THE INFLUENCE OF CELEBRITY POP MUSIC ARTISTS WHO DISCLOSE MENTAL HEALTH DIFFICULTIES ON THE DEPRESSION SUPPORT-SEEKING ATTITUDES AND BEHAVIORAL INTENTIONS OF AT-RISK U.S. YOUTH.

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ABSTRACT

Alex Kresovich: The Influence of Celebrity Pop Music Artists Who Disclose Mental Health Difficulties on the Support-Seeking Attitudes and Behavioral Intentions of At-Risk U.S. Youth. (Under the direction of Seth M. Noar and Francesca R. Dillman Carpentier)

In December 2021, the United States Surgeon General issued a public health advisory warning of an emerging mental health crisis among U.S. youth. Among potential interventions that might be effective with young people, recent literature suggests leveraging pop culture, and pop music culture in particular, to promote mental health care. This dissertation had two aims focused on increasing young people's intentions to disclose depression symptoms and seek support from a close friend, in addition to other sources. The first aim was to explore mental health attitudes, intentions to seek help, and wishful identification with celebrity pop music artists who have disclosed mental health difficulties. A survey of U.S. youth ages 16 to 24 ($N = 417$) indicated that self-efficacy is the most robust predictor of intentions to seek support from a close friend and that increasing outcome expectations of support-seeking is a promising avenue for increasing support-seeking intentions for youth regardless of whether they have elevated depressive symptomatology. Increased wishful identification was associated with increased outcome expectations and support-seeking intentions, but also increased public stigma. Finally, the survey was used to identify which contemporary pop music artists would serve as the best celebrity spokespeople in a depression support-seeking campaign. The second aim was to test effects of health messages using music celebrities as spokespeople (vs. non-celebrities) and language referencing "your" vs. a friend's depression (direct vs. mistargeted language, respectively). An experiment was conducted with U.S. youth (age 16-24) experiencing depressive symptoms who have never been diagnosed with or

treated for depression (*N* = 752). Findings suggest the use of celebrities in public service messages promoting depression support-seeking from friends might result in a boomerang effect increasing stigmatizing beliefs among this audience. Referent language did not affect responses except for participants' intention to seek depression support from a website. Similar to Aim 1, positive associations with wishful identification emerged alongside associations with increased stigma and depression romanticizing, both problematic responses to a health message. Nuanced demographic and symptomatic differences in responses are also discussed, along with the first empirical evidence of depression romanticizing by this population and its potential implications.

Everyone wanted to know what I would do if I *didn't* get a Ph.D.
I guess we'll never know.

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To be honest, I always dreamed that I would get to win a GRAMMY and I'd get the opportunity to give a speech onstage where they played me off for taking too long and I'd keep going until security dragged me off and I was banned from the show in the future. At least that's what I think and why I modified the Kanye quote from his first GRAMMY win for the quote above. Regardless, I never had that opportunity, and, my life has clearly worked out better for it (though I'll take a GRAMMY if the universe decides to reverse course). With that said, I'm going to use this opportunity to thank everyone in GRAMMY-winning speech style but without the timer and security to pull me offstage. Why? Because I can confidently say that this was one of the most difficult and rewarding undertakings of my life and I am beyond thankful to a host of people for helping to make it possible.

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CHAPTER ONE: INTRODUCTION

In December 2021, the United States Surgeon General issued a public health advisory warning of an emerging mental health crisis among U.S. youth (U.S. Department of Health and Human Services, 2021). Even before the COVID-19 pandemic, depression rates increased significantly among U.S. adolescents and young adults from 2005 to 2018 (Mojtabai & Olfson, 2020; Twenge et al., 2019), affecting millions of U.S. youth. A major depressive episode (MDE) is defined by the National Institute of Mental Health (NIMH) (2019) as a period of at least two weeks when a person experiences a depressed mood or loss of interest or pleasure in daily activities. According to Mental Health America's (2021) latest *The State of Mental Health in America* annual report, more than three million (13.8% of U.S. youth ages 12 to 17) reported suffering from at least one major depressive episode (MDE) in the past year, representing an increase of 206,000 youth from the previous year's data set. Early estimates suggest that depression rates among youth (ages ≤18 years) doubled during the COVID-19 pandemic (Racine et al., 2021).

Rates of suicide and suicidal ideation have increased alongside the increased prevalence of depression among this age cohort. Beyond the increasing MDEs, estimates suggest that an additional 126,000 youth (ages 12 to 17) reported experiencing severe major depression during 2020 compared to 2019 (0.5% increase) (Mental Health America, 2021). Severe major depression is characterized by the "maximum level of interference over four role domains including chores at home, school or work, family relationships, and social life" (Mental Health America, 2021, p. 23).

Major depressive disorder (MDD) is the most prevalent lifetime disorder among suicidal adolescents (Nock et al., 2013). By 2017, the suicide rate had increased to its highest point since 2000 among U.S. youth ages 15 to 19 (2000: 8 per 100,000; 2017: 12 per 100,000) and young adults ages 20 to 24 (2000: 12 per 100,000; 2017: 17 per 100,000) (Miron et al., 2019). This trend only appears to be worsening as emergency department visits for suspected suicide attempts among adolescents were 51% higher for girls and 4% for boys in early 2021 compared to the same time period in early 2019 (Yard et al., 2021). Estimates suggest that there were more than 6,600 deaths by suicide among U.S. youth (ages 10 to 24) in 2020 (Curtin & Hedegaard, 2021).

The Surgeon General's Advisory (2021) highlights finding ways to encourage U.S. youth struggling with depression to seek mental health support as an urgent public health priority. It appeals to youth struggling with their mental health, advising them to "Find trusted adults, friends, or family members to talk to about stressful situations" (U.S. Department of Health and Human Services, 2021, p. 14). While professional help-seeking is the optimal outcome, research suggests that depressed youth are most likely to open up to a friend first (Seize the Awkward, 2018), who might then become the critical gateway to eventual professional help. Strategies to improve support-seeking among U.S. youth need to focus on increasing mental health literacy and reducing stigma while accounting for youth's tendency towards maladaptive self-reliance when dealing with personal mental health difficulties (Gulliver et al., 2010).

Youth also perceive encouragement from others to aid the mental health help-seeking process (Gulliver et al., 2010). Celebrity pop music artists who disclose mental health difficulties in their music may be uniquely influential as role models to help encourage U.S. youth to seek depression support (Cheong-Clinch, 2019; Kresovich, 2020). Pop music is a critical element of

youth culture and central to young people's social system (Frith, 1978; Kotarba, 2017). The latest Nielsen data suggests that 73% of U.S. youth ages 15 to 25 stream or download music daily (Ipsos, 2019). Music plays a role for youth in essential developmental processes related to emotional regulation, identity formation, and peer socialization (McFerran et al., 2019). Messages from celebrity pop music artists can be especially influential among this age cohort, as 63% of youth ages 16 to 24 identify as 'loving music' or being 'fanatical' about it (IFPI, 2020).

An increasing proportion of the most popular songs in the United States contain messages referencing mental health difficulties. A recent content analysis of popular rap music – now the most popular music genre in the United States (Lynch, 2018) – revealed significant increases in the proportion of rap songs with references to mental health difficulties (Kresovich et al., 2021). Specifically, the study found an increasing proportion of popular rap songs from 1998 to 2018 with references to depression, suicidal ideation, and metaphors representing a mental health difficulty. For example, rapper Logic's 2017 hit song "1-800-273-8255" chronicles the experience of a young person who struggles with depression, self-worth, and suicidal ideation before calling the National Suicide Prevention Lifeline (NSPL – the phone number is the title of the song) and deciding against taking their own life. The song went on to immense success, peaking at #3 on the *Billboard Hot 100* chart and receiving a 5-time platinum certification – indicating more than 5 million song sales within the United States. *Pitchfork* music columnist Jayson Greene recently cited this broad and emerging trend in American popular music: "If it's possible to gauge the current pop landscape… it's *dark* out there." (Greene, 2018, p. para. 4).

These celebrity health disclosures appear to have significant implications for public health (Beck et al., 2014). Research suggests that the Logic song "1-800-273-8255" was associated with a significant increase in calls to the NSPL and a slight reduction in suicides during the peak of

social media discourse about the song (Niederkrotenthaler et al., 2021). Further, growing evidence suggests that celebrity health disclosures can lead to increases in risk susceptibility (Lee et al., 2020), information-seeking (Francis, 2018), and even encourage people to open up about their own mental health difficulties (Hoffner, 2019). Indeed, the extant health communication literature supports the idea that these celebrity pop music artists who have disclosed mental health difficulties can serve as role models to U.S. youth (ages 16 to 24) experiencing depressive symptoms. By serving as role models, these celebrity pop music artists become social peers or social authorities with the power to 'sanitize' (p. 278) the euphemistic label of depression and 'sanction' (p.279) the act of opening up to someone close to them about difficulties with depression (Bandura, 2001).

While the U.S. Surgeon General Advisory (2021) advocates for normalizing and crafting authentic stories about mental health and illness in media, to date, the health communication field has only started to explore the potential influence of celebrity pop music artists who disclose mental health difficulties on U.S. youth's mental health attitudes and behaviors (Francis, 2018; Kresovich, 2020). Research suggests that pop music artists are the most influential celebrity role models to youth (Riles & Adams, 2020). This dissertation develops and experimentally tests the effectiveness of using celebrity pop music artists who have disclosed mental health difficulties in their music to deliver a depression public service announcement (D-PSA) aimed toward at-risk U.S. youth to promote intentions to seek support for their mental health difficulties.

This dissertation has two aims: 1) to explore U.S. youth's mental health attitudes, intentions to seek help, and perceptions of celebrity pop music artists in order to assess which artists may be most effective in promoting intentions to seek help among this vulnerable audience in a D-PSA format; and 2) to test D-PSAs aimed at U.S. youth with heightened depressive symptomology

exploring both celebrity status and referent language as main effects on primary and secondary outcomes. The primary outcome across these aims is the willingness to disclose mental health difficulties to a close friend. Secondary outcomes include enhancing attitudes toward seeking help, increasing help-seeking self-efficacy and outcome expectations, boosting intention to seek support from a website, and minimizing mental health stigma and self-reliant beliefs.

For the first aim, I surveyed U.S. youth aged 16-24. In the second aim, I conducted a between-subjects experiment with a sample of U.S. youth aged 16-24 with heightened depressive symptomatology who have never been diagnosed with or treated for depression. U.S. youth aged 16-24 were selected as the target population for three reasons. First, the transition between adolescence and young adulthood is a critical intervention point to influence depressive trajectories across the life course (Adkins et al., 2009; Hargrove et al., 2020). Second, "people's heaviest investment into popular music is when they are teenagers and young adults" (Frith, 1987, p. 143). Unsurprisingly, this is the stage of development when musical tastes tend to peak (Hemming, 2013; Holbrook & Schindler, 1989). Third, an ongoing mental health intervention designed to empower teens and young adults (ages 16 to 24) to reach out to a friend they perceive may be struggling with mental health issues and at risk for suicide is already targeting this age cohort – highlighting their prioritization (Seize the Awkward, 2018). Heightened depressive symptomatology is central to this dissertation for three crucial reasons:

1. increased symptomatology puts youth at increased risk of suicide (Nock et al., 2013);
2. health communication scholars are only beginning to establish effective messaging strategies to reach this population (Siegel et al., 2015);
3. the limited work done so far suggests that those with increased symptomatology are particularly difficult to persuade (Siegel et al., 2017).

The remainder of this dissertation is structured as follows:

In Chapter 2, I review the literature on how popular music functions within the lives of youth, the status of U.S. youth mental health, and why this developmental stage is a critical intervention point. I also review the literature on mental health messaging, the influence of celebrity disclosures on health-related behaviors, and the specific theoretical perspectives and determinants guiding this research. After the literature review in Chapter 2, the subsequent two chapters (Chapters 3 and 4) are written as standalone articles.

In Chapter 3, I identify which attitudes are most important for persuading U.S. youth (ages 16 to 24) to increase intentions to seek depression support from a close friend. I also assess the target population's perceptions of – and involvement with – celebrity pop music artists who have disclosed mental health difficulties to identify which celebrities are most appropriate to use as celebrity spokespeople to promote depression help-seeking.

In Chapter 4, I explore the effectiveness of utilizing celebrity spokespeople – namely celebrity pop music artists that reference mental health difficulties in their music – and *mistargeting* as the referent language to persuade U.S. youth to seek depression support from a close friend. This study aims to provide an initial test of a message promoting disclosure using an experimental design. This study was informed by the findings of Chapter 3 in terms of which celebrity pop music artists were selected to serve as spokespeople in the experimental public service announcement stimuli.

In Chapter 5, I summarize the overall findings of this dissertation. I use this chapter to discuss the broader implications of these findings, summarize the various limitations of the methodological choices utilized in the two studies, and provide an outlook for future research directions that health communication and media effects scholars can take.

CHAPTER TWO: LITERATURE REVIEW

Depression among U.S. youth

Adolescence and emerging adulthood (ages 16 to 24) is a period of rapid change across physical, emotional, developmental, and social domains, all of which may impact experience with stress and other mental health risks (Crockett, 1997). It is a time of transition between childhood and adulthood in which feelings of vulnerability and isolation are common (Laursen & Hartl, 2013). During this stage, young people encounter new and complex emotions for the first time while also developing their sense of self-identity and place within the broader world (Arnett, 2000). Youth ages 13-18 are at increased risk of internalizing symptoms characterized by negative emotion and cognitive processing issues linked to anxiety, depression, and suicidal ideation (McLaughlin & King, 2015).

Major depressive disorder (MDD) is the leading cause of disability in the United States for U.S. youth ages 16 to 24 (Anxiety & Depression Association of America, 2021). MDD is characterized by persistent feelings of sadness and a lack of interest or pleasure in previously rewarding or enjoyable activities (World Health Organization, 2021). A major depressive episode (MDE) is characterized by these symptoms persisting for two weeks or more (American Psychiatric Association, 2013). It is estimated that more than three million youth (ages 12 to 17) in the United States experienced a major depressive episode (MDE) in the previous year. However, only 40% received any form of treatment (Mental Health America, 2021). One possible explanation for why youth are less likely to seek help for experiences with depression may be due

to the cognitive processing associated with depression (Clark & Beck, 2010), such that risk avoidance is prioritized over reward-seeking (Armstrong & Olatunji, 2012; Carver & White, 1994; Lueck, 2017; Trew, 2011).

Further, depression rates have spiked more than 50% since 2007 among both adolescents (ages 12 to 17) and young adults (ages 18 to 25) (Twenge et al., 2019). MDE in adolescents (ages 12 to 17) increased by 60% from 2004 to 2018 (SAMHSA, 2020). These statistics are alarming, especially given that Major Depressive Disorder (MDD) is the most prevalent lifetime disorder among suicidal adolescents (Nock et al., 2013). Suicidal thoughts peak in adolescence, and severity increases during emerging adulthood (Goldston et al., 2015). Similar to the depression rate, the suicide rate among U.S. youth (ages 15 to 19) and young adults (ages 20 to 24) spiked from 2007 to 2017, reaching its highest point since 2000 (Miron et al., 2019).

Finding ways to address depression and encourage support-seeking behaviors during this period of adolescence and young adulthood is crucial. The transition between adolescence and early adulthood is a period of elevated risk (Copeland et al., 2013), and depressive symptomatology during this developmental stage may impact later life stages. Depression is usually a chronic and recurrent disorder, with most individuals who recover from a first episode experiencing additional MDEs in their lifetime (American Psychiatric Association, 2013; Kupfer et al., 1996; Post, 1992). The age of depression onset is particularly critical as earlier onset of depression is associated with more recurrent and severe depression later in life (Zisook et al., 2007). Depressive symptoms typically appear to follow a normative “U-shaped” pattern throughout the life course, first appearing and rising through early adolescence and peaking in mid-late adolescence (15 to 17) before declining again in adulthood (Adkins et al., 2009).

Among young people under the age of 25, the amount of depressive symptoms a person has experienced is negatively associated with their intentions to seek help or support (Rickwood et al., 2007; Wilson et al., 2007). The negative cognition associated with depression remains a significant hurdle (Clark & Beck, 2010). Other factors that may reduce help-seeking include fear of potential stigma (Rickwood et al., 2005), limited mental health literacy (Kelly et al., 2007), and the preference of adolescents to rely on themselves to fix their own problems rather than reaching out to others (Rickwood et al., 2007). Perceived anticipated support and outcome expectations appear to be additional factors that adolescents consider when deciding whether or not to disclose a mental health difficulty to a close other (i.e., a close friend) (Rasmussen et al., 2020).

Depression messaging to encourage support-seeking

Support-seeking is a vital step between problem recognition and receiving necessary mental health services (Cauce et al., 2002; Srebnik et al., 1996), and help-seeking interventions are a promising tool for this age group (Hernan et al., 2010; Le et al., 2019; Lindow et al., 2020). In addition, both messaging strategy and suitable message sources are vital components of successful mental health interventions (Pirkis et al., 2019). The extant mental health communication literature highlights messaging strategies that have shown promise for encouraging help-seeking behaviors among audience members experiencing depression (Kim, 2016; Lueck, 2017, 2018; Siegel et al., 2017; Siegel et al., 2015; Suka et al., 2018, 2019, 2020; Yzer et al., 2021). Research also has highlighted potential strategies for audiences with heightened depressive symptomatology (Lienemann & Siegel, 2016, 2018, 2019; Lienemann et al., 2013; Lueck, 2017, 2018; Lueck, 2019; Siegel et al., 2017; Siegel et al., 2015; Siegel & Thomson, 2017). For example, while the evidence on gain- or loss-framing is still mixed, loss-framed messages

appear to perform better at encouraging help-seeking intentions than gain-framed messages (Hui et al., 2015; Klimes-Dougan et al., 2016; Lueck, 2017, 2018; Suka et al., 2018, 2019).

Klimes-Dougan et al. (2016) found evidence that a loss-framed *mistargeted* message ("Stop depression from taking another life") could be especially effective as a D-PSA. *Mistargeting* is one of the more promising communication strategies for encouraging help-seeking. Mistargeting is promising because exposure to messages directly targeting adults with elevated depressive symptomatology appears to lead to decreased seeking of support from friends and family (Christensen et al., 2006). However, *mistargeted* communication can enhance the persuasive strength of messages aimed at increasing support-seeking intentions among people with depression (Siegel et al., 2015). *Mistargeted* communication, an approach inspired by Walster & Festinger's (1962) overheard communication technique, is the technique of leading the target of a message to believe the message is intended *for someone else* (i.e., "Do you know someone who is struggling with depression?"). People who do not believe they are the intended target of persuasive communication are significantly less likely to counterargue with the message and are more likely to be persuaded (Brock & Becker, 1965; Walster & Festinger, 1962). Siegel et al. (2015) conducted two experimental tests of this phenomenon using mistargeted communication as part of a depression public service announcement (D-PSA) (e.g., "Do you have a friend who is depressed?"). Among participants assigned to the mistargeted D-PSA condition, those with heightened depressive symptomatology had significantly more favorable attitudes and increased intentions to seek depression support from a close friend.

Research also suggests that celebrities could play a pivotal role in addressing youth with heightened depressive symptoms in a D-PSA. An emerging body of literature suggests that celebrity health coverage in the media has substantial implications for public health (Beck et al.,

2014; Brown & Basil, 2010; Kresovich & Noar, 2020; Noar et al., 2014). Indeed, it appears that celebrity self-disclosure of mental health difficulties and advocacy can lead to normalization, increased awareness, and even encourage help-seeking (Calhoun & Gold, 2020). Most encouragingly, research suggests that celebrity pop music artists may be especially effective at promoting favorable mental health attitudes and behavioral intentions (Francis, 2018; Hoffner, 2019; Kresovich, 2020; N. C. Wong et al., 2017). For example, Francis (2018) observed that celebrity rap artist Kid Cudi's Facebook post disclosing his decision to seek professional help for depression led to increased information seeking among young black men. Further, research suggests that rap artist Logic's song "1-800-273-8255" about struggling with suicidal ideation before calling the National Suicide Prevention Lifeline (NSPL) was associated with a significant increase in calls to the NSPL and a slight reduction in suicides during periods when it was a popular topic on social media (Niederkrotenthaler et al., 2021).

In addition to having an appropriate message, U.S. youth ages 16 to 24 will need to perceive that the celebrity pop music artist serving as a spokesperson is *appropriate* to be speaking about the cause or issue. Celebrities are increasingly popular to utilize for the public good (i.e., philanthropy or PSAs) because they can increase media attention to the cause and leverage the target audiences' emotional attachment to them (Traub, 2008, March 9). Specifically, audience perceptions of the celebrity's issue-relevant credibility, expertise, trustworthiness, altruistic motives, and celebrity-cause congruence are vital to account for when selecting an effective spokesperson (Ohanian, 1990; Park & Cho, 2015).

It stands to reason that enlisting a celebrity to appear in a D-PSA could effectively persuade at-risk youth to reach out to a close other for support (i.e., a close friend). Encouraging young people to reach out to close others is essential, as half the people who take their own life do so

without telling another person of their plans (Kisely et al., 2011). Given their lack of mental health literacy and personal resources, close others are often the first place young people turn to when they recognize early signs of mental health problems. According to the *Seize the Awkward* campaign, when youth seek support, an estimated 76% will reach out to a peer (Seize the Awkward, 2018). In 2018, the Jed Foundation, the American Foundation for Suicide Prevention (AFSP), the Ad Council, and Doga5 launched the *Seize the Awkward* campaign, a mental health intervention designed to empower teens and young adults (ages 16 to 24) to reach out to a friend whom they suspect may be struggling with mental health issues and may be at risk for suicide. Among the influencers involved, the campaign utilizes numerous celebrity pop music artists – Billie Eilish, Lauv, Meghan Trainor, Noah Cyrus, and Aminè – to encourage and empower young people to initiate mental health conversations with friends who may be struggling with their mental health (Seize the Awkward, 2018). Messages can be perceived as direct to those reaching out to a friend or a mistargeted to those struggling with their mental health. One question health communicators might have is how to identify the ideal type of celebrity to enhance the impact of their messages; the *Seize the Awkward* campaign implies a harnessing of another significant influence in young people's lives — popular music.

Popular music in the lives of U.S. youth

Popular music is being consumed at unprecedented rates in American history. According to the most recent available data, an estimated 72.1 million people in the United States are now paying for monthly subscriptions to music streaming services. In 2019, on-demand streams crossed the one trillion threshold for the first time in a calendar year (Caulfield, 2020; Friedlander, 2020). The greatest proportion of consumers with subscriptions to music streaming services (i.e., Spotify,

Apple Music) are between 16 to 19 (46%), followed by 20 to 24 (42%), and U.S. youth ages 16 to 24 report spending nearly three hours per day listening to music (AudienceNet, 2018).

"It is a sociological truism that people's heaviest personal investment into popular music is when they are teenagers and young adults – music then ties into a particular kind of emotional turbulence, when issues of identity and social place, the control of public and private feelings, are at a premium" (Frith, 1987, p. 141). Song choices relate to their experiences, reflect their inner life, resonate with their identities, search for meaning, and provide them with a crucial emotional language (Cheong-Clinch, 2019; Cheong-Clinch & McFerran, 2016). Scholars argue that, at its core, youth musical engagement is an individualized act of creating, re-constructing, and cultivating a sense of self in the social world, one which emphasizes youth's agency in how to think of and express themselves (DeNora, 1999; Krueger, 2011; Saarikallio, 2019).

Music has a unique appeal and set of features that make it a popular medium for youth, especially among those experiencing depression. At its core, music has a eudaimonic component often missing in other media. Many of these functions of music listening are appealing because they are adaptive for wellbeing, enabling consumers to experience peak experience (Gabrielsson, 2010), flow (Lamont, 2011), and transcendence (Groarke & Hogan, 2015). In addition, music has a distinct set of features that differentiate it from other popular mediums in this context. Music has repeatability that many other media do not have – it is possible to repeat-watch movies, but not to the extent that one can repeat-listen to songs based on the consumption time required. Music also allows for more open interpretation and personalization as opposed to how video games and films are interpreted. With technological advancements (i.e., smartphones, Bluetooth speakers), music is also an incredibly portable medium that is relatively easy to consume in most contexts (Katz,

2010). It is also a medium with fewer sensory requirements (hearing only) than other forms of popular media, such as social media, video games, television, and movies.

There are deeply rooted biological, psychological, and social processes that explain how celebrity music artists can influence U.S. youth mental health attitudes and behaviors through their public comment, in addition to their music (Hoffman & Tan, 2015). Limited research on mental health disclosures by celebrity pop music artists has revealed that their public comment alone can reduce stigma and inspire information- and help-seeking behaviors (Francis, 2018; Hoffner, 2019; Kresovich, 2020; N. C. Wong et al., 2017). As central and prominent figures in American popular culture, celebrity pop music artists have the potential to persuade U.S. youth to engage in proactive mental health behaviors by modeling courage and vulnerability in their public comment: "Pleas [for mental health care] from (artists) young and old are louder now than ever, and these kinds of calls to action are valuable… When (artists) open up, fans listen" (Pearce, 2017, para. 13).

U.S. youth hold celebrity pop music artists in especially high regard because their music is a fundamental part of three vital adolescent developmental processes: emotional regulation, identity formation, and social inclusion among peers (McFerran et al., 2019). Adolescence and early adulthood are characterized by intense emotional unrest and increased demands for emotional regulation (Casey & Caudle, 2013; Halle, 2003). One of the most fundamental reasons youth listen to music is emotional regulation, reflecting their needs for self-determination of personal mood states. Adolescence is when most Strong Experiences Related to Music (SEM) occur (Gabrielsson & Wik, 2003). SEM is defined as the 'most' intense emotional experience an individual can have while listening to music. Youth learn to strategically rely on celebrity pop music artists' creations (songs) to cope with this complex and emotionally tumultuous developmental stage, using music to increase or maintain positive emotions, decrease negative

emotions, or process emotions by intensifying negative emotional states (Papinczak et al., 2015; Saarikallio & Erkkilä, 2007; Tarrant, 2002).

Youth also admire celebrity pop music artists because their music plays an integral role in supporting identity formation, a critical and defining youth process (Bennett & Nikulinsky, 2019). During this stage of development, youth go through the processes of identification with others' characteristics, the individuation of their own identity across contexts, and the integration of these new characteristics into a stable personal identity (Erikson, 1968; Lamont & Hargreaves, 2019). Certain songs, musical artists, bands, and genres provide ideas of narrative that youth identify and value about themselves (Bennett & Nikulinsky, 2019). Songs can act as an autobiography by proxy, in which youth hear their stories being re-told by musical artists who share the same emotional experiences. Celebrity pop music artists exist – making music, public comments, and appearances – such that their example provides youth a context for images of self, helping them in their self-discovery process to actualize their developing identity – both as existing and as an ideal.

Celebrity pop music artists' music also subconsciously draws youth into affective and emotional alliances with both the artists themselves *and* their peers who share the same musical tastes (Frith, 1998). This shared musical bond allows youth to feel a sense of social inclusion, positive belonging, and heightened self-esteem (Bennett & Nikulinsky, 2019). As already discussed, youth admire celebrity pop artists because they have made music that has 'been there' for them in times of emotional turbulence and taxing personal discovery. Thus, youth experiencing depression may be inspired by these celebrity pop music artists who have disclosed their mental health difficulties yet remain popular and admired – if not at least in part because of their mental health difficulties themselves – to both interpret that their personal mental health difficulties are

not uncommon among their peers and to feel more comfortable in opening up about them to a peer or someone else close to them.

The health communication literature has yet to examine the potential of leveraging the socio-developmental influence of celebrity pop music artists who disclose depression difficulties in mental health messaging to persuade depressed U.S. youth ages 16 to 24 to seek support from a close other (i.e., a close friend). Youth spend hours daily with these artists, connecting and relating with them and following them on social media. They turn to them – expressly, their music – in times of difficulty or when they are feeling at their lowest. Thus, health communication scholars may be able to harness the immense influence of these artists – especially as role models – to promote proactive mental health attitudes and behaviors.

Theoretical perspectives and determinants

Social cognitive theory (SCT) provides the theoretical framework for predicting how the use of celebrity pop music artists in mental health messages can encourage youth to seek support from close others (i.e., close friends). Specifically, this theory provides guidance for crafting a depression-related public service announcement, or D-PSA, as an intervention to increase intentions to seek depression support from a close friend among U.S. youth (ages 16 to 24) experiencing depressive symptoms.

Bandura's (2001) SCT suggests that celebrity pop music artists will be able to persuade and influence U.S. youth's attitudes and behavioral intentions because of their status as role models. Role models are vicarious motivators – they show audiences the rewards and punishments of engaging in certain behaviors and what outcomes they should expect via mass media – an "electronic acculturation" (Bandura, 2001, p. 271). As depicted through the mass media, role models not only motivate audiences but also inform and enable them. Celebrity pop music artists

who disclose mental health difficulties may therefore have the potential to normalize mental health difficulties, reduce mental health stigma, and most importantly, persuade people who are aware of the celebrities' disclosures to seek help. By modeling courage and vulnerability to millions of young people through their music and public statements, celebrity pop music artists can model seeking help for depression as salient, simple to understand, accessible, prevalent, and valued. In other words, these artists may be able to 'sanitize' (p. 278) the euphemistic label of depression. Further, as admired legitimate 'cool' authorities to youth, celebrity artists can 'sanction' (p.279) the pursuit of mental health treatment via seeking support from a close other (i.e., close friend) for the millions of vulnerable U.S. youth (ages 16 to 24) urgently in need of a path to disclosure intent.

SCT also highlights two vital proximal outcomes that can be embedded in health messages to encourage help-seeking among depressed youth: outcome expectations and self-efficacy to engage in behaviors leading to positive outcomes. *Self-efficacy* is generally defined as individuals' assessment of their effectiveness or competency to perform a specific behavior successfully. Outcome expectations refer to one's beliefs that their behavior will lead to the desired outcome (Bandura, 2001). To effectively persuade U.S. youth experiencing depressive symptoms to seek support via disclosure to a close other (i.e., a close friend), health messages will need to maximize perceived self-efficacy and outcome expectations for help-seeking among this vulnerable population. If executed properly, messages from these role models will lead to changes that impact cognition, attitudes, and behavior.

Role modeling has been listed as an attribute of identification (Brown, 2015), and identification with a character is one antecedent that might explain how audiences would be influenced by mental health disclosures from well-liked celebrities (Brown & Basil, 2010; Francis, 2018; Hoffner & Cohen, 2018; Kresovich, 2020). *Identification* is an involvement process in which

audience members internalize the celebrity or media personae's attitudes, beliefs, and values (Kelman, 1958, 1961). Cohen (2001) best defines the identification construct as an intense empathetic reaction in audiences to a celebrity or media personae. Cohen's (2001) widely acknowledged conceptualization highlights the alteration of the self-concept as "when identifying, one lacks the awareness of the self, and, therefore, the distinction between the self and the other" (p. 253). When an audience member identifies with a media character, the entire self-concept is lost, and the audience member imagines 'becoming' the celebrity or media personae. Francis' (2018) survey of young black men's reaction to a celebrity rap artist's public depression disclosure on social media observed associations between identification and increased information-seeking as mediated by emotional distress.

Hoffner and Buchanan's (2005) conceptualization of wishful identification outlines how an audience member desires to emulate the character, especially as a role model for identity development processes. This role modeling mechanism helps to explain how SCT operates on the individual level. Kresovich and Noar's (2020) recent meta-analysis observed a small-to-medium effect size between audience involvement with characters, such as identifying with characters, and health behavior intentions in response to a celebrity health disclosure or health event (i.e., highly-publicized death or hospitalization). However, only a few studies in the meta-analysis examined mental health intentions, and more research is needed to explore this potential phenomenon further. Relevant to this dissertation, *wishful identification* is defined as the desire to be like or act like the media character, or in this case, a celebrity pop music artist who openly discloses depression difficulties. In terms of this research specifically, wishful identification does *not* refer to a young person wishing to have the same mental health diagnosis or challenges as the celebrity pop music artist. Instead, in these instances, I hypothesize that the young person is wishfully identifying with

the solution-oriented aspects of the celebrity pop music artist based on the disclosure of positive outcomes associated with help-seeking or the implied positive outcomes based on the appearance of health or success of the artist.

This dissertation measures U.S. youth's wishful identification with celebrity pop music artists to assess the level of role modeling or emulation that may be occurring among at-risk audience members. The assessed emulation will be focused on the artist's positive characteristics (i.e., success, fame) rather than their less positive attributes (i.e., having depression, being sad). However, how much participants *romanticize* the idea of struggling with depression, perhaps due to their favorite artists openly disclosing their difficulties, will also be measured. In addition, this dissertation explores the use of mistargeted referent language in a D-PSA (e.g., "Do you know someone who is depressed?") in comparison with direct language (e.g., "Are you depressed?") as research suggests this may be a promising strategy to avoid potential iatrogenic boomerang effects among vulnerable audience members (Lienemann et al., 2013). The boomerang effect phenomenon is described in more detail in Chapter 4.

This dissertation examines the extent to which young celebrity pop music artists who open up about mental health difficulties in their music can persuade U.S. youth (ages 16 to 24) with heightened depressive symptomatology who have never been diagnosed with or treated for depression to seek support via disclosure to a close other (i.e., close friend) in response to viewing D-PSA messages in the form of social media posts. SCT provides the overarching theory of change, and the identification literature provides additional explanation for predicting how celebrity pop music artists may be powerfully persuasive change agents who could play a substantial role in helping to reverse troubling mental health trends among at-risk U.S. youth (Miron et al., 2019; Mojtabai & Olfson, 2020). D-PSAs aimed at depressed U.S. youth ages 16 to

24 will need to target vital cognitions and attitudes, including personal mental health literacy (Kelly et al., 2007), the tendency towards maladaptive self-reliance when dealing with personal mental health difficulties (Rickwood et al., 2007), anticipated support (Rasmussen et al., 2020), perceived social norms (Rickwood et al., 2007), stigma (Rickwood et al., 2005), perceived self-efficacy (Bandura, 2001), and outcome expectations (Rasmussen et al., 2020).

CHAPTER THREE: ASSESSMENT OF U.S. YOUTH MENTAL HEALTH ATTITUDES, BEHAVIORAL INTENTIONS, AUDIENCE INVOLVEMENT, AND PERCEPTIONS OF CELEBRITY POP MUSIC ARTISTS AS DEPRESSION SPOKESPEOPLE

Introduction

In December 2021, the United States Surgeon General issued a public health advisory warning that a mental health crisis was emerging among U.S. youth (U.S. Department of Health and Human Services, 2021). Even before the COVID-19 pandemic, depression rates had risen more than 50% from 2005 to 2017 among adolescents aged 12 to 17 and young adults aged 18 to 25 (Twenge et al., 2019). Major depressive episodes (MDE) in adolescents (ages 12 to 17) increased by 60% from 2004 to 2018 (SAMHSA, 2020). Results from the 2020 National Survey on Drug Use and Health indicate that only around 40% of U.S. youth (ages 12 to 17) who experienced a depressive episode in the previous year reported receiving treatment (Mental Health America, 2021). Worse yet, early estimates suggest that depression rates among youth (ages ≤18 years) doubled during the COVID-19 pandemic (Racine et al., 2021). These statistics are alarming, especially given that Major Depressive Disorder (MDD) is among the most prevalent lifetime disorder among suicidal adolescents (Nock et al., 2013).

One possible explanation for the lower help-seeking relative to experiences with depression may be due to the cognitive processing associated with depression (Clark & Beck, 2010). Other factors that may reduce support-seeking among this population include limited mental health literacy (Kelly et al., 2007), the tendency towards maladaptive self-reliance when dealing with

personal mental health difficulties (Rickwood et al., 2007), limited anticipated support (Rasmussen et al., 2020), perceived social norms (Rickwood et al., 2007), fear of potential stigma (Rickwood et al., 2005), limited perceived self-efficacy (Bandura, 2001), and outcome expectations (Rasmussen et al., 2020).

Research suggests that if depressed youth seek help, they are most likely to open up to a friend first (Seize the Awkward, 2018). These friends might then become the critical gateway to eventual professional help. Generally speaking, people who seek help for depression from informal sources like friends or family view the act as helpful. The primary advantages are the emotional and information support provided (Griffiths et al., 2011). Adolescents appear to prefer informal sources of help (i.e., friends) compared to more formal sources (i.e., mental health professionals) when seeking support for depression (Singh et al., 2019). Close friends are the "front line" (Dunham, 2004, p. 64) of youth suicide interventions. Close friends with experience with others who have attempted or completed suicides are also more likely to provide helpful responses and tell an adult authority who can help (Dunham, 2004). However, it is worth noting that anticipated stigma and unhelpful support (i.e., support which creates feelings of dependency or inadequacy among those with low self-esteem) loom as significant disadvantages to support seeking from informal resources like close friends and family (Griffiths et al., 2011). Further, adolescents with high levels of depression may even be less likely to seek help from trusted friends or family. Thus, peer and family vigilance and engagement are still valuable for adolescents with high depressive symptomatology (Sawyer et al., 2012).

It is then critical to determine which predictor variables to target in a potential intervention to persuade at-risk youth to seek depression support from a close other (i.e., a close friend). Gulliver et al.'s (2010) systematic review of the perceived barriers and facilitators to mental health

help-seeking in youth highlights mental health literacy (Kelly et al., 2007), stigma (Rickwood et al., 2005), and the tendency towards maladaptive self-reliance when dealing with personal mental health difficulties (Rickwood et al., 2007) as significant predictors of help-seeking intentions. In addition, anticipated support (Rasmussen et al., 2020), perceived social norms (Rickwood et al., 2007), perceived self-efficacy (Bandura, 2001), and outcome expectations (Rasmussen et al., 2020) are also all correlates and potential predictors of depression support-seeking intentions from close others (i.e., close friends) among this target population. While the mental health communication literature has indicated connections between audience involvement and some of these predictors (Francis, 2018; Hoffner & Cohen, 2018; Kresovich, 2020; N. C. Wong et al., 2017), no existing body of literature explores these particular support-seeking predictors or support-seeking intentions as a target outcome in this context.

The most recent Surgeon General's Advisory (2021) highlights the emerging mental health crisis among U.S. youth. The Advisory appeals to youth struggling with their mental health, advising them to "Find trusted adults, friends, or family members to talk to about stressful situations" (U.S. Department of Health and Human Services, 2021, p. 14). Therefore, the present study explores how health messages might encourage adolescents with elevated depressive symptomatology to seek the support of a close friend or family member. This study explores the use of celebrity spokespeople, specifically celebrity music artists, to encourage support seeking. There are deeply rooted biological, psychological, and social processes that explain how celebrity music artists may be able to effectively promote these support-seeking attitudes and behavioral intentions among U.S. youth as part of a mental health intervention (Hoffman & Tan, 2015). U.S. youth hold celebrity pop music artists in high regard because their music is a fundamental part of numerous vital socio-developmental processes (McFerran et al., 2019). Indeed, research suggests

that pop music artists, specifically, are the most influential celebrity role models to youth (Riles & Adams, 2020). Limited research on mental health disclosures by celebrity pop music artists has revealed that their public comment alone can reduce stigma and inspire both information- and help-seeking behaviors (Francis, 2018; Hoffner, 2019; N. C. Wong et al., 2017). Further, a recent pop song about struggling with suicidal ideation ("1-800-273-8255" by Logic) was associated with a significant increase in calls to the National Suicide Prevention Lifeline (NSPL – the phone number is the title of the song) and coincided with the timing with a slight reduction in suicides during peak social media discourse about the song (Niederkrotenthaler et al., 2021).

Bandura's (2001) social cognitive theory suggests that celebrity pop music artists who disclose their mental health difficulties can model proactive mental health attitudes and behaviors for depressed youth. As role models, these artists are vicarious motivators who show audiences the rewards and punishments of engaging in certain behaviors and what outcomes they should expect. Hoffner and Buchanan's (2005) conceptualization of wishful identification outlines how individuals desire to emulate the character as a role model. Wishful identification, in this case, does not refer to a young person wishing to have the same mental health diagnosis or challenges that the celebrity pop music artist does. Instead, wishful identification refers to the solution-oriented aspects of the celebrity pop music artist based on the disclosure of positive outcomes associated with help-seeking or the implied positive outcomes based on the artist's appearance of health or success. Limited health communication literature has shown identification as a mediator for attitude and behavior change in response to mental health disclosures by well-liked celebrities (Brown & Basil, 2010; Francis, 2018; Hoffner & Cohen, 2018; Kresovich, 2020). For example, Francis (2018) observed that young black men's identification with a celebrity rap artist mediated

depression information-seeking in the wake of the artist's social media post disclosing his decision to seek professional help for depression.

The promising results from Francis (2018) were also likely possible because, in addition to their identification with Cudi, the audience would have perceived Cudi as a legitimate authority on depression as all participants in the study knew about his social media disclosure. In other words, Cudi's personal experience with depression enhanced the audience's perception of his issue-relevant expertise. Audience perceptions of the spokesperson are crucial to acknowledge as the effectiveness of celebrities as role models come from a combination of the audience's perception of their attractiveness, trustworthiness, and issue-relevant expertise (Ohanian, 1990). Therefore, audience perceptions of the celebrity's issue-relevant credibility (i.e., expertise and trustworthiness), altruistic motives, and attractiveness (wishful identification) will be vital to understand when selecting an effective spokesperson to serve as a role model to this at-risk population (Ohanian, 1990; Park & Cho, 2015).

Building upon Bandura's (2001) social cognitive theory, I posit that empirically-informed selections of celebrity pop music artists who are open about mental health difficulties (making them credible subject experts based on their personal experiences) will be persuasive as role models encouraging depressed youth to engage in support-seeking behaviors from a trusted close other (i.e., close friend). First, this survey aims to identify which attitudes are most important for persuading U.S. youth (ages 16 to 24) to engage in mental health support-seeking via disclosure to a close other (i.e., close friend). Second, this exploratory survey assesses the target population's perceptions of – and involvement with – celebrity pop music artists who have disclosed mental health difficulties to identify which celebrities would be the most appropriate to use as spokespeople to promote depression help-seeking. This study also assesses if involvement with

these celebrity pop music artists who have expressed mental health difficulties may be unintentionally encouraging this age cohort to romanticize depression as trendy or as a "fascinating" character trait (Dunn, 2017; Jadayel et al., 2017; Scarano & Webster, 2018, p. 1).

Hypotheses and Research Questions

This exploratory survey examines associations between audience involvement (operationalized as wishful identification) with a depression-associated celebrity pop music artist and established predictors of depression support-seeking behavioral intentions. This study begins by testing the predictors of support-seeking intentions established by the extant literature before exploring the relationship between audience involvement with a celebrity pop music artist associated with depression and these predictors.

H1: Support-seeking intentions from a close friend among U.S. youth (ages 16 to 24) will be associated with (a) higher levels of each known perceived support-seeking facilitator (depression literacy, anticipated support, social norms, self-efficacy, outcome expectations) and (b) lower levels of each known perceived support-seeking barrier (maladaptive self-reliance beliefs, self-stigma, public stigma).

RQ1: How does audience involvement (wishful identification) with participants' most depression-associated celebrity pop music artist relate to their levels of (a) perceived support-seeking facilitators (depression literacy, anticipated support, social norms, self-efficacy, outcome expectations), (b) perceived support-seeking barriers (maladaptive self-reliance beliefs, self-stigma, public stigma), and (c) depression support-seeking intentions from a close other when controlling for

participants' depression history, depressive symptomatology, and recent history of choosing to listen to songs about depression?

RQ2: Are higher levels of wishful identification with participants' most depression-associated celebrity pop music artist associated with higher levels of depression romanticizing?

RQ3: How do the known support-seeking facilitators or barriers associate with the other potential sources of support (parent, family, intimate partner, etc.)?

RQ4: How do participants' music mood regulation use habits associate with their audience involvement (wishful identification) with their most depression-associated celebrity pop music artist, support-seeking facilitators, support-seeking barriers, intention to seek depression support from a close friend, and depression romanticizing when controlling for demographics, depression history, depressive symptomatology, and recent history of choosing to listen to songs about depression?

RQ5: How does participants' depression romanticizing associate with participants' audience involvement (wishful identification) with their most depression-associated celebrity pop music artist, support-seeking facilitators, support-seeking barriers, and intention to seek depression support from a close friend when

controlling for demographics, depression history, depressive symptomatology, and recent history of choosing to listen to songs about depression?

RQ6: What differences in participants' levels of (a) perceived support-seeking facilitators (depression literacy, anticipated support, social norms, self-efficacy, outcome expectations), (b) perceived support-seeking barriers (maladaptive self-reliance beliefs, self-stigma, public stigma), (c) depression support-seeking intentions from a close friend, and (d) depression romanticizing emerged based on separate analyses of participant gender, race/ethnicity, or socioeconomic status?

RQ7: Does depressive symptomatology moderate any observed associations between their intention to seek support from a close friend and their support-seeking facilitator or barrier attitudes and beliefs (comparing participants with PHQ-9 score < 9 to those with PHQ-9 score ≥ 10)?

