian Journal of Psychology*.
- Conley, C., Shapiro, J., Kirsch, A., & Durlak, J. (2017). A meta-analysis of indicated mental health prevention programs for at-risk higher education students. *Journal of Counseling Psychology, 64*(2), 121–140. <https://doi.org/10.1037/cou0000190>
- Diehl, K., Jansen, C., Ishchanova, K., & Hilger-Kolb, J. (2018). Loneliness at universities: determinants of emotional and social loneliness among students. *International journal of environmental research and public health, 15*(9), 1865. <https://doi.org/10.3390/ijerph15091865>
- Ettman, C. K., Abdalla, S. M., Cohen, G. H., Sampson, L., Vivier, P. M., & Galea, S. (2020). Prevalence of depression symptoms in US adults before and during the COVID-19 pandemic. *JAMA network open, 3*(9), e2019686. <https://doi.org/10.1001/jamanetworkopen.2020.19686>
- Facts & statistics: Anxiety and Depression Association of America, ADAA. (n.d.). Retrieved <https://adaa.org/understanding-anxiety/facts-statistics>
- González-Sanguino, C., Ausín, B., Castellanos, M. Á., Saiz, J., López-Gómez, A., Ugidos, C., &

- Muñoz, M. (2020). Mental health consequences during the initial stage of the 2020 Coronavirus pandemic (COVID-19) in Spain. *Brain, Behavior, and Immunity*. Advance online publication. <https://doi.org/10.1016/j.bbi.2020.05.040>
- Haines, D. A., Scalise, J. J., & Ginter, E. J. (1993). Relationship of loneliness and its affective elements to self-esteem. *Psychological Reports*, 73, 479-482.
<https://doi.org/10.2466/pr0.1993.73.2.479>
- Hawkley, L. C., Preacher, K. J., Cacioppo, J. T. (2007). Multilevel modeling of social interactions and mood in lonely and socially connected individuals: The MacArthur social neuroscience studies. In: Ong, A.D., van Dulmen, M., (Eds.). *Oxford handbook of methods in positive psychology*. New York, NY: Oxford University Press; 2007. pp. 559–575.
- Hawkley, L.C., Hughes, M.E., Waite, L.J., Masi, C.M., Thisted, R.A., & Cacioppo, J.T. (2008). From social structural factors to perceptions of relationship quality and loneliness: The Chicago Health, Aging, and Social Relations Study. *The Journals of Gerontology: Series B*, 63(6), S375-S384, <https://doi.org/10.1093/geronb/63.6.S375>
- Holt-Lunstad, J. (2021). A pandemic of social isolation? *World Psychiatry*, 20(1), 55–56.
<https://doi.org/10.1002/wps.20839>
- Gallup® and Inside Higher Ed. (2020). The 2020 Inside Higher Ed survey of college and university student affairs officers. Jaschik, S., Lederman, D., (Eds.) *Inside Higher Ed*.
https://www.insidehighered.com/system/files/media/2020_Student_AffairsOfficersSurvey.pdf
- Käll, A., Shafran, R., Lindegaard, T., Bennett, S., Cooper, Z., Coughtrey, A., Andersson, G.,

- Smits, J., Dalglish, T., Black, M., Davilla, J. (2020). A common elements approach to the development of a modular cognitive behavioral theory for chronic loneliness. *Journal of Consulting and Clinical Psychology*, 88(3), 269–282.
<https://doi.org/10.1037/ccp0000454>
- Lipson, S. K., & Eisenberg, D. (2018). Mental health and academic attitudes and expectations in university populations: results from the healthy minds study. *Journal of mental health (Abingdon, England)*, 27(3), 205–213. <https://doi.org/10.1080/09638237.2017.1417567>
- Lim, M. H., Rodebaugh, T. L., Zyphur, M. J., & Gleeson, J. F. M. (2016). Loneliness over time: The crucial role of social anxiety. *Journal of Abnormal Psychology*, 125(5), 620–630. <https://doi.org/10.1037/abn0000162>
- Mann, F., Bone, J., Lloyd-Evans, B., Frerichs, J., Pinfold, V., Ma, R., Wang, J., & Johnson, S. (2017). A life less lonely: the state of the art in interventions to reduce loneliness in people with mental health problems. *Social Psychiatry and Psychiatric Epidemiology*, 52(6), 627–638. <https://doi.org/10.1007/s00127-017-1392-y>
- Masi, C. M., Chen, H. Y., Hawkey, L. C., & Cacioppo, J. T. (2011). A meta-analysis of interventions to reduce loneliness. *Personality and social psychology review: an official journal of the Society for Personality and Social Psychology, Inc*, 15(3), 219–266.
<https://doi.org/10.1177/1088868310377394>
- Mellor, D., Stokes, M., Firth, L., Hayashi, Y., Cummins, R. (2008). Need for belonging, relationship satisfaction, loneliness, and life satisfaction. *Personality and Individual Differences*, 45 (2008), 213-218. <https://doi.org/10.1016/j.paid.2008.03.020>
- Moeller, R., Seehuus, M. (2019). Loneliness as a mediator for college students' social skills and