RQ8: Do the support-seeking facilitators and barriers mediate the relationship between audience involvement with the celebrity pop music artist most associated with depression and support-seeking behavioral intentions from a close friend when controlling for demographics, depression history, depressive symptomatology, and recent history of choosing to listen to songs about depression?

Second, the exploratory survey will help to identify which celebrity pop music artists are most appropriate to use as celebrity spokespeople to persuade U.S. youth (ages 16 to 24) to engage

in mental health support-seeking via disclosure to a close other (i.e., close friend, family member, intimate partner).

RQ9: Comparing mean scores from participants, which celebrity pop music artists are the best spokespeople in a D-PSA aimed at this population given participants' familiarity, attitude toward the celebrity, perceived altruistic motive, perceived depression experience, trustworthiness, wishful identification, and peer appeal for (a) all participants and (b) participants with heightened depressive symptomatology (PHQ-9 score ≥ 5)?

Methods

Procedure

The cross-sectional survey was programmed and delivered to a convenience sample of U.S. youth ages 16 to 24 using panels administered by Qualtrics. The survey was advertised as a "Popular Music and Mental Health Survey" and administered from October 12, 2021 to October 26, 2021, and took 16 minutes on average to complete. Analyses were conducted using SPSS version 26.0 (Armonk, NY: IBM Corp.). All hypotheses and research questions except for RQ6, RQ7, and RQ8 were tested using Pearson correlations. RQ6 was tested using analysis of variance (ANOVAs). RQ7 used Z-tests to examine differences between the two groups. Finally, RQ8 was tested using the PROCESS Macro for SPSS (v3.3) Model 4 (Hayes, 2017) with bootstrapping procedures with 5,000 bootstrap samples and bias-corrected 95% confidence intervals.

I selected twenty-three celebrity pop music artists for inclusion based on the criteria of being a popular contemporary pop music artist who has publicly opened up about depression difficulties in the previous five years or has had their music highlighted in mainstream media for

depressive themes. “Contemporary” refers to the artists having released a highly successful major-label album or consistent music stream (i.e., successful single song releases or EPs) in the previous five years. The popularity of the selected celebrity pop music artists among the target population will be ensured by setting inclusion criteria as appearing in the Top 25 of the Billboard *Artist 100 Year-End* chart at least once between 2017 and 2020. The Billboard *Artist 100 Year-End* chart combines performance across the *Hot 100* (top-selling songs) chart, the *Billboard 200* album chart, and the Internet-centric *Social 50* chart.

At the time of the study, the mean age of the twenty-three included artists was 28.05 years old (*SD* = 5.06), with a low of 18 and a high of 37. Therefore, based on the outlined criteria, the twenty-three included artists with their peak *Artist 100 Year-End* rank between 2017-2020 or 2021 weekly peak (in parentheses) were Ariana Grande (#2), Billie Eilish (#3), DaBaby (#4), Drake (#1), Dua Lipa (#12), Ed Sheeran (#1), Future (#8), Halsey (#10), J. Cole (#22), Justin Bieber (#15), Kendrick Lamar (#4), Khalid (#4), Lil’ Baby (#7), Lil’ Uzi Vert (#12), Lizzo (#20), Luke Combs (#13), Olivia Rodrigo (#1 - 2021), Post Malone (#1), Shawn Mendes (#9), Suga (Rapper of BTS) (#8), Taylor Swift (#4), The Weeknd (#2), and Travis Scott (#6). Unfortunately, two of the most well-known young artists who spoke openly about depression difficulties in their music – JuiceWRLD (#6) and XXXTentacion (#6) – passed away in the years preceding this study.

Upon providing consent (including parental consent and participant assent for participants under 18), participants were provided with a list of the twenty-three artists and asked to select all artists with whom they were familiar. From those selections, participants then selected 3-5 artists that they “turn to most to feel better when they are feeling down.” Participants then answered a battery of questions regarding the selected celebrity pop music artists’ fits as potential D-PSA

spokespeople (i.e., attitude toward the celebrity, perceived altruistic motives, issue-relevant expertise, trustworthiness as a D-PSA spokesperson, wishful identification).

Following this battery of questions, participants then selected the artist they "*most* associate with depression (being open about their difficulties with depression, being known for opening up about depression in their music or interviews/social media, being a mental health advocate, etc.)." By maximizing depression association (and attempting to hold it constant), the results help to answer if *liking* an artist (being involved with them) is essential when considering using an artist as a spokesperson in a D-PSA. This selection also guided the wording of the wishful identification measure. Upon completing the wishful identification measure, participants responded to measures for depression literacy, maladaptive self-reliance beliefs, depression support-seeking attitudes, and depression support-seeking intentions. Demographics (gender, age, race, socioeconomic status, education level, parent education level, depressive symptomatology, depression history), participant musical preferences, music mood regulation use habits, depression romanticizing, and history of listening to songs about depression were also collected. The survey instrument can be found in Appendix A. The university's Institutional Review Board approved all study procedures.

Measures

Audience involvement

Wishful identification. Participants' wishful identification with the celebrity pop music artist they most associate with depression was assessed using five items adapted from Hoffner and Buchanan's (2005) instrument, which assessed how much respondents desire to be like or act like their favorite characters (Hoffner, 1996). Participants will indicate on a 7-point Likert scale from *strongly disagree* (1) to *strongly agree* (7) with statements including: [Artist] is the sort of person I want to be like myself; Sometimes I wish I could be more like [artist]; [Artist] is someone I see

as a role model. A shortened two-item version of the measure was utilized when participants assessed all the celebrity pop music artists they reported being 'familiar' with for inclusion in the D-PSA messages in the experiment (M = 4.31, SD = 1.56, α = .89).

Support-seeking facilitators

Depression literacy. Participants' depression literacy was assessed with a shortened version of the Public Understanding of Depression Questionnaire (PUDQ) (Swannell & McDermott, 2015), utilizing the 'ability to recognize depression' items. The following ten items were adapted and measured using a 7-point Likert scale from *strongly disagree* (1) to *strongly agree* (7) for participants' agreement about the following symptoms being a sign of depression: feeling down or sad most of the time; little interest in doing pleasurable activities most of the time; feelings of worthlessness or guilt; fixating on past failures or self-blame; trouble thinking, concentrating, making decisions, or remembering things; sleep disturbances, including sleeping too little or sleeping too much; tiredness or lack of energy; reduced appetite and weight loss or increased cravings for food and weight gain; slowed thinking, speaking, or body movements. As all items are symptoms of depression, higher scores will indicate higher depression literacy (M = 5.47, SD = 1.17, α = .93).

Perceived anticipated support from a close other. A measure for participants' perceived anticipated support from close others was adapted from Nambisan (2011). The 5-item measure utilizes a 7-point Likert-type scale from *strongly disagree* (1) to *strongly agree* (7). The items included: I could count on talking to someone close to me for support if I experienced depression; I could share my depression difficulties with someone close to me; I could get the emotional help and support I need from someone close to me if I were depressed; I could talk about my depression with someone close to me; I know someone close to me who is a real source of comfort (α = .91).

Depression support-seeking social norms. A single item was adapted from Vogel et al. (2007) to measure participants' perception of support-seeking social norms. The question asks participants to report their agreement from *strongly disagree* (1) to *strongly agree* (7) with the statement, "There is a person close to me who would think that I should reach out to them for support if I were experiencing depression." The Vogel et al. (2007) was initially taken from Bayer and Peay's (1997) social norm for seeking mental health services measure, who found that this single item exceptionally predicted help-seeking intent.

Depression support-seeking self-efficacy. Adapting Hernandez & Organista's (2013) self-efficacy scale for identifying the need for depression treatment, a support-seeking self-efficacy measure was created. The measure utilized a 7-point Likert scale from *strongly disagree* (1) to *strongly agree* (7) and has three items: (1) I could seek support for depression by opening up to someone close to me if I needed to, (2) If I were experiencing depression, I am confident that I would be able to open up to someone close to me for support, (3) If I were experiencing depression, I could find someone close to me that I would be able to open up to for support (α = .87).

Depression support-seeking outcome expectations. Support-seeking outcome expectancies were measured using an adaptation of Siegel et al.'s (2015) scale, which consists of five items on a scale with endpoints from *strongly disagree* (1) to *strongly agree* (7). Scale items assessing participants' social support outcome expectancies will be evaluated with their agreement with the statement "Seeking support for depression from someone close (e.g., close friend, family member, etc.)…" with the following items: "will make a positive difference"; "will help a depressed person"; "will shorten the length of time that a person with depression will remain depressed"; "will be valuable to help recover"; "helps a depressed person to get better" (α = .87).

Support-seeking barriers

Maladaptive self-reliance beliefs. Participants' tendency towards maladaptive self-reliance when dealing with personal mental health difficulties was assessed using a three-item measure from Britt et al. (2011), which was adapted from Mackenzie et al.'s (2004) attitudes toward seeking professional help scale. This measure utilizes a 7-point Likert scale from *strongly disagree* (7) to *strongly agree* (1) to assess preferences for dealing with depression problems without the help of others. Items will include: "I prefer to handle mental health problems, like feeling depressed, by myself as opposed to seeking the support of others"; "People should work out their own mental health problems. Reaching out to others for support when depressed should be a last resort"; "Depression tends to work itself out on its own" ($\alpha = .69$).

Depression support-seeking self-stigma. The Self-Stigma of Seeking Help (SSOSH) (Vogel et al., 2006) was utilized to measure reductions in self-esteem that result from receiving the label of a seeker of depression support from a close other (Vogel et al., 2009). This measure was shortened to include five items that were adapted to seeking depression support from a close other, measured on a 7-point Likert scale from *strongly disagree* (1) to *strongly agree* (7). The five items were: I would feel worse about myself if I could not handle being depressed on my own; If I was depressed and I opened up to someone close to me for support, I would be less satisfied with myself; My self-confidence would be threatened if I opened up to someone close to me for support if I was depressed; My self-esteem would INCREASE if I opened up to someone close to me for support if I was depressed (reversed); I would feel inadequate if I went to someone close to me for support if I was depressed. The SSOSH has shown high internal consistency and 2-month test-retest reliability in undergraduate samples (Vogel et al., 2006) ($\alpha = .75$).

Depression support-seeking public stigma. The Social Stigma of Receiving Psychological Help Scale (SSRPH) (Komiya et al., 2000) was adapted to assess perceptions associated with seeking support for depression from a close other. The five-question measure has items rated on a Likert scale ranging from *strongly disagree* (1) to *strongly agree* (7). The items included: I believe seeking support for depression from someone close to you carries social stigma; People generally believe it is a sign of personal weakness or inadequacy to seek support for depression from someone close to you; People would see me in a less favorable way if they come to know that I had opened up to someone close to me for depression support; It would be advisable for me to not tell people that I had opened up to someone close to me for depression support; People tend to dislike those who seek depression support from others close to them ($\alpha = .84$).

Target outcome

Depression support-seeking intention. These items were taken from the General Help-Seeking Questionnaire (GHSQ) (Wilson et al., 2005). Validity of the GHSQ was supported with the GHSQ being positively associated with prior and future help-seeking behavior, and initial testing revealed 3-week test-retest reliability. The eight items were taken from the GHSQ representing intentions to seek support from a close other use a 7-point Likert scale from *extremely unlikely* (1) to *extremely likely* (7) to assess how likely individuals who are experiencing depression are to seek help or support from various sources. For analyses, this study was primarily concerned with the 'close friend' measure, given the target population's preference for support-seeking from this group. Other items included: intimate partner (i.e., boyfriend, girlfriend, husband, wife, etc.), parent, family member (other relative/non-parent), mental health professional (e.g., psychologist, therapist, social worker, counselor), mental health website, Minister or religious leader (e.g., Priest, Rabbi, Chaplain), or an additional item stating 'I would seek help

from another not listed above (e.g., co-worker, roommate, resident assistant (RA), etc.).'I also included an item reading 'I would not seek help from anyone.'

Celebrity spokesperson measures

Likelihood of listening to the celebrity if feeling sad. Participants rated the likelihood of listening to their selected three to five celebrity pop music artists when they feel sad using a single item I created. Participants were asked, "How likely would is it that you would listen to [Artist] if you were feeling down, sad, lonely, or depressed?" and reported their likelihood of listening to the artist using a 7-point semantic differential scale from 1 (*Very unlikely*) to 7 (*Very likely*).

Celebrity personal appeal. Participants rated their attitude toward the three to five celebrity pop music artists they selected using a single item I created. Participants were asked, "How do you feel about [artist]?" and reported their attitude using a 7-point semantic differential scale from 1 (*strongly dislike*) to 7 (*strongly like*).

Celebrity appeal to peers. A single-item measure adapted from Ouvrein et al. (2019) was used to capture participants' perceptions of the appeal of the celebrity to their peer group. The single-item measure was rated on a Likert scale ranging from *strongly disagree* (1) to *strongly agree* (7) for the statement, "My friends like [Artist]."

Celebrity-depression association. Using two items I developed, participants rated the strength of their selected artists' association with depression. Participants were asked about their agreement with the following statements: "I think of [Artist] as someone who has made songs about feeling down, sad, or depressed" and "[Artist] is someone I associate with depression." Participants will report their agreement using a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

Celebrity-depression altruistic motive. Participants assessed the perceived altruistic motives of the three to five celebrity pop music artists they selected as the "most associated with depression" to appear in a depression D-PSA utilizing a two-item Likert-type scale adapted from Rifon et al. (2004) ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) for: [Artist] is concerned about depression, and [Artist] sincerely believes that depression is an important issue.

Celebrity-depression perceived expertise. A single-item measure adapted from Ohanian's (1990) celebrity endorser scale was used to assess the perceived depression expertise of the three to five celebrity pop music artists they selected as the ones they most associated with depression. "[Artist] is qualified to talk about experiencing depression" was measured from 1 (*strongly disagree*) to 7 (*strongly agree*).

Celebrity-depression perceived sincerity. A single-item measure adapted from Ohanian's (1990) celebrity endorser scale was used to assess the perceived sincerity of the three to five celebrity pop music artists they selected. "In general, [Artist] is sincere." The item was measured from 1 (*strongly disagree*) to 7 (*strongly agree*).

Music Listening Measures

Depression song listening history. Participants were asked if they recently chose to listen to music that mentions "feelings of depression" to control for those naturally drawn to music with depression themes. This single item was adapted from Kam et al. (2014) and measured on a 7-point agreement scale from 1 (*strongly disagree*) to 7 (*strongly agree*) (M = 4.82, SD = 1.84). Respondents were also asked how often their favorite music helps them "deal with your own mental health issues" (M = 5.57, SD = 1.56).

Favorite music genre. Participants were asked to rate how much they enjoy specific genres of music from 1 (*strongly dislike*) to 7 (*strongly like*) with a measure I created. The music

genre choices were adapted from Marshall and Naumann (2018), including: Country (*M* = 3.42, SD = 2.12), K-Pop (*M* = 3.12, SD = 2.10), Pop (*M* = 5.00, SD = 1.70), Rap/Hip-Hop (*M* = 5.42, SD = 1.62), Rock/Alternative (*M* = 4.83, SD = 2.00), R&B/Soul (*M* = 4.65, SD = 1.83). These categories are not inclusive of all musical genres and were only meant to cover the various genres of the artists included in the study.

Music mood regulation use. Adapted from Saarikallio and Erkkilä (2007), participants were asked to clarify which emotional goals they look to achieve when listening to music, including Entertainment (E), Revival (R), Strong Sensation (SS), Diversion (Div), Discharge (Dis), Mental Work (MW), and Solace (S). The 7-item measure has items rated on a Likert scale ranging from *strongly disagree* (1) to *strongly agree* (7). Items included: I like to listen to music when I can to make my atmosphere more pleasant, often as background music (Entertainment) (*M* = 5.92, SD = 1.32); I listen to music to get new energy after a rough day (Revival) (*M* = 5.82, SD = 1.42); music evokes strong emotional experiences in me (Strong Sensation) (*M* = 5.80, SD = 1.44); For me, listening to music is a way to forget about my worries (Diversion) (*M* = 5.81, SD = 1.43); I listen to music to release complicated feelings (Discharge) (*M* = 5.58, SD = 1.63); Music helps me to understand different feelings in myself (Mental Work) (*M* = 5.64, SD = 1.54); I listen to music to feel understood and comforted (Solace) (*M* = 5.72, SD = 1.49). All items were moderately to strongly correlated (mean *r*=.55) but not multicollinear, so the items were combined to create a composite measure for participants who use Music for Mood Regulation to identify participants who are more prone to using music for emotional regulation (*M*=5.74, SD = 1.15, α = .90).

Individual differences

Depressive symptomatology. Participants' depressive symptomatology was assessed using the Patient Health Questionnaire-9 (PHQ-9) (Kroenke & Spitzer, 2002). The PHQ-9 is a depression module that scores each of the 9 DSM-IV criteria as "0" (*not at all*) to "3" (*nearly every day*). Scores range from 1-4 (minimal depression), 5-9 (mild depression), 10-14 (moderate depression), 15-19 (moderately severe depression), 20-27 (severe depression). Participants are prompted, "Over the last two weeks, how often have you been bothered by any of the following problems?" Items include "Little interest or pleasure in doing things," "Feeling down, depressed, or hopeless," and "Feeling bad about yourself – or that you are a failure or have let yourself or your family down" (M = 12.5, SD = 7.62, α = .91).

Depression history. During the demographic section at the end of the instrument, participants were asked to self-report if they: are currently diagnosed with depression (32%), have ever been diagnosed or treated for depression (36%), think they are currently depressed (46%), had ever sought treatment for depression from a professional or friends and family (40%), or had personally known someone who has been depressed (74%). These five items were summed and averaged to create a depression history measure (M = .48, SD = .35, α = .76).

Depression romanticizing. There is growing concern among scholars that popular culture – including celebrity pop music artists through their disclosures of mental health difficulties – is unintentionally making mental health conditions like depression seem appealing to youth. This study will create a short measure for assessing how much U.S. youth see depression as trendy or as a "fascinating" character trait (Dunn, 2017; Jadayel et al., 2017; Scarano & Webster, 2018, p. 1). This 6-item measure will present respondents with the statement "People my age with depression are…" and provided anchor scales on a 5-point scale from -2 to +2 scored as *very (negative characteristic)* (-2), *somewhat (negative characteristic)* (-1), *neither (negative*

characteristic) nor (positive characteristic) (0), *somewhat (positive characteristic)* (1), and *very (positive characteristic)* (2) with scale anchors including: "uninteresting-interesting," "shallow-deep," "unimaginative-imaginative," "dull-fascinating," "uncreative-creative," "boring-captivating" (M = 0.41, SD = 0.78, α = .83).

Results

Participants

A national convenience sample of English-speaking U.S. youth ages 16 to 24 familiar with at least three celebrity pop music artists who have disclosed mental health difficulties (out of 23 potential artists) was recruited via online panels administered by Qualtrics (N = 417). For participants 16 or 17 years old, parents were invited to consider the survey opportunity for their children and, if interested, complete the parental consent. Once parental consent was acquired, the parent transferred device access to their child to provide assent and complete the survey. The majority of participants identified as female (n = 202; 48.4%), followed by male (n = 179; 42.9%), transgender (n = 18; 4.3%), and neither male, female, nor transgender (n = 18; 4.3%). In terms of racial and ethnic demographics, the majority of participants identified as White (n = 215; 51.6%), followed by Black or African-American (n = 89; 21.3%), Latinx/Hispanic (n = 46; 11%), Asian (n = 29; 7%), and mixed-race (n = 25; 6%). Participants were between 16 and 24 years old (M = 17.9, SD = 2.35), the vast majority (69.1%) being either 16 or 17 years old.

Initial descriptive and correlational analyses

Table 1 below presents the means, standard deviations, and zero-order correlations between variables of interest. Gender (coded as male or female) and race (coded as White or Non-White) are included among correlations to show general relationships with the measured variables. The majority of participants reported having personally known someone who had been depressed (n =

315; 75.5%). The Patient Health Questionnaire-9 (PHQ-9) (Kroenke & Spitzer, 2002) assessment of participants indicated that almost one in five (*n* = 78; 18.8%) were currently experiencing at most minimal depressive symptoms (PHQ-9 score < 4), a similar number (*n* = 75; 18.0%) were experiencing mild depressive symptoms (PHQ-9 score 5-9) and moderate depressive symptoms (*n* = 80; 19.2%; PHQ-9 score 10-14). Most participants were experiencing moderately severe depressive symptoms (*n* = 106; 25.4%; PHQ-9 score 15-19). Almost one in five participants was currently experiencing severe depressive symptoms (*n* = 77; 18.5%; PHQ-9 score 20=27).

On average, participants reported being familiar with 14 of the 23 (60.9%) celebrity pop music artists included in the study. Nearly two-thirds of the participants (*n* = 217, 65.0%) indicated some level of agreement (Slightly Agree: *n* = 94; 22.5%; Agree: *n* = 87; 20.9%; Strongly Agree: *n* = 90; 21.6%) that they had been listening to songs that mentioned feelings of depression in the previous two weeks. An overwhelming majority of the participants (*n* = 337, 80.9%) expressed some level of agreement (Slightly Agree: *n* = 75; 18.0%; Agree: *n* = 119; 28.5%; Strongly Agree: *n* = 143; 34.3%) that their favorite music helps them deal with their own mental health issues and a third of participants (*n* = 143, 34.3%) strongly agreed with this statement.

Table 1. Means, standard deviations, and zero-order correlations between variables.

Variables	*Mean*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Gender	N/A	N/A	–	-.09	.07	-.04	.19**	.22**	.18**	.08	-.06	.05	-.03	-.07	-.22**	.01	-.02	-.08
2. Age	17.91	2.35		–	.05	-.22**	.06	.03	-.05	.12*	-.03	-.04	-.04	.03	.13**	.01	.10*	-.09
3. Race	N/A	N/A			–	-.11*	.06	-.15*	-.01	.02	-.10*	-.18**	-.08	-.08	.07	.09	.04	-.13*
4. SES	3.05	1.71				–	-.06	-.02	-.01	-.07	.12*	.13*	.13*	.14*	-.11*	.00	-.01	.10
5. DEP symptoms	12.47	7.62					–	.42**	.30**	.16*	-.11*	-.08	-.14*	-.10*	.15*	.35**	.34**	-.14*
6. DEP history	0.48	.35						–	.34**	.07	.10*	.11*	.01	-.03	-.13*	.03	.07	.03
7. DEP literacy	5.47	1.17							–	.10*	.33**	.36**	.25**	.39**	-.15*	.10*	.15**	.14*
8. Wishful identif	4.31	1.56								–	.05	.04	.08	.15*	.09	.03	.12*	.13*
9. Anticip support	5.27	1.42									–	.66**	.76**	.61**	-.05	-.22**	-.14*	.44**
10. Social norms	5.41	1.56										–	.60**	.50**	-.13*	-.18**	-.12*	.35**
11. Self-efficacy	5.15	1.51											–	.61**	-.08	-.24**	-.17*	.55**
12.Outcome exp	5.17	1.21												–	.06	-.03	.03	.40**
13. Self-reliance	3.87	1.47													–	.45**	.45**	-.08
14. Self-stigma	4.14	1.30														–	.65**	-.16*
15. Public stigma	4.10	1.43															–	-.08
16. DEP support-seeking (friend)	4.84	1.42																–

Notes. For gender, 1 = male, 2 = female (transgender and non-identifying participants omitted in correlations for gender, n = 36, 8.6%). Age is in years. For race, 0 = White, 1 = Non-White. For SES, 1 = less than $20,000, 2 = $30,000 to $34,999, 3 = $35,000 to $49,999, 4 = $50,000 to $74,999, 5 = $75,000 to $99,999, 6 = more than $100,000. DEP symptoms summed PHQ-9 scores which range from 0 to 27 with nine 4-point items (scored from 0-3). Depression history was summed scores for history, 0 = no experience, 1 = experience. All other measures were rated on scales of 1-7. $^*p < .05$. $^{**}p < .001$.

Correlational analysis of facilitators and barriers to support-seeking

H1a predicted that higher levels of perceived support-seeking facilitators would be associated with higher depression support-seeking intentions from a close friend. This hypothesis was supported. All of the measured known support-seeking facilitators, namely depression literacy (r=.14), anticipated support (r=.44), perceived social norms (r=.35), self-efficacy (r=.55), and outcome expectations regarding seeking depression support (r=.40) were significantly and positively associated with increased depression support-seeking intentions from a close friend (p < .001 across all variables except depression literacy, p = .004) (Table 1).

H1b predicted that lower perceived support-seeking barriers would be associated with higher depression support-seeking intentions from a close friend. H1b was supported for one of the three measured support-seeking barriers. A significant (p = .001) negative association was observed between participants' self-stigma and increased intentions to seek depression support from a close friend (r=-.16). However, no significant relationship emerged for maladaptive self-reliance beliefs (r=-.08) or public stigma (r=-.08). In other words, findings indicate a positive relationship between support-seeking facilitating attitudes and increased intentions to seek depression support from a close friend. However, only self-stigma was related to decreased intentions to seek depression support from a close friend among this sample. Neither maladaptive self-beliefs nor public stigma appeared to relate to this outcome.

RQ1 asked how audience involvement (wishful identification) with participants' most depression-associated celebrity pop music artist related to their (a) levels of perceived support-seeking facilitators, (b) perceived support-seeking barriers, and (c) depression support-seeking intentions from a close friend while controlling for depression-related history variables. Based on partial correlations controlling for depression experience, current depressive symptoms, and recent

music listening history of depression-themed songs, wishful identification was only significantly associated with outcome expectations (r_p = .11, p = .03) and intention to seek support from a close friend (r_p = .13, p = .01). That is, the more U.S. youth (ages 16 to 24) viewed a celebrity pop music artist whom they associated with depression as a role model, the more likely they were to have positive outcome expectations of seeking support for depression from someone close to them and the more likely they were to indicate that they would seek depression support from a close friend if needed. No associations were observed between wishful identification and any of the perceived support-seeking barriers or other support-seeking facilitators.

RQ2 asked if higher levels of wishful identification with participants' most depression-associated celebrity pop music artist was associated with higher levels of depression romanticizing. Zero-order Pearson correlations revealed a significant positive correlation between wishful identification and depression romanticizing among this sample (r = .23, p < .001). The association remained significant in a partial correlation analysis controlling for participants' depressive symptomatology, depression history, and recent music listening history of depression-themed songs (r = .15, p < .01). Put another way, the more U.S. youth (ages 16 to 24) wishfully identify with a role model pop music artist they associated with depression, the more likely they were to romanticize depression as a positive or desirable character trait.

Support-seeking facilitators and barriers of alternative sources of support for depression

Alterative support-seeking sources came from the General Help-Seeking Questionnaire (GHSQ) (Wilson et al., 2005), including intimate partner (i.e., boyfriend, girlfriend, husband, wife, etc.), parent, family member (other relative/non-parent), mental health professional (e.g., psychologist, therapist, social worker, counselor), mental health website, Minister or religious leader (e.g., Priest, Rabbi, Chaplain), or an additional item stating 'I would seek help from another

not listed above (e.g., co-worker, roommate, resident assistant (RA)).'I also included an item reading 'I would not seek help from anyone.'

As seen below in Table 2, the results of RQ3 indicate the positive effects of anticipated support, social norms, self-efficacy, and outcome expectations remained robust across all sources of depression support. As expected, meaningful relationships emerged among participants who reported they would not seek help from anyone and maladaptive self-reliance beliefs, self-stigma, and public stigma. The role of depression literacy varied depending on the support resource. Participants who endorsed higher levels of maladaptive self-reliance beliefs and public stigma were significantly more likely to report willingness to use a private resource like a mental health website, religious leader, another resource, or no one. By contrast, those barriers did not affect more personal connections (i.e., close friends, intimate partners, parents, family members, and mental health professionals). In contrast, self-stigma was the main barrier for those closer connections. Interestingly, the only significant inverse relationship for support-seeking among depression literacy was among support-seeking intentions from a religious leader. Table 2 illustrates the full relationships.

Table 2. Zero-order correlations between support-seeking facilitators and barriers for all potential depression support resources among U.S. youth (ages 16 to 24).

Support-Seeking Intention	DEP Literacy	Anticipated Support	Social Norms	Self-Efficacy	Outcome Expect.	Self-Reliance	Self-Stigma	Public Stigma
Close Friend	.14*	.44**	.35**	.55**	.40**	-.08	-.16*	-.08
Intimate Partner	.16*	.40**	.34**	.46**	.37**	-.07	-.17**	-.07
Parent	-.05	.38**	.23**	.42**	.32**	.02	-.16*	-.09
Family Member	-.03	.36**	.19**	.42**	.32**	.09	-.04	-.02
MH Professional	.18*	.35**	.33**	.44**	.33**	-.09	-.11*	-.05
MH Website	.13*	.26**	.21**	.26**	.30**	.10*	.09	.14*
Religious Leader	-.19**	.17*	.01	.21**	.21**	.34**	.09	.11*
Other	03	.32**	.21**	.38**	.33**	.21**	.02	.12*
No One	.08	-.32**	-.28**	-.37**	-.17**	.33**	.41**	.36**

Note. All items were measured on a 7-point scale. *$p < .05$. **$p < .001$.

Associations between music mood regulation use and support-seeking attitudes and behaviors

RQ4 explored how participants' music mood regulation use habits are associated with their audience involvement (wishful identification) with their most depression-associated celebrity pop music artist, support-seeking facilitators, support-seeking barriers, intention to seek depression support from a close friend, and depression romanticizing. This partial correlation analysis

controlled for gender, age, race, socioeconomic status (mother's education), depressive symptomatology, depression history, and inclination to listen to songs with depressive themes.

As seen below in Table 3, reported use of music for mood regulation was positively associated with support-seeking facilitators (wishful identification, depression literacy, anticipated support, social norms, self-efficacy, and outcome expectations) but not barriers. In addition, it was associated with increased intentions to seek depression support from a close friend and to romanticize depression as a desirable trait. In other words, even when accounting for demographics, depressive symptoms, depression history, and music listening habits, the more U.S. youth (ages 16 to 24) reported using music for mood regulation purposes, the more likely they were to role model their most depression-associated celebrity pop music artist. In addition, they were also more likely to endorse positive mental health attitudes and intentions to seek depression support. They may have been more likely to romanticize depression as a desirable character trait with a larger sample.

Table 3. Partial correlations between music mood regulation use and outcomes of interest while controlling for background variables among U.S. youth (ages 16 to 24).

	WI	**DEP Literacy**	**Anticip. Support**	**Social Norms**	**Self-Efficacy**	**Outcome Expect.**	**Self-R**	**Self-Stigma**	**Public Stigma**	**S-Seek (Friend)**	**DEP ROM**
	r	***r***	***r***	***r***	***r***	***r***	***r***	***r***	***r***	***r***	***r***
Music Mood Regulation Use	.20**	.43**	.20**	.24**	.24**	.33**	-.06	.05	.05	.14*	.10

Note. WI = Wishful Identification. Self-R = Self-Reliance. S-Seek = Support-Seeking Intentions. DEP ROM = Depression Romanticizing. All items were measured on a 7-point scale. *$p < .05$. **$p < .001$. Partial correlation analysis controlled for gender, age, race, socioeconomic status (mother's education), depressive symptomatology, depression history, and inclination to listen to songs with depressive themes.

Associations between depression romanticizing and support-seeking attitudes and behaviors

RQ5 explored how participants' depression romanticizing is associated with their audience involvement (wishful identification) with their most depression-associated celebrity pop music artist, support-seeking facilitators, support-seeking barriers, and intention to seek depression support from a close friend. This partial correlation analysis controlled for gender, age, race, socioeconomic status (mother's education), depressive symptomatology, depression history, and inclination to listen to songs with depressive themes.

As seen below in Table 4, similar to reported use of music for mood regulation, depression romanticizing was positively associated with support-seeking facilitators (wishful identification (r = .15), depression literacy (r = .20), anticipated support (r = .14), social norms (r = .21), self-efficacy (r = .11), and outcome expectations (r = .11)) but not barriers. Depression romanticizing was also associated with increased intentions to seek depression support from a close friend (r = .13). In other words, even when accounting for demographics, depressive symptoms, depression history, and music listening habits, the more U.S. youth (ages 16 to 24) reported depression romanticizing, the more likely they were to role model their most depression-associated celebrity pop music artist. In addition, they were also more likely to endorse positive mental health attitudes and intentions to seek depression support.

Table 4. Partial correlations between depression romanticizing and outcomes of interest while controlling for background variables among U.S. youth (ages 16 to 24).

	WI	DEP Literacy	Anticip. Support	Social Norms	Self-Efficacy	Outcome Expect.	Self-Reliance	Self-Stigma	Public Stigma	Support-Seek (Friend)
	r	*r*	*r*	*r*	*r*	*r*	*r*	*r*	*r*	*r*
DEP ROM	.15*	.20**	.14*	.21**	.11*	.11*	-.02	-.01	.03	.13*

Note. DEP ROM = Depression Romanticizing. WI = Wishful Identification. All items were measured on a 7-point scale. *$p < .05$. **$p < .001$. Partial correlation analysis controlled for gender, age, race, socioeconomic status (mother's education), depressive symptomatology, depression history, and inclination to listen to songs with depressive themes.

Comparisons across gender, race, and socioeconomic status

RQ6 explored differences in the relationships between perceived support-seeking facilitators and barriers with depression support-seeking intentions from a close friend based upon gender, race, socioeconomic status (SES), and depressive symptomatology among U.S. youth (ages 16 to 24) using a custom analysis of variance (ANOVA) with gender, race, SES, and depressive symptomatology entered as fixed factors. Two-way interactions between demographics (gender, race, SES, symptomatology) were also included in the analyses as fixed factors. For gender comparisons, participants who identified as males or females were included in the analysis, and transgender and "other gender identity" participants were omitted due to small sample sizes. Only White, Black/African-American, and Latinx/Hispanic participants were included for race comparisons, with other racial groups being omitted due to small sample sizes. Differences among perceived support-seeking facilitators, barriers, and intention to seek support from a close friend by socioeconomic status (SES) were assessed via participants' maternal education scores, as research suggests maternal education can serve as a proxy measure for socioeconomic status (Desai & Alva, 1998). Participants were sorted into two categories for their maternal education scores – high school degree or less or college degree (i.e., Associate's, Bachelor's, graduate

degree) or more, in order to assess differences based upon SES. Depressive symptomatology groups were sorted into low (participants with minimal and moderate scores (PHQ-9 scores: 0 - 14)) and high (participants with moderately severe and severe scores (PHQ-9 scores: 15 – 27)) groups due to the limited number of participants with severe depressive symptoms. All of the omissions above left these analyses with 322 participants.

First, I explored differences in depression literacy across demographic and symptomatic groups, including the interactions. As seen below in Table 5, male participants (*M* = 5.25, SD = 1.20) scored significantly lower for depression literacy than female participants (*M* = 5.62, SD = 1.04) for depression literacy. Also, participants experiencing more intense depressive symptoms (*M* = 5.64, SD = 1.07) scored significantly higher for depression literacy than participants experiencing less intense depressive symptoms (*M* = 5.33, SD = 1.15). No other differences were found.

Table 5. Results of ANOVAs exploring demographic and symptomatic differences in depression literacy.

Variable	***df***	***F-Score***	***p***
Gender	(1, 265)	4.32	.04*
Race	(2, 265)	2.07	.13
Socioeconomic Status	(1, 265)	.01	.94
DEP Symptomatology	(1, 265)	8.53	.00*
Gender x Race	(2, 265)	.54	.59
Gender x SES	(1, 265)	.24	.62
Gender x DEP Symptom	(1, 265)	1.52	.22
Race x SES	(2, 265)	1.02	.36
Race x DEP Symptom	(2, 265)	1.52	.22
SES x DEP Symptom	(1, 265)	.60	.44

Note. *$p < .05$, **$p < .001$.

Next, I explored differences in wishful identification across demographic and symptomatic groups, including the interactions. As seen below in Table 6, participants experiencing more

intense depressive symptoms (M = 4.61, SD = 1.46) scored significantly higher than participants experiencing less intense depressive symptoms (M = 4.13, SD = 1.60) for wishful identification with the most depression associated celebrity pop music artist. An interaction also emerged for wishful identification between gender and race, $F(2, 266) = 3.07$, $p < .05$. Tukey HSD post-hoc analyses indicated that the significant difference within females was driven by the Latinx/Hispanic female participants (M = 4.96, SD = 1.34) and White female participants (M = 4.70, SD = 1.51) scoring significantly higher than the Black/African-American female participants (M = 3.87, SD = 1.62). No other differences were found.

Table 6. Results of ANOVAs exploring demographic and symptomatic differences in wishful identification.

Variable	***df***	***F-Score***	***p***
Gender	(1, 265)	.14	.71
Race	(2, 265)	2.65	.07
Socioeconomic Status	(1, 265)	.24	.62
DEP Symptomatology	(1, 265)	4.60	.03*
Gender x Race	(2, 265)	3.07	.05*
Gender x SES	(1, 265)	1.25	.26
Gender x DEP Symptom	(1, 265)	1.10	.30
Race x SES	(2, 265)	.38	.69
Race x DEP Symptom	(2, 265)	.06	.94
SES x DEP Symptom	(1, 265)	.98	.32

Note. *$p < .05$, **$p < .001$.

Next, I explored differences in anticipated support across demographic and symptomatic groups, including the interactions. As seen below in Table 7, a significant difference in anticipated support emerged based on socioeconomic status. Results indicate that participants from higher socioeconomic backgrounds (M = 5.54, SD = 1.26) scored significantly higher for anticipated support than participants from lower socioeconomic backgrounds (M = 5.12, SD = 1.47). No other differences were found.

Table 7. Results of ANOVAs exploring demographic and symptomatic differences in anticipated support.

Variable	*df*	*F-Score*	*p*
Gender	(1, 265)	.00	.98
Race	(2, 265)	2.39	.09
Socioeconomic Status	(1, 265)	4.42	.04*
DEP Symptomatology	(1, 265)	.21	.65
Gender x Race	(2, 265)	1.14	.32
Gender x SES	(1, 265)	.32	.57
Gender x DEP Symptom	(1, 265)	.44	.51
Race x SES	(2, 265)	.66	.52
Race x DEP Symptom	(2, 265)	.41	.67
SES x DEP Symptom	(1, 265)	.01	.91

Note. *$p < .05$, **$p < .001$.

Next, I explored differences in social norms across demographic and symptomatic groups, including the interactions. As seen below in Table 8, the exploration of demographic and symptomatic differences in social norms revealed a significant difference based on race. White participants ($M = 5.68$, SD = 1.44) had significantly higher perceptions of social norms for seeking depression support from a close informal contact (i.e., close friend) than the Black/African-American participants ($M = 4.93$, SD = 1.57). No other differences were found.

Table 8. Results of ANOVAs exploring demographic and symptomatic differences in social norms.

Variable	*df*	*F-Score*	*p*
Gender	(1, 265)	2.14	.15
Race	(2, 265)	5.57	.00*
Socioeconomic Status	(1, 265)	3.36	.07
DEP Symptomatology	(1, 265)	1.31	.25
Gender x Race	(2, 265)	1.28	.28
Gender x SES	(1, 265)	.07	.80
Gender x DEP Symptom	(1, 265)	1.68	.20
Race x SES	(2, 265)	.50	.61
Race x DEP Symptom	(2, 265)	.21	.81
SES x DEP Symptom	(1, 265)	.01	.91

Note. *$p < .05$, **$p < .001$.

Next, I explored differences in self efficacy across demographic and symptomatic groups, including the interactions. As seen below in Table 9, analyses indicated only a significant difference based upon socioeconomic status (SES), such that participants from higher SES backgrounds ($M = 5.41$, SD = 1.35) scored significantly higher than participants from lower SES backgrounds ($M = 4.96$, SD = 1.58) for self-efficacy attitudes regarding depression support-seeking from a close contact. No other differences were found.

Table 9. Results of ANOVAs exploring demographic and symptomatic differences in self-efficacy.

Variable	*df*	*F-Score*	*p*
Gender	(1, 265)	.20	.66
Race	(2, 265)	1.58	.21
Socioeconomic Status	(1, 265)	5.87	.02*
DEP Symptomatology	(1, 265)	.03	.87
Gender x Race	(2, 265)	.51	.60
Gender x SES	(1, 265)	.50	.48
Gender x DEP Symptom	(1, 265)	.50	.48
Race x SES	(2, 265)	.57	.57
Race x DEP Symptom	(2, 265)	1.31	.27
SES x DEP Symptom	(1, 265)	.26	.61

Note. *$p < .05$, **$p < .001$.

Next, I explored differences in outcome expectations demographic and symptomatic groups, including the interactions. As seen below in Table 10, no significant differences were found.

Table 10. Results of ANOVAs exploring demographic and symptomatic differences in outcome expectations.

Variable	*df*	*F-Score*	*p*
Gender	(1, 265)	.16	.69
Race	(2, 265)	2.17	.12
Socioeconomic Status	(1, 265)	2.25	.14
DEP Symptomatology	(1, 265)	.69	.41
Gender x Race	(2, 265)	.92	.40
Gender x SES	(1, 265)	.85	.36
Gender x DEP Symptom	(1, 265)	.50	.48
Race x SES	(2, 265)	.42	.66
Race x DEP Symptom	(2, 265)	.01	.99
SES x DEP Symptom	(1, 265)	.40	.53

Note. *$p < .05$, **$p < .001$.

Next, I explored differences in maladaptive self-reliance across demographic and symptomatic groups, including the interactions. As seen below in Table 11, the custom analysis of

variance (ANOVA) indicated numerous significant differences based on race and depressive symptomatology as well as an interaction between gender and race for participants' scores on maladaptive self-reliance. Male participants (*M* = 4.19, SD = 1.52) scored significantly higher than female participants (*M* = 3.73, SD = 1.41) for maladaptive self-reliance attitudes toward depression treatment. In addition, participants experiencing more intense depressive symptoms (*M* = 4.12, SD = 1.42) scored significantly higher for self-reliance beliefs than participants experiencing less intense depressive symptoms (*M* = 3.64, SD = 1.48). Results also indicated an interaction between gender and race where the significance was driven by the difference between Latinx/Hispanic female participants (*M* = 3.54, SD = .99) and Latinx/Hispanic male participants (*M* = 4.73, SD = 1.41), $t(41) = 2.77$, $p = .01$. No other differences were found.

Table 11. Results of ANOVAs exploring demographic and symptomatic differences in maladaptive self-reliance.

Variable	***df***	***F-Score***	***p***
Gender	(1, 265)	8.48	.00*
Race	(2, 265)	.51	.60
Socioeconomic Status	(1, 265)	.06	.80
DEP Symptomatology	(1, 265)	11.77	.00*
Gender x Race	(2, 265)	3.29	.04*
Gender x SES	(1, 265)	.32	.57
Gender x DEP Symptom	(1, 265)	1.71	.19
Race x SES	(2, 265)	1.83	.16
Race x DEP Symptom	(2, 265)	.51	.60
SES x DEP Symptom	(1, 265)	.07	.79

Note. *$p < .05$, **$p < .001$.

Next, I explored differences in self stigma across demographic and symptomatic groups, including the interactions. As seen below in Table 12, analyses only indicated significant differences based on depressive symptomatology. Participants experiencing more intense depressive symptoms (*M* = 4.58, SD = 1.27) scored significantly higher for self-stigma than

participants experiencing less intense depressive symptoms (*M* = 3.73, SD = 1.17). No other differences were found.

Table 12. Results of ANOVAs exploring demographic and symptomatic differences in self-stigma.

Variable	***df***	***F-Score***	***p***
Gender	(1, 265)	.92	.34
Race	(2, 265)	.53	.59
Socioeconomic Status	(1, 265)	.06	.80
DEP Symptomatology	(1, 265)	17.66	.00**
Gender x Race	(2, 265)	.82	.44
Gender x SES	(1, 265)	1.55	.21
Gender x DEP Symptom	(1, 265)	1.82	.18
Race x SES	(2, 265)	2.21	.11
Race x DEP Symptom	(2, 265)	.29	.75
SES x DEP Symptom	(1, 265)	.01	.93

Note. *$p < .05$, **$p < .001$.

Next, I explored differences in public stigma across demographic and symptomatic groups, including the interactions. As seen below in Table 13, Results of the custom analysis of variance (ANOVA) indicated significant differences in public stigma scores based on gender and depressive symptomatology. Male participants scored significantly higher (*M* = 4.13, SD = 1.48) than female participants (*M* = 4.02, SD = 1.34) for public stigma perceptions. Participants experiencing more intense depressive symptoms (*M* = 4.55, SD = 1.27) scored significantly higher for perceptions of public stigma than participants experiencing less intense depressive symptoms (*M* = 3.73, SD = 1.40). No other findings were significant.

Table 13. Results of ANOVAs exploring demographic and symptomatic differences in public stigma.

Variable	*df*	*F-Score*	*p*
Gender	(1, 265)	4.14	.04*
Race	(2, 265)	.13	.88
Socioeconomic Status	(1, 265)	.13	.72
DEP Symptomatology	(1, 265)	16.75	.00**
Gender x Race	(2, 265)	.56	.57
Gender x SES	(1, 265)	2.79	.10
Gender x DEP Symptom	(1, 265)	1.67	.20
Race x SES	(2, 265)	.21	.81
Race x DEP Symptom	(2, 265)	.94	.39
SES x DEP Symptom	(1, 265)	.06	.81

Note. *$p < .05$, **$p < .001$.

Next, I explored differences in intentions to seek depression support from a close friend across demographic and symptomatic groups, including the interactions. As seen below in Table 14, no significant differences emerged. No other differences were found.

Table 14. Results of ANOVAs exploring demographic and symptomatic differences in intentions to seek depression support from a close friend.

Variable	*df*	*F-Score*	*p*
Gender	(1, 265)	.75	.39
Race	(2, 265)	1.98	.14
Socioeconomic Status	(1, 265)	1.89	.17
DEP Symptomatology	(1, 265)	.81	.37
Gender x Race	(2, 265)	.00	1.00
Gender x SES	(1, 265)	.05	.83
Gender x DEP Symptom	(1, 265)	.16	.69
Race x SES	(2, 265)	1.48	.23
Race x DEP Symptom	(2, 265)	.08	.92
SES x DEP Symptom	(1, 265)	.35	.56

Note. *$p < .05$, **$p < .001$.

Finally, I explored differences in depression romanticizing across demographic and symptomatic groups, including the interactions. Results of the custom analysis of variance

(ANOVA) indicated significant differences based on participants' depressive symptomatology. Participants experiencing more intense depressive symptoms (*M* = .57, SD = .74) scored significantly higher for depression romanticizing than participants experiencing less intense depressive symptoms (*M* = .23, SD = .79). No other findings emerged.

Table 15. Results of ANOVAs exploring demographic and symptomatic differences in depression romanticizing.

Variable	***df***	***F-Score***	***p***
Gender	(1, 265)	.00	.99
Race	(2, 265)	.53	.59
Socioeconomic Status	(1, 265)	3.30	.07
DEP Symptomatology	(1, 265)	10.40	.00*
Gender x Race	(2, 265)	.51	.60
Gender x SES	(1, 265)	.37	.54
Gender x DEP Symptom	(1, 265)	.47	.49
Race x SES	(2, 265)	.80	.45
Race x DEP Symptom	(2, 265)	.22	.80
SES x DEP Symptom	(1, 265)	1.92	.17

Note. *$p < .05$, **$p < .001$.

Moderator and mediator analyses

For RQ7, participants were split into two groups – those who scored as having mild depressive symptoms or less (PHQ-9 score < 9, *n* = 153, 36.8%) and those with moderate depressive symptoms or more (PHQ-9 score > 10, *n* = 263, 63.2%). Correlations for each separate group can be found below in Table 19 and Table 20.

Table 16. Correlations between intentions to seek depression support from a close friend and outcomes of interest among U.S. youth (ages 16 to 24) experiencing mild depressive symptoms or less (PHQ-9 score < 10) (*n* = 153).

	DEP Literacy	Anticip. Support	Social Norms	Self-Efficacy	Outcome Expect.	Self-Reliance	Self-Stigma	Public Stigma
	r	*r*	*r*	*r*	*r*	*r*	*r*	*r*
Support-Seeking (Friend)	.12	.50**	.32**	.57**	.30**	-.02	-.15	-.10

Note. **p < .05. **p < .001.*

Table 17. Correlations between intentions to seek depression support from a close friend and outcomes of interest among U.S. youth (ages 16 to 24) experiencing moderate depressive symptoms or greater (PHQ-9 score ≥ 10) (*n* = 263).

	DEP Literacy	Anticip. Support	Social Norms	Self-Efficacy	Outcome Expect.	Self-Reliance	Self-Stigma	Public Stigma
	r	*r*	*r*	*r*	*r*	*r*	*r*	*r*
Support-Seeking (Friend)	.22**	.38**	.34**	.51**	.43**	-.06	-.09	.01

Note. **p < .05. **p < .001.*

Z-tests were then utilized to test differences between the two groups. Results indicated no significant differences across any of the outcomes. However, differences between groups for anticipated support (z = 1.46, *p* = .07) and outcome expectations (z = -1.47, *p* = .07) both approached significance. It is important to note that the change in anticipated support was negative, whereas the change in outcome expectations was positive. That is, among those with lower levels of depressive symptomatology, anticipated support related positively at *r* = .50 to intentions to seek support from a close friend. Among those with higher levels of depressive symptomatology, the relationship was still positive but at a lower *r* = .38. Conversely, among those with lower levels of depressive symptomatology, outcome expectancies related positively at *r* = .30 to intentions to

seek support from a close friend. Among those with higher levels of depressive symptomatology, this relationship was positive at a higher $r = .43$.

I then conducted an exploratory post hoc moderation analysis of both potential interactions. The interaction between anticipated support and depressive symptomatology did not indicate a significant interaction in intentions to seek depression support from a close friend, $B = -.11$, 95% CI (-.34, .12). The relationship between outcome expectations and depressive symptomatology indicated a significant interaction on intentions to seek depression support from a close friend, $B = .30$, 95% CI (.03, .57), $p = .03$. As seen below in Figure 1, the positive relationship between participants' outcome expectations and support-seeking intentions was more pronounced in the high-depressive symptoms group than in the low-depressive symptoms group, consistent with the correlations noted in the above paragraph. Support-seeking intentions appear to be equivalent regardless of depression symptomatology level for participants with the most positive outcome expectancies. For those with low outcome expectancies, however, support-seeking intentions diverged between the low- and high-depressive groups, such that intentions were lower among the high-depressive group compared to the other group. This finding suggests that intentions to seek support might increase if outcome expectations for seeking depression support increase, to the point where any reductions in intention due to symptomatology are overcome.

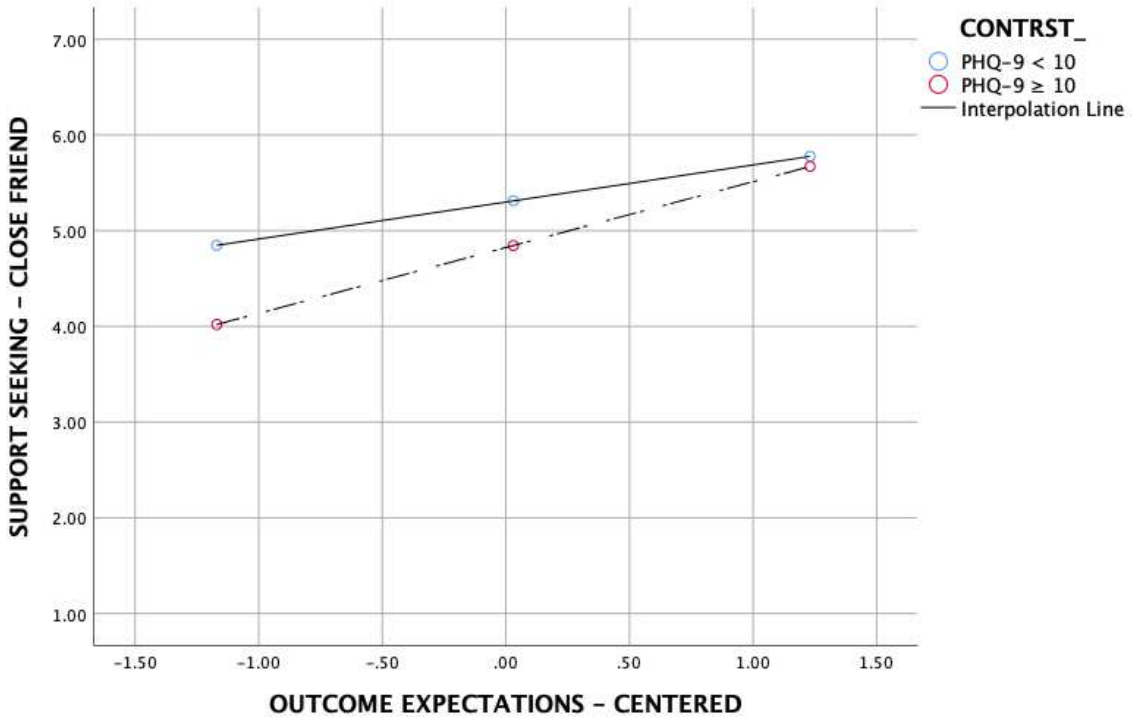


Figure 1. Interaction between outcome expectations and depressive symptomology on support-seeking intentions from a close friend.

Next, this study examined the mediating role of support-seeking facilitators and barriers between audience involvement with the celebrity pop music artist participants most associate with depression and intentions to seek depression support from a close friend. The mediation model accounted for depression history, depressive symptomatology, and recent history of listening to songs about depression. Although the overall model was significant $F(15,344) = 10.82$, $p < .001$, $R^2 = .32$, none of the facilitators nor barriers mediated the relationship between wishful identification with the most depression-associated artist and intentions to seek depression support from a close friend. When accounting for background variables, only self-efficacy's direct path and the direct wishful identification path emerged as significant predictors of intentions to seek depression support from a close friend. In other words, self-efficacy emerged as a robust predictor of support-seeking intentions from a close friend in this model, although not as a mediator. In

addition, role modeling a celebrity pop music artist associated with depression (wishful identification) may also play an essential role in predicting intentions in this context.

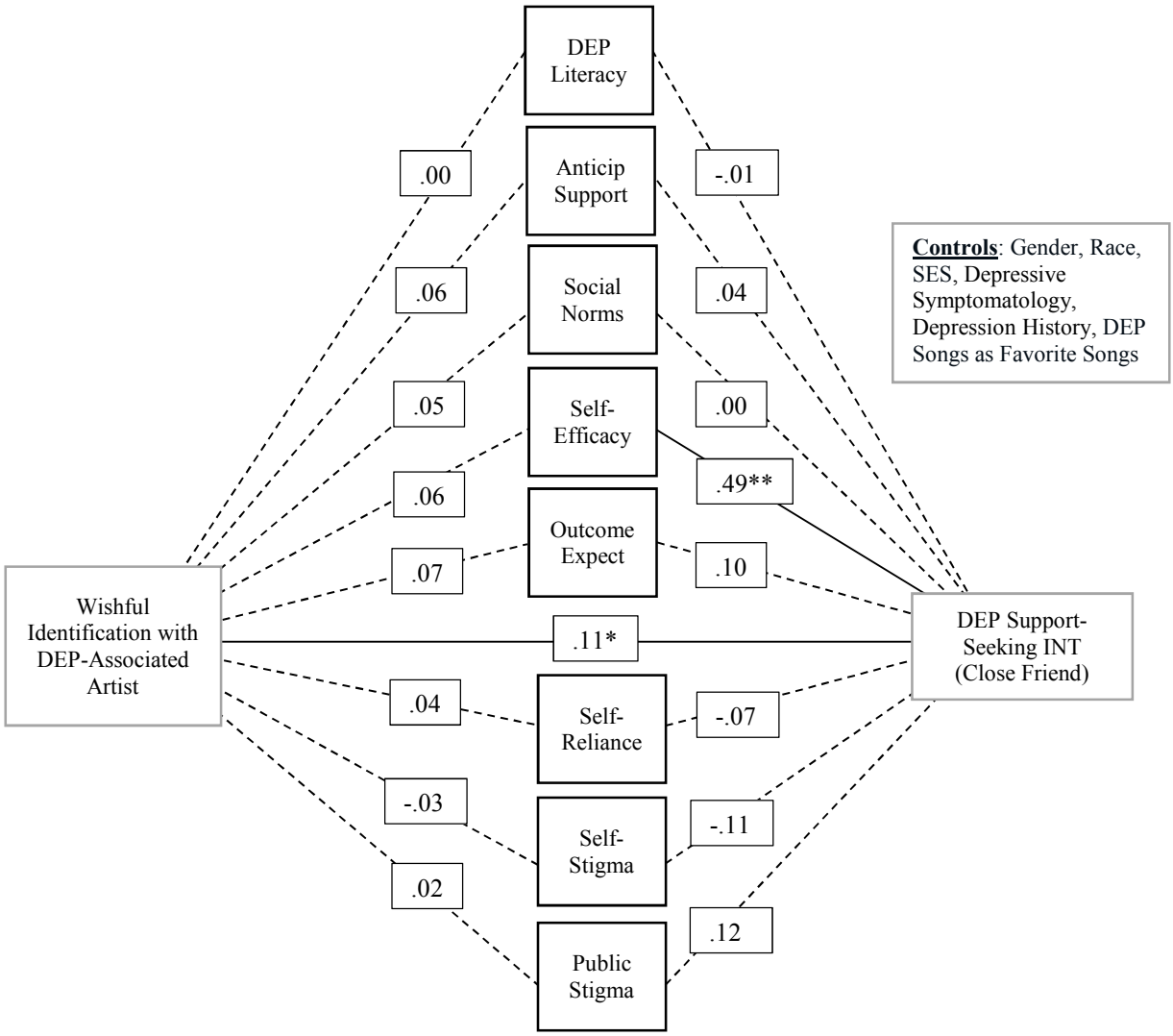


Figure 2. Analysis of the relationship between wishful identification and depression support-seeking intentions from a close friend as mediated by support-seeking facilitators and barriers.

*$p < .05$. **$p < .01$. ***$p < .001$.

Celebrity spokesperson selection

For RQ9 – which involved the selection of celebrity spokespersons – I reviewed the scores among the participants using meaningful thresholds to aid the spokesperson selection process. I systematically selected the best celebrity spokespeople for a depression public service announcement campaign using based on the following criteria: (1) as celebrity is a function of fame, the spokespeople must be familiar to at least two-thirds of the target population across demographics, (2) the spokespeople must have music be viewed as artists who make appealing music across target population demographics, and (3) the spokespeople must have issue-relevant credibility (i.e., expertise, sincerity, altruism, role model appeal). Finally, I will ensure that the spokespeople selected for the campaign are inclusive in representing gender (both male and female) and race (both white and non-white).

RQ8 explored participant perceptions of which celebrity pop music artists would be the best spokespeople in a D-PSA based on their respective scores for familiarity, personal appeal, peer appeal, perceived issue-relevant credibility (DEP Sincerity, DEP Altruism, DEP Expertise), and role modeling potential (wishful identification). The results of these analyses for all 23 celebrities can be found below in Table 21 (for all participants) and Table 22 (for participants experiencing heightened depressive symptomatology -- PHQ-9 score ≥ 5).

Table 18. Celebrity spokesperson scores among U.S. youth (ages 16 to 24).

Artist	Familiar *% (n)*	Listen if Sad *% (n)*	Listen if Sad *M (SD)*	Appeal (Self) *M (SD)*	Appeal (Friend) *M (SD)*	DEP Assoc. *M (SD)*	DEP Expert *M (SD)*	DEP Sincerity *M (SD)*	DEP Altruism *M (SD)*	WI *M (SD)*
Ariana Grande	87 (362)	23 (95)	5.19 (1.67)	6.04 (1.21)	5.39 (1.04)	3.95 (1.51)	4.76 (1.54)	5.69 (1.31)	5.00 (1.46)	4.97 (1.71)
Drake	81 (339)	28 (116)	5.29 (1.69)	5.74 (1.41)	5.74 (1.29)	4.51 (1.52)	4.28 (1.61)	5.03 (1.41)	4.65 (1.52)	4.73 (1.69)
Billie Eilish	81 (336)	44 (183)	5.39 (1.70)	5.69 (1.42)	5.41 (1.32)	5.28 (1.31)	5.10 (1.62)	5.44 (1.42)	5.58 (1.26)	4.44 (1.75)
The Weeknd	76 (315)	24 (101)	5.09 (1.69)	5.82 (1.30)	5.49 (1.32)	4.52 (1.33)	4.60 (1.38)	5.12 (1.28)	4.90 (1.28)	4.12 (1.64)
Taylor Swift	75 (312)	20 (82)	5.27 (1.61)	5.80 (1.32)	5.43 (1.50)	4.68 (1.36)	4.54 (1.60)	5.46 (1.43)	5.09 (1.36)	4.80 (1.87)
Post Malone	73 (304)	16 (68)	5.69 (1.37)	6.07 (1.04)	5.79 (1.05)	5.20 (1.23)	5.00 (1.44)	5.63 (1.28)	5.27 (1.15)	4.79 (1.57)
Justin Bieber	72 (299)	7 (29)	4.69 (1.87)	5.03 (1.76)	4.79 (1.74)	4.09 (1.63)	4.31 (1.87)	4.69 (187)	4.83 (1.53)	3.95 (2.08)
Ed Sheeran	71 (294)	19 (80)	4.85 (1.75)	5.43 (1.30)	5.14 (1.21)	4.38 (1.29)	4.41 (1.46)	5.35 (1.18)	4.51 (1.22)	4.31 (1.54)
DaBaby	69 (286)	14 (60)	4.63 (2.09)	5.40 (1.62)	5.50 (1.63)	4.11 (1.70)	4.60 (1.64)	5.02 (1.49)	4.71 (1.51)	4.48 (1.51)
Travis Scott	63 (263)	8 (35)	4.89 (1.97)	5.43 (1.75)	4.97 (1.72)	4.20 (1.69)	4.77 (1.37)	4.97 (1.60)	4.87 (1.50)	4.81 (1.64)
Shawn Mendes	62 (260)	12 (48)	4.96 (1.68)	5.65 (1.16)	5.23 (1.42)	4.35 (1.40)	4.71 (1.35)	5.38 (1.25)	5.21 (1.24)	4.48 (1.56)
Kendrick Lamar	60 (250)	11 (44)	4.89 (1.83)	6.00 (1.31)	5.50 (1.44)	4.35 (1.47)	4.86 (1.55)	5.45 (1.72)	4.99 (1.42)	4.95 (1.49)
Khalid	59 (247)	9 (37)	5.30 (1.49)	5.84 (1.30)	5.59 (1.21)	4.82 (1.13)	4.81 (1.29)	5.68 (103)	5.32 (1.23)	4.64 (1.46)
Lil' Uzi Vert	56 (235)	12 (49)	5.80 (1.29)	6.18 (1.07)	6.14 (1.08)	5.30 (1.41)	5.04 (1.72)	5.80 (1.22)	5.59 (1.23)	5.21 (1.34)
Lil' Baby	56 (233)	11 (44)	5.00 (1.68)	5.98 (1.23)	5.52 (1.62)	4.31 (1.79)	4.45 (1.52)	5.09 (1.46)	4.83 (1.54)	4.63 (1.56)
Olivia Rodrigo	55 (228)	27 (113)	5.43 (1.60)	5.71 (1.19)	5.63 (1.38)	5.01 (1.36)	4.60 (1.50)	5.73 (1.22)	5.34 (1.23)	4.61 (1.69)
Halsey	54 (226)	15 (62)	5.24 (1.66)	5.82 (1.25)	5.31 (1.10)	5.00 (1.28)	5.29 (1.37)	5.65 (1.27)	5.56 (1.13)	4.57 (1.61)
Lizzo	54 (224)	8 (34)	5.15 (1.78)	6.35 (0.95)	5.94 (1.25)	3.37 (1.50)	4.41 (1.78)	5.79 (1.45)	5.50 (1.22)	5.34 (1.54)
Dua Lipa	54 (223)	7 (29)	4.90 (1.68)	5.48 (1.60)	5.21 (1.40)	3.33 (1.41)	4.48 (1.30)	5.28 (1.46)	4.62 (1.29)	4.66 (1.34)
J. Cole	51 (214)	16 (66)	5.59 (1.45)	6.09 (1.12)	5.68 (1.46)	4.58 (1.59)	5.23 (1.35)	5.76 (1.39)	5.30 (1.21)	5.36 (1.24)

Future	51 (213)	10 (42)	4.74 (1.73)	5.50 (1.31)	5.50 (1.29)	4.05 (1.68)	3.93 (1.70)	4.64 (1.58)	4.30 (1.38)	4.71 (1.63)
Luke Combs	25 (102)	7 (27)	5.26 (1.70)	6.19 (1.04)	5.22 (1.60)	3.80 (1.23)	4.41 (1.19)	5.74 (1.13)	4.48 (1.17)	4.87 (1.66)
Suga (BTS)	22 (91)	6 (23)	5.40 (1.82)	6.43 (1.04)	5.57 (1.50)	5.28 (1.46)	5.35 (1.82)	6.09 (1.28)	5.89 (1.43)	5.65 (1.64)

Note. *N* = 417. Familiar = Familiarity. WI = Wishful Identification. Listen if Sad, Appeal (Self). Appeal (Friends), DEP Association, DEP Expertise, DEP Sincerity, DEP Altruism, and Wishful Identification were measured on a 7-point scale.

Table 19. Celebrity spokesperson scores among U.S. youth (ages 16 to 24) with mild depressive symptoms or worse (PHQ-9 score ≥ 5).

Artist	**Familiar** *% (n)*	**Listen if Sad** *% (n)*	**Listen if Sad** *M (SD)*	**Appeal (Self)** *M (SD)*	**Appeal (Friend)** *M (SD)*	**DEP Assoc.** *M (SD)*	**DEP Expertise** *M (SD)*	**DEP Sincerity** *M (SD)*	**DEP Altruism** *M (SD)*	**WI** *M (SD)*
Ariana Grande	87 (293)	24 (81)	5.16 (1.65)	6.05 (1.21)	5.31 (1.38)	3.99 (1.46)	4.79 (1.58)	5.67 (1.32)	5.02 (1.48)	4.98 (1.66)
Billie Eilish	81 (274)	48 (162)	5.43 (1.70)	5.70 (1.45)	5.44 (1.30)	5.33 (1.27)	5.17 (1.61)	5.51 (1.43)	5.61 (1.24)	4.51 (1.72)
Drake	80 (269)	28 (93)	5.28 (1.68)	5.72 (1.36)	5.74 (1.34)	4.66 (1.52)	4.32 (1.68)	5.01 (1.44)	4.69 (1.56)	4.90 (1.59)
Taylor Swift	77 (260)	21 (71)	5.27 (1.50)	5.83 (1.27)	5.42 (1.42)	4.65 (1.40)	4.46 (1.65)	5.44 (1.44)	5.07 (1.36)	4.87 (1.79)
The Weeknd	76 (256)	24 (81)	5.11 (1.70)	5.79 (1.38)	5.40 (1.39)	4.56 (1.38)	4.59 (1.46)	5.07 (1.32)	4.90 (1.34)	4.09 (1.72)
Post Malone	73 (247)	15 (50)	5.70 (1.36)	6.08 (0.94)	5.72 (1.11)	5.41 (1.22)	5.10 (1.56)	5.60 (1.37)	5.32 (1.23)	4.86 (1.52)
Justin Bieber	71 (241)	6 (19)	5.47 (1.27)	5.68 (1.16)	5.47 (1.54)	4.50 (1.53)	4.53 (1.81)	5.00 (1.83)	5.11 (1.40)	4.34 (1.97)
Ed Sheeran	70 (273)	19 (64)	4.88 (1.75)	5.34 (1.39)	5.17 (1.20)	4.45 (1.29)	4.34 (1.53)	5.25 (1.23)	4.50 (1.24)	4.35 (1.58)
DaBaby	67 (226)	15 (49)	4.78 (2.04)	5.57 (1.49)	5.47 (1.67)	4.35 (1.67)	4.67 (1.70)	4.96 (1.55)	4.79 (1.64)	4.73 (1.37)
Shawn Mendes	62 (211)	11 (36)	4.64 (1.73)	5.50 (1.18)	5.17 (1.32)	4.38 (1.43)	4.78 (1.36)	5.31 (1.24)	5.06 (1.21)	4.31 (1.48)
Travis Scott	62 (208)	8 (26)	4.69 (2.19)	5.31 (1.96)	4.96 (1.91)	4.33 (1.82)	4.88 (1.53)	4.88 (1.71)	4.96 (1.60)	4.98 (1.80)
Khalid	60 (202)	9 (30)	5.20 (1.40)	5.67 (1.35)	5.47 (1.20)	4.83 (1.06)	4.77 (1.28)	5.43 (0.97)	5.05 (1.16)	4.33 (1.33)
Kendrick Lamar	59 (198)	10 (34)	4.68 (1.84)	5.85 (1.42)	5.32 (1.51)	4.31 (1.49)	4.91 (1.62)	5.38 (1.86)	5.01 (1.48)	5.06 (1.47)
Olivia Rodrigo	58 (197)	30 (100)	5.41 (1.57)	5.70 (1.13)	5.63 (1.30)	5.02 (1.33)	4.66 (1.48)	5.78 (1.16)	5.36 (1.17)	4.64 (1.71)

Halsey	57 (194)	17 (56)	5.20 (1.63)	5.73 (1.27)	5.20 (1.07)	4.98 (1.26)	5.29 (1.39)	5.57 (1.29)	5.54 (1.14)	4.55 (1.61)
Dua Lipa	54 (182)	7 (23)	5.13 (1.49)	5.52 (1.59)	5.09 (1.41)	3.54 (1.35)	4.39 (1.31)	5.43 (1.38)	4.85 (1.27)	4.65 (1.32)
Lil' Baby	54 (184)	10 (32)	5.00 (1.72)	6.09 (1.15)	5.47 (1.67)	4.55 (1.84)	4.47 (1.67)	5.09 (1.55)	4.97 (1.63)	4.84 (1.61)
Lizzo	54 (183)	10 (32)	5.13 (1.79)	6.38 (0.98)	5.94 (1.29)	3.41 (1.51)	4.34 (1.77)	5.81 (1.45)	5.50 (1.20)	5.33 (1.54)
Lil' Uzi Vert	52 (177)	10 (35)	5.80 (1.21)	6.14 (0.97)	6.26 (0.95)	5.53 (1.36)	5.06 (1.77)	5.86 (1.31)	5.66 (1.25)	5.47 (1.42)
J. Cole	50 (170)	16 (54)	5.61 (1.42)	6.04 (1.15)	5.61 (1.50)	4.66 (1.57)	5.28 (1.32)	5.70 (1.38)	5.25 (1.18)	5.43 (1.21)
Future	48 (161)	9 (31)	4.55 (1.86)	5.35 (1.33)	5.35 (1.38)	4.11 (1.64)	3.74 (1.84)	4.58 (1.63)	4.26 (1.41)	4.73 (1.53)
Luke Combs	24 (80)	7 (23)	5.17 (1.75)	6.22 (1.00)	5.09 (1.62)	3.80 (1.31)	4.48 (1.28)	5.78 (1.04)	4.57 (1.17)	4.89 (1.46)
Suga (BTS)	23 (77)	6 (20)	5.25 (1.92)	6.40 (1.10)	5.50 (1.50)	5.20 (1.53)	5.35 (1.93)	6.00 (1.34)	5.78 (1.49)	5.60 (1.71)

Note. $N = 338$. Familiar = Familiarity. WI = Wishful Identification. Listen if Sad, Appeal (Self). Appeal (Friends), DEP Association, DEP Expertise, DEP Sincerity, DEP Altruism, and Wishful Identification were measured on a 7-point scale. "+" indicates positive significant difference ($p < .05$) and "-" indicates negative significant difference ($p < .05$) from global mean of total ratings ($N = 1477$) based on two-sample t-test.

Familiarity was deemed the most crucial variable for selecting the best celebrity spokespeople because recognizability is a vital characteristic of celebrity. To best ensure familiarity would be at an acceptable level, I established an exclusionary level of less than two-thirds (66%) familiarity across race and gender of participants with at least mild depressive symptomology (PHQ-9 score ≥ 5), as those will be the participants eligible for the experiment. In other words, I explored familiarity scores for gender (male and female) and race (white and non-white) to identify which celebrity pop music artists would be recognizable by at least two-thirds of participants regardless of gender and race. This two-thirds minimum familiarity threshold across gender and race limited the potential celebrity spokespeople candidates to Ariana Grande, Billie Eilish, Drake, The Weeknd, Post Malone, and Justin Bieber. Celebrity spokesperson familiarity scores for the candidate artists across gender and race can be found below in Table 23.

Table 20. Celebrity spokesperson familiarity scores across race and gender among U.S. youth (ages 16 to 24) with mild depressive symptoms or worse (PHQ-9 score ≥ 5).

Artist	**Familiarity (Male)** *M (SD)*	**Familiarity (Female)** *M (SD)*	**Familiarity (White)** *M (SD)*	**Familiarity (Non-White)** *M (SD)*
Ariana Grande	**.76 (.43)**	**.94 (.24)**	**.84 (.37)**	**.90 (.30)**
Billie Eilish	**.68 (.47)**	**.88 (.33)**	**.81 (.40)**	**.81 (.39)**
Drake	**.90 (.30)**	**.75 (.34)**	**.76 (.43)**	**.84 (.37)**
The Weekend	**.72 (.45)**	**.77 (.42)**	**.74 (.44)**	**.77 (.42)**
Post Malone	**.73 (.45)**	**.74 (.44)**	**.71 (46)**	**.75 (.43)**
Justin Bieber	**.67 (.47)**	**.75 (.43)**	**.70 (.46)**	**.73 (45)**
Taylor Swift	.64 (.48)	**.85 (.36)**	**.77 (.42)**	**.77 (.43)**
Ed Sheeran	.58 (.50)	**.77 (.42)**	**.68 (.47)**	**.72 (.45)**
DaBaby	**.74 (.44)**	.65 (.48)	.56 (.50)	**.78 (.41)**
Travis Scott	**.69 (.46)**	.58 (.50)	.55 (.50)	**.69 (.46)**
Khalid	.53 (.50)	**.68 (.47)**	.53 (.50)	**.66 (**.47)
Shawn Mendes	.45 (.50)	**.73 (.44)**	.62 (.46)	.63 (.49)
Olivia Rodrigo	.37 (.49)	**.73 (.45)**	.58 (.50)	.58 (.49)
Halsey	.36 (.48)	**.70 (.46)**	.58 (.50)	.57 (.50)
Kendrick Lamar	.63 (.49)	.59 (.50)	.49 (.50)	**.69 (.49)**
Lizzo	.33 (.47)	**.70 (.46)**	.49 (.50)	.59 (.49)
Dua Lipa	.39 (.49)	**.66 (.48)**	.51 (.50)	.57 (.50)
Lil' Baby	.64 (.48)	.52 (.50)	.44 (.50)	**.66 (.48)**
Lil' Uzi Vert	.58 (.50)	.53 (.50)	.44 (.50)	.64 (.48)
J. Cole	.57 (.50)	.48 (.50)	.41 (.49)	.60 (.49)
Future	.58 (.50)	.43 (.50)	.40 (.49)	.56 (.50)
Luke Combs	.16 (.37)	.30 (.46)	.34 (.47)	.13 (.34)
Suga (BTS)	.16 (.36)	.26 (.44)	.16 (.37)	.30 (.46)

Note. Familiarity was scored as a binary measure as either unfamiliar (0) or familiar (1). Therefore, scores represent familiarity percentages if multiplied by 100. Numbers in bold are those above the two-thirds threshold for familiarity, names in bold are the artists that met criteria across gender and race.

The next most important variable to determine the candidates that most encompassed "celebrity" as a concept was the celebrity's personal appeal to the participants, examined across race and gender. Ariana Grande and Post Malone were the only celebrity pop artists with mean scores above 6.00 – indicating scores at or above *Like* (6) – for personal appeal across racial groups (both white and non-white participants). At the same time, Post Malone was the only artist with mean scores above *Like* (6) across both male and female participants. However, the samples sizes

of measures for some of the finalists were relatively small across some racial and gender categories ($N < 10$). Analyses indicated that all six finalist spokesperson candidates maintained a mean of at least 5.5 – halfway between *Slightly Like* (5) and *Like* (6) – across racial groups (white and non-white) and gender (male and female) for personal appeal. The only exception to this minimum threshold was Drake among white participants with PHQ-9 indicating at least mild depression ($M = 5.24$, SD = 1.69, $N = 38$).

Similarly, all six finalists maintained mean scores above a minimum threshold of 5.00 – indicating at least *Slightly Like* – for appeal to participants' peer groups which was a consistent score across gender (male and female) and racial (white and non-white) groups. Celebrity spokesperson finalist scores across gender and race for personal and peer group appeal can be found in Table 24 below.

Table 21. Celebrity spokesperson finalist scores for personal appeal and peer group appeal across race and gender among U.S. youth (ages 16 to 24) with mild depressive symptoms or worse (PHQ-9 score ≥ 5).

Artist	Appeal (Self) (Male) *M (SD)*	Appeal (Self) (Female) *M (SD)*	Appeal (Self) (White) *M (SD)*	Appeal (Self) (Non-White) *M (SD)*	Appeal (Friends) (Male) *M (SD)*	Appeal (Friends) (Female) *M (SD)*	Appeal (Friends) (White) *M (SD)*	Appeal (Friends) (Non-White) *M (SD)*
Ariana Grande	5.60 (1.19)*	**6.25 (1.19)**	**6.03 (1.21)**	**6.06 (1.22)**	5.00 (1.34) [a]	5.42 (1.43)	5.30 (1.33)	5.31 (1.42)
Billie Eilish	5.51 (1.49)	5.84 (1.40)	5.72 (1.55)	5.69 (1.34)	5.15 (1.53)	5.55 (1.20)	5.42 (1.34)	5.47 (1.26)
Drake	5.52 (1.50)	**6.09 (1.02)**	5.24 (1.68)	**6.05 (0.97)**	5.74 (1.35)	5.78 (1.39)	5.55 (1.62)	5.87 (1.11)
The Weekend	5.88 (1.39)	**6.00 (1.29)**	5.79 (1.38)	5.79 (1.39)	5.41 (1.58)	5.55 (1.31)	5.26 (1.55)	5.52 (1.23)
Post Malone	**6.00 (0.92)**	**6.33 (0.97)** [a]	**6.10 (0.94)**	**6.05 (0.97)** [a]	5.55 (1.18)	**6.06 (0.94)** [a]	5.55 (1.21)	5.95 (0.92) [a]
Justin Bieber	5.86 (1.35)[a]	5.58 (1.08) [a]	5.80 (1.40) [a]	5.56 (0.88) [a]	5.43 (1.99) [a]	5.50 (1.31) [a]	5.40 (1.71) [a]	5.56 (1.42) [a]

Note. Appeal (Self) and Appeal (Friends) were measured on a 7-point scale. Subscript ([a]) denote scores where the $N < 25$ participants for the variable and category, so these scores, in particular, should be assessed with caution. Scores ranged from "Strongly dislike (1)" to "Strongly like (7)." Scores above "Like (6)" are in bold.

Audience perceptions of the celebrity's issue-relevant credibility (i.e., expertise), altruistic motives, and attractiveness (wishful identification) were also important considerations for spokesperson selection. While all finalist candidates scored above *Slightly agree (5)* for perceived depression sincerity across at least three of the four categories, Drake's mean scores for altruism were below *Slightly agree (5)* across all demographics. Similarly, The Weeknd's scores were beneath the same threshold in three of the four demographic categories. In other words, U.S. youth scored Drake and The Weeknd lower than the other four candidates for issue-relevant perceived altruism. These scores indicate that Drake and The Weeknd may not be ideal celebrity pop music artist candidates for a depression help-seeking intervention for U.S. youth (ages 16 to 24). Finalist

celebrity spokesperson candidate scores for perceived depression sincerity and altruism across race (white and non-white) and gender (male and female) can be found below in Table 25.

Table 22. Celebrity spokesperson finalist scores for perceived issue-related sincerity and altruism gender among U.S. youth (ages 16 to 24) with mild depressive symptoms or worse (PHQ-9 score ≥ 5).

Artist	DEP Sincerity (Male) *M (SD)*	DEP Sincerity (Female) *M (SD)*	DEP Sincerity (White) *M (SD)*	DEP Sincerity (Non-White) *M (SD)*	DEP Altruism (Male) *M (SD)*	DEP Altruism (Female) *M (SD)*	DEP Altruism (White) *M (SD)*	DEP Altruism (Non-White) *M (SD)*
Ariana Grande	**5.70 (1.13)** [a]	**5.67 (1.45)**	**5.52 (1.18)**	**5.77 (1.42)**	4.85 (1.57) [a]	**5.07 (1.52)**	**5.01 (1.48)**	**5.03 (1.50)**
Billie Eilish	**5.39 (1.38)**	**5.60 (1.40)**	**5.52 (1.62)**	**5.49 (1.19)**	**5.48 (1.36)**	**5.67 (1.22)**	**5.57 (1.38)**	**5.66 (1.08)**
Drake	**5.05 (1.36)**	**5.06 (1.41)**	4.61 (1.59)	**5.29 (1.27)**	4.75 (1.60)	4.70 (1.50)	4.46 (1.69)	4.85 (1.46)
Justin Bieber	4.57 (1.99) [a]	**5.25 (1.77)***	**5.20 (1.81)** [a]	4.78 (1.92) [a]	4.79 (1.65) [a]	**5.29 (1.27)** [a]	4.95 (1.14) [a]	**5.28 (1.70)** [a]
Post Malone	**5.59 (1.50)**	**5.83 (1.15)** [a]	**5.52 (1.43)**	**5.71 (1.31)** [a]	**5.33 (1.24)**	**5.50 (1.19)** [a]	**5.22 (1.18)**	**5.45 (1.31)** [a]
The Weekend	**5.31 (1.18)**	**5.29 (1.18)**	**5.05 (1.28)**	**5.10 (1.38)**	**5.00 (1.22)**	4.97 (1.56)	4.86 (1.14)	4.94 (1.53)

Note. DEP Sincerity and DEP Altruism were measured on a 7-point scale. Subscript ([a]) denote scores where the $N < 25$ participants for the variable and category, so these scores, in particular, should be assessed with caution. Scores above "Slightly agree (5)" are in bold.

Finalist spokesperson candidate scores for perceived depression expertise and wishful identification across race (white and non-white) and gender (male and female) can be found below in Table 26. Only Post Malone and Billie Eilish performed well across demographic categories for depression expertise. However, Ariana Grande approached the *Slightly agree (5)* threshold for males and non-white U.S. youth. None of the six artists performed particularly well relative to the threshold in terms of wishful identification scores. In other words, U.S. youth (ages 16 to 24)

appear to view Billie Eilish and Post Malone as having more issue-relevant expertise than the four other finalist candidates. In contrast, none of the candidates particularly shined as obvious role model candidates for this population.

Table 23. Celebrity spokesperson finalist scores for issue-relevant expertise and wishful identification among U.S. youth (ages 16 to 24) with mild depressive symptoms or worse (PHQ-9 score ≥ 5).

Artist	DEP Expert (Male) *M (SD)*	DEP Expert (Female) *M (SD)*	DEP Expert (White) *M (SD)*	DEP Expert (Non-White) *M (SD)*	Wishful Ident. (Male) *M (SD)*	Wishful Ident. (Female) *M (SD)*	Wishful Ident. (White) *M (SD)*	Wishful Ident. (Non-White) *M (SD)*
Ariana Grande	4.90 (1.74)	4.77 (1.60)	4.70 (1.33)	4.85 (1.74)	4.90 (1.67)	**5.09 (1.65)**	4.83 (1.60)	**5.08 (1.71)**
Billie Eilish	4.98 (1.51)	**5.20 (1.68)**	**5.27 (1.58)**	**5.05 (1.65)**	4.39 (1.71)	4.67 (1.65)	4.64 (1.84)	4.38 (1.59)
Drake	4.57 (1.71)	4.09 (1.51)	3.92 (1.81)	4.60 (1.55)	**5.15 (1.44)**	4.62 (1.55)	4,51 (1.73)	**5.16 (1.45)**
Justin Bieber	4.43 (2.37) [a]	4.58 (1.51) [a]	4.60 (1.84) [a]	4.44 (1.88) [a]	4.71 (2.44) [a]	4.13 (1.72) [a]	4.40 (2.09) [a]	4.28 (1.95) [a]
Post Malone	**5.07 (1.49)**	**5.39 (1.69)** [a]	**5.00 (1.54)**	**5.24 (1.61)** [a]	4.83 (1.48)	**5.31 (1.30)** [a]	4.76 (1.58)	**5.00 (1.47)** [a]
The Weekend	4.84 (1.55)	4.58 (2.54)	4.56 (1.43)	4.62 (1.43)	4.42 (1.67)	4.08 (1.81)	4.06 (1.83)	4.12 (1.64)

Note. DEP Expertise and Wishful Identification were measured on a 7-point scale. Subscript ([a]) denote scores where the $N < 25$ participants for the variable and category, so these scores, in particular, should be assessed with caution. Scores above "Slightly agree (5)" are in bold.

Taken together, this data from U.S. youth (ages 16 to 24) experiencing at least mild depressive symptoms indicate that the best celebrity pop music artist spokespeople from the twenty-three available selections would be Ariana Grande (female – White), Billie Eilish (female – White), and Post Malone (male – White). Billie Eilish and Post Malone appear to be great depression public service announcement candidates for U.S. youth (ages 16 to 24). This population

recognizes them and believes they have issue-relevant sincerity, altruism, and expertise. While this population does not view Ariana Grande as having issue-relevant expertise, she was the most recognized celebrity pop music artist and she was viewed by the target population as having issue-relevant sincerity across all demographics and altruism across all demographics except males.

As neither Drake (male – Black/African-American) nor The Weeknd (male – Black/African-American) were viewed by U.S. youth as having issue-relevant credibility, I needed to expand the spokesperson search for a fourth candidate to ensure that one of the spokespeople was racially similar to non-white U.S. youth (ages 16 to 24). The remaining non-white spokesperson candidates above the two-thirds familiarity score threshold among non-white U.S. youth (ages 16 to 24) experiencing at least mild depressive symptoms (PHQ-9 score > 4) were DaBaby (78%), Travis Scott (68%), Kendrick Lamar (68%), and Khalid (67%), all of whom are Black/African-American male artists (Table 23 with familiarity scores). As Lil' Baby (65%), Lil' Uzi Vert (61%), and J. Cole (60%) also approached the familiarity threshold and are non-white (all are Black/African-American males), they were also included in the analyses. The musical appeal, issue-relevant credibility (sincerity, altruism, and expertise), and role model potential (wishful identification scores) for all seven candidates can be found below in Table 27.

Table 24. Non-White celebrity spokesperson finalist scores for appeal, issue-relevant credibility, and wishful identification among non-White U.S. youth (ages 16 to 24) with mild depressive symptoms or worse (PHQ-9 score ≥ 5).

Artist	Familiarity *M (SD)*	Appeal (Self) *M (SD)*	Appeal (Friends) *M (SD)*	DEP Sincerity *M (SD)*	DEP Altruism *M (SD)*	DEP Expertise *M (SD)*	Wishful Identification *M (SD)*
DaBaby	.78 (.42)	5.13 (1.93)	5.62 (1.81)	4.84 (1.65)	4.81 (1.66)	4.78 (1.77)	4.55 (1.66)
Travis Scott	.69 (.46)	**6.21 (1.12)**	5.43 (1.40)	**5.57 (1.56)**	**5.04 (1.77)**	4.86 (1.61)	**5.14 (1.49)**
K. Lamar	.69 (.49)	**6.03 (1.33)**	5.58 (1.31)	**5.52 (1.55)**	**5.00 (1.62)**	**5.00 (1.53)**	4.95 (1.54)
Khalid	.66 (.47)	5.81 (1.33)	5.76 (1.14)	**5.81 (0.98)**	**5.38 (1.40)**	4.76 (1.41)	4.81 (1.48)
Lil' Baby	.66 (.48)	**6.04 (1.11)**	5.46 (1.88)	4.92 (1.65)	4.98 (1.70)	4.58 (1.79)	4.83 (1.75)
Lil' Uzi Vert	.64 (.48)	**6.25 (1.33)**	**6.08 (1.25)**	**5.96 (1.40)**	**5.67 (1.42)**	**5.00 (1.82)**	**5.48 (1.38)**
J. Cole	.60 (.49)	**6.07 (1.14)**	5.72 (1.49)	**5.91 (1.36)**	**5.45 (1.13)**	**5.42 (1.20)**	**5.56 (1.20)**

Note. N = 202 for familiarity scores. K. Lamar = Kendrick Lamar. Familiarity was scored as a binary measure as either unfamiliar (0) or familiar (1). Therefore, scores represent familiarity percentages if multiplied by 100. Appeal (Self), Appeal (Friends), DEP Sincerity, DEP Altruism, DEP Expertise, and Wishful Identification were measured on a 7-point scale. Scores above "Like "6" for Appeal (Self) and Appeal (Friends) and "Slightly agree (5)" for DEP Sincerity, DEP Altruism, DEP Expertise, and Wishful Identification are in bold.

Among the seven remaining potential spokesperson candidates, only Lil' Uzi Vert scored above all of the desired threshold scores for appeal, issue-relevant credibility, and role modeling potential (wishful identification) for non-White U.S. youth (ages 16 to 24) experiencing mild depressive symptoms or worse. For all categories, J. Cole scored above all thresholds except for peer group appeal and Kendrick Lamar, except for peer-group appeal and role modeling potential (wishful identification). Although DaBaby was significantly more familiar to the population than the other potential spokespeople candidates, he performed below the threshold on all relevant metrics. For these reasons, Lil' Uzi Vert is the best fit as the fourth spokesperson, making the final four selections as follows: Ariana Grande (White – Female), Billie Eilish (White – Female), Lil' Uzi Vert (Black/African-American – Male) and Post Malone (White – Male).