- experiences of depression and anxiety. *Journal of Adolescence (London, England.)*, 73, 1–13. <https://doi.org/10.1016/j.adolescence.2019.03.006>
- Palgi, Y., Shrira, A., Ring, L., Bodner, E., Avidor, S., Bergman, Y., Cohen-Fridel, S., Keisari, S., & Hoffman, Y. (2020). The loneliness pandemic: Loneliness and other concomitants of depression, anxiety and their comorbidity during the COVID-19 outbreak. *Journal of affective disorders*, 275, 109–111. <https://doi.org/10.1016/j.jad.2020.06.036>
- Peplau, L. A., & Perlman, D. (1982). *Loneliness: a sourcebook of current theory, research, and therapy*. New York, NY: Wiley.
- Richardson, T., Elliott, P., & Roberts, R. (2017). Relationship between loneliness and mental health in students. *Journal of Public Mental Health*, 16(2), 48–54. <https://doi.org/10.1108/JPMH-03-2016-0013>
- Sneyers, E., & De Witte, K. (2018). Interventions in higher education and their effect on student success: a meta-analysis. *Educational Review (Birmingham)*, 70(2), 208–228. <https://doi.org/10.1080/00131911.2017.1300874>
- Thompson, C., Mancebo, M., & Moitra, E. (2021). Changes in social anxiety symptoms and loneliness after increased isolation during the COVID-19 pandemic. *Psychiatry Research*, 298, 113834–113834. <https://doi.org/10.1016/j.psychres.2021.113834>
- Twenge, J., & Joiner, T. (2020). Mental distress among U.S. adults during the COVID-19 pandemic. *Journal of Clinical Psychology*, 76(12), 2170–2182. <https://doi.org/10.1002/jclp.23064>
- Qualter, P., Vanhalst, J., Harris, R., Van Roekel, E., Lodder, g., Bangee, M., Maes, M., & Verhagen, M. (2015). Loneliness across the life span. *Perspectives on Psychological Science*, 10(2), 250–264. <https://doi.org/10.1177/1745691615568999>

- van der Velden, P. G., Contino, C., Das, M., van Loon, P., & Bosmans, M. (2020). Anxiety and depression symptoms, and lack of emotional support among the general population before and during the COVID-19 pandemic. A prospective national study on prevalence and risk factors. *Journal of affective disorders*, 277, 540–548.
<https://doi.org/10.1016/j.jad.2020.08.026>
- von Soest, T., Luhmann, M., & Gerstorf, D. (2020). The development of loneliness through adolescence and young adulthood: Its nature, correlates, and midlife outcomes. *Developmental Psychology*, 56(10), 1919–1934. <https://doi.org/10.1037/dev0001102>
- Wang, J., Lloyd-Evans, B., Marston, L., Mann, F., Ma, R., & Johnson, S. (2020). Loneliness as a predictor of outcomes in mental disorders among people who have experienced a mental health crisis: a 4-month prospective study. *BMC Psychiatry*, 20(1), 249–249.
<https://doi.org/10.1186/s12888-020-02665-2>
- Watson, J., & Nesdaie, D. (2012). Rejection sensitivity, social withdrawal, and loneliness in young adults. *Journal of Applied Social Psychology*, 42, 1984–2005.
<http://dx.doi.org/10.1111/j.1559-1816.2012.00927.x>
- Weiss, R. S. (1973). *Loneliness: the experience of emotional and social isolation*. Cambridge, MA: The MIT press.
- Williams, S., & Braun, B. (2019). Loneliness and social isolation—A private problem, a public issue. *Journal of Family and Consumer Sciences*, 111(1), 7–14.
<https://doi.org/10.14307/JFCS111.1.7>
- Xiao, H., Carney, D., Youn, S. J., Janis, R., Castonguay, L., Hayes, J. A., & Locke, B. D. (2017). Are we in crisis? National mental health and treatment trends in college counseling centers. *Psychological services*, 14(4), 407–415. <https://doi.org/10.1037/ser0000130>