Discussion

As youth who end up taking their own life do so without telling another person of their plans (Kisely et al., 2011), the Surgeon General's Advisory implored at-risk youth to "find trusted adults, friends, or family members to talk to about stressful situations" (U.S. Department of Health

and Human Services, 2021, p. 14). Of these resources, my study specifically focused on U.S. youth's intentions to seek depression support from a close friend because research suggests that depressed youth are most likely to open up to a friend first (Seize the Awkward, 2018).

Beliefs and Attitudes to Target in Communication Interventions

Scholars have previously called for additional research on support-seeking facilitators (Gulliver et al., 2010). Initially, analyses indicated that the perceived support-seeking facilitators of intentions to seek depression support (depression literacy, anticipated support, perceived social norms, self-efficacy, and outcome expectations) were all significantly associated with intentions to seek depression support from a close friend among U.S. youth (ages 16 to 24). The existing literature anticipated these findings (Bandura, 2001; Kelly et al., 2007; Rasmussen et al., 2020; Rickwood et al., 2007).

Most importantly for mental health practitioners, one facilitator target attitude, in particular, emerged as absolutely vital for depression support-seeking messaging targeting U.S. youth (ages 16 to 24): self-efficacy. Only self-efficacy significantly predicted the target outcome (intentions to seek depression support from a close friend) when controlling for background variables. Further, the association remained remarkably strong ($r = .49$, $p < .001$) even when all other intervening variables were introduced into the model. Self-efficacy is needed to change behavior (Bandura, 2001), and copious research suggests that positive self-efficacy beliefs are both protective and essential for persuading at-risk youth to engage in depression support-seeking behaviors (Garland & Zigler, 1994; King et al., 2011; Muris et al., 2001; Prescott et al., 2020; Saltzman & Holahan, 2002; Strunk et al., 2013). Mental health practitioners creating messaging designed to persuade depressed U.S. youth (ages 16 to 24) to seek support from a close friend must ensure that the messaging increases the audience's perceived self-efficacy.

Outcome expectations also emerged as a promising attitudinal target of consequence as they might enhance U.S. youth (ages 16 to 24) intentions to seek support, at least from a close friend, regardless of their level of depression symptomatology. Analyses comparing participants based upon depressive symptomatology indicated that the positive association between outcome expectations and support-seeking intentions from a close friend was stronger among the U.S. youth participants experiencing greater depressive symptoms than those experiencing more minor symptoms. Post hoc analyses of this relationship indicated an interaction between outcome expectations and the depressive symptomatology of the U.S. youth participants. Among those with lower outcome expectancies, participants with low levels of depressive symptomatology (mild or fewer symptoms) indicated greater support-seeking intentions than those with higher levels of symptomatology. However, regardless of symptom levels, support-seeking intentions were high across participants if outcome expectations were also high.

Previous research in this area utilizing non-youth participants had indicated that for those with higher depressive symptomatology, outcome expectations for help-seeking were lower compared to non-youth with lower symptomatology levels (Lienemann & Siegel, 2016; Siegel et al., 2015). These findings suggest an important need to explore how to increase outcome expectancies among those with high symptomatology. U.S. youth today are more likely to report mental health concerns and receive treatment from a mental health professional than previous generations (American Psychological Association, 2019). Thus, it may be that this trend might be utilized to promote higher outcome expectations for seeking support in this generation of U.S. youth. Future research could explore age differences in facilitator and barrier attitudes to support-seeking for depression. Regardless, in addition to targeting self-efficacy beliefs, it would be wise for mental health practitioners to prioritize targeting outcome expectation beliefs. Strong

foundational outcome expectation beliefs may help protect youth and simplify the persuasion of at-risk youth to seek depression support even as their risk and illness increase.

The extant literature also highlights stigma and maladaptive self-reliance beliefs as the most significant barriers to help-seeking behaviors among youth (Rickwood et al., 2005; Rickwood et al., 2007). Of the perceived barriers to support-seeking intentions among this population, only self-stigma emerged as a significant predictor of support-seeking intentions from a close friend. These results also indicated the barrier role that self-stigma plays for other more immediate close personal resources to U.S. youth, including intimate partners or parents in addition to mental health professionals. Ample research supports self-stigma as one of the most significant barriers to support-seeking intentions among this population (Clement et al., 2015; Ibrahim et al., 2019).

Interestingly, while maladaptive self-reliance beliefs and public stigma were not significantly associated with intentions to seek depression support from a close friend or other close personal resources, these two attitudes emerged as the only significant predictors of U.S. youth's (ages 16 to 24) intentions to seek depression support from a mental health website, religious leader, another source, or among participants who indicated they 'would not seek depression support from anyone.' Other studies highlight the lack of anonymity as a significant barrier among this population (Liverpool et al., 2020; Webb et al., 2008). Therefore, these findings indicate that messaging framed towards improving support-seeking intentions from close friends may be ineffective for significant portions of the target population (U.S. youth ages 16 to 24). Practitioners need to account for likely sizable segments of the target population where self-reliant attitudes and public stigma beliefs are prominent. These hurdles are more substantial among male and minority U.S. youth compared to other gender or racial/ethnic groups (DuPont-Reyes et al.,

2020; Eisenberg et al., 2009). Some of these results echoed this literature, such as male U.S. youth (ages 16 to 24) being significantly more likely to endorse maladaptive self-reliance beliefs than their female counterparts. If nothing else, my findings further highlight the need for mental health practitioners to create persuasive support-seeking messaging for U.S. youth to include anonymous resources (i.e., mental health websites with more anonymous therapeutic resources – such as *BetterHelp* and *TalkSpace*) that promote proactive help-seeking intentions in addition to the primary target support-seeking resource (i.e., close friends). By doing so, practitioners will ensure viable options for members of the target audience where lack of anonymity persists as a significant hurdle. Taken together, these findings help to highlight which support-seeking attitudes may be most vital to target in communication messaging aimed at depressed U.S. youth (ages 16 to 24).

The Complex Nature of Attempting to Leverage Wishful Identification

One of the primary purposes of this study was to explore the relationship between U.S. youth's wishful identification with the celebrity pop music artist they "most associate with depression" and depression support-seeking facilitators, barriers, and intentions to seek support from a close friend. My analyses indicated that participants' wishful identification with their most depression-associated celebrity pop music artist was only significantly associated with depression literacy, outcome expectations, public stigma (positively), and intentions to seek depression support from a close friend among this sample of U.S. youth (ages 16 to 24).

It was surprising that wishful identification was not associated with self-stigma in any way and was *positively* related to public stigma. Previous research has indicated that increased involvement with a celebrity pop music artist who discloses mental health difficulties is associated with less stigma and more proactive mental health attitudes and behaviors (Hoffner, 2019; Kresovich, 2020; N. C. Wong et al., 2017). The influence from vicarious modeling likely helps

explain the association between wishful identification and outcome expectations (Bandura, 2001). The positive association with public stigma is more confounding (Eaton, 2009; Ferrari, 2016, 2020; Hoffner, 2019), but some emerging evidence and scholarly thinking suggests that celebrity disclosures may negatively influence public stigma perceptions (Corrigan et al., 2021).

Post hoc analyses indicated that wishful identification with the most depression-associated celebrity pop music artist was also associated with intentions to seek depression support from a mental health professional and a mental health website in addition to a close friend. However, wishful identification in this context was not associated with depression support-seeking intentions from a parent, partner, or family member. Close friends were the second-highest rated support-seeking source after intimate partner. However, as not all U.S. youth would necessarily have an intimate partner, this research underscores the importance of close friends in curbing troubling mental health trends. As highlighted by the *Seize the Awkward* campaign strategy (2018), it does appear that of all proximal resources to U.S. youth, close friends are indeed the "front line" of support (Dunham, 2004, p. 64; Labouliere et al., 2015).

It was surprising that mediation was not observed between U.S. youth's (ages 16 to 24) wishful identification with the celebrity pop music artist they most associate with depression, facilitating and barrier beliefs of support-seeking intentions, and intentions to seek depression support from a close friend. Two background variables played a more prominent role in explaining the relationship with outcome expectations – participants' depressive symptomatology and their recent history of choosing to listen to songs with depressive themes. Interestingly, even though wishful identification was not significantly associated with outcome expectations when accounting for background variables, the more participants reported listening to songs with depressive themes, the higher intentions they had to seek depression support from a close friend if needed. Clearly,

the relationship between celebrity pop music artists who disclose depression difficulties in their music, outcome expectations, and intentions to seek depression support from a close friend is complex. It also may be that having participants select the artist they "most associate with depression" from a limited list of options did not accurately represent the impact wishful identification can have in this context. However, it could also be that youth separate this potential source of solace (the artist) from what they perceive as real-world support and stigma, or at least their wishful identification has little to do with their thoughts about real-world support. Youth may see these highly successful celebrity pop music artists and believe they have access to resources and environmental support that they do not have. Indeed, it could be more about the message rather than the individual celebrity or the music being of comfort in and of itself. Future research can help to tease out these apparent intricacies of vicarious modeling of mental health attitudes and behaviors in this context.

Of vital importance, these results underscore how important it is for health communicators to consider music as a potential medium for attitude and behavior change among U.S. youth (ages 16 to 24). An overwhelming majority of the participants (n = 337, 80.9%) expressed some level of agreement that their favorite music helps them deal with their own mental health issues. Further, more than a third of participants (n = 143, 34.3%) strongly agreed with that statement. This finding aligns with previous research which utilized a youth sample (Kresovich, 2020). Partial correlational analyses revealed that even after controlling for background variables, U.S. youth (ages 16 to 24) who utilize music for mood regulation purposes also reported increased anticipated support, perceived social norms, self-efficacy, outcome expectations, and intentions to seek depression support from a close friend. Previous research has indicated that music may help youth access these attitudes via empathetic reactions to celebrity role models (Clarke et al., 2015; Elvers,

2016; Kresovich, 2020). As outlined earlier, this study adds to the emerging evidence of a relationship between popular music consumption and proactive mental health behaviors among U.S. youth (Kresovich, 2020; Lee et al., 2021).

Depression Romanticizing as an Emerging Issue

Although depression stigma has decreased over time (Pescosolido et al., 2021), scholars are becoming increasingly concerned about U.S. youth viewing depression as trendy or as a "fascinating" character trait (Dunn, 2017; Jadayel et al., 2017; Scarano & Webster, 2018, p. 1). Celebrity pop music artists have increasingly opened up the conversation around mental health difficulties in recent years, from public comment (Chan, 2021), to the lyrical content of an increasing proportion of the most popular songs in the United States (Kresovich et al., 2021). Unfortunately, these findings revealed that wishful identification with a depression-associated artist was positively related to increased romanticization of depression among U.S. youth (ages 16 to 24) in this sample. The youth in this study who reported role modeling a celebrity pop music artist they associate with depression were more likely to view their peers with depression as 'interesting,' 'deep,' 'imaginative,' 'fascinating,' 'creative,' and 'captivating' than U.S. youth who did not view these celebrity pop music artists as role models. Also, my findings indicate that at-risk U.S. youth (ages 16 to 24) – those experiencing more intense depressive symptoms – are more likely to romanticize depression than youth experiencing less intense depressive symptoms.

This finding is troubling, and this study presents the first known evidence supporting this phenomenon. Encouragingly, depression romanticizing among this sample was only associated with positive attitudes and increased intentions to seek depression support from a close friend without being associated with any adverse outcomes (i.e., stigma, self-reliant beliefs). However, this evidence is limited to this sample. It may not represent the associations between depression

romanticizing and these outcomes among U.S. youth (ages 16 to 24). Attention is still urgently needed to the discourse around mental health difficulties in response to these celebrity disclosures. It may very well be that this increased depression romanticizing among this population indicates a general increasing acceptance of mental health and mental illness, especially as stigma diminishes (Pescosolido et al., 2021). Future research is needed to continue to explore this emerging phenomenon among this increasingly at-risk population (Miron et al., 2019; Mojtabai & Olfson, 2020).

Demographic Differences in Attitudes, Beliefs, and Behavioral Intentions

My exploration of demographic differences in facilitator and barrier variables to depression support-seeking among U.S. youth revealed exciting findings. Regarding gender differences, female youth (ages 16 to 24) had significantly higher depression literacy than male youth, while male youth had significantly higher maladaptive self-reliance attitudes towards help-seeking. These findings would be considered in line with the existing literature indicating female youth have higher depression literacy (Olsson & Kennedy, 2010; Townsend et al., 2019), while males are more likely to endorse maladaptive self-reliance belief attitudes due to masculine norms (Y. J. Wong et al., 2017). However, this may be changing over time (Labouliere et al., 2015).

Racial differences across depression support-seeking facilitators, barriers, and intentions to seek depression support from a close friend also emerged. When comparing the White, Black, and Latinx U.S. youth participants, analyses revealed significant differences in scores for perceived social norms. White U.S. youth (ages 16 to 24) scored significantly higher for perceived social norms than Black youth. These findings align with previous literature on racial differences in mental health stigma and stereotypes among youth (DuPont-Reyes et al., 2020; Eisenberg et al., 2009). While depression stigma has diminished over time (Pescosolido et al., 2021), racial

differences still need to be accounted for when crafting messaging to persuade youth to seek support.

My demographic analysis also revealed differences based on socioeconomic status for U.S. youth (ages 16 to 24). U.S. youth in lower socioeconomic strata reported significantly lower anticipated support and self-efficacy. The strongest risk factor predictor for depression among adolescents is low socioeconomic status (Adkins et al., 2009). Lower socioeconomic status among youth predicts decreased intentions to seek mental health support among U.S. youth (Hunt & Eisenberg, 2010). However, these findings add to the existing literature by revealing that lacking anticipated support and self-efficacy may be the real culprits in hindering minority U.S. youth (ages 16 to 24) from seeking much-needed treatment for depression. Practitioners would be wise to account for perceived social norms and self-efficacy beliefs of Black/African-American youth and Latinx/Hispanic youth in any attempts to persuade youth members of these groups to seek depression support.

In addition, vital symptomatic differences emerged. U.S. youth (ages 16 to 24) experiencing more intense depressive symptoms (PHQ-9 score of moderately severe or greater) scored significantly higher for depression literacy, wishful identification with the most depression-associated celebrity pop music artist, maladaptive self-reliance, self-stigma, public stigma, and depression romanticizing than youth experience less intense depressive symptoms (PHQ-9 score of moderate or less). These observations helped to add context for why other literature has shown a negative association between increased symptomatology and support-seeking intentions (Sawyer et al., 2012). While no significance emerged for support seeking intentions based on symptomatology, my findings hint as pessimistic feelings of fatalism or resignation to depression as depressive intensity increases. Mental health communicators will need to account for the

substantial obstacle that depressive symptoms present when attempting to persuade this age cohort to engage in help-seeking behaviors.

Identification of Ideal Celebrity Pop Music Artist Spokespeople

Celebrity spokespeople are most effective if recognizable to the target audience and perceived as having issue relevant expertise, sincerity, and altruism (Ohanian, 1990; Park & Cho, 2015). My study systematically analyzed 23 contemporary celebrity pop music artists who had disclosed mental health difficulties publicly for fit as spokespeople. A significant challenge to health communicators in this type of work will always be finding artists with enough mass appeal to work as depression spokespeople while still being relevant to the diversity of U.S. youth experiencing depression. Research indicates that audiences respond best to health messages from demographically matched spokespeople (Kim et al., 2016; Wang & Arpan, 2008) or from spokespeople they feel an affinity toward (Kresovich & Noar, 2020).

Much like how music artists choose performance locations based upon data analytics of where their fans are located (Steele, 2021), health communicators would be wise to utilize secondary data (i.e., where selected spokespeople tour, what artists are most popular among U.S. youth experiencing depression) to make spokespeople selections and to determine what media channels to utilize to reach the target audience effectively. As youth use of the internet is near-universal (Vogels, 2020), health communicators will likely need to utilize tailoring as a strategy for web- or social media-based interventions aimed at this population to maximize efficacy (Noar et al., 2007). For example, support-seeking intervention messages from celebrity spokespeople could pop up on a music platform (i.e., Spotify, Apple Music) as an at-risk youth listener plays songs by participating spokespeople who reference mental health difficulties.

My analyses suggest that Ariana Grande, Billie Eilish, Lil' Uzi Vert, and Post Malone would be the best celebrities to utilize in this fashion to persuade depressed U.S. youth (ages 16 to 24) to seek depression support. Grande, Eilish, Malone, and Vert surpassed the set thresholds across various celebrity spokesperson measures, including recognizability, perceived issue-relevant expertise and altruism, and their appeal as role models. Future research should test these specific artists in a depression public service announcement campaign to vicariously model self-efficacy and outcome expectations among at-risk U.S. youth.

Limitations

As with all research, this study has limitations. Participants in this study self-selected to participate in the study and may have chosen to do so based on their interest in the topic. The study was advertised as a "Popular Music and Mental Health" survey. This advertising may help to explain why such a disproportionate number of participants (n = 263, 63.2%) scored as having at least moderate depressive symptoms. However, research suggests that depression rates among U.S. youth (ages 16 to 24) have been trending significantly upward recently (SAMHSA, 2020; Twenge et al., 2019), even spiking since the emergence of the COVID-19 pandemic (Racine et al., 2021). Despite this potential for bias, these findings are incredibly valuable by addressing gaps in the dearth of strategic mental health communication literature. Further, as depressed individuals are among the most challenging populations to persuade (Siegel et al., 2017), these findings add invaluable insights to this emerging literature (Lienemann & Siegel, 2016, 2018, 2019; Lueck, 2017, 2018).

This research is also limited by gathering a sample via Qualtrics. While Qualtrics panels appear to be the closest to a national probability sample compared to alternative convenience sample options (Boas et al., 2020), age, education, income, race, and ethnicity biases persist and

are potential confounding factors that may limit external validity. However, this study utilized quotas to represent the demographics of U.S. youth (ages 16 to 24) across gender and racial groups. As internet penetration among U.S. youth is near 100% (Vogels, 2020), my methodological design helps to ensure that the data represent U.S. youth (ages 16 to 24) as much as possible. It is also worth noting that early estimates suggest that depression rates among youth (ages ≤18 years) doubled during the COVID-19 pandemic (Racine et al., 2021). Thus, the observations from this study may not be as representative of U.S. youth's mental health attitudes and behavioral intentions during times that are less generally traumatic for mental health.

Conclusion

This survey's findings are invaluable to the mental health communication literature in four critical ways. First, these findings help practitioners by highlighting the most vital attitudes to target in a communication intervention to encourage U.S. youth (ages 16 to 24) to seek depression support from various resources (i.e., close friends, parents, mental health professionals, a mental health website). In particular, my study highlights self-efficacy and outcome expectations as two critical variables that need to be accounted for in all campaigns aimed at this target audience. Second, these findings also underscore the immense potential of leveraging U.S. youth's audience involvement (wishful identification) with celebrity pop music artists who disclose mental health difficulties to improve depression support-seeking intentions from a close friend. Third, these findings provide evidence of depression romanticizing as an emerging phenomenon among U.S. youth (ages 16 to 24) and discuss the potential implications. Finally, my findings illuminate which contemporary celebrity pop music artists would be the most effective spokespeople in a depression public service announcement campaign to encourage U.S. youth (ages 16 to 24) to seek depression support.

"Changing how we discuss mental health, personifying mental illness in characters, and sad songs topping music charts have all changed the relationship between mental health and media (Younglove, 2020, para. 2)." While much more extensive research is needed in this area, this much is clear: U.S. youth (ages 16 to 24) are in the midst of a mental health crisis, and celebrity pop music artists who disclose mental health difficulties are inextricably linked to both potentially exciting and troubling outcomes. Thus, it is the urgent responsibility of mental health communication researchers to continue to explore this phenomenon.

CHAPTER FOUR: DEVELOPMENT AND EVALUATION OF D-PSAS UTILIZING CELEBRITY POP MUSIC ARTISTS AND MISTARGETED REFERENT LANGUAGE ON DEPRESSED U.S. YOUTH SUPPORT-SEEKING ATTITUDES AND INTENTIONS

Introduction

The most recent Surgeon General's Advisory (2021) cites an emerging mental health crisis among U.S. youth. The advisory encourages youth struggling with depression to seek mental health support, "Find trusted adults, friends, or family members to talk to about stressful situations" (U.S. Department of Health and Human Services, 2021, p. 14). According to the *Seize the Awkward* campaign, when U.S. young adults (ages 18 to 24) seek mental health support, an estimated 76% will reach out to a peer (Seize the Awkward, 2018). Adolescents (ages 10 to 19) are most likely to reach out to informal sources of help (i.e., friends) compared to more formal sources (i.e., mental health professionals) when seeking support for depression (Singh et al., 2019). The perceived advantages of informal sources (i.e., friends) for youth depression support-seekers include emotional and information support. However, stigma, inappropriate support, and lack of relevant expertise persist as considerable perceived disadvantages (Griffiths et al., 2011). Due to these disadvantages, it is preferable for youth to seek professional treatment. Nevertheless, considering the limited mental health literacy of youth (Lam, 2014), youth suicide interventions consider close friends the "front line" (Dunham, 2004, p. 64) of treatment-seeking behaviors.

Interventions are a safe and effective strategy for youth suicide prevention (Calear et al., 2016). The U.S. Surgeon General (2021) recently called for interventions that urge youth to take

the vital first step of reaching out to someone close to them for support when in need. Major Depressive Disorder (MDD) is the most prevalent lifetime disorder among suicidal adolescents (Nock et al., 2013). Further, the suicide rate among both adolescents (ages 15 to 19) and young adults (ages 20 to 24) increased from 2000 to 2017 by 47.5% and 36%, respectively (Miron et al., 2019). Thus, this study aimed at developing and testing depression public service announcement (D-PSA) messages to persuade U.S. youth (ages 16 to 24) experiencing heightened depressive symptomatology to engage in support-seeking via disclosure to a close friend.

First and foremost, it is vital to acknowledge the precarious situation facing health communicators addressing audiences experiencing depression. Depression is characterized by a negative cognition affecting how individuals view themselves, their world, and their future (Clark & Beck, 2010). Depression is also characterized by attitudinal certainty (Andersen, 1990; Andersen & Schwartz, 1992), making depressed people among the most challenging populations to target as subjects for persuasion (Siegel et al., 2015). Previous research has also suggested that a boomerang effect exists such that D-PSA messages directly targeting people with depression can backfire (Christensen et al., 2006). The boomerang effect refers to the phenomenon in which depressed people exposed to a D-PSA addressing the stigma of depression help-seeking report iatrogenic effects – weaker help-seeking intentions and increased help-seeking stigma – rather than intended positive effects after D-PSA exposure (Lienemann et al., 2013). In other words, it is about undesired responses to the message, as opposed to worsening of symptoms. Lienemann et al. (2013) hypothesize that this boomerang effect through two pathways. In one pathway, the strategic method unintentionally activates attitudes or beliefs that would not have otherwise been activated (i.e., the connection between self-stigma and help-seeking). The second pathway hypothesizes that

the receiver processes the message as intended but chooses noncompliance or adapting oppositional attitudes due to negatively biased cognitive processing (Beck, 1979).

Mistargeted referent language appears to be a promising persuasive communication strategy for D-PSAs designed to encourage depressed youth to engage in support-seeking via disclosure to a close other (i.e., close friend). Mistargeted language is when the language in a message is designed to lead the message's target to believe the message is intended for someone else (i.e., "Do you know someone who is struggling with depression?"). Siegel et al. (2015) conducted two experimental tests of this phenomenon using mistargeted communication as part of a D-PSA (e.g., "Do you have a friend who is depressed?"). Their findings suggest that assignment to the mistargeted D-PSA condition resulted in significantly more favorable attitudes and increased intentions to seek help among those with heightened depressive symptomatology, specifically from a close other like a close friend. These findings are promising and therefore warrant further empirical review.

In addition to mistargeted referent language, celebrity spokespeople may also provide promise to health communicators hoping to promote support-seeking behavioral intentions among this challenging population. Celebrity self-disclosure of mental health difficulties and advocacy can lead to normalization, stigma reduction, and even encourage help-seeking among at-risk populations (Calhoun & Gold, 2020). Research suggests that celebrity pop music artists who have disclosed depression difficulties may be especially effective at promoting favorable mental health attitudes (Francis, 2018; Hoffner, 2019; Kresovich, 2020; Niederkrotenthaler et al., 2021; N. C. Wong et al., 2017).

Research suggests that pop music artists are the most influential celebrity role models to youth (Riles & Adams, 2020). Celebrity pop music artists are held in especially high regard by

U.S. youth (ages 16 to 24) because their music is a fundamental part of three vital developmental processes: emotional regulation, identity formation, and social inclusion among peers (McFerran et al., 2019). First, youth learn to strategically rely on celebrity pop music artists' creations (songs) to cope with this complex and emotionally tumultuous developmental stage, using music to increase or maintain positive emotions, decrease negative emotions, or process emotions by intensifying negative emotional states (Papinczak et al., 2015; Saarikallio & Erkkilä, 2007; Tarrant, 2002). Second, celebrity pop music artists exist – making music, public comments, and appearances – such that their example provides youth a context for images of self, helping them in their self-discovery process to actualize their developing identity – both as existing and as an ideal (Bennett & Nikulinsky, 2019). Finally, celebrity pop music artists' music also plays a significant socializing role as it subconsciously draws youth into affective and emotional alliances with both the artists themselves *and* their peers who share the same musical tastes (Frith, 1998). This shared musical bond allows youth to feel a sense of social inclusion, positive belonging, and heightened self-esteem (Bennett & Nikulinsky, 2019).

The link between celebrity pop music artists who disclose mental health difficulties and the youth developmental experience is inextricable. However, whereas the potential positive effects of utilizing a celebrity spokesperson to encourage positive mental health behaviors are promising, a review of mental health literature produced no published tests of the effects of using celebrity spokespeople as part of a D-PSA among U.S. youth (ages 16 to 24), nor among members of this population experiencing heightened depressive symptomatology. Further, although increased depression intensity is negatively associated with support-seeking intentions among adolescents (Sawyer et al., 2012), no study exists that explores the use of either celebrity spokespeople or mistargeted referent language as solutions to the persuasive challenges resulting

from increasing depressive intensity among U.S. youth (ages 16 to 24). Given the evidence of diminishing support-seeking intentions as depression intensity increases (Siegel et al., 2015), I hypothesize that depressive symptomatology will moderate the relationship between referent language condition and intentions to seek support from a close other (i.e., close friend). I also hypothesize an interaction effect between celebrity status and mistargeted referent language. Mistargeting may be the same strategy utilized by the *Seize the Awkward* (2018) mental health support-seeking campaign. Both strategies – mistargeted referent language and celebrity spokespeople – have indicated efficacy in reducing psychological reactance (counterarguing) among audiences in response to a persuasive message (Schartel Dunn & Nisbett, 2020; Siegel et al., 2015).

Bandura's (2001) Social Cognitive Theory (SCT) provides a theoretical roadmap to envision how a celebrity pop music artist who makes music referencing mental health difficulties could serve as a role model and persuade a young person with depression to seek help in a D-PSA. As role models, celebrity pop music artists who have disclosed mental health difficulties serve as vicarious motivators who can influence audiences' anticipated self-satisfaction of fulfilling valued standards, in this case, the valued standard of support-seeking behaviors when experiencing depressive symptoms. As role models, these artists can 'sanitize' (p. 278) the euphemistic label of depression and, as legitimate social authorities, 'sanction' (p.279) the act of opening up to someone close to them about difficulties with depression (Bandura, 2001).

In concert with the depression support-seeking literature, SCT highlights self-efficacy and outcome expectations as vital proximal outcomes to target when attempting to influence behavioral intentions. Self-efficacy is an individual's assessment of their effectiveness or competency to perform a specific behavior successfully. Outcome expectations refer to one's beliefs that their

behavior will lead to the desired outcome. To effectively increase intentions by U.S. youth experiencing depressive symptoms who have never been diagnosed or treated for depression to seek support from a close friend, the D-PSAs will utilize both empowering and positive consequence statements to maximize perceived self-efficacy and outcome expectations for help-seeking among this vulnerable population.

Literature on audience involvement with media characters offers insight into why role models may impact audience intentions, as discussed in SCT. For example, Kresovich and Noar's (2020) recent meta-analysis observed a small-to-medium effect size between audience involvement with a celebrity and health behavior intentions in response to a celebrity health disclosure or health event such as a highly publicized death or hospitalization. In particular, identification with a character has been linked to role modeling (Brown, 2015) and has explained why audience influence occurs in response to mental health disclosures by well-liked celebrities (Brown & Basil, 2010; Francis, 2018; Hoffner & Cohen, 2018; Kresovich, 2020). Growing literature examining celebrity disclosures supports that identification can have substantial psychological and behavioral consequences for audience members' related mental health attitudes and behaviors (Dillman Carpentier & Parrott, 2016; Francis, 2018; Hoffner, 2018).

Hoffner and Buchanan (2005) define wishful identification as the desire to be like or act like the media character, or in this case, a celebrity pop music artist who openly discloses depression difficulties. In this study, wishful identification does not refer to a young person wishing to have the same mental health diagnosis or challenges as the celebrity pop music artist. Instead, in these instances, the young person is wishfully identifying with the solution-oriented aspects of the celebrity pop music artist based on the disclosure of positive outcomes associated with help-seeking or the implied positive outcomes based on the appearance of health or success

of the artist. Through wishful identification with the celebrity's promising experience, this study hypothesizes that the presence of the celebrity spokesperson will strengthen the audience member's behavioral intentions compared to a non-celebrity spokesperson. However, this study will also assess if involvement with these celebrity spokespeople may be unintentionally encouraging U.S. youth (ages 16 to 24) to romanticize depression as trendy or as a "fascinating" character trait (Dunn, 2017; Jadayel et al., 2017; Scarano & Webster, 2018, p. 1).

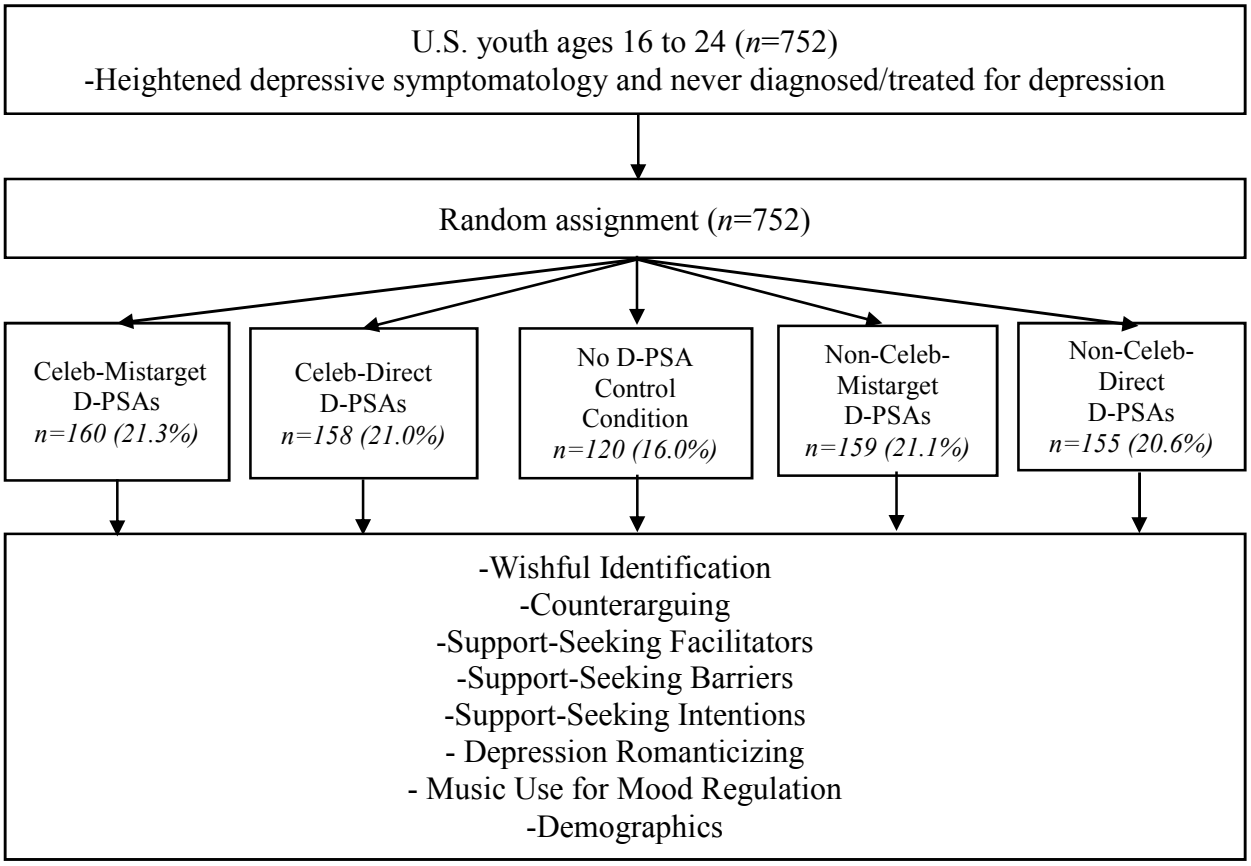
Based on the extant youth mental health help-seeking literature, a successful D-PSA will activate positive support-seeking attitudes by enhancing this population's anticipated support (Rasmussen et al., 2020), perceived social norms (Rickwood et al., 2007), perceived self-efficacy (Bandura, 2001), and outcome expectations (Bandura, 2001; Rasmussen et al., 2020). At the same time an effective D-PSA will also reduce depressed youth's fear of potential stigma (Rickwood et al., 2005) and tendency towards maladaptive self-reliance when dealing with personal mental health difficulties (Rickwood et al., 2007).

Hypotheses & Research Questions

The Surgeon General's Advisory (2021) on the emerging youth mental health crisis calls upon the mainstream media to help destigmatize mental health help-seeking through crafting normalizing and authentic mental health success stories. The purpose of this study is to experimentally test the effectiveness of D-PSAs aimed at U.S. youth (ages 16 to 24) with heightened depressive symptomatology who have never been diagnosed with or treated for depression, depending on whether the spokesperson in the message is a celebrity pop music artist or a non-celebrity and whether the referent language is mistargeted or directly targeting the viewer. This study hypothesizes a combined positive interaction effect from celebrity status and mistargeted communication on help-seeking. This study will also examine if any interactions

between the type of spokesperson and the referent language may amplify one another's effects. In addition to examining effects on the primary outcome of intentions to seek depression support from a close friend, this study will also explore how the different D-PSAs impact intentions to seek depression support from a website, depression-related outcome expectancies, self-efficacy, perceived social norms, and perceived stigma, known predictors of behavioral intentions, generally, and support-seeking intentions, specifically. Finally, this study will test the differential impact of the D-PSAs on wishful identification with the celebrity and evaluate the role of this variable in explaining support-seeking intentions and predictors of those intentions (Figure 3).

Figure 3. Flow diagram of participant recruitment and assignment.



The following hypotheses and research questions are posed:

H1: Compared to D-PSAs featuring a non-celebrity spokesperson and the no D-PSA control condition, D-PSAs featuring a celebrity pop music artist associated with mental health difficulties as the spokesperson will a) increase wishful identification with the spokesperson, b) improve depression support-seeking outcome expectancies, c) self-efficacy, d) perceptions of social norms, e) perceived anticipated support, f) and perceived stigma, and f) strengthen intentions to seek help by disclosing to a close friend, and g) a website.

H2: Compared to D-PSAs using direct referential language and the no D-PSA control condition, D-PSAs utilizing misdirected referential language will a) decrease counterarguing with the spokesperson, b) improve depression support-seeking outcome expectancies, c) self-efficacy, d) perceptions of social norms, e) perceived anticipated support, f) and perceived stigma, and f) strengthen intentions to seek depression support from a close friend, and g) a website.

H3: An interaction between celebrity status and referent language exists such that participants in the celebrity mistargeted D-PSA condition will report a) increased wishful identification with the spokespeople, b) decreased counterarguing, c) improved depression support-seeking outcome expectancies, c) self-efficacy, d) perceptions of social norms, e) perceived anticipated support, f) and perceived stigma, and f) strengthened intentions to seek depression support from a close friend, and g) a website when compared to the other three stimuli conditions.

H4: For the participants in the stimuli-viewing conditions, a) decreased counterarguing with the spokesperson, b) improved depression support-seeking outcome expectancies, c) self-efficacy, d) anticipated support, e) perceptions of social norms, f) perceived stigma, and g) maladaptive self-reliance beliefs will mediate the relationship between wishful identification with the spokesperson and participants strengthened intentions to seek depression support from a close friend when controlling for demographics and potential background variables.

H5: For the participants in the stimuli-viewing conditions, a) decreased counterarguing with the spokesperson, b) improved depression support-seeking outcome expectancies, c) self-efficacy, d) anticipated support, e) perceptions of social norms, f) perceived stigma, and g) maladaptive self-reliance beliefs will mediate the relationship between wishful identification with the spokesperson and participants strengthened intentions to seek depression support from a website when controlling for demographics and potential background variables.

RQ1: Do gender, race, socioeconomic status, or depressive symptomatology moderate the main effects of referent language and spokespeople celebrity status on any of the target attitudes (including depression romanticizing) or behavioral intentions?

RQ2: How does participants' depression romanticizing associate with participants' audience involvement (wishful identification) with the D-PSA spokespeople,

support-seeking facilitators, support-seeking barriers, intention to seek depression support from a close friend, and intention to seek depression support from a mental health website when controlling for demographics and depressive symptomatology?

RQ3: Compared to utilizing non-celebrities in a D-PSA, do celebrity spokespeople (celebrity pop music artists that reference mental health difficulties in their music) in a D-PSA aimed at at-risk youth yield higher levels of romanticizing depression?

RQ4: Does increased wishful identification with the D-PSA spokesperson associated with depression mediate increased depression romanticizing among participants in the celebrity D-PSA conditions?s

RQ5: How do participants' tendency to use music for mood regulation associated with levels of (a) wishful identification or (b) counterarguing with the D-PSA spokespeople, (c) perceived support-seeking facilitators (depression literacy, anticipated support, social norms, self-efficacy, outcome expectations), (d) perceived support-seeking barriers (maladaptive self-reliance beliefs, self-stigma, public stigma), (e) depression support-seeking intentions from a close friend or (f) a website, and (g), and (g) depression romanticizing when controlling for background variables (gender, race, depressive symptomatology, socioeconomic status, depression literacy)?

Methods

Design

In a 2 (celebrity status – celebrity vs. non-celebrity) x 2 (referential language – mistargeted vs. direct) post-test only between-subjects factorial design with a control group, participants were randomly assigned to one of five between-subject experimental conditions: (a) celebrity pop music artist spokespeople D-PSAs with a mistargeted message (four messages); (b) celebrity pop music artist spokespeople D-PSAs with a direct message (four messages); (c) non-celebrity spokespeople D-PSAs with a mistargeted message (four messages); (d) non-celebrity spokespeople D-PSAs with a direct message (four messages); or (e) no treatment control group (no D-PSAs). There are no hypotheses or research questions about the control condition.

Participants

Participants (N = 752) were English-speaking U.S. youth ages 16 to 24 (M = 20.23, SD = 2.41) with heightened depressive symptomatology who had never been diagnosed with nor treated for depression recruited via Qualtrics. The majority of participants identified as female (n = 395; 52.5%), followed by male (n = 339; 45.1%), transgender (n = 8; 1.1%), and other gender identities (n = 10; 1.3%). The majority of participants identified as White (n = 417; 55.5%), followed by Black or African-American (n = 158; 21.0%), Latinx/Hispanic (n = 128; 17.0%), Asian (n = 27; 3.6%), and mixed-race (n = 15; 2.0%). See Table 28 for a breakdown of participants by experimental condition.

Table 25. Demographics of sample by experimental condition.

	Experimental Condition				
	Celeb Mistarget *n* (%)	Celeb Direct *n* (%)	Non-Celeb Mistarget *n* (%)	Non-Celeb Direct *n* (%)	No-DPSA Control *n* (%)
Gender					
Female	85 (53)	82 (52)	78 (49)	81 (52)	69 (57)
Male	74 (46)	71 (45)	75 (47)	69 (45)	50 (42)
Transgender	0 (0)	3 (2)	2 (1)	2 (1)	1 (1)
Other	1 (2)	2 (1)	4 (3)	3 (2)	0 (0)
Race					
White	86 (54)	89 (56)	87 (55)	88 (57)	67 (56)
Black	34 (21)	33 (21)	37 (23)	32 (21)	22 (18)
Latinx	31 (20)	26 (17)	24 (15)	23 (15)	24 (20)
Asian	2 (1)	5 (3)	6 (4)	8 (5)	6 (5)
Other	7 (4)	5 (3)	5 (3)	4 (2)	1 (1)
PHQ-9 Score					
Mild	74 (46)	84 (53)	80 (50)	78 (50)	67 (56)
Moderate	44 (28)	36 (23)	51 (32)	40 (26)	31 (26)
Mod. Severe	24 (15)	25 (16)	21 (13)	27 (17)	14 (12)
Severe	18 (11)	13 (8)	7 (4)	10 (7)	8 (7)

Note. $N = 572$ (Celeb Mistarget, $n = 160$, Celeb Direct, $n = 158$, Non-Celeb Mistarget, $n = 159$, Non-Celeb Direct, $n = 155$, Control = 120).

Eligibility. To be eligible, participants filled out an eligibility screener to confirm that they were U.S. youth between ages 16 to 24 and meet the minimum threshold for mild levels of depressive symptomatology (PHQ-9 score > 4). This specific age group (16 to 24) was selected as the target population for two reasons. First, the transition between adolescence and young adulthood is a critical intervention point to influence depressive trajectories across the life course (Adkins et al., 2009; Hargrove et al., 2020). Second, an ongoing mental health intervention designed to empower teens and young adults (ages 16 to 24) to reach out to a friend they perceive may be struggling with mental health issues and at risk for suicide is already targeting this age cohort – highlighting their prioritization (Seize the Awkward, 2018).

In the screener, participants completed the Patient Health Questionnaire-9 (PHQ-9) (Kroenke & Spitzer, 2002). Participants with PHQ-9 scores equal to or greater than 5 (the threshold for mild depression) who had never been diagnosed or treated for depression were eligible for the study. The debrief section of the questionnaire provided all participants with information on numerous mental health resources. The participants who scored greater than or equal to 1 on the self-harm PHQ-9 question (PHQ_9) were directed to a Debrief section that said, "Your responses suggest that you should consider speaking with someone close to you or a mental health professional in your area" and outline more urgent mental health resources. These Debrief section messages came from previous research using participants with heightened depressive symptomatology (Lienemann & Siegel, 2016, 2018; Siegel et al., 2015).

For participants 16 or 17 years old, parents were invited to consider the survey opportunity for their children and, if interested, complete the parental consent. Once parental consent was acquired, the parent transferred device access to their child to provide assent and complete the survey.

Experimental Procedure

This factorial experiment was programmed and delivered to a convenience sample of English-speaking U.S. youth ages 16 to 24 experiencing increased depressive symptomatology who have never been diagnosed or treated for depression using panels administered by Qualtrics from January 11, 2022 to February 3, 2022. Once eligibility was confirmed and consent was obtained, participants were sent a link to the experimental questionnaire.

Participants were randomly assigned into five equal groups to either view the four mistargeted social media D-PSAs (Instagram posts) from celebrity spokespeople, four direct (i.e., not mistargeted) social media D-PSAs from celebrity spokespeople, four mistargeted social media

D-PSAs from non-celebrity, four direct (i.e., not mistargeted) social media D-PSAs from non-celebrity spokespeople, or to the no D-PSA control group which will not view any stimuli and skip to the measures. Stimuli order was randomized. Participants were not able to advance for a minimum of 15 seconds. Following message exposure, participants were assessed for their involvement and their depression support-seeking attitudes and behaviors. Demographic information was collected at the end of the questionnaire. The experiment took participants 17 minutes to complete on average. The university's Institutional Review Board approved all study procedures. Analyses were conducted using SPSS version 26.0 (Armonk, NY: IBM Corp.).

Stimuli

The stimuli were four social media D-PSAs in each condition in the form of Instagram posts which were created using Adobe Photoshop to create the images with the mental health campaign tagline ("Find Your Voice") and a website designed to generate realistic Instagram posts (https://generatestatus.com/generate-fake-instagram-post/). Instagram was selected as the media channel as health communicators are increasingly turning to social media to access youth audiences, given their disproportionate use of these platforms (Cappella et al., 2015).

The D-PSA social media post format featured a headshot of the celebrity spokesperson (or non-celebrity spokesperson) in a PSA format with a campaign title ('Find Your Voice') from the verified @FindYourVoice account. The caption featured the D-PSA script in two different versions using differing referent language (direct vs. mistargeted) (i.e., "Are you depressed?" vs. "Do you know someone who is depressed?").

The spokesperson headshots used (four celebrity spokespeople and four non-celebrity spokespeople) were matched based on demographic characteristics, clothes, and general pose or posture to minimize any latent message effects based on gender, race, or age of the spokesperson.

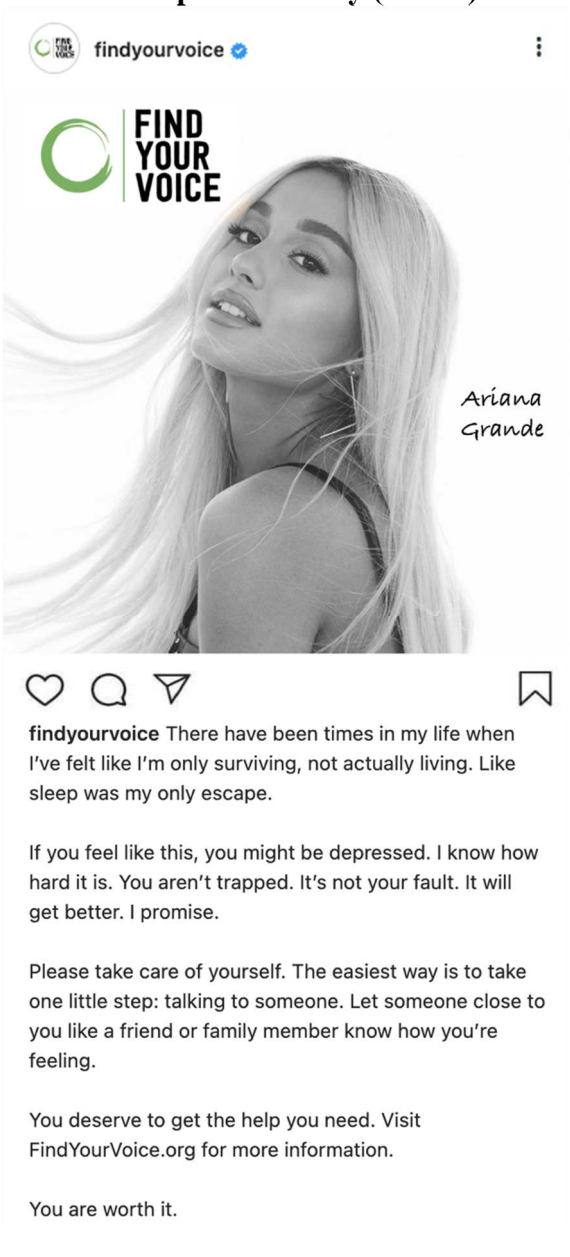
The non-celebrity stimuli were pre-tested with 45 participants in the target population age range (U.S. youth ages 16 to 24) to ensure that the non-celebrity stimuli were not recognizable or perceived as celebrities, that the non-celebrity stimuli would be not viewed as physically unattractive using a 7-point scale from *not at all physically attractive* (1) to *extremely physically attractive* (7), and to assess which non-celebrity stimuli options (two non-celebrity options per celebrity stimuli) match best with the existing celebrity stimuli. Whichever non-celebrity image was viewed as the "best match" was selected as long as pre-test results indicated they were not viewed as recognizable, were not perceived as a celebrity, and were not viewed as physically unattractive. All non-celebrity stimuli used in the study scored above *average physical attractiveness* (4) except for one, which achieved an acceptable physical attractiveness score (M = 3.71, SD = 1.14, N = 45) and was overwhelmingly selected by the participants as the best matching image of the two options for the celebrity stimuli (78%, n = 35). The full non-celebrity stimuli pre-test results are available upon request.

The Instagram captions (message text beneath the image) were written in the first person. The messages were composed entirely of statements adapted from Siegel et al.'s (2015) D-PSA messaging study and adapted quotes from celebrity messages in the *Seize the Awkward* (2018) campaign (Figure 4). The format of the message statements was the same across all four stimuli in each condition, and all of the experimental stimuli can be found in Appendix C, and the full stimuli messages can be found in Appendix D.

Figure 4. D-PSA stimuli examples.

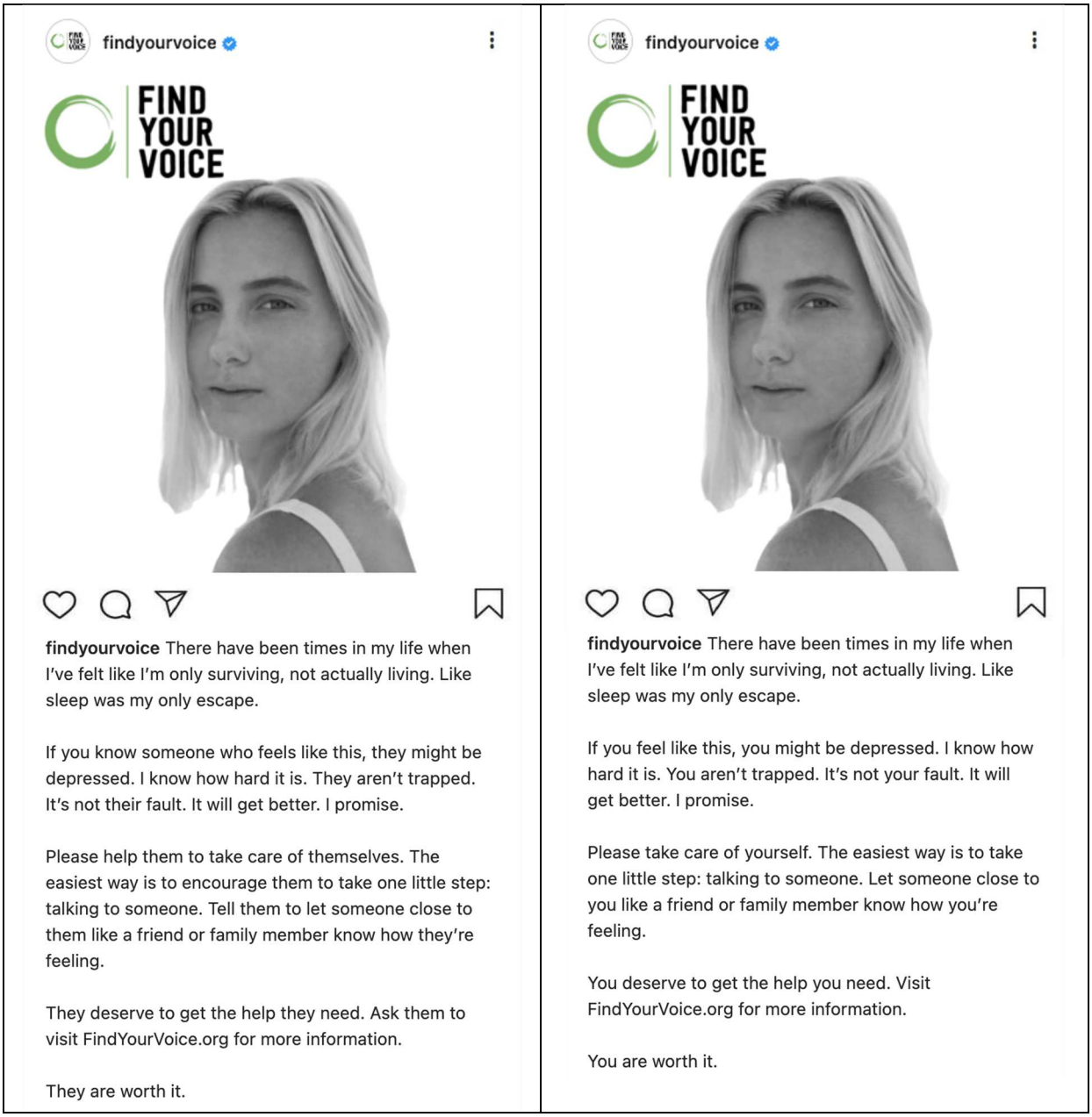
Example: Celebrity (Mistargeted)

Example: Celebrity (Direct)



Example: Non-Celebrity (Mistargeted)

Example: Non-Celebrity (Direct)



The celebrity pop music artists representing the celebrity spokespeople in this fictitious campaign were selected based on previous analyses. I systematically selected the best celebrity spokespeople for a depression public service announcement campaign based on the following criteria: (1) as celebrity is a function of fame, the spokespeople must be familiar to at least two-thirds of the target population (U.S. youth ages 16 to 24) across demographics, (2) the

spokespeople must be viewed as artists who make appealing music across target population demographics, and (3) the spokespeople must have issue-relevant credibility (i.e., expertise, sincerity, altruism, role model appeal). After conducting these previous analyses (available upon request), Ariana Grande, Billie Eilish, Lil' Uzi Vert, and Post Malone were selected as the celebrity pop music artist spokespeople for the celebrity condition of the stimuli.

Measures

Table 29 below presents the means, standard deviations, and zero-order correlations between variables of interest. Gender (coded as male or female) and race (coded as White or Non-White) are included among correlations to show general relationships with the measured variables.

Table 26. Means, standard deviations, and zero-order correlations between variables.

Variables	*Mean*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Gender	N/A	N/A	–	-.05	.06	.14**	.03	-.09*	.04	.04	.02	-.09*	-.14**	-.04	-.01	-.02	.10*	.10*
2. Race	N/A	N/A		–	.06	-.15**	.06	.08*	-.12*	-.09*	-.09*	-.05	.18**	.06	.07	-.02	.03	.10*
3. DEP symptoms	10.72	5.03			–	.06	.09*	.06	-.19**	-.16**	-.21**	-.14**	.14**	.28**	.21**	-.16**	.01	.04
4. DEP literacy	5.35	1.00				–	.14*	-.07	.27**	.28**	.31**	.45**	-.14**	.03	.03	.10*	.19**	.22**
5. Wishful identif	4.50	1.30					–	-.15**	.17**	.11*	.15**	.27**	.12*	.15**	.12*	.23**	.30**	.14**
6. Counterarguing	3.23	1.43						–	-.10*	-.15**	-.11*	-.17**	.33**	.24**	.29**	-.09*	-.05	-.04
7. Anticip support	5.04	1.39							–	.71**	.73**	.48**	-.20**	-.30**	-.20**	.47**	.16**	.11*
8. Social norms	5.28	1.58								–	.58**	.42**	-.15**	-.19**	-.15**	.34**	.10*	.13*
9. Self-efficacy	4.87	1.43									–	.56**	-.17**	-.34**	-.21**	.40**	.18**	.14**
10. Outcome exp	5.02	1.07										–	-.17**	-.13**	-.12	.25**	.25**	.18**
11. Self-reliance	3.52	1.25											–	.41**	.36**	-.16**	-.07*	-.07
12. Self-stigma	4.03	1.20												–	.55**	-.27**	-.02	-.02
13. Public stigma	3.96	1.21													–	-.11*	.02	.02
14. DEP support-seeking (friend)	4.81	1.68														–	.23**	.09*
15. DEP support-seeking (web)	4.19	1.70															–	.05
16. DEP romanticizing	.27	.70																–

Notes. For gender, 1 = male, 2 = female (transgender and non-identifying participants omitted in correlations for gender, n = 36, 8.6%). Age is in years. For race, 1 = White, 2 = Non-White. DEP symptoms summed PHQ-9 scores which range from 0 to 27 with nine 4-point items (scored from 0-3). Depression romanticizing measured from -2 to +2. All other measures were rated on scales of 1-7. *$p < .05$. **$p < .001$.

Audience involvement

Wishful identification. Participants' wishful identification with the group of spokespeople in the D-PSA social media posts was assessed as a global measure using four items adapted from Hoffner and Buchanan's (2005) instrument, which assessed how much respondents desire to be like or act like their favorite characters (Hoffner, 1996). Participants indicated on a 7-point Likert scale from *strongly disagree* (1) to *strongly agree* (7) with statements including: The four @FindYourVoice spokespeople in the Instagram posts I just viewed are the sort of people I want to be like myself; Sometimes I wish I could be more like the four @FindYourVoice spokespeople in the Instagram posts I just viewed; I see the four @FindYourVoice spokespeople in the Instagram posts I just viewed as role models (M = 4.50, SD = 1.30, α = .86).

Target outcome

Depression support-seeking intention. The experiment's primary outcome was participants' support-seeking intention via disclosure to a close friend. These items were taken from the General Help-Seeking Questionnaire (GHSQ) (Wilson et al., 2005). Validity of the GHSQ was supported with the GHSQ being positively associated with prior and future help-seeking behavior, and initial testing revealed 3-week test-retest reliability. The eight items were taken from the GHSQ representing intentions to seek support from a close other use a 7-point Likert scale from *extremely unlikely* (1) to *extremely likely* (7) to assess how likely individuals who are experiencing depression who have never been diagnosed or treated for depression are to seek help or support from various sources. For analyses, this study was primarily concerned with the 'close friend' measure, given the target population's preference for support-seeking from this group. In addition, I prioritized the 'website' measure as that is the other resource advocated for in the D-PSAs. Other measured items included: intimate partner (i.e., boyfriend, girlfriend,

husband, wife, etc.), parent, family member (other relative/non-parent), mental health professional (e.g., psychologist, therapist, social worker, counselor), minister or religious leader (e.g., Priest, Rabbi, Chaplain), or an additional item stating 'I would seek help from another not listed above (e.g., co-worker, roommate, resident assistant (RA), etc.).'I also included an item reading 'I would not seek help from anyone.' Descriptives for these items among this sample of U.S. youth (ages 16 to 24) experiencing depressive symptoms can be found below in Table 30.

Table 27. Participant scores for intentions to seek depression support from various resources.

Resource	***Mean***	***SD***
Intimate Partner	5.13	1.68
Close Friend	4.81	1.68
MH Professional	4.69	1.74
MH Website	4.19	1.70
Parent	4.09	1.97
Family Member	3.83	1.88
Other	3.61	1.73
No One	3.61	1.84
Religious Leader	2.95	1.86

Note. Support-seeking intentions measured on 7-point scale. $N = 752$.

Support-seeking facilitators

Depression literacy. Participants' depression literacy was assessed with a shortened version of the Public Understanding of Depression Questionnaire (PUDQ) (Swannell & McDermott, 2015), utilizing the 'ability to recognize depression' items. The following ten items were adapted and measured using a 7-point Likert scale from *strongly disagree* (1) to *strongly agree* (7) for participants' agreement about the following symptoms being a sign of depression: feeling down or sad most of the time; little interest in doing pleasurable activities most of the time; feelings of worthlessness or guilt; fixating on past failures or self-blame; trouble thinking,

concentrating, making decisions, or remembering things; sleep disturbances, including sleeping too little or sleeping too much; tiredness or lack of energy; reduced appetite and weight loss or increased cravings for food and weight gain; slowed thinking, speaking, or body movements. As all items are symptoms of depression, higher scores indicate higher depression literacy (M = 5.35, SD = 1.00, α = .90).

Perceived anticipated support from a close other. A measure for participants' perceived anticipated support from close others was adapted from Nambisan (2011). The 5-item measure utilizes a 7-point Likert-type scale from *strongly disagree* (1) to *strongly agree* (7). The items included: I could count on talking to someone close to me for support if I experienced depression; I could share my depression difficulties with someone close to me; I could get the emotional help and support I need from someone close to me if I were depressed; I could talk about my depression with someone close to me; I know someone close to me who is a real source of comfort (M = 5.04, SD = 1.39, α = .91).

Depression support-seeking social norms. A single item was adapted from Vogel et al. (2007) to measure participants' perception of support-seeking social norms. The question asks participants to report their agreement from *strongly disagree* (1) to *strongly agree* (7) with the statement, "There is a person close to me who would think that I should reach out to them for support if I were experiencing depression." The Vogel et al. (2007) was initially taken from Bayer and Peay's (1997) social norm for seeking mental health services measure, who found that this single item predicted help-seeking intent (M = 5.28, SD = 1.58).

Depression support-seeking self-efficacy. Adapting Hernandez & Organista's (2013) self-efficacy scale for identifying the need for depression treatment, a support-seeking self-efficacy measure was created. The measure utilized a 7-point Likert scale from *strongly disagree*

(1) to *strongly agree* (7) and has three items: (1) I could seek support for depression by opening up to someone close to me if I needed to, (2) If I were experiencing depression, I am confident that I would be able to open up to someone close to me for support, (3) If I were experiencing depression, I could find someone close to me that I would be able to open up to for support (M = 4.87, SD = 1.43, α =.88).

Depression support-seeking outcome expectations. Support-seeking outcome expectancies were measured using an adaptation of Siegel et al.'s (2015) scale, which consists of five items on a scale with endpoints from *strongly disagree* (1) to *strongly agree* (7). Scale items assessing participants' social support outcome expectancies were evaluated with their agreement with the statement "Seeking support for depression from someone close (e.g., close friend, family member, etc.)…" with the following items: will make a positive difference; will help a depressed person; will shorten the length of time that a person with depression will remain depressed; will be valuable to help recover; helps a depressed person to get better (M = 5.02, SD = 1.07, α = .86).

Support-seeking barriers

Counterarguing. Three items will be used to assess participants' agreement about their counterarguing (or lack thereof) with the stimuli D-PSA messages utilizing Silvia's (2006) scale. The items will be measured on a 7-point scale from *strongly disagree* (1) to *strongly agree* (7) for the statements: I was criticizing the messages in the Instagram posts while I was reading them; While reading the Instagram posts, I was thinking of points that went against the spokespeople's arguments; and While reading the Instagram posts, I was feeling skeptical of the spokespeople's arguments (M = 3.22, SD = 1.43, α = .84).

Maladaptive self-reliance beliefs. Participants' tendency towards maladaptive self-reliance when dealing with personal mental health difficulties was assessed using a three-item

measure from Britt et al. (2011), which was adapted from Mackenzie et al.'s (2004) attitudes toward seeking professional help scale. This measure utilizes a 7-point Likert scale from *strongly disagree* (7) to *strongly agree* (1) to assess preferences for dealing with depression problems without the help of others. Items include: I prefer to handle mental health problems, like feeling depressed, by myself as opposed to seeking the support of others; People should work out their own mental health problems. Reaching out to others for support when depressed should be a last resort; Depression tends to work itself out on its own"(M = 3.52, SD = 1.25, α = .63). Despite the low reliability score, all three items were within the ideal inter-item correlation range (r = .34 to r = .49) (Piedmont, 2014), so no items were discarded before conducting analyses.

Depression support-seeking self-stigma. The Self-Stigma of Seeking Help (SSOSH) (Vogel et al., 2006) was utilized to measure reductions in self-esteem that result from receiving the label of a seeker of depression support from a close other (Vogel et al., 2009). This measure was shortened to include five items that were adapted to seeking depression support from a close other, measured on a 7-point Likert scale from *strongly disagree* (1) to *strongly agree* (7). The five items were: I would feel worse about myself if I could not handle being depressed on my own; If I was depressed and I opened up to someone close to me for support, I would be less satisfied with myself; My self-confidence would be threatened if I opened up to someone close to me for support if I was depressed; My self-esteem would INCREASE if I opened up to someone close to me for support if I was depressed (reversed); I would feel inadequate if I went to someone close to me for support if I was depressed. The SSOSH has shown high internal consistency and 2-month test-retest reliability in undergraduate samples (Vogel et al., 2006) (M = 4.03, SD = 1.20, α = .82).

Depression support-seeking public stigma. The Social Stigma of Receiving Psychological Help Scale (SSRPH) (Komiya et al., 2000) was adapted to assess perceptions

associated with seeking support for depression from a close other. The five-question measure has items rated on a Likert scale ranging from *strongly disagree* (1) to *strongly agree* (7). The items included: I believe seeking support for depression from someone close to you carries social stigma; People generally believe it is a sign of personal weakness or inadequacy to seek support for depression from someone close to you; People would see me in a less favorable way if they come to know that I had opened up to someone close to me for depression support; It would be advisable for me to not tell people that I had opened up to someone close to me for depression support; People tend to dislike those who seek depression support from others close to them (M = 3.96, SD = 1.21, α =.80).

Individual differences

Favorite music genre. Participants were asked to rate how much they enjoy specific genres of music from 1 (*strongly dislike*) to 7 (*strongly like*) with a measure I created. The music genre choices were adapted from Marshall and Naumann (2018), including Pop (M = 5.11, SD = 1.53), Rap/Hip-Hop (M = 5.03, SD = 1.76), Rock/Alternative (M = 4.72, SD = 1.77), R&B/Soul (M = 4.61, SD = 1.81). These categories are not inclusive of all musical genres and were only meant to cover the various genres of the artists included in the study.

Music mood regulation use. Adapted from Saarikallio and Erkkilä (2007), participants were asked to clarify which emotional goals they look to achieve when listening to the celebrity's music, including Entertainment (E), Revival (R), Strong Sensation (SS), Diversion (Div), Discharge (Dis), Mental Work (MW), and Solace (S). The 7-item measure has items rated on a Likert scale ranging from *strongly disagree* (1) to *strongly agree* (7). Items included: I like to listen to music when I can to make my atmosphere more pleasant, often as background music (Entertainment) (M = 5.78, SD = 1.20); I listen to music to get new energy after a rough day

(Revival) (*M* = 5.50, SD = 1.43); Music evokes strong emotional experiences in me (Strong Sensation) (*M* = 5.56, SD = 1.39); For me, listening to music is a way to forget about my worries (Diversion) (*M* = 5.51, SD = 1.39); I listen to music by music to release complicated feelings (Discharge) (*M* = 5.35, SD = 1.48); Music helps me to understand different feelings in myself (Mental Work) (*M* = 5.39, SD = 1.42); I listen to music to feel understood and comforted (Solace) (*M* = 5.35, SD = 1.46). All items were moderately to strongly correlated (mean *r* = .52) but not multicollinear, so the items were combined to create a composite measure for participants who use Music for Mood Regulation to identify participants who are more prone to using music for emotional regulation (*M*=5.49, *SD* = 1.07, α = .88).

Depressive symptomatology. Participants' depressive symptomatology was assessed using the Patient Health Questionnaire-9 (PHQ-9) (Kroenke & Spitzer, 2002), requiring participants to score above "5 (mild depressive symptoms)" to be eligible for the study. The PHQ-9 is a depression module that scores each of the nine DSM-IV criteria as "0" (*not at all*) to "3" (*nearly every day*). Scores range from 1-4 (minimal depression), 5-9 (mild depression), 10-14 (moderate depression), 15-19 (moderately severe depression), 20-27 (severe depression). Participants are prompted, "Over the last two weeks, how often have you been bothered by any of the following problems?" Items include "Little interest or pleasure in doing things," "Feeling down, depressed, or hopeless," and "Feeling bad about yourself – or that you are a failure or have let yourself or your family down" (*M* = 10.72, *SD* = 5.03, α = .79).

Although all participants experienced at least "mild depressive symptoms" according to the PHQ-9, only 39% (*n* = 293) of participants believed they were currently depressed. Participant PHQ-9 scores were 5-9 (mild depression) (*n* = 383; 50.9%), 10-14 (moderate depression) (*n* = 202; 26.9%), 15-19 (moderately severe depression) (*n* = 121; 16.1%), and 20-27 (severe depression) (*n*

= 56; 7.4%). For main analyses, participants were divided into two groups, a low depressive symptomatology group (mild + moderate scores, *N* = 585; 77.8%) and a high depressive symptomatology group (moderately severe + severe scores, *N* = 167; 22.2%).

Depression song listening history. Participants were asked if they recently chose to listen to music that mentions "feelings of depression" to control for those naturally drawn to music with depression themes. This measure was adapted from Kam et al. (2014), and the single item was measured on a 7-point agreement scale from 1 (*strongly disagree*) to 7 (*strongly agree*) (*M* = 4.27, *SD* = 1.82). Most of the participants (*n* = 383; 51%) indicated some agreement that they had been listening to songs that mentioned feelings of depression in the previous two weeks. Respondents were also asked how often their favorite music helps them "deal with your own mental health issues" (*M* = 5.17, *SD* = 1.45). An overwhelming majority of the participants (*n* = 539; 71.9%) agreed that their favorite music helps them deal with their own mental health issues. More than a fifth of participants (*n* = 151, 20.1%) strongly agreed with the statement.

Depression romanticizing. There is growing concern among scholars that popular culture – including celebrity pop music artists through their personal disclosures of mental health difficulties – are unintentionally making mental health conditions like depression seem appealing to youth. This study created a short measure for assessing how much U.S. youth see depression as trendy or as a "fascinating" character trait (Dunn, 2017; Jadayel et al., 2017; Scarano & Webster, 2018, p. 1). This 6-item measure will present respondents with the statement "People my age with depression are…" and provided anchor scales on a 5-point scale from -2 to +2 scored as *very (negative characteristic)* (-2), *somewhat (negative characteristic)* (-1), *neither (negative characteristic) nor (positive characteristic)* (0), *somewhat (positive characteristic)* (1), and *very (positive characteristic)* (2) with scale anchors including: "uninteresting-interesting," "shallow-

deep," "unimaginative-imaginative," "dull-fascinating," "uncreative-creative," "boring-captivating" (*M* = 0.27, *SD* = 0.70, α = .82).

Celebrity status manipulation check. To ensure that celebrity status of the stimuli was successfully manipulated, participants were asked to rate their level of agreement with the statement, "The @FindYourVoice spokespeople in the four Instagram posts are celebrities that I know of." This item was measured using a 7-point scale ranging from *Strongly disagree* (1) to *Strongly agree* (7) (*M* = 4.32, *SD* = 2.43).

Referent language manipulation. To ensure that the referent language of the stimuli (mistargeted vs. direct) was successfully manipulated, participants were asked to rate their level of agreement using a 7-point scale ranging from *Strongly disagree* (1) to *Strongly agree* (7) with the statements "The @FindYourVoice spokespeople in the four Instagram posts were encouraging me to seek depression support for myself" (*M* = 5.11, *SD* = 1.48) and "The @FindYourVoice spokespeople in the four Instagram posts were encouraging me to help someone else seek depression support" (*M* = 5.30, *SD* = 1.38).

Depression history. During the demographic section at the end of the instrument, participants were asked to self-report if they think they are currently depressed (39%), or had personally known someone who has been depressed (82%).

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Results

Analysis plan

The cross-sectional experimental questionnaire was programmed and delivered to a convenience sample of U.S. youth ages 16 to 24 experiencing depressive symptoms who have never been diagnosed with or treated for depression using panels administered by Qualtrics. The survey was advertised as a "Mental Health Social Media Study" and administered from January 11, 2022, to February 3, 2022, and took participants 17 minutes to complete on average. The university's Institutional Review Board approved all study procedures. Analyses were conducted using SPSS version 26.0 (Armonk, NY: IBM Corp.).

H1 was tested using one-way analyses of variance (ANOVA) for each outcome comparing three groups: celebrity conditions, non-celebrity conditions, and the control group, where participants did not view any D-PSAs across all outcome variables. Celebrity status was entered as a fixed factor. H2 was also tested using one-way analyses of variance (ANOVA) for each outcome variable comparing three groups: mistargeted referent language conditions, direct referent language conditions, and the control group where participants did not view any D-PSAs. Referential language was entered as a fixed factor. A series of 2x2 analyses of variance (ANOVA) with the control group removed were utilized to test H3. Spokesperson celebrity status and referent language were entered as fixed factors. The control (no D-PSA) group was omitted from

interaction analyses as the experimental design was not fully crossed. H4 and H5 used PROCESS Macro for SPSS (v3.3) Model 4 (Hayes, 2017) with bootstrapping procedures with 5,000 bootstrap samples and bias-corrected 95% confidence intervals. For RQ1, I conducted a custom analysis of variance (ANOVA) with spokesperson celebrity status, referent language, gender, race, SES, and depressive symptomatology entered as fixed factors. Two-way interactions between demographics (gender, race, SES, symptomatology) were included in the analyses. For RQ2 and RQ5, I conducted a partial correlation analysis controlling for gender, age, race, socioeconomic status, depression literacy, depressive symptomatology, and inclination to listen to songs with depressive themes. RQ3 and RQ4 utilized PROCESS Macro for SPSS (v3.3) Model 4 (Hayes, 2017) with bootstrapping procedures with 5,000 bootstrap samples and bias-corrected 95% confidence intervals.

Manipulation Checks

This experimental design utilized two factors, and I conducted manipulation checks to ensure that the manipulations of both of these factors were successful. First, to ensure that the celebrity spokespeople were, in fact, more often recognized than the non-celebrity spokespeople, participants were asked to rate the recognizability of the spokespeople from 'Strongly Disagree' (1) to 'Strongly Agree' (7). As expected, the participants viewing celebrity spokespeople (M = 6.26, SD = 1.12) rated their spokespeople to be more recognizable ($t(541.37) = 34.06$, $p < .001$) than the participants who viewed non-celebrity spokespeople (M = 2.35, SD = 1.70). Second, to ensure that participants perceived differences in the referent language of the Instagram post (mistargeted vs. direct), participants were asked to rate if the Instagram posts were encouraging them to seek support for themselves or others. Participants in the mistargeted referent language conditions (M = 5.44, SD = 1.35) perceived the stimuli to be encouraging them to help *someone*

else to seek support for depression, $t(630) = 2.53$, $p = .01$, significantly more than the participants in the direct referent language conditions ($M = 5.16$, $SD = 1.39$). Similarly, participants in the direct referent language conditions ($M = 5.27$, $SD = 1.46$) perceived the stimuli to be encouraging them to seek support *for themselves*, $t(630) = -2.62$, $p = .01$, significantly more than the participants in the mistargeted referent language conditions ($M = 4.96$, $SD = 1.48$).

Main effects and interaction analyses

H1 predicted that the D-PSAs featuring celebrity pop music artists associated with mental health difficulties would a) increase wishful identification with the spokesperson, b) improve depression-related outcome expectancies, c) self-efficacy, d) perceptions of social norms, e) perceived anticipated support, f) and perceived stigma, and f) strengthen intentions to seek help by disclosing to a close friend. As seen below in Table 31, omnibus tests indicated no significant differences between the conditions across any outcome variable. H1 was not supported. In other words, there were no differences in participants who viewed D-PSAs utilizing celebrity pop music spokespeople, non-celebrity spokespeople, or the participants who did not view any D-PSAs (control). However, it is worth noting that the differences in maladaptive self-reliance beliefs approached significance ($p = .08$) and intentions to seek support from a website ($p = .06$), indicating that celebrity D-PSAs may have iatrogenic effects on self-reliance attitudes and intentions to seek support from a website when compared to non-celebrity D-PSA messages.

Table 28. Analysis of variance exploring main effect of celebrity status on outcome variables.

	WI	Outcome Expect.	Self-Efficacy	Social Norms	Anticip. Support	Self-Reliance	Self-Stigma	Public Stigma	Support-Seek (Friend)	Support-Seek (Website)
Group	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*
Celeb (*n* = 318)	4.54 (1.35)	5.02 (1.14)	4.83 (1.52)	5.29 (1.64)	5.03 (1.41)	3.64 (1.28)	4.13 (1.23)	4.05 (1.19)	4.77 (1.70)	4.18 (1.75)
Non-Celeb (*n* = 314)	4.53 (1.24)	5.05 (1.01)	4.94 (1.32)	5.29 (1.53)	5.12 (1.39)	3.41 (1.22)	3.93 (1.16)	3.89 (1.19)	4.93 (1.66)	4.31 (1.67)
Control (*n* = 120)	-	4.96 (1.06)	4.79 (1.45)	5.23 (1.57)	4.87 (1.36)	3.49 (1.22)	4.07 (1.24)	3.93 (1.28)	4.63 (1.68)	3.90 (1.64)
Test Statistic										
F-Score	.84	.30	.78	.08	1.35	2.60	2.20	1.42	1.68	2.56
p-Value	.40	.74	.46	.92	.26	.08	.11	.24	.19	.08

Note. Df = (1, 747) for all measures except Wishful Identification where Df = 630. T-statistics are reported for Wishful Identification because there were only two groups (no control condition). Asterisks (*) denote significant differences observed for the variable using analysis of variance (ANOVA). Symbol (^) denotes significance differences between groups using Tukey HSD post-hoc analysis. WI = Wishful Identification. All items are measured from 1-7, with higher values indicating more X.

H2 predicted that compared to D-PSAs using direct referential language and the no D-PSA control condition, D-PSAs utilizing misdirected referential language would a) decrease counterarguing with the spokesperson, b) improve depression-related outcome expectancies, c) self-efficacy, d) perceptions of social norms, e) perceived anticipated support, f) and perceived stigma, and f) strengthen intentions to seek help by disclosing to a close friend. As seen below in Table 32, omnibus tests indicated no significant differences between the conditions across any outcome variables except for support-seeking intentions from a website. Therefore, H2 was partially supported. Based on Tukey's HSD post-hoc tests, D-PSAs using direct referent language (speaking to "you") were more effective at encouraging U.S. youth (ages 16 to 24) experiencing depressive symptoms who have never been diagnosed or treated for depression to seek support from a website than mistargeted D-PSAs or no D-PSAs.

Table 29. Analysis of variance exploring main effect of referent language on outcome variables.

Group	Counter-Arguing *M (SD)*	Outcome Expect. *M (SD)*	Self-Efficacy *M (SD)*	Social Norms *M (SD)*	Anticip. Support *M (SD)*	Self-Reliance *M (SD)*	Self-Stigma *M (SD)*	Public Stigma *M (SD)*	Support-Seek (Friend) *M (SD)*	Support-Seek (Website) *M (SD)*
Mistarget (*n* = 319)	3.15 (1.37)	4.99 (1.09)	4.82 (1.45)	5.23 (1.58)	5.00 (1.41)	3.49 (1.24)	3.99 (1.20)	3.91 (1.15)	4.85 (1.64)	4.15 (1.74)
Direct (*n* = 313)	3.31 (1.48)	5.08 (1.06)	4.95 (1.40)	5.35 (1.59)	5.15 (1.39)	3.56 (1.28)	4.07 (1.20)	4.03 (1.24)	4.85 (1.71)	4.35^ (1.68)
Control (*n* = 120)	-	4.96 (1.06)	4.79 (1.45)	5.23 (1.57)	4.87 (1.36)	3.49 (1.22)	4.07 (1.24)	3.93 (1.28)	4.63 (1.68)	3.90^ (1.64)
Test Statistic										
F-Score	1.97	.83	.83	.58	1.94	.26	.43	.81	.91	3.13
p-Value	.16	.44	.44	.56	.14	.78	.65	.45	.41	.04*

Note. Df = (1, 747) for all measures except Counterarguing where Df = 630. T-statistics are reported for Wishful Identification because there were only two groups (no control condition). Asterisks (*) denote significant differences observed for the variable using analysis of variance (ANOVA). Symbol (^) denotes significance differences between groups using Tukey HSD post-hoc analysis. All items are measured from 1-7, with higher values indicating more X.

H3 predicted an interaction between celebrity status and referent language exists such that participants in the celebrity mistargeted D-PSA condition would report a) increased wishful identification with the spokespeople, b) decreased counterarguing, c) improved depression-related outcome expectancies, c) self-efficacy, d) perceptions of social norms, e) perceived anticipated support, f) and perceived stigma, and f) strengthened intentions to seek depression support from a close friend when compared to the other three stimuli conditions. As seen below in Table 33, omnibus tests indicated no significant differences between the conditions across any outcome variables. H3 was not supported. In other words, the celebrity mistarget D-PSA condition did not perform better than any of the other conditions across any of the outcome variables.

Table 30. Analysis of variance tests (ANOVAs) exploring interaction effects of celebrity status and referent language on target outcome variables across conditions.

	WI	Counter -arguing	Outcome Expect.	Self-Efficacy	Social Norms	Anticip. Support	Self-Reliance	Self-Stigma	Public Stigma	Support -Seek (Friend)	Support -Seek (Web)
Group	***M (SD)***	***M (SD)***	***M (SD)***	***M (SD)***	***M (SD)***	***M (SD)***	***M (SD)***	***M (SD)***	***M (SD)***	***M (SD)***	***M (SD)***
C-Mist (n = 160)	4.50 (1.36)	3.01 (1.37)	4.95 (1.13)	4.78 (1.57)	5.31 (1.59)	5.00 (1.37)	3.56 (1.17)	4.04 (1.19)	3.99 (1.11)	4.85 (1.59)	4.06 (1.76)
C-Direct (n =158)	4.58 (1.35)	3.33 (1.51)	5.09 (1.15)	4.86 (1.46)	5.27 (1.70)	5.06 (1.45)	3.71 (1.39)	4.21 (1.27)	4.12 (1.27)	4.70 (1.78)	4.30 (1.74)
N-Mist (n = 159)	4.40 (1.27)	3.28 (1.37)	5.04 (1.04)	4.88 (1.32)	5.14 (1.56)	5.01 (1.45)	3.43 (1.30)	3.94 (1.20)	3.84 (1.19)	4.87 (1.68)	4.24 (1.73)
N-Direct (n = 155)	4.51 (1.19)	3.26 (1.46)	5.07 (.97)	5.03 (1.33)	5.43 (1.47)	5.23 (1.32)	3.37 (1.15)	3.92 (1.11)	3.94 (1.20)	5.03 (1.62)	4.39 (1.61)
Test Statistic											
Celeb											
F-Score	.70	.91	.10	1.09	.00	.64	5.07	4.38	2.77	1.58	.91
***p*-Value**	.40	.34	.76	.30	1.00	.43	.03*	.04*	.10	.21	.34
Referent											
F-Score	1.15	1.95	1.14	1.20	1.01	1.81	.39	.74	1.53	.00	2.04
***p*-Value**	.28	.16	.29	.28	.32	.18	.53	.39	.22	.97	.15
INT											
F-Score	.05	1.99	.35	.10	1.63	.55	1.02	.79	.01	1.48	.12
***p*-Value**	.83	.16	.55	.75	.20	.46	.31	.37	.94	.23	.73

Note. Df = (1, 628) for all measures. INT = Interaction. WI = Wishful Identification. Web = Website. C-Mist = Celebrity Mistarget condition. C-Direct = Celebrity Direct condition. N-Mist = Non-Celebrity Mistarget Condition. N-Direct = Non-Celebrity Direct Condition. Asterisks (*) denote significant differences observed for the variable using analysis of variance (ANOVA). Symbol (^) denotes significance differences between groups using Tukey HSD post-hoc analysis. All items were measured on a 7-point scale. Differences in Celeb and Referent scores observed here compared to Main Effects above occur due to lack of Control condition in these analyses.

Mediation and moderation analyses

H4 posited that counterarguing, outcome expectations, self-efficacy, anticipated support, social norms, stigma, and maladaptive self-reliance beliefs would mediate the relationship between wishful identification with the D-PSA spokesperson and intentions to seek depression support from a close friend. This analysis controlled for participant gender (coded as 1 = male, 2 = female), race (1 = White, 2 = Black/African-American, 3 = Latinx/Hispanic), age, socioeconomic status

(coded by mother education, 1 = some college or less, 2 = associate's degree or more), and depressive symptomatology (1 = low depressive symptomatology (mild + moderate PHQ-9 groups), 2 = high depressive symptomatology (moderately severe + severe PHQ-9 groups). Transgender and "other gender identity" participants were omitted due to small sample sizes. Also, only White, Black/African-American, and Latinx/Hispanic participants were included in this analysis. Due to small sample sizes, other racial groups were omitted, leaving $N = 540$. Using PROCESS Macro for SPSS (v3.3) Model 4 (Hayes, 2017) with bootstrapping procedures with 5,000 bootstrap samples and bias-corrected 95% confidence intervals, wishful identification was set as the independent variable (X), counterarguing, outcome expectations, self-efficacy, anticipated support, social norms, stigma, and maladaptive self-reliance beliefs were set as parallel mediators (Ms), and intentions to seek depression support from a close friend was set as the outcome (Y). Overall, the model fit was significant, $F(14, 525) = 13.82$, $p < .001$, $R^2 = .27$. The results of the model are summarized in Figure 5.

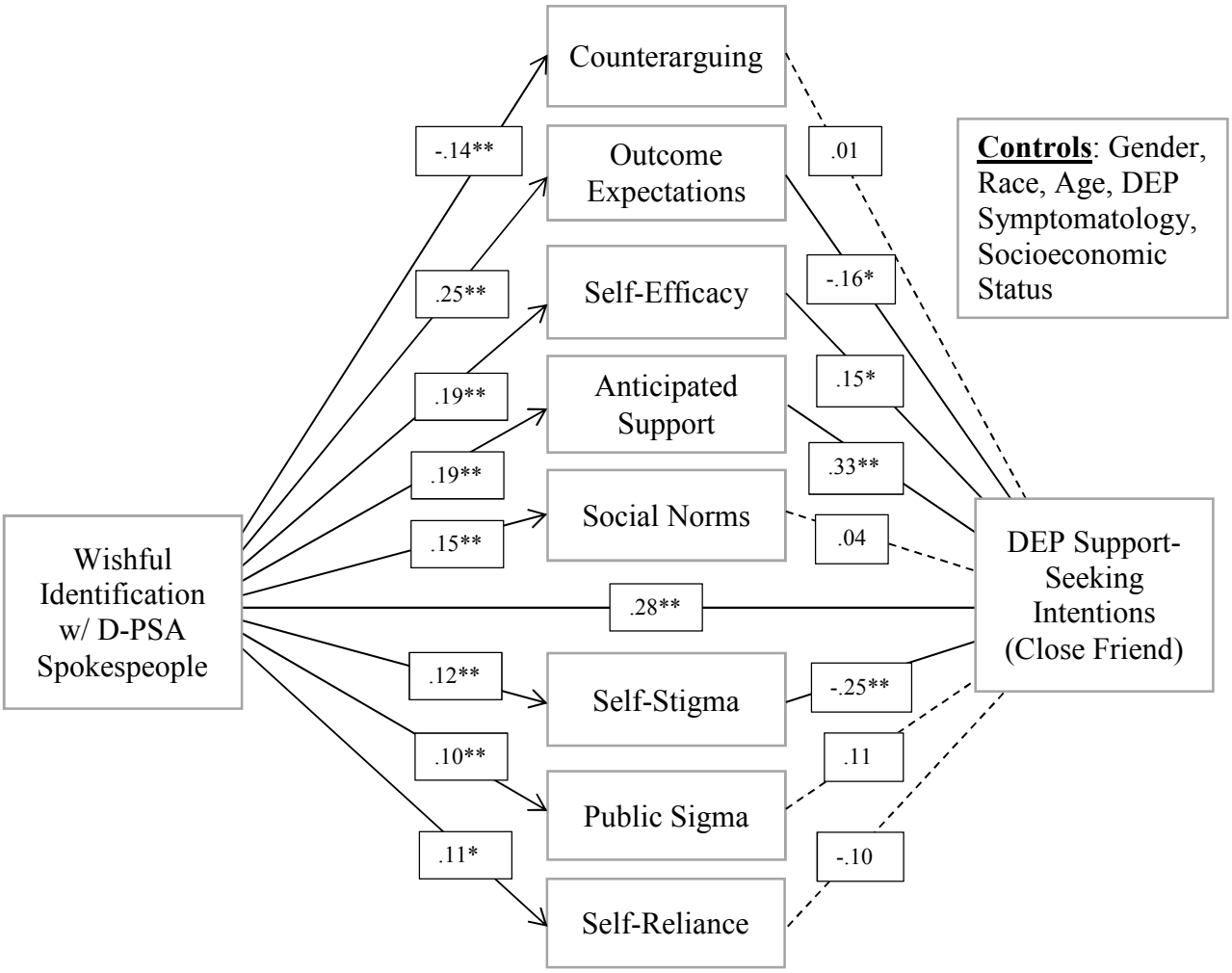

Figure 5. Analysis of the relationship between wishful identification with the D-PSA spokesperson and intentions to seek depression support from a close friend as mediated by variables of interest.

*$p < .05$, **$p < .01$.

As seen in Figure 5, using 5,000 bootstrap samples to generate 95% confidence intervals, only indirect effects were supported through outcome expectations, B = -.04, Boot SE B = .02, Boot CI (-.08, -.00), self-efficacy, B = .03, Boot SE B = .02, Boot CI (.00, .07), anticipated support, B = .06, Boot SE B = .02, Boot CI (.02, .11), and self-stigma, B = -.03, Boot SE B = .01, Boot CI (-.06, -.01). These four variables partially mediated the relationship between depressed at-risk U.S. youth (ages 16 to 24) wishful identification with the D-PSA spokespeople and their intentions to seek depression support from a close friend when controlling for background variables (gender,

race, age, current depressive symptoms, socioeconomic status). H4 was partially supported. The direct relationship between wishful identification with the D-PSA spokespeople and intentions to seek depression support from a close friend was also significant in the model B = .28, Boot SE B = .05, $p < .001$, t = 5.28, Boot CI (.18, .39). In other words, those with higher levels of wishful identification with their D-PSA spokesperson also had greater intentions to seek depression support from a close friend compared to those with lower levels of wishful identification. However, their outcome expectations, self-efficacy, perceptions of anticipated support, and levels of self-stigma still predicted their depression support-seeking intentions from a close friend.

H5 posited that counterarguing, outcome expectations, self-efficacy, anticipated support, social norms, stigma, and maladaptive self-reliance beliefs would mediate the relationship between wishful identification with the D-PSA spokesperson and intentions to seek depression support from a website. Using PROCESS Macro for SPSS (v3.3) Model 4 (Hayes, 2017) with bootstrapping procedures with 5,000 bootstrap samples and bias-corrected 95% confidence intervals, wishful identification was set as the independent variable (X), counterarguing, outcome expectations, self-efficacy, anticipated support, social norms, stigma, and maladaptive self-reliance beliefs were set as parallel mediators (Ms), and intentions to seek depression support from a website was set as the outcome (Y). This analysis controlled for participant gender, race, age, socioeconomic status, and depressive symptomatology. Transgender and "other gender identity" participants were omitted due to small sample sizes. Also, only White, Black/African-American, and Latinx/Hispanic participants were included in this analysis. Due to small sample sizes, other racial groups were omitted, leaving $N = 540$. Overall, the model fit was significant, $F(14, 525) = 6.78$, $p < .001$, $R^2 = .15$. The results of the model are summarized in Figure 6.

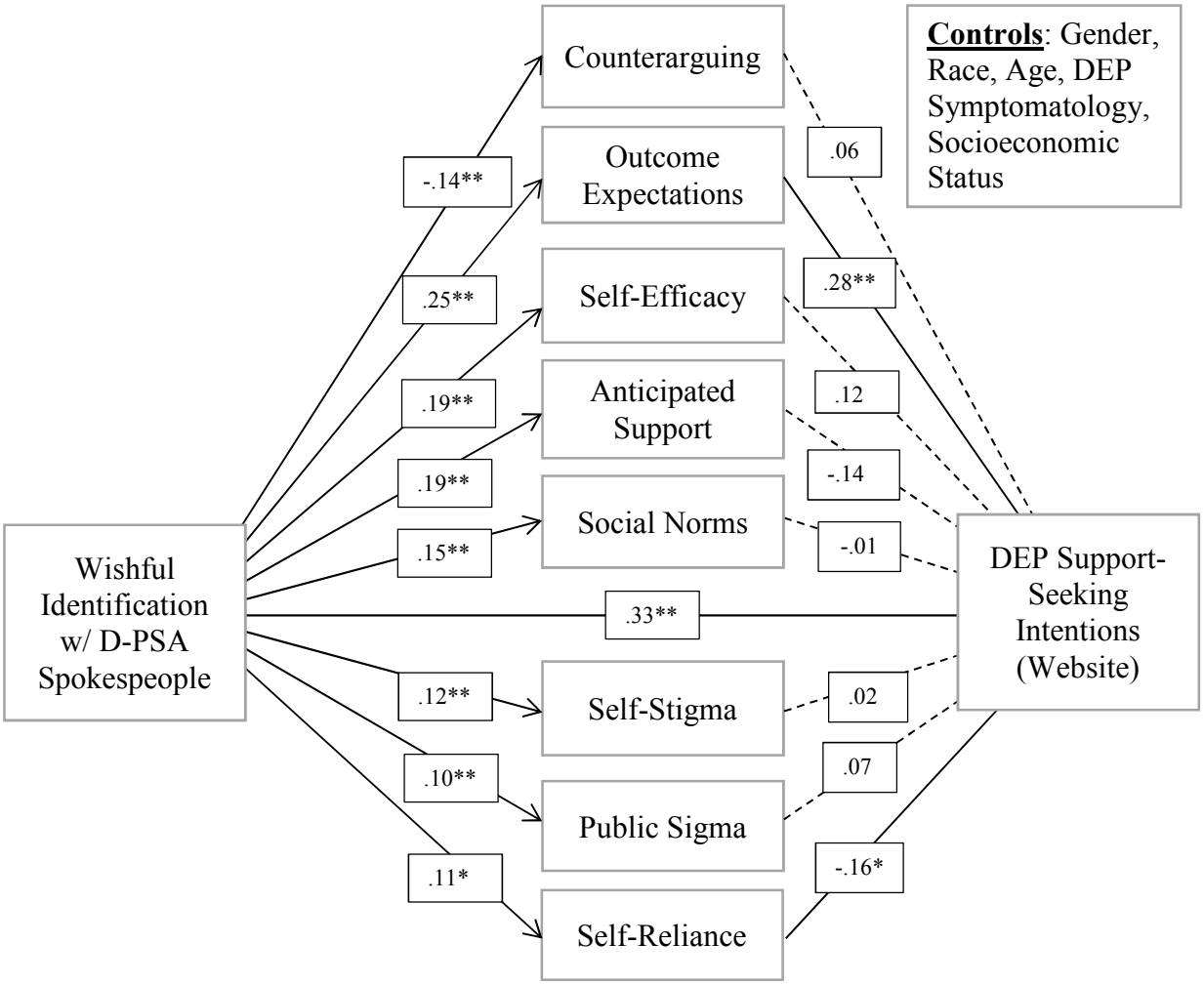

Figure 6. Analysis of the relationship between wishful identification with the D-PSA spokesperson and intentions to seek depression support from a website as mediated by variables of interest.

*p < .05, **p < .01.

As seen in Figure 6, using 5,000 bootstrap samples to generate 95% confidence intervals, only indirect effects were supported through outcome expectations, B = .07, Boot SE B = .02, Boot CI (.03, .12), and maladaptive self-reliance beliefs, B = -.02, Boot SE B = .01, Boot CI (-.04, -.00). These two variables partially mediated the relationship between depressed at-risk U.S. youth (ages 16 to 24) wishful identification with the D-PSA spokespeople and their intentions to seek depression support from a website when controlling for background variables (gender, race, age,

current depressive symptoms, socioeconomic status). H5 was partially supported. The direct relationship between wishful identification with the D-PSA spokespeople and intentions to seek depression support from a close friend was also significant in the model B = .33, Boot SE B = .06, t = 5.54, $p < .001$, Boot CI (.21, .45). In sum, participants with higher levels of wishful identification with their D-PSA spokesperson also had greater intentions to seek depression support from a website compared to those with lower levels of wishful identification. However, their perceptions of outcome expectations and levels of maladaptive self-reliance beliefs still predicted their depression support-seeking intentions from a website.

Demographic and symptomatic differences in target outcomes

RQ1 explored if gender, race, socioeconomic status (SES), or depressive symptomatology moderate the main effects of celebrity spokespeople status and referent language for any of the target attitudes or behavioral intentions. For gender comparisons, participants who identified as males or females were included in the analysis, and transgender and "other gender identity" participants were omitted due to small sample sizes. Only White, Black/African-American, and Latinx/Hispanic participants were included for race comparisons. Other racial groups were omitted due to small sample sizes. Differences among perceived support-seeking facilitators, barriers, and intention to seek support from a close friend by socioeconomic status (SES) were assessed via participants' maternal education scores. Research suggests maternal education can serve as a proxy measure for socioeconomic status (Desai & Alva, 1998). Participants were sorted into two categories for their maternal education scores – high school degree or less, or college degree (i.e., Associate's, Bachelor's, graduate degree) or more to assess differences based upon SES. Depressive symptomatology groups were sorted into low (participants with low and moderate scores) and high (participants with moderately severe and severe scores) groups due to the limited

number of participants with severe depressive symptoms. Participants in the control condition were also omitted from these analyses, leaving us with 575 participants.

First, I explored differences in wishful identification across demographic and symptomatic differences. As seen below in Table 34, the only significant difference for wishful identification scores emerged based on participants' depressive symptomatology. Participants with high depressive symptoms (M = 4.70, SD = 1.40) scored higher for wishful identification with the D-PSA spokespeople than participants with low depressive symptoms (M = 4.47, SD = 1.25).

Table 31. Results of ANOVAs exploring demographic and symptomatic differences in wishful identification.

Variable	***df***	***F-Score***	***p***
Celebrity Status	(1, 525)	.05	.83
Referent Language	(1, 525)	.71	.40
Gender	(1, 525)	.05	.83
Race	(2, 525)	2.76	.08
Socioeconomic Status	(1, 525)	.68	.41
DEP Symptomatology	(1, 525)	4.72	.03*
Referent x Gender	(1, 525)	2.61	.11
Referent x Race	(2, 525)	.10	.90
Referent x SES	(1, 525)	.65	.42
Referent x Symptomatology	(1, 525)	.02	.89
Celeb x Gender	(1, 525)	.04	.84
Celeb x Race	(2. 525)	.60	.55
Celeb x SES	(1, 525)	.10	.75
Celeb x Symptomatology	(1, 525)	.11	.75

Note. *p < .05, **p < .001.

Next, I explored demographic and symptomatic differences for counterarguing with the D-PSA messages. As seen below in Table 35, there were no significant differences for counterarguing based on demographic or symptomatic differences. Similarly, no differences were observed among the interactions.

Table 32. Results of ANOVAs exploring demographic and symptomatic differences in counterarguing.

Variable	*df*	*F-Score*	*p*
Celebrity Status	(1, 519)	1.04	.31
Referent Language	(1, 519)	1.01	.31
Gender	(1, 519)	3.36	.07
Race	(2, 519)	2.37	.10
Socioeconomic Status	(1, 519)	2.19	.14
DEP Symptomatology	(1, 519)	.10	.75
Referent x Gender	(1, 519)	.16	.69
Referent x Race	(2, 519)	/29	.75
Referent x SES	(1, 519)	.57	.45
Referent x Symptomatology	(1, 519)	.74	.39
Celeb x Gender	(1, 519)	1.05	.31
Celeb x Race	(2. 519)	.35	.71
Celeb x SES	(1, 519)	.20	.66
Celeb x Symptomatology	(1, 519)	.20	.65

Note. *$p < .05$, **$p < .001$.

We explored symptomatic and demographic differences in outcome expectations next. As seen below in Table 36, there were no significant differences in outcome expectations based on demographic or symptomatic differences. Significance differences emerged in outcome expectation scores based on participants' depressive symptomatology and interaction between referent language and race. Participants with lower depressive symptoms (M = 5.09, SD = 1.00) had significantly higher scores for outcome expectations than participants with higher depressive symptoms (M = 4.83, SD = 1.27). Latinx/Hispanic participants in the mistargeted referent language D-PSA condition (M = 5.34, SD = 0.85) scored significantly higher for outcome expectations than the Black/African-American participants (M = 4.77, SD = 1.11) in the mistargeted D-PSA condition.

Table 33. Results of ANOVAs exploring demographic and symptomatic differences in outcome expectations.

Variable	*df*	*F-Score*	*p*
Celebrity Status	(1, 519)	.44	.51
Referent Language	(1, 519)	.18	.68
Gender	(1, 519)	.45	.50
Race	(2, 519)	1.25	.29
Socioeconomic Status	(1, 519)	1.64	.20
DEP Symptomatology	(1, 519)	3.67	.05*
Referent x Gender	(1, 519)	2.19	.14
Referent x Race	(2, 519)	3.17	.04*
Referent x SES	(1, 519)	.13	.72
Referent x Symptomatology	(1, 519)	.66	.42
Celeb x Gender	(1, 519)	.66	.42
Celeb x Race	(2. 519)	.00	1.00
Celeb x SES	(1, 519)	.00	.99
Celeb x Symptomatology	(1, 519)	1.85	.18

Note. *$p < .05$, **$p < .001$.

Next, I explored symptomatic and demographic differences in self-efficacy. As seen below in Table 37, significant differences in self-efficacy only emerged based on participants' depressive symptomatology. Participants experiencing more intense depressive symptoms (higher depressive symptomatology) ($M = 4.27$, $SD = 1.62$) were significantly lower on scores for self-efficacy for seeking depression support than participants experiencing less intense depressive symptoms (lower depressive symptomatology) ($M = 5.06$, $SD = 1.32$). In other words, this association indicates that self-efficacy of support-seeking may diminish as depressive symptoms intensify. Conversely, it may also suggest that those with the lowest perceptions of self-efficacy for seeking depression support end up suffering the most with depressive symptoms – perhaps as a result of not seeking support.

Table 34. Results of ANOVAs exploring demographic and symptomatic differences in self-efficacy.

Variable	*df*	*F-Score*	*p*
Celebrity Status	(1, 519)	.04	.84
Referent Language	(1, 519)	1.77	.18
Gender	(1, 519)	2.51	.11
Race	(2, 519)	1.27	.28
Socioeconomic Status	(1, 519)	.12	.73
DEP Symptomatology	(1, 519)	24.15	<.001**
Referent x Gender	(1, 519)	2.49	.12
Referent x Race	(2, 519)	.06	.95
Referent x SES	(1, 519)	.60	.44
Referent x Symptomatology	(1, 519)	1.63	.20
Celeb x Gender	(1, 519)	.10	.75
Celeb x Race	(2. 519)	.146	.23
Celeb x SES	(1, 519)	.04	.85
Celeb x Symptomatology	(1, 519)	.76	.38

Note. *$p < .05$, **$p < .001$.

The next variable of interest was social norms. As seen below in Table 38, the custom analyses of variance (ANOVA) similarly indicated a significant difference in participant scores for perceptions of social norms based on participants' current depressive symptomatology. Participants experiencing more intense depressive symptoms (high depressive symptomatology group) ($M = 4.83$, $SD = 1.86$) scored significantly lower for perceptions of social norms for seeking depression support than participants experiencing less intense depression symptoms (low depressive symptomatology group) ($M = 5.39$, $SD = 1.50$). In other words, this association suggests that perceptions of social norms may diminish as depression symptoms worsen. Conversely, it may also suggest that those with the lowest perceptions of social norms for seeking depression support end up suffering the most with depressive symptoms – perhaps due to not seeking support.

Table 35. Results of ANOVAs exploring demographic and symptomatic differences in social norms.

Variable	*df*	*F-Score*	*p*
Celebrity Status	(1, 519)	.01	.94
Referent Language	(1, 519)	.29	.59
Gender	(1, 519)	.96	.33
Race	(2, 519)	2.24	.11
Socioeconomic Status	(1, 519)	.50	.48
DEP Symptomatology	(1, 519)	12.59	<.001**
Referent x Gender	(1, 519)	.59	.44
Referent x Race	(2, 519)	.38	.68
Referent x SES	(1, 519)	.13	.72
Referent x Symptomatology	(1, 519)	.28	.60
Celeb x Gender	(1, 519)	.20	.66
Celeb x Race	(2. 519)	.36	.70
Celeb x SES	(1, 519)	.00	.96
Celeb x Symptomatology	(1, 519)	.00	1.00

Note. *$p < .05$, **$p < .001$.

We next explored demographic and symptomatic differences in participants' scores for perceived anticipated support. As seen below in Table 39, analyses indicated significant differences based on participants' race, depressive symptomatology, and interaction between referent language conditions and gender. Black/African-American participants (*M* = 4.69, *SD* = 1.46) scored significantly lower than the White participants (*M* = 5.20, *SD* = 1.34) for anticipated support. Participants experiencing more intense depressive symptoms (higher depressive symptomatology) (*M* = 4.59, *SD* = 1.56) similarly scored significantly lower for anticipated support than participants experiencing less intense depression symptoms (lower depressive symptomatology) (*M* = 5.19, *SD* = 1.31). These analyses also indicated an interaction between referent language condition and gender, such that males in the mistarget referent language condition (*M* = 4.82, *SD* = 1.34) scored significantly lower than the females in the mistargeted referent language conditions (*M* = 5.25, *SD* = 1.43) and the males in the direct referent language

condition (*M* = 5.26, *SD* = 1.30). Simple effects post-hoc analyses indicated that the difference in male participants for referent language drove the observed gender differences, $F(2, 320) = 4.14$, $p = .02$, such that males in the direct D-PSA condition (*M* = 5.26, *SD* = 1.30) scored significantly higher for anticipated support than the males in the mistargeted D-PSA condition (*M* = 4.82, *SD* = 1.34). No significant difference was observed among female participants, $F(2, 361) = 1.82$, $p = .16$. In other words, direct referent language (speaking to "you") appears to be a much more effective way of promoting anticipated support beliefs among U.S. male youth (ages 16 to 24).

Table 36. Results of ANOVAs exploring demographic and symptomatic differences in anticipated support.

Variable	***df***	***F-Score***	***p***
Celebrity Status	(1, 519)	.11	.74
Referent Language	(1, 519)	.45	.50
Gender	(1, 519)	1.57	.21
Race	(2, 519)	4.53	.01*
Socioeconomic Status	(1, 519)	.79	.37
DEP Symptomatology	(1, 519)	16.20	<.001**
Referent x Gender	(1, 519)	4.80	.03*
Referent x Race	(2, 519)	.35	.70
Referent x SES	(1, 519)	.18	.67
Referent x Symptomatology	(1, 519)	.02	.89
Celeb x Gender	(1, 519)	.24	.63
Celeb x Race	(2. 519)	.92	.40
Celeb x SES	(1, 519)	.09	.76
Celeb x Symptomatology	(1, 519)	.01	.91

Note. *$p < .05$, **$p < .001$.

Next, demographic and symptomatic differences in participant scores for maladaptive self-reliance beliefs were assessed. Table 40 below shows that custom analyses of variance (ANOVA) indicated significant differences based on participants' gender and race. Male (*M* = 3.72, *SD* = 1.27) and Black/African-American participants (*M* = 3.92, *SD* = 1.34) were much more likely to endorse maladaptive self-reliance beliefs than female (*M* = 3.34, *SD* = 1.24) and White participants

(*M* = 3.34, *SD* = 1.19), respectively. A similar effect was observed among low (*M* = 3.46, *SD* = 1.27) and high (*M* = 3.72, *SD* = 1.23) depressive symptomatology participants in the direct D-PSA condition. Differences based on an interaction between referent language and SES and interaction between referent language and depressive symptomatology also approached significance (*p* = .05). The interaction was driven by the difference between the participants in the direct condition, *F*(1, 519) = 3.75, *p* = .05. The lower SES group (*M* = 3.74, *SD* = 1.27) in the direct D-PSA condition scored significantly higher for maladaptive self-reliance beliefs than participants in the direct D-PSA condition from the higher SES group (*M* = 3.33, *SD* = 1.26). Conversely, scores among low and high SES participants were identical in the mistargeting referent language condition. In other words, it could be that directly worded (speaking to "you") D-PSAs had an iatrogenic effect among participants from lower SES. However, the reasoning is unclear given the context at this point.

Table 37. Results of ANOVAs exploring demographic and symptomatic differences in maladaptive self-reliance beliefs.

Variable	***df***	***F-Score***	***p***
Celebrity Status	(1, 519)	1.10	.30
Referent Language	(1, 519)	.86	.35
Gender	(1, 519)	18.99	<.001**
Race	(2, 519)	7.86	<.001**
Socioeconomic Status	(1, 519)	2.39	.12
DEP Symptomatology	(1, 519)	2.56	.11
Referent x Gender	(1, 519)	.08	.78
Referent x Race	(2, 519)	1.62	.20
Referent x SES	(1, 519)	3.75	.05
Referent x Symptomatology	(1, 519)	3.26	.07
Celeb x Gender	(1, 519)	.28	.60
Celeb x Race	(2. 519)	.06	.94
Celeb x SES	(1, 519)	1.58	.21
Celeb x Symptomatology	(1, 519)	.03	.87

Note. *$p < .05$, **$p < .001$.

We assessed demographic and symptomatic differences in self-stigma next. As seen below in Table 41, results from the custom analyses of variance (ANOVA) indicated significant differences based on participants' gender, SES, depressive symptomatology, and interaction between referent language conditions and gender. Male participants (*M* = 4.10, *SD* = 1.26) scored significantly higher for self-stigmatizing beliefs than female participants (*M* = 3.95, *SD* = 1.18). Participants from higher SES backgrounds (*M* = 4.07, *SD* = 1.21) scored higher for self-stigma than participants from lower SES backgrounds (*M* = 3.97, *SD* = 1.22). Self-stigmatizing beliefs were also significantly higher among participants experiencing more intense depressive symptoms (high depressive symptomatology group) (*M* = 4.63, *SD* = 1.21) than the participants experiencing less intense depressive symptoms (low depressive symptomatology group) (*M* = 3.85, *SD* = 1.17).

Table 38. Results of ANOVAs exploring demographic and symptomatic differences in self-stigma.

Variable	***df***	***F-Score***	***p***
Celebrity Status	(1, 519)	.30	.58
Referent Language	(1, 519)	.36	.55
Gender	(1, 519)	5.09	.02*
Race	(2, 519)	1.17	.31
Socioeconomic Status	(1, 519)	6.30	.01*
DEP Symptomatology	(1, 519)	54.01	<.001**
Referent x Gender	(1, 519)	1.94	.17
Referent x Race	(2, 519)	1.05	.35
Referent x SES	(1, 519)	1.26	.26
Referent x Symptomatology	(1, 519)	.32	.57
Celeb x Gender	(1, 519)	1.65	.20
Celeb x Race	(2. 519)	.76	.47
Celeb x SES	(1, 519)	.01	.93
Celeb x Symptomatology	(1, 519)	.03	.86

Note. *$p < .05$, **$p < .001$.

Next, I explored demographic and symptomatic differences in public stigma. As seen below in Table 42, results indicated significant differences for public stigma beliefs based on

participants' current depressive symptomatology, such that participants experiencing higher depressive symptoms endorsed public stigma beliefs (*M* = 4.32, *SD* = 1.29) significantly more than participants experiencing less intense depressive symptoms (low depressive symptomatology group) (*M* = 3.86, *SD* = 1.15).

Table 39. Results of ANOVAs exploring demographic and symptomatic differences in public stigma.

Variable	***df***	***F-Score***	***p***
Celebrity Status	(1, 519)	.39	.53
Referent Language	(1, 519)	.65	.42
Gender	(1, 519)	2.62	.11
Race	(2, 519)	.61	.54
Socioeconomic Status	(1, 519)	.39	.53
DEP Symptomatology	(1, 519)	14.14	<.001**
Referent x Gender	(1, 519)	.27	.61
Referent x Race	(2, 519)	2.17	.12
Referent x SES	(1, 519)	1.99	.16
Referent x Symptomatology	(1, 519)	.27	.60
Celeb x Gender	(1, 519)	.05	.82
Celeb x Race	(2. 519)	.77	.46
Celeb x SES	(1, 519)	3.02	.08
Celeb x Symptomatology	(1, 519)	.53	.47

Note. *$p < .05$, **$p < .001$.

We assessed differences in intentions to seek depression support next. First, I examined demographic and symptomatic differences in participants' intentions to seek depression support from a close friend. As seen below in Table 43, significant differences in intentions to seek depression support from a close friend emerged based on participants' depressive symptomatology. Participants experiencing more intense depressive symptoms (high depressive symptomatology group) (*M* = 4.27, *SD* = 1.86) were significantly less likely to seek depression support from a close friend than participants experiencing less depressive symptoms (low depressive symptomatology group) (*M* = 4.96, *SD* = 1.61). In other words, this association suggests

that intentions to seek depression support from a close friend may diminish as depression symptoms worsen. Conversely, it may also suggest that those with the lowest intentions to seek depression support from a close friend end up suffering the most with depressive symptoms – perhaps as a result of not seeking support.

Table 40. Results of ANOVAs exploring demographic and symptomatic differences in intentions to seek depression support from a close friend.

Variable	***df***	***F-Score***	***p***
Celebrity Status	(1, 519)	1.81	.18
Referent Language	(1, 519)	.01	.91
Gender	(1, 519)	.34	.56
Race	(2, 519)	.13	.88
Socioeconomic Status	(1, 519)	.36	.55
DEP Symptomatology	(1, 519)	9.79	<.01*
Referent x Gender	(1, 519)	.06	.81
Referent x Race	(2, 519)	.96	.38
Referent x SES	(1, 519)	1.00	.32
Referent x Symptomatology	(1, 519)	.80	.37
Celeb x Gender	(1, 519)	.91	.34
Celeb x Race	(2. 519)	.14	.88
Celeb x SES	(1, 519)	.21	.65
Celeb x Symptomatology	(1, 519)	1.19	.28

Note. *$p < .05$, **$p < .001$.

Next, I explored demographic and symptomatic differences in participants' intentions to seek depression support from a mental health website. As seen below in Table 44, results from the custom analyses of variance (ANOVA) indicated significant differences in participants' intentions to seek depression support from a mental health website based on the D-PSA's referent language condition and participants' gender. As observed in H2, directly-worded D-PSAs (speaking to "you") (M = 4.36, SD = 1.70) were better at persuading participants to seek depression support from a mental health website than the mistargeted condition (speaking about "someone") (M = 4.14, SD = 1.75) and the no D-PSA (control) condition (M = 3.88, SD = 1.64). Females (M = 4.35,

SD = 1.72) scored significantly higher than male participants (*M* = 4.01, *SD* = 1.69) for intentions to seek depression support from a mental health website.

Table 41. Results of ANOVAs exploring demographic and symptomatic differences in intentions to seek depression support from a mental health website.

Variable	***df***	***F-Score***	***p***
Celebrity Status	(1, 519)	1.44	.23
Referent Language	(1, 519)	4.08	.04*
Gender	(1, 519)	5.42	.02*
Race	(2, 519)	.50	.61
Socioeconomic Status	(1, 519)	.05	.83
DEP Symptomatology	(1, 519)	.52	.47
Referent x Gender	(1, 519)	.68	.41
Referent x Race	(2, 519)	1.01	.37
Referent x SES	(1, 519)	.10	.76
Referent x Symptomatology	(1, 519)	2.06	.15
Celeb x Gender	(1, 519)	.01	.94
Celeb x Race	(2. 519)	.05	.95
Celeb x SES	(1, 519)	.37	.54
Celeb x Symptomatology	(1, 519)	.06	.81

Note. *$p < .05$, **$p < .001$.

Finally, I assessed demographic and symptomatic differences in participants' proclivity to romanticize depression. As seen below in Table 45, results from the custom analyses of variance (ANOVA) indicated significant differences based on participants' gender and race. Female participants (*M* = .31, *SD* = .66) scored significantly higher for depression romanticizing than male participants (*M* = .19, *SD* = .74). Black/African-American participants (*M* = .37, *SD* = .72) scored significantly higher for depression romanticizing than White participants (*M* = .20, *SD* = .68).

Table 42. Results of ANOVAs exploring demographic and symptomatic differences in depression romanticizing.

Variable	*df*	*F-Score*	*p*
Celebrity Status	(1, 519)	.79	.38
Referent Language	(1, 519)	1.06	.31
Gender	(1, 519)	8.99	<.01*
Race	(2, 519)	4.68	.01*
Socioeconomic Status	(1, 519)	2.54	.11
DEP Symptomatology	(1, 519)	.07	.80
Referent x Gender	(1, 519)	.38	.54
Referent x Race	(2, 519)	.40	.67
Referent x SES	(1, 519)	.01	.93
Referent x Symptomatology	(1, 519)	.10	.75
Celeb x Gender	(1, 519)	.07	.79
Celeb x Race	(2. 519)	.03	.97
Celeb x SES	(1, 519)	.00	.99
Celeb x Symptomatology	(1, 519)	.25	.62

Note. *$p < .05$, **$p < .001$.

Depression romanticizing analysis

RQ2 explored the potential implications of depression romanticizing among U.S. youth (ages 16 to 24) experiencing depressive symptoms who have never been treated for or diagnosed with depression. For the gender control, transgender and "other gender identity" participants were omitted due to small sample sizes. Only White, Black/African-American, and Latinx/Hispanic participants were included for the race control. The categorical race value was contrast-coded (Var 1: White = -1, Black/African-American = 1, Latinx/Hispanic = 0; Var 2: White = -1, Latinx/Hispanic = 1, Black/African-American = 0). Other racial groups were omitted due to small sample sizes. Participants in the control condition were omitted as they did not view any D-PSA stimuli, leaving this analysis with n = 575. As seen below in Table 46, depression romanticizing was associated with increased wishful identification with D-PSA spokespeople (r_p = .14) and outcome expectations (r_p = .12). Intentions to seek depression support from a close friend

approached significance (r_p = .08, p = .07). Depression romanticizing was not associated with any negative support-seeking attitudes or behavioral intentions.

Table 43. Partial correlations between depression romanticizing and outcomes of interest while controlling for background variables.

	WI	Counter -arguing	Anticip. Support	Social Norms	Self-Efficacy	Outcome Expect.	Self-Reliance	Self-Stigma	Public Stigma	S-Seek (Friend)	S-Seek (Web)
	r_p	r_p	r_p	r_p	r_p	r_p	r_p	r_p	r_p	r_p	r_p
DEP Romant.	.14*	-.05	.05	.04	.05	.12*	-.05	-.04	.01	.08	-.02

Note. WI = Wishful Identification. DEP Romant. = Depression Romanticizing. S-Seek = Support-Seeking Intentions. All items reflect correlation scores except for support-seeking intention which was measured on a 7-point scale. *$p < .05$. **$p < .001$. Partial correlation analysis controlled for gender, age, race, socioeconomic status (mother's education), and depressive symptomatology.

RQ3 and RQ4 explored if utilizing celebrity spokespeople (celebrity pop music artists that reference mental health difficulties in their music) in a D-PSA aimed at at-risk youth lead participants to further romanticize depression compared to the non-celebrity condition. Using PROCESS Macro for SPSS (v3.3) Model 4 (Hayes, 2017) with bootstrapping procedures with 5,000 bootstrap samples and bias-corrected 95% confidence intervals, celebrity spokesperson condition was set as the independent variable (X) (celebrity spokesperson condition = 1, non-celebrity spokesperson condition = 2), wishful identification as the mediator (M), and depression romanticizing was set as the outcome (Y). Participants in the no D-PSA control condition were omitted from this analysis as they would not have any scores for wishful identification with the D-PSA spokespeople. Overall, the model fit was significant, $F(2, 629) = 7.18$, $p < .001$, $R^2 = .02$. The results of the model are summarized below in Figure 7.

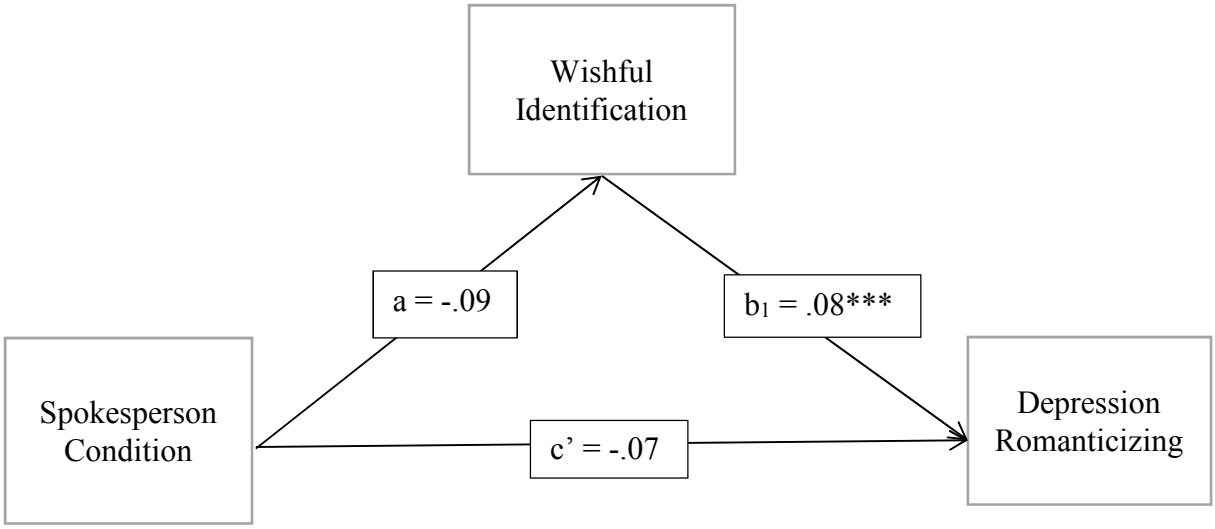

Figure 7. Analysis of the relationship between spokesperson condition (celebrity spokesperson condition = 1, non-celebrity spokesperson condition = 2) and depression romanticizing as mediated by wishful identification.

**p < .05. **p < .01. ***p < .001.*

RQ3 explored if utilizing celebrity spokespeople (celebrity pop music artists that reference mental health difficulties in their music) in a D-PSA aimed at at-risk youth lead participants to further romanticize depression compared to the non-celebrity and control conditions. As seen above in Figure 7, using 5,000 bootstrap samples to generate 95% confidence intervals, the direct path (c'), B = -.07, Boot SE B = .06, Boot CI (-.18, .04), was not significant. Utilizing celebrity D-PSA spokespeople did not increase wishful identification among participants compared to the condition where participants viewed non-celebrity D-PSA spokespeople. In other words, celebrity D-PSA spokespeople were no worse for enhancing depression romanticizing among U.S. youth (ages 16 to 24) experiencing depressive symptoms than non-celebrity spokespeople.

In address of RQ4, the estimated indirect effect between spokesperson condition and depression romanticizing (a-b), B = -.01, Boot SE B = .01, Boot CI (-.02, .01), did not support

mediation. The indirect path was broken by the lack of a significant association between spokesperson condition and wishful identification. Spokesperson condition did not influence wishful identification among this sample of U.S. youth (ages 16 to 24) experiencing depressive symptoms. In other words, celebrity status did not affect how much the U.S. youth (ages 16 to 24) audience aspired to role model the spokespeople in the D-PSA messages. Generally speaking, as observed in H1, participants felt the same toward the celebrity D-PSA spokespeople as they did the non-celebrity D-PSA spokespeople.

Partial correlations between music for mood regulation and other outcomes among participants in celebrity conditions

For RQ5, I explored how U.S. youth (ages 16 to 24) participants' tendencies to use music for emotional regulation was associated with target outcomes when controlling for gender, race, depressive symptomatology, socioeconomic status, depression literacy, and inclination to listen to songs with depressive themes. As seen in Table 47, analyses indicated that even when controlling for background variables, significant associations emerged with wishful identification, counterarguing, outcome expectations, self-efficacy, social norms, anticipated support, intentions to seek depression support from a close friend, and depression romanticizing. In other words, the more participants who viewed the celebrity pop music artist D-PSAs reported a tendency to use music for mood regulation, the more likely participants were to report wishful identification with the D-PSA spokespeople, higher outcome expectations, self-efficacy, social norms, anticipated support, intentions to seek depression support from a close friend, and depression romanticizing. Participants were less likely to counterargue with the D-PSAs featuring the celebrity spokespeople.

Table 44. Partial music for mood regulation correlations among participants in celebrity conditions when controlling for background variables.

	WI	C-A	OE	S-E	Social Norms	Anticip. Support	Self-Reliance	Self-Stigma	Public Stigma	S-Seek (Friend)	S- Seek (Web)	DEP ROM
	r_p	r_p	r_p	r_p	r_p	r_p	r_p	r_p	r_p	r_p	r_p	r_p
Music for Mood Regulation	.26**	-.13*	.19**	.18**	.17**	.19**	-.05	.01	-.04	.12*	.09*	.14*

Note. WI = Wishful Identification. C-A = Counter-arguing. OE = Outcome Expectations. S-E = Self-Efficacy. For this analysis, n = 318. All items reflect correlation scores except for support-seeking intention which was measured on a 7-point scale. $*p < .05$. $**p < .001$. Partial correlation analysis controlled for gender, race, socioeconomic status (mother's education), depressive symptomatology, depression history, and inclination to listen to songs with depressive themes. DEP ROM = Depression Romanticizing.

Discussion

Mental health trends among U.S. youth (ages 16 to 24) continue to worsen (Miron et al., 2019; Mojtabai & Olfson, 2020), and early signals from the COVID-19 pandemic portend further worsening of mental health in this age group (Racine et al., 2021). The U.S. Surgeon General recently highlighted this emerging mental health crisis, calling upon mental health communicators to encourage youth to seek support by reaching out to others close to them (U.S. Department of Health and Human Services, 2021). The primary purpose of this experiment was to test these promising factors – celebrity spokespeople and mistargeted referent language (language speaking about "someone else" rather than directly to "you") – as a means to persuade U.S. youth (ages 16 to 24) to seek depression support from a close friend.

Effects of Celebrity Status

Surprisingly, no significant differences emerged based on the celebrity status of the D-PSA spokespeople across target outcome attitudes, beliefs, or behavioral intentions. It appears that celebrity spokespeople may invite potential iatrogenic effects compared to non-celebrity spokespeople. The observed effect of celebrity D-PSA spokespeople was similar to the described boomerang effect, such that D-PSA messages directly targeting people with depression can

backfire (Christensen et al., 2006). In this case, the D-PSA with celebrity spokespeople appeared to unintentionally activate self-stigmatizing attitudes compared to the non-celebrity (peer) D-PSA messages (Lienemann et al., 2013). This potential observation echoes some emerging literature that indicates celebrity spokespeople can either have null effects (McCartney, 2019) or even adverse effects in this context (Corrigan et al., 2021). Indeed, audiences of U.S. youth (ages 16 to 24) may perceive celebrities are presenting recovery from mental illness as a form of achievement that results from competitive individualism, thus fostering more responsibility on the individual, increasing self-stigma and maladaptive self-reliance beliefs (Franssen, 2019). It may also be that celebrity spokespeople D-PSAs highlight a perceived gap in efficacy based on resource access, with celebrities likely having better access to better mental health resources than audiences.

It may just be that the celebrity status of the spokesperson does not matter to U.S. youth (ages 16 to 24) audiences in terms of D-PSAs encouraging support-seeking behaviors. These results indicate that non-celebrities may be better as D-PSA spokespeople for encouraging U.S. youth (ages 16 to 24) experiencing depressive symptoms who have never been diagnosed or treated for depression to seek depression support – at least in terms of less potential for unintentionally activating stigmatizing attitudes. Adolescents are susceptible to peer influence (Steinberg & Monahan, 2007). Mental health communicators have successfully utilized peer crowd targeting strategies to promote empirically-supported peer-to-peer programs (Bring Change 2 Mind, 2022; Moran et al., 2017; Seize the Awkward, 2018; Well Beings Youth Mental Health Project, 2022). Indeed, celebrities may be best for 'big picture' initiatives such as bringing awareness and increasing advocacy (Calhoun & Gold, 2020) rather than promoting attitude and behavior change. However, much more research is needed before drawing anything close to a meaningful conclusion on this matter. For example, the celebrity pop music star D-PSAs may have been more effective if

each D-PSA had an anchoring mental health-themed song performed by the artist playing in the background of a video message. This way, a musical feature could be used to activate participants' potential beliefs and emotions related to the celebrity pop music artists as mental health authorities and advocates.

The extant literature still suggests ample positive potential for celebrities as powerful mental health advocates with the power to reduce self-stigma (Calhoun & Gold, 2020; Ferrari, 2016; Hoffner, 2019; Hoffner & Cohen, 2018). It may be that the celebrity disclosures coming from the fictional Instagram campaign account rather than their personal Instagram account made the messages less sincere and efficacious to the audience. Perceived sincerity and altruism are at the core of spokesperson effectiveness (Ohanian, 1990; Park & Cho, 2015), though neither was assessed in this experiment. Future research can explore the various contexts and subtle differences in which mental health communicators and practitioners can deploy celebrity mental health narratives to ascertain if some contexts are more efficacious than others for promoting attitude and behavior change. For example, manipulation of message sources (campaign social media account vs. celebrity personal social media account) would be a great place to start.

Effects of Referent Language

Similar to spokesperson main effects, no significant differences were observed among the outcomes based on referent language of the D-PSAs except for participants' intentions to seek depression support from a website where the direct condition performed best. This finding may be explained by research indicating that second-person pronouns (as would be used in direct speaking to "you" messages) enhance perceived message effectiveness of persuasive messages (Chang, 2011; Cruz et al., 2017). This observation of direct language indicates that there may be value in the directness of speaking to "you" combined with the appeal of a more immediate, anonymous,

and confidential resource such as a mental health support website (Pretorius et al., 2019). Further, contrary to the evidence from Siegel et al. (2015), these findings highlight that mistargeted referent language is likely not a "catch-all" strategy that will improve support-seeking behavioral intentions among U.S. youth (ages 16 to 24), broadly speaking.

D-PSAs utilizing direct referent language (speaking to "you") appeared effective in specific contexts, with two essential caveats. While neither referent language style was broadly effective, my findings did indicate that directly-worded D-PSAs were generally more effective at promoting positive depression support-seeking attitude and behavior change among U.S. males (ages 16 to 24) experiencing depressive symptoms. This finding may be explained by psychology and communication literature, which indicates that males are generally more socialized and accustomed to more direct and assertive communication styles (Doyle & Paludi, 1991). It is thus unsurprising that the directly-worded D-PSA stimuli (speaking to "you") would increase outcome expectations, anticipated support, and self-efficacy among male youth. The observation that male U.S. youth (ages 16 to 24) experiencing depressive symptoms may respond better to directly-worded D-PSA messages is especially valuable to health communicators as the suicide rate among male U.S. youth has spiked in recent years (Miron et al., 2019). This strategy could be applied in concert with a peer crowd targeting strategy to promote empirically-supported peer-to-peer programs (Bring Change 2 Mind, 2022; Moran et al., 2017; Seize the Awkward, 2018; Well Beings Youth Mental Health Project, 2022). Female U.S. youth (ages 16 to 24) experiencing depressive symptoms who have never been diagnosed or treated for depression indicated a more negligible difference in referent language style.

However, these findings also indicate that directly-worded D-PSAs promoting support-seeking attitudes and behaviors can exacerbate self-stigmatizing beliefs among male U.S. youth

(ages 16 to 24) experiencing depressive symptoms. In other words, viewing the directly-worded D-PSAs appeared to make male U.S. youth (ages 16 to 24) experiencing depression feel worse. Depressed people are more likely than non-depressed people to report embarrassment about seeking depression support (Barney et al., 2006). This observed effect is emblematic of the boomerang effect described in the mental health communication literature. Generally speaking, people experiencing more intense depressive symptoms respond to viewing a support-seeking D-PSA with greater levels of self-stigma (Lienemann et al., 2013). Echoing the work of Lienemann et al. (2013), this experiment further indicates that D-PSA messaging has the potential to backfire, depending on the audience.

A second potential caveat of explicitly advocating for directly-worded D-PSAs emerged in that, though the observations only approached significance, mistargeted referent language appeared to be the more successful referent language strategy for promoting support-seeking intentions from a close friend among youth participants at the highest risk of adverse outcomes – those experiencing severe depressive symptoms. Post hoc analyses visualizing group differences also strongly implied that mistargeted referent language may have emerged as a much more effective strategy than direct referent language for reducing counterarguing among participants experiencing severe depressive symptoms with more statistical power (only 48 participants with severe depression). These findings align with Siegel et al.'s (2015) observation that mistargeted language could enhance the persuasive strength of support-seeking promotion messages by circumventing the negative cognitive processing biases typically experienced by those experiencing severe depressive symptoms (Beck, 1979; Dozois & Dobson, 2001). Future work focusing on youth experiencing severe depression is urgently needed to explore the efficacy of mistargeted referent language.

Given this potential but the risk of these caveats, I advocate for mental health communication practitioners to account for intersectionality in support-seeking intervention design, particularly concerning referent language use. Intersectionality is a sociological framework to explain how multiple social statuses come to affect health in multiplicative ways (Crenshaw, 1989). Specific to the issue at hand, my findings suggest numerous interaction effects involving referent language that highlight the need for mental health communicators to account for each audience members' gender, race, SES, and other vital characteristics (i.e., depressive symptomatology). Accounting for intersectionality will allow mental health communicators to carefully promote support-seeking behaviors in a manner that does not invite iatrogenic effects. Given the differences and interactions observed based on referent language, these results support the need for a tailored approach to persuasive D-PSA messaging aimed at U.S. youth (ages 16 to 24) experiencing depressive symptoms (Barney et al., 2006). Tailoring is the perfect remedy to account for intersectionality (Noar et al., 2007), allowing practitioners to ascertain specific intersections (i.e., gender, race, SES, depressive symptoms) of individual audience members to ensure persuasive message efficacy.

Other Notable Demographic and Symptomatic Differences

Vital differences in racial groups and socioeconomic status also emerged. White U.S. youth (ages 16 to 24) experiencing depressive symptoms who have never been diagnosed or treated for depression scored significantly higher for depression literacy than Black and Latinx/Hispanic youth. This finding aligns with previous literature exploring racial differences in depression literacy among youth (Kim et al., 2015; Wang et al., 2019). The White youth participants also scored significantly higher than Black youth for outcome expectations and anticipated support. Conversely, Black youth scored significantly higher than White youth for maladaptive self-

reliance beliefs and depression romanticizing. These findings are not surprising as self-reliant and stigmatizing attitudes are more common among minority populations in the United States (Anglin et al., 2008; DuPont-Reyes et al., 2020).

The only socioeconomic status (SES) difference that emerged among this sample was for depression literacy. The U.S. youth (ages 16 to 24) participants experiencing depressive symptoms from higher SES scored higher for depression literacy than those from lower SES. This finding also echoes the existing literature, especially as those in higher SES are more likely to have better access to depression information and higher educational attainment (Ram et al., 2016). Mental health practitioners will continue to need to account for both racial and socioeconomic differences in their target audiences when crafting persuasive messaging.

Other significant differences also emerged based on participants' current depressive symptomatology. Symptomatic differences included outcome expectations, social norms, anticipated support, self-reliance, self-stigma, public stigma, and intentions to seek depression support from a close friend. U.S. youth (ages 16 to 24) participants experiencing stronger depression symptoms scored lower for outcome expectations, self-efficacy, and anticipated social norms. Similarly, self-reliance beliefs and perceptions of stigma (both self-stigma and public stigma) were stronger among participants experiencing more severe depressive symptoms. This observation is unsurprising and further highlights why audiences experiencing depression are among the most difficult to persuade (Siegel et al., 2017).

It was fascinating that differences emerged among participants' intentions to seek support from a close friend but *not* their intentions to seek depression support from a mental health website. Although close friends are a much sought-after resource for U.S. youth (Seize the Awkward, 2018), this evidence suggests that mental health websites and apps may have advantages over close

friends or peers to mental health communication practitioners because depressive symptomatology may not influence their appeal. These apparent advantages may exist because mental health web resources (i.e., websites, mobile apps) are confidential and anonymous resources that uniquely offer protection from social or public stigma fears (Kenny et al., 2014; Rickwood et al., 2007). Future scholarly work would be wise to continue to explore the potential of mental health web resources because they may not diminish in appeal as depressive intensity grows. Further, scholars should continue to explore ways to encourage U.S. youth (ages 16 to 24) experiencing depressive symptoms to utilize these web-based resources as they are more reliable information sources than same-aged peers.

Mediating Beliefs and Attitudes to Target in Support-Seeking Interventions

Four attitudes robustly mediated participants' intentions to seek depression support from a close friend and emerged as essential beliefs to target in any intervention advocating seeking help from a close friend: anticipated support, self-efficacy, outcome expectations, and self-stigma. This observation aligns with research indicating that self-efficacy and perceived anticipated support are essential factors adolescents consider when deciding to disclose a mental health difficulty to a peer (Bandura, 2001; Rasmussen et al., 2020). Similarly, previous scholarly work indicates that fear of potential stigma is a significant barrier to youth seeking mental health support from others close to them (Rickwood et al., 2005). Any intervention aimed at persuading U.S. youth (ages 16 to 24) to seek depression support must ensure that – in addition to having spokespeople the audience will wishfully identify with – it enhances audience members' perceived anticipated support and self-efficacy while reducing self-stigmatizing attitudes.

It is important to note that the mediation model predicting intentions to seek depression support from a close friend indicated a *negative* relationship between outcome expectations and

support-seeking intentions. However, as predicted by the literature (Bandura, 2001; Rasmussen et al., 2020), zero-order correlations indicated a robust positive relationship between outcome expectations and intentions to seek depression support from a close friend. The observed negative association in this mediation model has three potential explanations: Simpson's paradox, Lord's paradox, and suppression effects (Arah, 2008). These explanations describe the puzzling but known phenomenon when the sign (positive or negative) of a relationship switches after controlling for a third variable. In other words, I would not suggest interpreting the negative relationship between outcome expectations and support-seeking intentions (close friend) in the model at face value as it is likely the result of a statistical phenomenon.

Two crucial factors emerged as mediators to support-seeking from a website among U.S. youth (ages 16 to 24) experiencing depressive symptoms who have never been diagnosed or treated for depression in addition to wishful identification – outcome expectations and maladaptive self-reliance beliefs. Outcome expectations play a pivotal role in the support-seeking attitudes of this population. Mental health communicators hoping to persuade youth to use a mental health website would be wise to emphasize positive outcome expectations, particularly with a spokesperson or numerous spokespeople who have successfully utilized the resource. At the same time, these messages will need to account for the barrier of maladaptive self-reliance beliefs that would dissuade youth from utilizing this resource. Youth tend toward self-reliant attitudes when dealing with personal mental health difficulties (Gulliver et al., 2010). This study echoes that these attitudes remain a considerable barrier when promoting use of a web resource for depression support. Future research can explore what types of messages are most efficacious for enhancing outcome expectations while minimizing self-reliant beliefs to persuade youth audiences to utilize a mental health web resource (i.e., website, mobile app).

The Double-Edged Sword of Wishful Identification

This study also reinforced that wishful identification is particularly potent in this context. Wishful identification with D-PSA stimuli spokespeople emerged as a robust predictor of both intentions to seek depression support from a close friend and a mental health website. This finding speaks to the value of vicarious modeling as outlined by social cognitive theory (Bandura, 2001). This finding further buoys the growing evidence of celebrity health disclosures as opportunities to promote proactive health attitudes and behaviors (Kresovich & Noar, 2020).

Wishful identification with the D-PSA spokespeople was associated with increased outcome expectations, self-efficacy, social norms, anticipated support, and intentions to seek depression support from a friend or a website and reduced D-PSA counterarguing. Post hoc analyses further indicated that these associations remained robust even when controlling for background variables (gender, race, SES, depressive symptomatology). This study adds to the evidence that audience involvement – in this case, wishful identification – is a powerful mechanism that mental health communicators need to account for when selecting spokespeople or models for a health intervention or campaign (Francis, 2018; Hoffner & Buchanan, 2005; Hoffner, 2019; Hoffner & Cohen, 2018; Kresovich, 2020; Kresovich & Noar, 2020; N. C. Wong et al., 2017).

Although exciting for health communicators, substantial downsides of wishful identification also emerged. Most importantly, the post hoc analyses controlling for background variables also suggested robust associations between wishful identification and increased self-stigma, public stigma, and maladaptive self-reliance beliefs among this population. This finding was surprising as previous studies have found that celebrity disclosures of mental health difficulties have been associated with less stigma (Calhoun & Gold, 2020; Hoffner, 2019; Hoffner

& Cohen, 2018; Kresovich, 2020; N. C. Wong et al., 2017). Although it may be that stigmatizing attitudes persisted among this sample as the D-PSA messages were more focused on encouraging help-seeking than reducing stigma, future research is needed to explore if additional stigmatizing and self-reliant beliefs are a potential side effect of leveraging the wishful identification of D-PSA spokespeople. It is also important to note that, in this study, no main effects based on celebrity vs. non-celebrity spokesperson conditions were found for wishful identification, and so the relationships with wishful identification noted here are across spokesperson conditions. In light of the literature that has focused on celebrities only, perhaps this study suggests the need for a more nuanced examination of how youth interpret celebrity and non-celebrity spokespeople in terms of social status and social norms.

Depression Romanticizing

This study also indicated a robust positive association between wishful identification with the D-PSA spokespeople and depression romanticizing among this sample of U.S. youth (ages 16 to 24) experiencing depressive symptoms. Scholars have expressed fear that these popular culture references to mental health difficulties unintentionally encourage youth to romanticize depression as trendy or a "fascinating" character trait (Dunn, 2017; Jadayel et al., 2017; Scarano & Webster, 2018, p. 1). This study adds to the emerging evidence of a connection between audience wishful identification with these types of spokespeople and depression romanticizing, even when controlling for background variables. Post hoc analyses indicated no differences in depression romanticizing scores based on participants' current depressive symptomatology.

However, the fear of depression romanticizing may be unwarranted. My exploration of its associations with target outcome variables indicated increased depression romanticizing was also associated with increased outcome expectations. The association with intentions to seek depression

support from a close friend also approached significance. These observations were made while controlling for demographic and symptomatic differences. In this case, depression romanticizing might not be as dire as scholars fear. Instead, this trend may be more superficial. Indeed, it may very well be that this increased depression romanticizing among this population indicates a general increasing acceptance of mental health and mental illness, especially as stigma diminishes (Pescosolido et al., 2021). Regardless, health communicators seeking to utilize wishful identification must ensure that the communication adheres to best practices to avoid the negatives of the double-edged sword of wishful identification as a persuasion mechanism.

The Inextricable Link Between Music and Mental Health among U.S. Youth

Finally, this study illustrated the depth of the connection between popular music and mental health among youth. RQ7 revealed that the more U.S. youth (ages 16 to 24) experiencing depressive symptoms who have never been diagnosed or treated for depression reported utilizing music for mood regulation purposes, the more likely they were to report increased wishful identification with the D-PSA spokespeople, outcome expectations, self-efficacy, social norms, anticipated support, intentions to seek depression support from a friend or website, and depression romanticizing. These findings are vital as popular music is a critical element of youth culture and central to young people's social system (Frith, 1978; Kotarba, 2017). Further, the most popular music in the United States increasingly references mental health difficulties (Kresovich et al., 2021). There was also a significant negative association observed with counterarguing with the D-PSA. This finding suggests that there is still a potential advantage for mental health communicators in utilizing celebrity pop music artists who have disclosed a mental health difficulty as mental health advocates if the target audience is prone to using music for mood regulation purposes.

Although the evidence of the connection between popular music consumption and positive mental health attitudes and intentions continues to grow (Kresovich, 2020; Lee et al., 2021), what remains unclear is if there is a causal relationship at the heart of this potential phenomenon. Today, U.S. youth are more likely to report mental health concerns and receive treatment from a mental health professional than previous generations (American Psychological Association, 2019). However, I do not know how consuming popular music with mental health messages is helping to promote mental health discourse among this population. Future research is needed to understand this relationship's existence – or lack thereof. Specifically, longitudinal studies exploring the consumption of popular songs with mental health messages by U.S. youth (ages 16 to 24) are needed to help tease out the role this medium may or may not be playing in shaping the relevant attitudes and beliefs of this increasingly at-risk population (Miron et al., 2019).

Limitations

As with all research, the present study had limitations. First, it is essential to acknowledge that depression is a gendered outcome that affects female youth significantly more than male youth (Adkins et al., 2009). Future research would be well advised to also explore externalizing disorders (i.e., substance abuse) among male U.S. youth (ages 16 to 24). In addition, participants self-selected to participate in the study and may have only chosen to do so based on their interest in the topic. The study was advertised as a "Mental health social media study." Further, participants only received a single exposure to the D-PSA stimuli in a Qualtrics questionnaire format. Thus, it was not an accurate recreation of where this population would encounter these messages. My study also utilized a convenience sample of U.S. youth (ages 16 to 24) presently experiencing depressive symptoms who have never been diagnosed or treated for depression. Future research work should be done to confirm these findings utilizing a national probability sample of adolescents

experiencing depressive symptoms who have never been diagnosed or treated for depression to determine the efficacy – or lack thereof – of these spokespeople and referent language strategies in hopes of persuading at-risk U.S. youth (ages 16 to 24) to engage in proactive mental health behavioral intentions. In addition, the global wishful identification measure used in response to all stimuli did not allow for assessment of the D-PSA stimuli individually, which may have better helped identify which aspects of each stimulus were most efficacious. Finally, a more nuanced and empirically-informed analysis of this target audience by age differences will be important as there are significant differences between late adolescence (ages 16 to 18) and early adulthood (ages 19 to 24).

Perhaps of greatest import, it is vital to acknowledge that this study only focused on disclosures to an informal contact (close friend), but not to a medical professional or other authority. Different D-PSA spokespeople might have been more effective if the D-PSA messages were persuading audiences to engage in a professional disclosure rather than an informal one. The participants may have viewed either group of spokespeople (young celebrity pop music artists or non-celebrity peers) and both groups might have made the youth audience members think of informal contacts like friends. This informal contact priming may be why no significant differences were found between conditions. Research suggests that it is preferable for youth to disclose mental health difficulties to formal sources for mental health treatment (i.e., mental health professionals) (Rickwood et al., 2005). Perhaps I would have found more support for celebrity pop music artist spokespeople or mistargeted referent language if the D-PSAs urged the audience toward formal resources rather than informal resources. Nevertheless, it is crucial to consider that stigma, inappropriate support, and lack of relevant expertise will always persist as considerable perceived disadvantages of informal sources (i.e., close friends) (Griffiths et al., 2011).

It is also worth noting that early estimates suggest that depression rates among youth (ages ≤18 years) doubled during the COVID-19 pandemic (Racine et al., 2021). Thus, the observations from this study may not be as representative of U.S. youth's mental health attitudes and behavioral intentions during times that are less generally traumatic for mental health.

Conclusion

Mental health communicators are continuing to search for the most effective ways to persuade at-risk audiences to seek help without incurring any unforeseen iatrogenic effects (Lienemann & Siegel, 2016, 2018, 2019; Lienemann et al., 2013; Lueck, 2017, 2018; Lueck, 2019; Shi & Dai, 2022; Siegel et al., 2012; Siegel et al., 2017; Siegel et al., 2015). The goal of this experiment was to explore these novel concepts – the use of pop music celebrities and mistargeted referent language – in depression public service announcements (D-PSAs) designed to persuade U.S. youth (ages 16 to 24) experiencing depressive symptoms who have never been diagnosed or treated for depression to seek depression support from a close friend or website.

The findings of this experiment contribute to the existing mental health strategic communication literature in five critical ways. First, these findings highlight the need for an intersectional approach to D-PSA messaging by underlining the complexity of strategically utilizing celebrity spokespeople and referent language selection for persuading U.S. youth (ages 16 to 24) experiencing depressive symptoms to seek depression support. Second, my findings highlight how imperative it is for mental health communicators and practitioners to consider the target audience's wishful identification with the spokespeople in media campaigns aimed at this population while cautioning of the potential boomerang effect. Third, I identify critical antecedent attitudes among U.S. youth for practitioners to target, which differ based on the target outcome. Fourth, I discuss the implications – or lack thereof – of the depression romanticizing trend among

youth. Finally, I add to the increasing evidence of music as a potential tool for increasing mental health support-seeking attitudes and intentions among at-risk U.S. youth (ages 16 to 24).

As troubling mental health trends persist among this population (Miron et al., 2019; Mojtabai & Olfson, 2020), these findings suggest that mental health communicators take a tailored and intersectional approach to D-PSA messaging, if at all possible. Further, practitioners must tailor the messaging to target specific attitudes and beliefs depending on which behavioral outcome is desired. The findings of this experiment suggest that neither celebrity spokespeople nor mistargeted language are advisable as a "catch-all" strategy for promoting behavior change among U.S. youth (ages 16 to 24), at least in the case of encouraging an informal disclosure (to a close friend). In many cases, these results support the opposite. Nonetheless, much more research is needed to determine the most effective ways to leverage celebrity status and referent language styles to persuade this population to seek support from close friends or a web resource (i.e., website, mobile app). Clearly, we still need to learn much more about responsible using communication strategies to help U.S. youth in need without causing any unintentional harm.

CHAPTER FIVE: DISCUSSION AND CONCLUSIONS

Overview of Findings

This dissertation had two aims: 1) to explore U.S. youth's (ages 16 to 24) mental health attitudes, intentions to seek support, and perceptions of celebrity pop music artists in order to assess which artists may be the most effective in promoting support-seeking attitudes among this population; and 2) to experimentally test D-PSAs aimed at U.S. youth (ages 16 to 24) experiencing depressive symptoms who have never been diagnosed or treated for depression while exploring both celebrity status and referent language as main effects on primary and secondary outcomes. The primary outcome across both aims was intention to seek depression support from a close friend. The secondary outcomes included enhancing attitudes toward seeking support, increasing support-seeking self-efficacy and outcome expectations, boosting intentions to seek support from a website, and minimizing stigma and self-reliant beliefs toward depression support-seeking.

U.S. youth aged 16-24 were selected as the target population for three reasons. First, the transition between adolescence and young adulthood is a critical intervention point to influence depressive trajectories across the life course (Adkins et al., 2009; Hargrove et al., 2020). Second, "people's heaviest investment into popular music is when they are teenagers and young adults" (Frith, 1987, p. 143). Indeed, this is the stage of development when musical tastes tend to peak (Hemming, 2013; Holbrook & Schindler, 1989). Third, an ongoing mental health intervention designed to empower teens and young adults (ages 16 to 24) to reach out to a friend they perceive

may be struggling with mental health issues and at risk for suicide is already targeting this age cohort – highlighting their prioritization (Seize the Awkward, 2018).

For Aim 1, I surveyed 417 U.S. youth (ages 16 to 24) to assess known facilitators and barrier attitudes and beliefs to depression support-seeking. In addition, I assessed how audience involvement (wishful identification) with their most depression-associated artist is associated with attitudes, beliefs, and support-seeking intentions. I also analyzed which contemporary celebrity pop music artists who have disclosed mental health difficulties would serve as the best D-PSA spokespeople for this population. Results from this study showed that self-efficacy emerged as a vital variable for depression support-seeking messaging targeting this population as it was the only variable that predicted support-seeking intentions from a close friend when controlling for background variables. Excitingly, my results also indicated that the link between depressive intensity and (decreased) intention to seek support might be lessened, if not negated, if outcome expectations of support-seeking can be maximized. In other words, U.S. youth (ages 16 to 24) with increased outcome expectations of support-seeking correspondingly had greater intentions to seek support from friends, irrespective of their level of depression symptomatology. The findings from aim one also indicated mixed results for leveraging wishful identification. Whereas increased wishful identification was associated with increased outcome expectations and intentions to seek depression support from a close friend, it was also associated with increased public stigma. Resources that youth can access anonymously, such as mental health web resources (i.e., websites, mobile apps), are likely advisable as they help circumvent fears of public stigma. Depression romanticizing also emerged as a potential issue among this population. Finally, the study identified which contemporary celebrity pop music artists are the best fit as celebrity spokespeople in a persuasive depression support-seeking campaign for U.S. youth (ages 16 to 24).

For Aim 2, I conducted an online experiment of "Find Your Voice" depression support-seeking campaign messages with 752 U.S. youth (ages 16 to 24) experiencing at least mild depressive symptoms but had never been diagnosed or treated for depression. For this experiment, I manipulated the celebrity status of the spokespeople and the referent language (mistargeted vs. direct) of the message. No main effects of the key manipulations were observed. Results indicated that celebrity spokespeople might have the potential for iatrogenic effects as D-PSA spokespeople (i.e., higher self-stigma and maladaptive beliefs among audiences than non-celebrity D-PSA spokespeople). However, the analyses were varied and far from conclusive. Similarly, referent language did not affect any outcomes except for participants' intention to seek depression support from a website, wherein the direct targeting condition outperformed the control condition. There were no significant interaction effects. Similar to Aim 1, the double-edged sword nature of leveraging wishful identification emerged. Wishful identification is a robust audience response to persuasive D-PSA messaging, but increased stigma and depression romanticizing among audience members still loom as undesirable potential consequences.

Mediation analyses exploring the relationship between wishful identification and support-seeking intentions revealed that anticipated support, self-efficacy, outcome expectations, and self-stigma serve as crucial antecedent mediators of youth intentions to engage in depression support-seeking from a close friend. By contrast, mediation analyses indicated that outcome expectations and maladaptive self-reliant beliefs appear to be critical antecedent factors in youth decisions to seek depression support from a website.

Research Contributions and Implications

The findings of the two empirical studies (Aim 1 and Aim 2) in this dissertation add to the mental health communication literature in many ways. First, and most importantly, the findings

shed light on the complex nature of leveraging an audience's wishful identification with spokespeople in this context. A recent meta-analysis revealed that audience involvement mechanisms – such as wishful identification – appear to be promising for health practitioners to promote positive health attitude and behavior change in the wake of a celebrity health event such as a disclosure (Kresovich & Noar, 2020). Across both studies, wishful identification was robustly associated with positive mental health outcomes, including increased anticipated support, self-efficacy, outcome expectations, and intentions to seek depression support from a close friend or web resource (i.e., website) even when accounting for background variables. Similarly, increased wishful identification with the D-PSA spokespeople in the experiment addressing Aim 2, which includes identification with both celebrities and non-celebrities, was robustly associated with reduced counterarguing with the D-PSA message. Evidence from other celebrity mental health literature has previously observed similar positive findings as a product of audience involvement (Francis, 2018; Hoffner, 2018, 2019; Hoffner & Cohen, 2018; Kresovich, 2020; N. C. Wong et al., 2017). What separates these findings from the existing literature is that this dissertation helped to improve our understanding of associations between this form of audience involvement and the known facilitating and barrier attitudes and beliefs to mental health support-seeking intentions among this increasingly vulnerable population (Miron et al., 2019; Mojtabai & Olfson, 2020). This dissertation also adds to the literature by considering wishful identification with celebrities (both studies) and non-celebrities (Aim 2 study).

Whereas the results for wishful identification were generally very optimistic, crucial pitfalls to leveraging wishful identification must be acknowledged and accounted for by mental health communication practitioners. First, the results of this dissertation indicate that wishful identification is actually associated with increased stigmatizing beliefs. This finding runs counter

to our current understanding of audience reactions to mental health disclosures by celebrities (Ferrari, 2016; Hoffner, 2019; Kresovich, 2020; N. C. Wong et al., 2017). In fact, non-celebrity D-PSA spokespeople performed far better than the celebrity D-PSA spokespeople among U.S. youth (ages 16 to 24) participants experiencing moderately severe and severe depressive symptoms. This finding may be explained because audiences may perceive that celebrities are presenting recovery from mental illness as a form of achievement that results from competitive individualism, thus fostering more responsibility on the individual, increasing misconceived perceptions among audiences (i.e., self-stigma, maladaptive self-reliance beliefs) (Franssen, 2019). Emerging research indicates that celebrities may be counterproductive for perceptions of public stigma (Corrigan et al., 2021). Indeed, it may be that the constant addressing of stigma in public discourse by celebrities only further heightens audience perceptions of how much public stigma there really is. It may also be that celebrity spokespeople D-PSAs highlight a perceived gap in efficacy based on resource access, with celebrities likely having better access to better mental health resources than audiences. More research is urgently needed to assess if increased public discourse of stigma by celebrities is ultimately enhancing stigma beliefs, particularly among U.S. youth (ages 16 to 24) experiencing depressive symptoms.

The most troubling finding from this dissertation may be the robust association among U.S. youth (ages 16 to 24) between wishful identification with celebrity pop music artists associated with depression (as observed in Aim 1) and depression romanticizing. I also observed a robust association between wishful identification with D-PSA spokespeople (both celebrity spokespeople and non-celebrity peer spokespeople) and depression romanticizing in Aim 2. Scholars have become increasingly concerned that depression romanticizing is an unanticipated side effect of increased mental health discussion in popular culture (Dunn, 2017; Jadayel et al., 2017; Scarano

& Webster, 2018). Social media platforms are the primary setting of this trend where U.S. youth are increasingly performing depression difficulties for attention (Joho, 2021). The findings of this dissertation lend credence to the idea that depression romanticizing is an emerging issue among U.S. youth (ages 16 to 24). Depression romanticizing is problematic as it obscures the potential identification of those genuinely suffering. It also fetishizes a life-threatening disease and may even potentially discourage youth from seeking urgently-needed support (Miron et al., 2019). However, it is also important to note that, as discussed in Aim 2 (the D-PSA experiment), increased depression romanticizing was associated with increased outcome expectations of depression support-seeking. Indeed, this data indicates that the youth act of romanticizing depression is more likely a superficial trend than an emerging public health issue with epidemiological consequences. It may very well be that this increased depression romanticizing among this population indicates a general increasing acceptance of mental health and mental illness, especially as stigma diminishes (Pescosolido et al., 2021). Nonetheless, more research on this phenomenon is urgently needed to understand the potential implications.

The findings of this dissertation also add to the celebrity health literature. Broadly, the evidence from this dissertation indicates that celebrity spokespeople are likely to be ineffective as spokespeople in a campaign to promote support-seeking behaviors from an informal source (i.e., close friend) among U.S. youth (ages 16 to 24) struggling with depression. Previous celebrity mental health literature suggested positive implications of disclosures in this context (Francis, 2018; Hoffner, 2019; N. C. Wong et al., 2017). Emerging research indicates that celebrities may not be the best spokespeople for health issues (Corrigan et al., 2021), particularly as audiences may perceive their participation to be motivated by self-interest rather than altruism (Chan & Zhang, 2019). The evidence from the D-PSA experiment suggests that audiences may react

differently to persuasive celebrity health promotion messages as part of an intervention than celebrity health disclosures (i.e., public statements, press announcements). The latter generally occur to explain reductions in performative output (i.e., Magic Johnson's HIV disclosure as the cause for his NBA retirement, Kid Cudi's depression disclosure as the cause of his lack of musical output), and these instances are what have been observed in the extant literature to date. It is also worth noting that the celebrity pop music star D-PSAs may have been more effective if each D-PSA had an anchoring mental health-themed song performed by the artist playing in the background of a video message. This way, a musical feature could be used to activate participants' potential beliefs and emotions about the celebrity pop music artists as mental health authorities and advocates. Nevertheless, as of now, the celebrity literature only indicates that celebrities may be best for bringing attention to an issue or reducing stigma rather than as advocates intentionally promoting behavior change.

However, as discussed in Aim 2, it is vital to acknowledge that the D-PSA experiment only focused on disclosures to an informal contact (close friend) but not to a medical professional or other authority. These D-PSA spokespeople (or different D-PSA spokespeople) might have been more effective if the D-PSA messages encouraged the youth participants to engage in a professional disclosure rather than an informal one. The participants may have viewed either group of spokespeople (young celebrity pop music artists or non-celebrity peers) and both groups might have made the youth audience members think of informal contacts like friends. This informal contact priming may be why no significant differences were found between conditions. Research suggests that it is preferable for youth to disclose mental health difficulties to formal sources for mental health treatment (i.e., mental health professionals) (Rickwood et al., 2005). Perhaps I would have found more support for celebrity pop music artist spokespeople or mistargeted referent

language if the D-PSAs urged the audience toward formal resources rather than informal resources. Nevertheless, there is still a dearth of research in this area, and much more work is required before drawing definitive conclusions.

This dissertation also builds upon the emerging mental health communication literature by exploring mistargeted referent language as a persuasive strategy for audiences experiencing depressive symptoms. Siegel et al. (2015) first explored this strategy, finding support for mistargeted referent language as a robust strategy to reduce counterarguing with D-PSA messaging and improve support-seeking intentions among audiences across the symptomatic spectrum (mild to severe depression symptoms). The findings of this dissertation in the D-PSA experiment provide mixed support for this assertion across this sample of U.S. youth (ages 16 to 24) experiencing depressive symptoms who have never been treated for or diagnosed with depression. As observed in Siegel et al. (2015), mistargeting (speaking about "someone else") appeared to be an effective messaging strategy for promoting support-seeking intentions from a close friend and reducing counterarguing among audiences experiencing elevated depressive symptoms (moderately severe or severe depressive symptomatology).

By contrast, direct referent language D-PSAs (speaking to "you") were generally more effective at promoting positive depression support-seeking attitude and behavior change among U.S. males (ages 16 to 24) experiencing depressive symptoms who have never been diagnosed with or treated for depression. This finding may be explained by psychology and communication literature, which indicates that males are generally more socialized and accustomed to more direct and assertive communication styles (Doyle & Paludi, 1991). However, this strategy requires nuance as, among some male U.S. youth participants (ages 16 to 24), directly-worded D-PSAs promoting support-seeking attitudes and behaviors also appeared to exacerbate self-stigmatizing

beliefs. This observed effect is emblematic of the boomerang phenomenon described in the mental health communication literature, such that depression messaging was unintentionally activating increased self-stigmatizing beliefs (Lienemann et al., 2013). The results from the D-PSA experiment may explain this observation as they indicated that male youth are prone to maladaptive self-reliant attitudes regarding seeking mental health support. When presented with the directly-worded D-PSA message, male youth may internalize the onus of control on themselves rather than a disease out of their control. The findings from the D-PSA experiment also suggest that male youth may also be more susceptible to stigmatizing beliefs in response to celebrity D-PSA spokespeople, perhaps because the ongoing public discourse of stigma distorts perceptions of public stigma prevalence. Nonetheless, more research is undoubtedly needed.

Given these results, I advocate for mental health communication practitioners to account for intersectionality in support-seeking intervention design, particularly concerning referent language use. Intersectionality is a sociological framework to explain how multiple social statuses come to affect health (Crenshaw, 1989). Specific to the issue at hand, these findings suggest numerous interaction effects involving referent language that highlight the need for mental health communicators to account for each audience members' gender, race, SES, and other vital characteristics (i.e., depressive symptomatology). Accounting for intersectionality will allow mental health communicators to carefully promote support-seeking behaviors in a manner that does not invite adverse effects (i.e., increased stigma). Given the differences and interactions observed based on referent language, these results support the need for a tailored approach to persuasive D-PSA messaging aimed at U.S. youth (ages 16 to 24) experiencing depressive symptoms (Barney et al., 2006). Tailoring is the perfect remedy to account for intersectionality

(Noar et al., 2007), allowing practitioners to ascertain specific intersections (i.e., gender, race, SES, depressive symptoms) of individual audience members to ensure persuasive message efficacy.

This dissertation also provides significant insights into which attitudes and beliefs to target in hopes of promoting support-seeking intentions among U.S. youth (ages 16 to 24) experiencing depressive symptoms who have never been treated or diagnosed. Support-seeking is a very nuanced outcome considering the variability in available resources. The exploratory survey (including participants without depressive symptoms) indicated that self-efficacy was the most vital belief in youth's decisions to engage in support-seeking. This finding makes sense and is foundational to Bandura's (2001) social cognitive theory. Youth – much like anyone – need to believe they have the power to engage in a behavior if they are going to do so. The D-PSA experiment unveiled some more nuanced attitudes to target to promote support-seeking intentions among youth experiencing depressive symptoms. If the goal is to promote intentions to seek depression support from a close friend, practitioners need to make sure their messaging accounts for self-efficacy, outcome expectations, anticipated support, and self-stigma.

Differing beliefs and attitudes emerged as mediators for web resources, underscoring the complexity of promoting support-seeking utilizing different resources. For example, suppose the goal is to promote intentions to seek help from a web resource (i.e., website, mobile app). In that case, this dissertation's findings indicate that practitioners must only ensure that their message addresses outcome expectations and maladaptive self-reliant beliefs (not also outcome expectations and anticipated support, as required by close friends). Web resources present mental health communicators with unique advantages. Symptomatic analyses revealed that mental health web resources (i.e., website, mobile app) do not differ in appeal between participants experiencing lesser depressive symptoms (mild + moderate PHQ-9) and participants experiencing more intense

depressive symptoms (moderately severe and severe PHQ-9), unlike seeking support from a close friend, which was lower among participants with more intensive depressive symptoms. When considering why promoting web resources appears less complicated than close friends, it is important to remember that the vulnerability required and social consequences of reaching out to a close friend are significantly more considerable than those required to seek depression support from a website anonymously. The consequences are minimal if a support-seeking experience goes poorly while anonymously utilizing a web resource. However, if a support-seeking experience goes poorly with a close friend, stigma, social rejection, and embarrassment are considerable consequences (Barker et al., 2005; Rickwood et al., 2005). Mental health communicators must consider the varying barriers and unique intricacies of promoting various mental health resources.

Finally, this dissertation underscores the inextricable link between popular music and mental health among U.S. youth (ages 16 to 24). It is well-established that popular music is a key element of youth culture (Frith, 1978; Kotarba, 2017), and youth use music for many vital developmental functions (McFerran et al., 2019). Across both samples in the exploratory survey (Aim 1) and the D-PSA experiment (Aim 2), three out of four U.S. youth (ages 16 to 24) reported that music helps them deal with their own mental health issues, with one in four 'strongly agreeing' with the statement. Interestingly, the D-PSA experiment revealed that higher scores among youth for using music for mood regulation purposes were significantly associated with increased outcome expectations, self-efficacy, social norms, anticipated support, and intentions to seek depression support from a close friend or website. As the U.S. Surgeon General recently called for innovative ways to promote support-seeking among youth (U.S. Department of Health and Human Services, 2021), it becomes more and more apparent that popular music is an avenue worthy of extensive scholarly exploration. An increasing proportion of popular songs have references to

mental health difficulties (Kresovich et al., 2021), putting the onus on health communicators and practitioners to leverage this highly influential yet understudied medium for public good.

Strengths and Limitations

The most prominent strength of this dissertation is that these two studies constitute the first steps in developing and experimentally testing the effectiveness of using celebrity pop music artists who have disclosed mental health difficulties to deliver public service announcements designed to persuade at-risk U.S. youth (ages 16 to 24) to seek support for depression. Scholars have historically dedicated ample time and effort toward our understanding of music, mental health, and the intersection between both. However, as mental health discourse becomes more common in popular music (Kresovich et al., 2021), very little existing literature is dedicated to understanding the implications of its consumption for a cohort of U.S. youth (ages 16 to 24) in the midst of a mental health crisis (Miron et al., 2019; Mojtabai & Olfson, 2020). Much less, scholarly work is only beginning to posit the potential of leveraging these artists, their music, and their disclosures to promote proactive mental health attitudes and behaviors among at-risk audiences (Francis, 2018; Hoffner, 2019; Kresovich, 2020; N. C. Wong et al., 2017). I hope studies will inspire future scholarly work on this potential phenomenon.

Another strength of this dissertation is the methodological design. By targeting U.S. youth (ages 16 to 24) experiencing depressive symptoms that have never been diagnosed or treated for depression, these findings shed light on the ideal target audience's beliefs, attitudes, and intentions of a support-seeking intervention or campaign. Further, both empirical studies were adequately powered and utilized different methods – survey and experiment – to explore this phenomenon. The experiment underwent thorough pre-testing with the target population during stimuli development, ensuring that analyses and comparisons would provide valid and meaningful data.

The meticulous attention to detail by my co-chairs and myself to thoughtful stimuli development, participant selection, and participant experience drastically improved the quality of the research. This dissertation provides a methodological model for future scholarly work in this area.

The other strength of this dissertation is that each study's sample size allowed for meaningful comparisons during demographic and symptomatic analyses. Participant requirements prioritized ensuring that the sample accurately reflected the demographics of Generation Z. Many significant differences emerged across demographic and symptomatic groups, thus providing valuable insights to mental health communicator scholars on the complexity and nuance that will be required to persuade U.S. youth (ages 16 to 24) to engage in proactive support-seeking behaviors. As the mental health communication literature has grown, it has become increasingly evident that audiences experiencing depression are among the most difficult to persuade and require the most care to avoid iatrogenic effects (Lienemann & Siegel, 2016, 2018; Lienemann et al., 2013; Lueck, 2017, 2018; Shi & Dai, 2022; Siegel et al., 2017; Siegel et al., 2015). Having an adequate number of participants to provide meaningful comparisons of groups based upon gender, race, socioeconomic status, and depressive symptomatology is vital for research going forward as vulnerable populations are often places where stigmatizing beliefs persist and support-seeking interventions are needed most (DuPont-Reyes et al., 2020; Eisenberg et al., 2009).

As with all research, this dissertation has limitations. First, it is essential to acknowledge that depression is a gendered outcome that affects female youth significantly more than male youth (Adkins et al., 2009). Future research would be well advised to also explore externalizing disorders (i.e., substance abuse) among male U.S. youth (ages 16 to 24). In addition, both studies utilized convenience samples of U.S. youth (ages 16 to 24) via Qualtrics. Whereas perhaps not representative of the population, Qualtrics panels provide national samples and may be better than

some alternative convenience sample options (Boas et al., 2020). Further, while both studies took place on an online platform (Qualtrics), this age cohort's internet penetration is nearly 100% (Vogels, 2020). It is possible that population segments were still unrepresented in the final samples, but methodological design diminished these concerns. This research was also limited by its one-shot cross-sectional design. It is unknowable if the observed efficacy of the D-PSA stimuli would persist over time. Also, the social media post stimuli were presented in a forced exposure experiment – embedded within a Qualtrics questionnaire – and the findings may not represent how participants would have responded to stimuli if they were encountered in the natural setting (an Instagram feed). It is also important to note that while I attempted to systematically select the best possible celebrity pop music artist spokespeople for the D-PSA experiment, there may have been other artists (or different non-music celebrity spokespeople) who would have performed better. The global measure for D-PSA spokespeople wishful identification also undercut the ability to analyze the effectiveness of any single D-PSA spokesperson. Vital differences likely would have emerged based on spokesperson-participant demographic matches or prior perceptions (i.e., liking/disliking their music) (Kim et al., 2016; Wang & Arpan, 2008). The single-item measure for my target outcomes (individual support-seeking intentions from a close friend or website) from the General Help-Seeking Questionnaire (GHSQ) is also a limitation (Wilson et al., 2005). However, these items were appropriate as the scope of my study was primarily limited only to two resources – close friends and a website. Finally, it is important to acknowledge that this research was conducted during the ongoing COVID-19 pandemic. Given that early estimates suggest that depression rates among youth (ages ≤18 years) doubled during the COVID-19 pandemic (Racine et al., 2021), the observations from this study may not be as representative of U.S. youth's mental

health attitudes and behavioral intentions during times that are less generally traumatic for mental health.

Future Directions

First and foremost, it is imperative to acknowledge that much further work is needed given the relative novelty of this area of inquiry. This dissertation addressed a focused selection of hypotheses and research questions around a single mental health affliction – depression – for a particular target audience – U.S. youth (ages 16 to 24). Mental health issues are not exclusive to this population, nor is depression the only disease to address. However, this particular life stage offers a unique opportunity to support an increasingly vulnerable population dealing with the first onset of a deadly disease (Copeland et al., 2013; Miron et al., 2019; Mojtabai & Olfson, 2020), especially at the same stage when popular music is of utmost importance (Frith, 1978; Kotarba, 2017). The increasing proportion of popular music songs with mental health themes only further heightens how much research on this potential phenomenon is needed. It is imperative that mental health communication researchers build upon this work much like this work builds upon the foundational work before it (Francis, 2018; Frith, 1987; Hoffner, 2019; Lienemann et al., 2013; Lueck, 2018; McFerran et al., 2019; Saarikallio & Erkkilä, 2007; Siegel et al., 2017). Below, I outline several future directions for scholars which I believe warrant further investigation.

As I emphasized throughout this dissertation, audience involvement – wishful identification, specifically – appears to be a very promising and robust mechanism for mental health communicators to explore and leverage (Francis, 2018; Hoffner, 2019; Hoffner & Cohen, 2018; Kresovich, 2020; N. C. Wong et al., 2017). The findings of this dissertation, especially Chapter 4, highlight how vital it is for mental health communicators to gauge the wishful identification potential of their desired spokespeople or models when crafting persuasive

messages. A meta-analysis by Kresovich and Noar (2020) observed a statistically significant positive association between audience involvement and behavioral intentions in the wake of a celebrity health disclosure or health event. This dissertation highlights both the positive and negative implications of the double-edged sword of wishful identification. Health communication scholars would be prudent to continue exploring both positive and negative implications of wishful identification in persuasive messaging.

In line with the wishful identification research needs, more research is needed to grasp the value – or lack thereof – of utilizing celebrities to promote healthy behavior. It appears that celebrities are a valuable resource for bringing awareness to health issues (Beck et al., 2014). However, despite evidence that celebrity health events can lead to proactive behavior changes in response to health disclosures or events (Kresovich & Noar, 2020), the D-PSA experiment called into question if celebrities are effective for promoting behavior change as part of a health campaign or intervention. Much more research is needed to tease out the differences between types of celebrity involvement in a health campaign to determine if they are helpful or if their participation causes iatrogenic effects. For example, future research can explore differences in audience reactions to celebrity health behavior promotion messages from social media differ based upon the source of the message (i.e., the celebrity's personal social media page vs. the official campaign social media campaign) or the message format (i.e., text, audio, video). Even if not for promoting behavior change, celebrities may still be valuable for awareness and stigma reduction. Nevertheless, celebrity health disclosures and health events appear to provide practitioners with opportunities to promote positive health behavior change (Kresovich & Noar, 2020)

It is also important to note that wishful identification does not need to be limited to celebrities. As evidenced by the D-PSA experiment, U.S. youth (ages 16 to 24) felt near-identical

wishful identification toward the non-celebrity (peer) D-PSA spokespeople as they did toward the celebrity pop music artist D-PSA spokespeople. Wishful identification still emerged as a significant predictor of positive support-seeking attitudes and beliefs. Indeed, it may be easier for audiences to perceive similarity, and thus wishful identification, with non-celebrity spokespeople (i.e., peers who similarly lack the substantial financial resources that celebrities often have access to) who report successful treatment than it is with a celebrity pop music artist they are a fan of who has disclosed mental health difficulties (Hoffner & Buchanan, 2005).

More research is also needed to explore referent language as a persuasive tool for improving support-seeking intentions among audiences experiencing depression. While the findings of the D-PSA experiment in Aim 2 support Siegel et al. (2015) that mistargeted referent language is best for audiences experiencing severe depressive symptoms, it remains unclear if this is a viable persuasive strategy for U.S. youth (ages 16 to 24) audiences at-large. Given that the exploratory survey in Aim 1 highlighted outcome expectations as a protective factor for support-seeking intentions, it seems vital to make sure that messaging received by youth experiencing less severe symptoms (or no symptoms at all) does not diminish vital target beliefs and attitudes (i.e., outcome expectations, self-efficacy) by using mistargeted referent language. Research in this area is urgently needed. Our current understanding of referent language advantages and disadvantages for different audiences is insufficient and leaves mental health communication practitioners having to rationalize outcome compromises based upon which audience segment is targeted.

In preparing for this dissertation, I was also surprised by the dearth of research assessing the known facilitator and barrier beliefs and attitudes of support-seeking intentions among audiences with depressive symptomatology. I know that psychological reactance and cognitive errors are substantial hurdles for mental health communicators trying to persuade audiences

experiencing depression (Lienemann & Siegel, 2016; Siegel et al., 2017). However, we still have an extremely limited understanding of how beliefs and attitudes fluctuate as depressive symptoms worsen. It seems essential for future research to explore changing cognitions among audiences experiencing depression to guide efficacious message design.

We must also investigate further if close friends are the ideal mental health resources to direct U.S. youth (ages 16 to 24) experiencing depressive symptoms to for support. I know close friends are not ideal compared to sending youth directly to a mental health professional. However, adolescents (ages 10 to 19) are most likely to reach out to informal sources of help (i.e., friends) compared to more formal sources (i.e., mental health professionals) when seeking support for depression (Singh et al., 2019). Unfortunately, youth are generally very limited in mental health literacy compared to other age groups (Farrer et al., 2008). As adolescents with high levels of depression may even be less likely to seek help from trusted friends or family, peers and family may be the most viable intervention target audience (Sawyer et al., 2012). This group also unintentionally requires communicators to use mistargeted referent language with the target population (i.e., "Is someone close to you experiencing depression?"), an unintended potential benefit of this approach. The *Seize the Awkward* campaign is currently targeting youth not experiencing mental health difficulties in supporting others who are. The perceived advantages of informal sources (i.e., friends) for youth depression support-seekers include emotional and information support. However, stigma, inappropriate support, and lack of relevant expertise persist as considerable perceived disadvantages (Griffiths et al., 2011). Due to these disadvantages, it is preferable for youth to seek professional treatment. Nevertheless, considering the limited mental health literacy of youth (Lam, 2014), youth suicide interventions consider close friends the "front line" (Dunham, 2004, p. 64) of treatment-seeking behaviors. Future research must explore – much

like celebrities as D-PSA spokespeople – if the utility of close friends as mental health resources is limited and needs to be specialized to particular tasks (i.e., first aid and referrals to more sufficient mental health support resources).

Finally, research is urgently needed to explore the implications of youth exposure to popular songs with mental health messages. Emerging research highlighted the increasing proportion of popular songs with references to mental health difficulties (Kresovich et al., 2021) and the implications of said exposure (Kresovich, 2020; Lee et al., 2021; Niederkrotenthaler et al., 2021; Torgerson et al., 2021). The findings of this dissertation both highlight potential positive implications and worrisome negative implications. In particular, I would like to call mental health communicators to the very real depression romanticizing trend emerging among U.S. youth as described in the findings of this dissertation. Scholarly investigation is needed into the nuances and the implications of mental health and depression becoming trendy among youth and popular culture (Dunn, 2017; Jadayel et al., 2017; Scarano & Webster, 2018). Other important questions remain: Are mental health messages from one medium (i.e., music, social media, interview) more persuasive among youth audiences than other media? What are the differences in reactions to disclosures, calls for help, or promoting healthy proactive attitudes and behaviors? How do these reactions differ based on the medium? Can celebrities be effective as mental health behavior promoters? Health communication scholars need to heed more attention to this potential phenomenon and what the implications may be for this increasingly vulnerable population (Miron et al., 2019; Mojtabai & Olfson, 2020).

It is essential to state that the advocated research questions above do not represent anything approaching an exhaustive list. Our understanding of this potential phenomenon requires consistent efforts and interdisciplinary participation across fields, including music,

communication, media studies, sociology, psychology, counseling, public health, and popular culture. Collaboration between these varied disciplines will be necessary to reverse the troubling mental health trends among U.S. youth (ages 16 to 24).

Conclusion

The goals of this dissertation were two-fold. The first goal was to improve our understanding of facilitating and barrier beliefs and attitudes of depression support-seeking behavioral intentions for U.S. youth (ages 16 to 24). The second goal was to explore the use of celebrity pop music artists who have disclosed anxiety, depression, and suicidal ideation as spokespeople in persuasive messages to encourage support-seeking behaviors among at-risk U.S. youth (ages 16 to 24) experiencing depressive symptoms who have never been diagnosed or treated for depression. The findings of this dissertation highlight the power of wishful identification, vital attitudes and beliefs to target for promotion of support-seeking behaviors, and the promise and pitfalls of utilizing celebrities and mistargeted referent language in a mental health communication intervention aimed at at-risk U.S. youth.

Popular music is a highly influential medium among youth. Nevertheless, the medium – and its performers – remain vastly understudied by health communicators as a tool for mental health promotion despite the inextricable link between popular music and the youth experience. Pop music is a critical element of youth culture and central to young people's social system (Frith, 1978; Kotarba, 2017). I sincerely hope the findings of this dissertation inspire scholars and begin to lay the groundwork for researchers to conduct future work in this area. "A well-timed song is a reminder of what is at stake, and has the capacity to assure even the most jaded listener that they were never really alone in the first place" (Beauchemin, 2019, para. 33).

APPENDIX A: SURVEY INSTRUMENT

	Item	Response scale	Source	Notes
Consent form	Thank you for taking this important questionnaire on Instagram posts about mental health. This survey will take approximately 15-20 minutes to complete. Please click on the arrow to continue.			
BLOCK: SCREENER QUESTIONS				
ID_1_AGE	What is your age in years? (Whole numbers only, please)	Open-ended		Skip logic: If not between 16 and 24, skip to end of the survey.
SCREEN_2	Is English your first language?	1. Yes, English is my first language. 2. No, English is not my first language.		Skip logic: If no, skip to end of survey
SCREEN_3	Do you live in the United States?	1. Yes, I live in the United States. 2. No, I do not live in the United States.		Skip logic: If no, skip to end of survey
SCREEN_FAMILIAR_1	We'd now like to know about some popular music artists that you may or may not be familiar with… Of the list of pop music artists below, please select all of the artists that you would say you are familiar with. If you are unfamiliar with all of these artists, click "I'm not	1. Ariana Grande 2. Billie Eilish 3. DaBaby 4. Drake 5. Dua Lipa 6. Ed Sheeran 7. Future 8. Halsey 9. J. Cole 10. Justin Bieber		Skip logic: If less than three artists, skip to end of survey Loop and merge based

	familiar with any of these artists" and click to continue.	11. Kendrick Lamar 12. Khalid 13. Lil' Baby 14. Lil' Uzi Vert 15. Lizzo 16. Luke Combs 17. Olivia Rodrigo 18. Post Malone 19. Shawn Mendes 20. Suga (BTS) 21. Taylor Swift 22. The Weeknd 23. Travis Scott 24. I'm not familiar with any of these artists.		upon selected artists.
BLOCK: ARTIST_SELECTION				
ARTIST_SELECTION_1	Now, of the artists you're familiar with, **select 3 to 5 artists** that you would turn to most when you're feeling down, sad, lonely, or depressed.	1. Ariana Grande 2. Billie Eilish 3. DaBaby 4. Drake 5. Dua Lipa 6. Ed Sheeran 7. Future 8. Halsey 9. J. Cole 10. Justin Bieber 11. Kendrick Lamar 12. Khalid 13. Lil' Baby 14. Lil' Uzi Vert 15. Lizzo 16. Luke Combs	Loop forward selections from SCREEN_FAMILIAR_1	Loop and merge based upon selected artists.

		17. Olivia Rodrigo 18. Post Malone 19. Shawn Mendes 20. Suga (BTS) 21. Taylor Swift 22. The Weeknd 23. Travis Scott		
BLOCK: CELEBRITY SPOKESPERSON MEASURES				
Blocks appear based upon participants' 3-5 selected artists from ARTIST_SELECTION_1.				
	We now have a few questions about how you feel about [Artist] and [Artist]'s experiences with depression.			
CELEB_FAMILIAR	First, how likely is it that you would listen to **[Artist] if you were feeling down, sad, lonely, or depressed**?	1 = Very unlikely 2 = Unlikely 3 = Somewhat unlikely 4 = Neither unlikely nor likely 5 = Somewhat likely 6 = Likely 7 = Very likely	Developed by researcher	
CELEB_SELF_LIKE	How do you feel about [Artist]?	1 = Strongly dislike 2 = Dislike 3 = Slightly dislike 4 = Neither like nor dislike 5 = Slightly like 6 = Like 7 = Strongly like	Developed by researcher	
CELEB_PEER_LIKE	In general, how do your friends feel about [Artist]?	1 = Strongly dislike 2 = Dislike	Developed by researcher	

		3 = Slightly dislike 4 = Neither like nor dislike 5 = Slightly like 6 = Like 7 = Strongly like		
	Please rate your agreement with the following statements.			
CELEB_ ASSOC_1	I think of [Artist] as someone who has made songs about feeling down, sad, or depressed.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Developed by researcher	
CELEB_ ASSOC_2	[Artist] is someone I associate with depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Saarikallio and Erkkilä (2007)	
CELEB_ ALTRUIS M_1	[Artist] is concerned about depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree	Rifon et al. (2004)	

		5 = Slightly agree 6 = Agree 7 = Strongly agree		
CELEB_ ALTRUIS M_2	[Artist] sincerely believes that depression is an important issue.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Rifon et al. (2004)	
CELEB__ CRED_1	[Artist] is qualified to talk about experiencing depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Ohanian (1990)	
CELEB_C RED_2	In general, [Artist] is sincere.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Ohanian (1990)	

CELEB_WI_1	I see [Artist] as a role model.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Hoffner and Buchanan (2005)	
CELEB_WI_2	Sometimes I wish I could be more like [Artist].	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Hoffner and Buchanan (2005)	
BLOCK: MUSIC LISTENING QUESTIONS				
	Please rate your level of agreement with the following statements about your music listening habits.			
FAV_SONGS_DEP	In the past two weeks, I've been listening to songs that mention feelings of depression (i.e., sadness, hopelessness, feeling worthless).	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Kam et al. (2014)	

FAV_SONGS_HELP_SELF	My favorite songs help me to deal with my own mental health issues.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Kam et al. (2014)	
GENRE_COUNTRY	I enjoy listening to **country** music.	1 = Strongly dislike 2 = Dislike 3 = Slightly dislike 4 = Neither dislike nor like 5 = Slightly like 6 = Like 7 = Strongly like	Marshall and Naumann (2018)	
GENRE_KPOP	I enjoy listening to **K-Pop (Korean Pop)** music.	1 = Strongly dislike 2 = Dislike 3 = Slightly dislike 4 = Neither dislike nor like 5 = Slightly like 6 = Like 7 = Strongly like	Marshall and Naumann (2018)	
GENRE_POP	I enjoy listening to **Pop** music.	1 = Strongly dislike 2 = Dislike 3 = Slightly dislike 4 = Neither dislike nor like 5 = Slightly like 6 = Like	Marshall and Naumann (2018)	

		7 = Strongly like		
GENRE_ RAP	I enjoy listening to **rap/hip-hop** music.	1 = Strongly dislike 2 = Dislike 3 = Slightly dislike 4 = Neither dislike nor like 5 = Slightly like 6 = Like 7 = Strongly like	Marshall and Naumann (2018)	
GENRE_ ROCK	I enjoy listening to **rock/alternative** music.	1 = Strongly dislike 2 = Dislike 3 = Slightly dislike 4 = Neither dislike nor like 5 = Slightly like 6 = Like 7 = Strongly like	Marshall and Naumann (2018)	
GENRE_ RNB	I enjoy listening to **R&B/soul** music.	1 = Strongly dislike 2 = Dislike 3 = Slightly dislike 4 = Neither dislike nor like 5 = Slightly like 6 = Like 7 = Strongly like	Marshall and Naumann (2018)	
BLOCK: MUSIC MOOD QUESTIONS				
Randomize all 7 MOOD items.				
MOOD_I ntro	Now please rate your level of agreement with the following statements about your reasons for listening to music.			
MOOD_E ntertain	I like to listen to music when I can to make my atmosphere more pleasant, often as background music.	1 = Strongly disagree 2 = Disagree	Saarikallio and Erkkilä (2007)	

		3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree		
MOOD_Revival	I listen to my favorite music to get new energy after a rough day.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Saarikallio and Erkkilä (2007)	
MOOD_StrongSen	Music evokes strong emotional experiences in me.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Saarikallio and Erkkilä (2007)	
MOOD_Diversion	For me, listening to music is a way to forget about my worries.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree	Saarikallio and Erkkilä (2007)	

		5 = Slightly agree 6 = Agree 7 = Strongly agree		
MOOD_Discharge	I listen to music to release complicated feelings.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Saarikallio and Erkkilä (2007)	
MOOD_MentalWork	Music helps me to understand different feelings in myself.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Saarikallio and Erkkilä (2007)	
MOOD_Solace	I listen to music to feel understood and comforted.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Saarikallio and Erkkilä (2007)	
BLOCK: MOST ASSOCIATE WITH DEPRESSION SELECTION				

	Now please select the **<u>one</u>** music artist that **you *<u>most</u>* associate with depression** as a topic (e.g., being open about their difficulties with depression, being known for talking about depression in their music or in interviews/social media, etc.).	1. Ariana Grande 2. Billie Eilish 3. DaBaby 4. Drake 5. Dua Lipa 6. Ed Sheeran 7. Future 8. Halsey 9. J. Cole 10. Justin Bieber 11. Kendrick Lamar 12. Khalid 13. Lil' Baby 14. Lil' Uzi Vert 15. Lizzo 16. Luke Combs 17. Olivia Rodrigo 18. Post Malone 19. Shawn Mendes 20. Suga (BTS) 21. Taylor Swift 22. The Weeknd 23. Travis Scott	Loop forward selections from ARTIST_SELECTION 1	
BLOCK: WISHFUL IDENTIFICATION				
Randomize items WISHFUL_1 – WISHFUL_5				
	We now have a few questions about your feelings toward [Depression-Associated Artist].			
WISHFUL_1	[Depression-Associated Artist] is the type of person I want to be like myself.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree	Hoffner and Buchanan (2005)	

		5 = Slightly agree 6 = Agree 7 = Strongly agree		
WISHFUL_2	Sometimes I wish I could be more like [Depression-Associated Artist].	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Hoffner and Buchanan (2005)	
WISHFUL_3	I see [Depression-Associated Artist] as a role model.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Hoffner and Buchanan (2005)	
WISHFUL_4	I'd like to do the types of things that [Depression-Associated Artist] does.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Hoffner and Buchanan (2005)	

WISHFUL_5_REV	I would NEVER want to act the way that [Depression-Associated Artist] does. (Reversed)	7 = Strongly disagree 6 = Disagree 5 = Slightly disagree 4 = Neither agree nor disagree 3 = Slightly agree 2 = Agree 1 = Strongly agree	Hoffner and Buchanan (2005)	
BLOCK: MALADAPTIVE SELF-RELIANCE BELIEFS				
Randomize items SELF_RELIANCE_1 – SELF_RELIANCE_3				
	Now please rate your level of agreement with the following statements about your attitudes toward mental health help-seeking.			
SELF_RELIANCE_1	I prefer to handle mental health problems, like feeling depressed, by myself as opposed to seeking the support of others.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Britt et al. (2011)	
SELF_RELIANCE_2	People should work out their own mental health problems. Reaching out to others for support when depressed should be a last resort.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree	Britt et al. (2011)	

		7 = Strongly agree		
SELF_RELIANCE_3	Depression tends to work itself out on its own.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Britt et al. (2011)	
BLOCK: PERCEIVED ANTICIPATED SUPPORT & SOCIAL NORMS				
Randomize items ANTICIPATED_SUPPORT_1 – ANTICIPATED_SUPPORT_5				
	Now please rate your level of agreement with the following statements about your attitudes toward speaking to someone close to you if you experienced depression.			
ANTICIPATED_SUPPORT_1	I could count on talking to someone close to me for support if I experienced depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Nambisan (2011)	
ANTICIPATED_SUPPORT_2	I could share my depression difficulties with someone close to me.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree	Nambisan (2011)	

		5 = Slightly agree 6 = Agree 7 = Strongly agree		
ANTICIPATED_SUPPORT_3	I could get the emotional help and support I need from someone close to me if I were depressed.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Nambisan (2011)	
ANTICIPATED_SUPPORT_4	I could talk about my depression with someone close to me.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Nambisan (2011)	
ANTICIPATED_SUPPORT_5	I know someone close to me who is a real source of comfort.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Nambisan (2011)	

SOCIAL_NORMS_1	There is a person close to me who would think that I should reach out to them for support if I were experiencing depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Vogel et al. (2007)	
BLOCK: SUPPORT-SEEKING SELF-STIGMA				
Randomize items SELF_STIGMA_1 – SELF-STIGMA_5				
	For these questions, think about how you would feel about seeking support for depression from someone close to you.			
SELF_STIGMA_1	I would feel worse about myself if I could not handle being depressed on my own.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Vogel et al. (2006)	
SELF_STIGMA_2	If I was depressed and I opened up to someone close to me for support, I would be less satisfied with myself.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Vogel et al. (2006)	

SELF_STIGMA_3	My self-confidence would be threatened if I opened up to someone close to me for support if I was depressed.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Vogel et al. (2006)	
SELF_STIGMA_4_RC	My self-esteem would INCREASE if I opened up to someone close to me for support if I was depressed. (Reversed)	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Vogel et al. (2006)	
SELF_STIGMA_5	I would feel inadequate if I went to someone close to me for support if I was depressed.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Vogel et al. (2006)	
BLOCK: SUPPORT-SEEKING PUBLIC STIGMA				
Randomize items PUBLIC_STIGMA_1 – PUBLIC_STIGMA_5				
	Now think about what you believe **others would think about you** if you were to seek			

	support for depression from someone close to you.			
PUBLIC_ STIGMA_ 1	I believe seeking support for depression from someone close to you carries social stigma.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Komiya et al. (2000)	
PUBLIC_ STIGMA_ 2	People generally believe it is a sign of personal weakness or inadequacy to seek support for depression from someone close to you.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Komiya et al. (2000)	
PUBLIC_ STIGMA_ 3	People would see me in a less favorable way if they come to know that he/she has opened up to someone close to them for depression support.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Komiya et al. (2000)	
PUBLIC_ STIGMA_ 4	It would be advisable for me to not tell people that I had opened up to someone close to me for support for depression.	1 = Strongly disagree 2 = Disagree	Komiya et al. (2000)	

		3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree		
PUBLIC_STIGMA_5	People tend to dislike those who seek support for depression from others who are close to them.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Komiya et al. (2000)	
BLOCK: SUPPORT-SEEKING SELF-EFFICACY				
Randomize items SELF_EFFICACY_1 – SELF_EFFICACY_3				
	Now think about your ability to seek support for depression from someone close to you.			
SELF_EFFICACY_1	I could seek support for depression by opening up to someone close to me if I needed to.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Hernandez & Organista's (2013)	
SELF_EFFICACY_2	If I were experiencing depression, I am confident that I would be able to open up to	1 = Strongly disagree 2 = Disagree	Hernandez & Organista's (2013)	

	someone close to me for support.	3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree		
SELF_EFFICACY_3	If I were experiencing depression, I could find someone close to me that I would be able to open up to for support.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Hernandez & Organista's (2013)	
BLOCK: SUPPORT-SEEKING OUTCOME EXPECTATIONS				
Randomize items OUTCOME_EXPECT_1 – OUTCOME_EXPECT_5				
	Now think about your attitudes toward seeking help for depression from someone close to you (e.g., a close friend, a family member, an intimate partner, etc.).			
OUTCOME_EXPECT_1	Seeking support for depression from someone (e.g., close friend, family member, etc.) **will make a positive difference**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Siegel et al. (2015)	

OUTCOME_EXPECT_2	Seeking support for depression from someone close (e.g., close friend, family member, etc.) **will help a depressed person**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Siegel et al. (2015)	
OUTCOME_EXPECT_3	Seeking support for depression from someone close (e.g., close friend, family member, etc.) **will shorten the length of time that a person with depression will remain depressed**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Siegel et al. (2015)	
OUTCOME_EXPECT_4	Seeking support for depression from someone close (e.g., close friend, family member, etc.) **will be valuable to help recover from depression**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Siegel et al. (2015)	
OUTCOME_EXPECT_5	Seeking support for depression from someone close (e.g., close friend, family member, etc.) **helps a depressed person to get better**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree	Siegel et al. (2015)	

		4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree		
BLOCK: DEPRESSION SUPPORT-SEEKING INTENTION				
	Now please rate your level of agreement regarding **what you would do if you were personally experiencing depression.**			
SEEK_FRIEND	If I were experiencing depression, **I would seek help from a close friend**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Wilson et al. (2005)	
SEEK_PARTNER	If I were experiencing depression, **I would seek help from an intimate partner (e.g., boyfriend, girlfriend, husband, wife, etc.)**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Wilson et al. (2005)	
SEEK_PARENT	If I were experiencing depression, **I would seek help from a parent or guardian**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree	Wilson et al. (2005)	

		4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree		
SEEK_FAMILYMEMBER	If I were experiencing depression, **I would seek help from a family member (other relative/non-parent)**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Wilson et al. (2005)	
SEEK_WEBSITE	If I were experiencing depression, **I would seek help from a mental health website**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Wilson et al. (2005)	
SEEK_PROFESSIONAL	If I were experiencing depression, **I would seek help from a mental health professional (e.g., psychologist, therapist, social worker, counselor)**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree	Wilson et al. (2005)	

		7 = Strongly agree		
SEEK_RELIGIOUS	If I were experiencing depression, **I would seek help from a Minister or religious leader (e.g., Priest, Rabbi, Chaplain, etc.)**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Wilson et al. (2005)	
SEEK_ANOTHER	If I were experiencing depression, **I would seek help from another not listed above (e.g., co-worker, roommate, etc.)**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Wilson et al. (2005)	
SEEK_NO_ONE	If I were experiencing depression, **I would not seek help from anyone**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Wilson et al. (2005)	
BLOCK: DEPRESSION ROMANTICIZING				
Randomize items ROMANTICIZE_1 – ROMANTICIZE_6				
	Now think about people your age who have experienced			

	depression and use the sliders to answer the questions below.			
ROMANTICIZE_1	People my age with depression are…	-2 = Very uninteresting -1 = Somewhat uninteresting 0 = Neither uninteresting nor interesting 1 = Somewhat interesting 2 = Very interesting	Developed by researcher	
ROMANTICIZE_2	People my age with depression are…	-2 = Very shallow -1 = Somewhat shallow 0 = Neither shallow nor deep 1 = Somewhat deep 2 = Very deep	Developed by researcher	
ROMANTICIZE_3	People my age with depression are…	-2 = Very unimaginative -1 = Somewhat unimaginative 0 = Neither unimaginative nor imaginative 1 = Somewhat imaginative 2 = Very imaginative	Developed by researcher	
ROMANTICIZE_4	People my age with depression are…	-2 = Very dull -1 = Somewhat dull 0 = Neither dull nor fascinating 1 = Somewhat fascinating 2 = Very fascinating	Developed by researcher	

ROMANTICIZE_5	People my age with depression are…	-2 = Very uncreative -1 = Somewhat uncreative 0 = Neither uncreative nor creative 1 = Somewhat creative 2 = Very creative	Developed by researcher	
ROMANTICIZE_6	People my age with depression are…	-2 = Very boring -1 = Somewhat boring 0 = Neither boring nor captivating 1 = Somewhat captivating 2 = Very captivating	Developed by researcher	
BLOCK: DEPRESSION LITERACY				
Randomize items LITERACY_1 – LITERACY_10				
	We now would like to know more about your mental health attitudes and beliefs. Please rate your agreement about each of the following statements below about **symptoms of depression**.			
LITERACY_1	I believe that **feeling down or sad most of the time** is a symptom of depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Swannell and McDermott (2015)	
LITERACY_2	I believe that **little interest in doing pleasurable activities**	1 = Strongly disagree	Swannell and	

	most of the time is a symptom of depression.	2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	McDermott (2015)	
LITERACY_3	I believe that **feelings of worthlessness or guilt** is a symptom of depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Swannell and McDermott (2015)	
LITERACY_4	I believe that **fixating on past failures or self-blame** is a symptom of depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Swannell and McDermott (2015)	
LITERACY_5	I believe that **trouble thinking, concentrating, making decisions, or remembering things** is a symptom of depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree	Swannell and McDermott (2015)	

		5 = Slightly agree 6 = Agree 7 = Strongly agree		
LITERACY_6	I believe **that sleep disturbances, including sleeping too little or sleeping too much** is a symptom of depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Swannell and McDermott (2015)	
LITERACY_7	I believe that **tiredness or lack of energy** is a symptom of depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Swannell and McDermott (2015)	
LITERACY_8	I believe that **reduced appetite and weight loss** is a symptom of depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Swannell and McDermott (2015)	

LITERACY_9	I believe that **increased cravings for food and weight gain** is a symptom of depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Swannell and McDermott (2015)	
LITERACY_10	I believe that **slowed thinking, speaking, or body movements** is a symptom of depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Swannell and McDermott (2015)	
BLOCK: PHQ-9				
Randomize items PHQ_1 – PHQ_9				
	Before the conclusion of this survey, we have just a few questions remaining about how you have felt during these past two weeks.			
PHQ_1	Over the last two weeks, how often have you experienced **feeling little interest or pleasure in doing things?**	0 = Not at all 1 = Several days 2 = More than half the days 3 = Nearly every day	Kroenke and Spitzer (2002)	
PHQ_2	Over the last two weeks, how often have you experienced **feeling down, depressed, or hopeless?**	0 = Not at all 1 = Several days	Kroenke and Spitzer (2002)	

		2 = More than half the days 3 = Nearly every day		
PHQ_3	Over the last two weeks, how often have you experienced **trouble falling asleep or staying asleep, or sleeping too much?**	0 = Not at all 1 = Several days 2 = More than half the days 3 = Nearly every day	Kroenke and Spitzer (2002)	
PHQ_4	Over the last two weeks, how often have you experienced **feeling tired or having little energy?**	0 = Not at all 1 = Several days 2 = More than half the days 3 = Nearly every day	Kroenke and Spitzer (2002)	
PHQ_5	Over the last two weeks, how often have you experienced **poor appetite or overeating?**	0 = Not at all 1 = Several days 2 = More than half the days 3 = Nearly every day	Kroenke and Spitzer (2002)	
PHQ_6	Over the last two weeks, how often have you experienced **feeling bad about yourself... or that you are a failure or have let yourself or your family down?**	0 = Not at all 1 = Several days 2 = More than half the days 3 = Nearly every day	Kroenke and Spitzer (2002)	
PHQ_7	Over the last two weeks, how often have you experienced **trouble concentrating on things, such as reading the newspaper or watching television?**	0 = Not at all 1 = Several days 2 = More than half the days 3 = Nearly every day	Kroenke and Spitzer (2002)	
PHQ_8	Over the last two weeks, how often have you experienced **moving or speaking so slowly that other people could have noticed? Or the opposite -- being so fidgety**	0 = Not at all 1 = Several days 2 = More than half the days	Kroenke and Spitzer (2002)	

	or restless that you have been moving around a lot more than usual?	3 = Nearly every day		
PHQ_9	Over the last two weeks, how often have you experienced **thoughts that you would be better off dead, or of hurting yourself?**	0 = Not at all 1 = Several days 2 = More than half the days 3 = Nearly every day	Kroenke and Spitzer (2002)	If any answer other than '0', re-direct to At-Risk Debrief at conclusion of survey
DEMOGRAPHICS				
	To finish, we have just a few questions about you and your experiences with depression.			
DEP_EVEREXPERIENCE	Have you ever been diagnosed or treated for depression?	1. Yes, I have been diagnosed or treated for depression. 2. No, I have never been diagnosed with or treated for depression.		
DEP_THINKCURRNT	Do you think you are currently depressed?	0 = No 1 = Yes		
DEP_EVERSEEK	Have you ever sought treatment for depression from a professional or friends and family?	0 = No 1 = Yes		
DEP_KNOWSOMEONE	Have you personally known someone who has been depressed?	0 = No 1 = Yes		
ID_1_AGE	What is your age in years? (Whole numbers only, please)	Open-ended		
ID_2_Gender	How do you describe your gender identity?	1 = Male 2 = Female 3 = Transgender 4 = Do not identify as		

		male, female, or transgender		
ID_3_Hisp	Are you of Hispanic, Latino, or Spanish origin?	0 = No 1 = Yes		
ID_4_Race	Which one of these groups best represents you?	1 = White 2 = Black or African American 3 = American Indian or Alaska Native 4 = Asian 5 = Native Hawaiian or Pacific Islander 6 = Latinx/Hispanic 7 = Mixed race 8 = Race not listed		
ID_5_Education	What is the highest degree or level of education you have completed?	1 = Less than a high school degree 2 = High school graduate (or GED) 3 = Some college or technical school 4 = Associate's degree 5 = Bachelor's degree 6 = Graduate or professional degree		
ID_6_Employ	"What is your current employment status?"	1 = Employed full time (40 or more hours per week) 2 = Employed part time (up to 39 hours per week)		

		3 = Unemployed and currently looking for work 4 = Unemployed and not currently looking for work 5 = Student 6 = Self-employed 7 = Unable to work		
ID_7_Father_Education	What is the highest degree or level of school <u>your father or male guardian</u> has completed?	1. Less than high school 2. High school graduate (or equivalent, such as GED) 3. Some college 4. Associate degree 5. Bachelor's degree 6. Graduate or professional degree 7. I don't know 8. Not applicable – no father nor male guardian	Adapted from GFK	
ID_8_Mother_Education	What is the highest degree or level of school <u>your mother or female guardian</u> has completed?	1. Less than high school 2. High school graduate (or equivalent, such as GED) 3. Some college	Adapted from GFK	

		4. Associate degree 5. Bachelor's degree 6. Graduate or professional degree 7. I don't know 8. Not applicable – no mother nor female guardian		
ID_7_Income	"What is your annual household income?"	1 = Less than $20,000 2 = $20,000 to $34,999 3 = $35,000 to $49,999 4 = $50,000 to $74,999 5 = $75,000 to $99,999 6 = Over $100,000		
DEBRIEF_REGULAR	IRB Study # Title of Study: Pop Music and Mental Health Study Principal Investigator: Alex Kresovich Principal Investigator Phone number: 607-227-1690 Principal Investigator Email Address: akk28@live.unc.edu Thank you for your participation in this research study. For this study, it was important that I withhold some information from you about some aspects of the study. Now that your participation is completed, I will describe the withheld information to you,			

	why it was important and answer any of your questions. As a reminder: your responses will be completely de-identified and all data will only be reported in the aggregate so as to preserve participant confidentiality. Please note, the data is not anonymous as the investigator may have access to IP addresses temporarily and Qualtrics Panels hold information about the subjects. However, the investigator will destroy this data so as to make it impossible for the anyone to identify you from your responses in the stored data. **What you should know about this study** I'm interested in how young adults' attitudes toward seeking help for depression are impacted by their involvement with celebrity pop music artists who make music about dealing with mental health struggles (i.e., anxiety, depression, suicidal ideation). The study introduction does not mention asking about your depression-related attitudes and behavioral intentions in order to avoid biasing your responses. According to the CDC, suicide rates for teens and young adults in the U.S. (ages 15 – 24) are the highest since 2000. Ultimately, I hypothesize that celebrity musicians who discuss mental health are an extremely underutilized tool in public health interventions and could			

	be effectively used to encourage proactive mental health behaviors in populations where mental health stigma remains a significant barrier to seeking treatment. Your answers on the artists you reported being familiar with will help to inform future research. **If you have any questions** The main researcher conducting this study is Alex Kresovich, a graduate student in the Hussman School of Journalism and Media at the University of North Carolina – Chapel Hill. Please ask any questions you have now. If you have questions later, you may contact Alex Kresovich at akk28@live.unc.edu or at 607-227-1690. If you have any questions or concerns regarding your rights as a research participant in this study, you may contact the Institutional Review Board (IRB) Chairperson at 919-966-3113 or irb_questions@unc.edu. If you would like to talk to someone about depression or learn more about depression, please use one of the following avenues: the SAMHSA National Helpline (1-800-662-HELP [4357]), the National Suicide Prevention Lifeline (1-800-273-TALK [8255]), the Depression & Bipolar Support Alliance website (http://www.dbsalliance.org), or the American Foundation for Suicide Prevention website (http://www.afsp.org/).			

DEBRIEF_ATRISK	Many people feel depressed, but there are places you can get help. Depression is treatable if you are willing to seek help. Your responses suggest that you should consider talking to a family member or a mental health professional in your area. You could also contact the National Suicide Prevention lifeline (1-800-273-TALK [8255]), the SAMHSA National Helpline (1-800-662-HELP [4357]), the Depression & Bipolar Support Alliance website (http://www.dbsalliance.org), or the American Foundation for Suicide Prevention website (http://www.afsp.org/). Help is available. IRB Study # Title of Study: Popular Music & Mental Health Study Principal Investigator: Alex Kresovich Principal Investigator Phone number: 607-227-1690 Principal Investigator Email Address: akk28@live.unc.edu Thank you for your participation in this research study. For this study, it was important that I withhold some information from you about some aspects of the study. Now that your participation is completed, I will describe the withheld information to you, why it was important and answer any of your questions. As a reminder: your responses will be completely de-identified			

	and all data will only be reported in the aggregate so as to preserve participant confidentiality. Please note, the data is not anonymous as the investigator may have access to IP addresses temporarily and Qualtrics Panels hold information about the subjects. However, the investigator will destroy this data so as to make it impossible for the anyone to identify you from your responses in the stored data. **What you should know about this study** I'm interested in how young adults' attitudes toward seeking help for depression are impacted by their involvement with celebrity pop music artists who make music about dealing with mental health struggles (i.e., anxiety, depression, suicidal ideation). The study introduction does not mention asking about your depression-related attitudes and behavioral intentions in order to avoid biasing your responses. According to the CDC, suicide rates for teens and young adults in the U.S. (ages 15 – 24) are the highest since 2000. Ultimately, I hypothesize that celebrity musicians who discuss mental health are an extremely underutilized tool in public health interventions and could be effectively used to encourage proactive mental health behaviors in populations where mental health stigma remains a significant barrier to seeking			

	treatment. Your answers on the artists you reported being familiar with will help to inform future research. **If you have any questions** The main researcher conducting this study is Alex Kresovich, a graduate student in the Hussman School of Journalism and Media at the University of North Carolina – Chapel Hill. Please ask any questions you have now. If you have questions later, you may contact Alex Kresovich at akk28@live.unc.edu or at 607-227-1690. If you have any questions or concerns regarding your rights as a research participant in this study, you may contact the Institutional Review Board (IRB) Chairperson at 919-966-3113 or irb_questions@unc.edu. If you would like to talk to someone about depression or learn more about depression, please use one of the following avenues: the SAMHSA National Helpline (1-800-662-HELP [4357]), the National Suicide Prevention Lifeline (1-800-273-TALK [8255]), the Depression & Bipolar Support Alliance website (http://www.dbsalliance.org), or the American Foundation for Suicide Prevention website (http://www.afsp.org/).			

APPENDIX B: EXPERIMENTAL QUESTIONNAIRE INSTRUMENT

	Item	Response scale	Source	Notes
BLOCK: INTRO				
INTRO	Thank you for taking this important questionnaire on Instagram posts about mental health. This survey will take approximately 15-20 minutes to complete. Please click on the arrow to continue.			
BLOCK: SCREENER QUESTIONS				
ID_1_AGE	What is your age in years? (Whole numbers only, please)	Open-ended		Skip logic: If not between 16 and 24, skip to end of survey
SCREEN_2	Is English your first language?	1. Yes, English is my first language. 2. No, English is <u>not</u> my first language.		Skip logic: If no, skip to end of survey
SCREEN_3	Do you live in the United States?	1. Yes, I live in the United States. 2. No, I do <u>not</u> live in the United States.		Skip logic: If no, skip to end of survey
SCREEN_4	Have you ever been diagnosed or treated for depression?	1. Yes, I have been diagnosed or treated for depression. 2. No, I <u>have never</u> been diagnosed with or treated for depression.		Skip logic: If yes, skip to end of survey
BLOCK: PHQ-9 SCREENER				
	Before the beginning the questionnaire, we have just a			Skip logic: If summed

	few questions about how you have felt during these past two weeks. Over the last two weeks, how often have you experienced...			PHQ-9 score from 9 questions below is less than 5, skip to end of survey
PHQ_1	Little interest or pleasure in doing things	0 = Not at all 1 = Several days 2 = More than half the days 3 = Nearly every day	Kroenke and Spitzer (2002)	
PHQ_2	Feeling down, depressed, or hopeless	0 = Not at all 1 = Several days 2 = More than half the days 3 = Nearly every day	Kroenke and Spitzer (2002)	
PHQ_3	Trouble falling asleep or staying asleep, or sleeping too much	0 = Not at all 1 = Several days 2 = More than half the days 3 = Nearly every day	Kroenke and Spitzer (2002)	
PHQ_4	Feeling tired or having little energy	0 = Not at all 1 = Several days 2 = More than half the days 3 = Nearly every day	Kroenke and Spitzer (2002)	
PHQ_5	Poor appetite or overeating	0 = Not at all 1 = Several days 2 = More than half the days 3 = Nearly every day	Kroenke and Spitzer (2002)	
PHQ_6	Feeling bad about yourself… or that you are a failure or have let yourself or your family down	0 = Not at all 1 = Several days 2 = More than half the days 3 = Nearly every day	Kroenke and Spitzer (2002)	

PHQ_7	Trouble concentrating on things, such as reading the newspaper or watching television	0 = Not at all 1 = Several days 2 = More than half the days 3 = Nearly every day	Kroenke and Spitzer (2002)	
PHQ_8	Moving or speaking so slowly that other people could have noticed. Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual	0 = Not at all 1 = Several days 2 = More than half the days 3 = Nearly every day	Kroenke and Spitzer (2002)	
PHQ_9	Thoughts that you would be better off dead, or of hurting yourself	0 = Not at all 1 = Several days 2 = More than half the days 3 = Nearly every day	Kroenke and Spitzer (2002)	If any answer other than '0', re-direct to At-Risk Debrief at conclusion of survey
CONDITION ASSIGNMENT				
CONDITION_ASSIGN	Thank you for answering those questions and for agreeing to participate in this questionnaire! Please click on the right arrow to proceed to the next section.			Skip logic (evenly randomized to 13 groups): • 20% to Celeb-Mistarget D-PSA Images Condition • 20% to Celeb-

				Direct D-PSA Images Condition • 20% to Non-Celeb-Mistarget D-PSA Images Condition • 20% to Non-Celeb-Direct D-PSA Images Condition • 20% to No-PSA Control Condition
BLOCK: CELEB PSA CONDITIONS (MISTARGET AND DIRECT)				

Randomize Participant Stimuli Order				
D-PSA_PRESENTATION	You will now see four Instagram posts. You will presented with one message at a time and the 'Advance' arrow button **will not appear for 15 seconds**. Click the arrow to advance.			
	Reminder: After 15 seconds, the arrow to advance will appear. [Insert D-PSA 1]	[No page advancing for 15 seconds]		
	Reminder: After 15 seconds, the arrow to advance will appear. [Insert D-PSA 2]	[No page advancing for 15 seconds]		
	Reminder: After 15 seconds, the arrow to advance will appear. [Insert D-PSA 3]	[No page advancing for 15 seconds]		
	Reminder: After 15 seconds, the arrow to advance will appear. [Insert D-PSA 4]	[No page advancing for 15 seconds]		
BLOCK: NON-CELEB PSA CONDITIONS (MISTARGET AND DIRECT)				
D-PSA_PRESENTATION	You will now see four Instagram posts. You will presented with one message at a time and the 'Advance' arrow button **will not appear for 15 seconds**. Click the arrow to advance.			

	Reminder: After 15 seconds, the arrow to advance will appear. [Insert D-PSA 1]	[No page advancing for 15 seconds]		
	Reminder: After 15 seconds, the arrow to advance will appear. [Insert D-PSA 2]	[No page advancing for 15 seconds]		
	Reminder: After 15 seconds, the arrow to advance will appear. [Insert D-PSA 3]	[No page advancing for 15 seconds]		
	Reminder: After 15 seconds, the arrow to advance will appear. [Insert D-PSA 4]	[No page advancing for 15 seconds]		
BLOCK: NO PSA CONTROL CONDITION				
CONTROL_PROMPT	Please click the right arrow to proceed.			
BLOCK: DEPRESSION SUPPORT-SEEKING INTENTION				
	Now, ***think about the four messages you just viewed*** **(this omitted from control condition)**, and please rate your level of agreement with the following statements about **what you would do if you were personally experiencing depression.**			
SEEK_FRIEND	If I were experiencing depression, **I would seek help from a close friend**.	1 = Strongly disagree 2 = Disagree	Wilson et al. (2005)	

		3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree		
SEEK_PARTNER	If I were experiencing depression, **I would seek help from an intimate partner (e.g., boyfriend, girlfriend, husband, wife, etc.)**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Wilson et al. (2005)	
SEEK_PARENT	If I were experiencing depression, **I would seek help from a parent or guardian**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Wilson et al. (2005)	
SEEK_FAMILYMEMBER	If I were experiencing depression, **I would seek help from a family member (other relative/non-parent)**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree	Wilson et al. (2005)	

		5 = Slightly agree 6 = Agree 7 = Strongly agree		
SEEK_WEBSITE	If I were experiencing depression, **I would seek help from a mental health website**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Wilson et al. (2005)	
SEEK_PROFESSIONAL	If I were experiencing depression, **I would seek help from a mental health professional (e.g., psychologist, therapist, social worker, counselor)**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Wilson et al. (2005)	
SEEK_RELIGIOUS	If I were experiencing depression, **I would seek help from a Minister or religious leader (e.g., Priest, Rabbi, Chaplain, etc.)**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Wilson et al. (2005)	

SEEK_ANOTHER	If I were experiencing depression, **I would seek help from another not listed above (e.g., co-worker, roommate, etc.)**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Wilson et al. (2005)	
SEEK_NO_ONE	If I were experiencing depression, **I would not seek help from anyone**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Wilson et al. (2005)	
BLOCK: WISHFUL IDENTIFICATION				
Randomize Wishful_1 – Wishful_5				
	We now have a few questions about **your feelings toward the four @FindYourVoice spokespeople in the Instagram posts you just viewed**. Please rate your agreement with the following statements below.			
WISHFUL_1	The four @FindYourVoice spokespeople are the sort of people I want to be like myself.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree	Hoffner and Buchanan (2005)	

		4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree		
WISHFUL_2	Sometimes I wish I could be more like the four @FindYourVoice spokespeople.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Hoffner and Buchanan (2005)	
WISHFUL_3	I see the four @FindYourVoice spokespeople as role models.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Hoffner and Buchanan (2005)	
WISHFUL_4	I'd like to do the types of things that the four @FindYourVoice spokespeople do.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree	Hoffner and Buchanan (2005)	

		7 = Strongly agree		
WISHFUL_5_REV	I would NEVER want to act the way that the four @FindYourVoice spokespeople do. (Reversed)	7 = Strongly disagree 6 = Disagree 5 = Slightly disagree 4 = Neither agree nor disagree 3 = Slightly agree 2 = Agree 1 = Strongly agree	Hoffner and Buchanan (2005)	
BLOCK: COUNTERARGUING				
COUNTER_INTRO	**Now think about the four statements (captions)** from the *@FindYourVoice* spokespeople in the four Instagram posts you just viewed. **Rate your level of agreement with the following statements below about the four statements (captions) you viewed**.			
COUNTER_1	**I was criticizing the messages (captions)** from the @FindYourVoice spokespeople in the four Instagram posts I just viewed **while I was reading them**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	(Silvia, 2006)	
COUNTER_2	**While reading the messages (captions)** from the @FindYourVoice spokespeople in the four Instagram posts I just	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree	(Silvia, 2006)	

	viewed, **I was thinking of points that went against their arguments.**	4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree		
COUNTER_3	**While reading the statements (captions)** from the @FindYourVoice spokespeople in the four Instagram posts I just viewed, **I was feeling skeptical of their arguments.**	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	(Silvia, 2006)	
BLOCK: MALADAPTIVE SELF-RELIANCE BELIEFS				
Randomize items SELF_RELIANCE_1 – SELF_RELIANCE_3				
	Now please rate your level of agreement with the following statements about your attitudes toward mental health help-seeking.			
SELF_RELIANCE_1	I prefer to handle mental health problems, like feeling depressed, by myself as opposed to seeking the support of others.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Britt et al. (2011)	
SELF_RELIANCE_2	People should work out their own mental health problems. Reaching out to others for	1 = Strongly disagree 2 = Disagree	Britt et al. (2011)	

	support when depressed should be a last resort.	3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree		
SELF_RELIANCE_3	Depression tends to work itself out on its own.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Britt et al. (2011)	
BLOCK: PERCEIVED ANTICIPATED SUPPORT & SOCIAL NORMS				
Randomize items ANTICIPATED_SUPPORT_1 – ANTICIPATED_SUPPORT_5				
	Now please rate your level of agreement with the following statements about your attitudes toward speaking to someone close to you if you experienced depression.			
ANTICIPATED_SUPPORT_1	I could count on talking to someone close to me for support if I experienced depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Nambisan (2011)	

ANTICIPATED_SUPPORT_2	I could share my depression difficulties with someone close to me.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Nambisan (2011)	
ANTICIPATED_SUPPORT_3	I could get the emotional help and support I need from someone close to me if I were depressed.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Nambisan (2011)	
ANTICIPATED_SUPPORT_4	I could talk about my depression with someone close to me.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Nambisan (2011)	
ANTICIPATED_SUPPORT_5	I know someone close to me who is a real source of comfort.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree	Nambisan (2011)	

		4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree		
SOCIAL_NORMS_1	There is a person close to me who would think that I should reach out to them for support if I were experiencing depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Vogel et al. (2007)	
BLOCK: SUPPORT-SEEKING SELF-STIGMA				
Randomize items SELF_STIGMA_1 – SELF-STIGMA_5				
	For these questions, think about how you would feel about seeking support for depression from someone close to you.			
	For these questions, think about how you would feel about seeking support for depression from someone close to you.			
SELF_STIGMA_1	I would feel worse about myself if I could not handle being depressed on my own.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree	Vogel et al. (2006)	

		7 = Strongly agree		
SELF_STIGMA_2	If I was depressed and I opened up to someone close to me for support, I would be less satisfied with myself.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Vogel et al. (2006)	
SELF_STIGMA_3	My self-confidence would be threatened if I opened up to someone close to me for support if I was depressed.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Vogel et al. (2006)	
SELF_STIGMA_4	My self-esteem would INCREASE if I opened up to someone close to me for support if I was depressed. (Reversed)	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Vogel et al. (2006)	
BLOCK: SUPPORT-SEEKING PUBLIC STIGMA				
Randomize items PUBLIC_STIGMA_1 – PUBLIC_STIGMA_5				
	Now think about what you believe **others would think**			

	about you if you were to seek support for depression from someone close to you.			
PUBLIC_STIGMA_1	I believe seeking support for depression from someone close to you carries social stigma.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Komiya et al. (2000)	
PUBLIC_STIGMA_2	People generally believe it is a sign of personal weakness or inadequacy to seek support for depression from someone close to you.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Komiya et al. (2000)	
PUBLIC_STIGMA_3	People would see me in a less favorable way if they come to know that he/she has opened up to someone close to them for depression support.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Komiya et al. (2000)	
PUBLIC_STIGMA_4	It would be advisable for me to not tell people that I had	1 = Strongly disagree 2 = Disagree	Komiya et al. (2000)	

	opened up to someone close to me for support for depression.	3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree		
PUBLIC_STIGMA_5	People tend to dislike those who seek support for depression from others who are close to them.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Komiya et al. (2000)	
BLOCK: SUPPORT-SEEKING SELF-EFFICACY				
Randomize items SELF_EFFICACY_1 – SELF_EFFICACY_3				
	Now think about your ability to seek support for depression from someone close to you.			
SELF_EFFICACY_1	I could seek support for depression by opening up to someone close to me if I needed to.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Hernandez & Organista's (2013)	
SELF_EFFICACY_2	If I were experiencing depression, I am confident that I would be able to open up to	1 = Strongly disagree 2 = Disagree	Hernandez & Organista's (2013)	

	someone close to me for support.	3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree		
SELF_EFFICACY_3	If I were experiencing depression, I could find someone close to me that I would be able to open up to for support.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Hernandez & Organista's (2013)	
BLOCK: SUPPORT-SEEKING OUTCOME EXPECTATIONS				
Randomize items OUTCOME_EXPECT_1 – OUTCOME_EXPECT_5				
	Now think about your attitudes toward seeking help for depression from someone close to you (e.g., a close friend, a family member, an intimate partner, etc.).			
OUTCOME_EXPECT_1	Seeking support for depression from someone (e.g., close friend, family member, etc.) **will make a positive difference**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Siegel et al. (2015)	

OUTCOME_EXPECT_2	Seeking support for depression from someone close (e.g., close friend, family member, etc.) **will help a depressed person**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Siegel et al. (2015)	
OUTCOME_EXPECT_3	Seeking support for depression from someone close (e.g., close friend, family member, etc.) **will shorten the length of time that a person with depression will remain depressed**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Siegel et al. (2015)	
OUTCOME_EXPECT_4	Seeking support for depression from someone close (e.g., close friend, family member, etc.) **will be valuable to help recover from depression**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Siegel et al. (2015)	
OUTCOME_EXPECT_5	Seeking support for depression from someone close (e.g., close friend, family member, etc.) **helps a depressed person to get better**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree	Siegel et al. (2015)	

		4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree		
BLOCK: DEPRESSION ROMANTICIZING				
Randomize items ROMANTICIZE_1 – ROMANTICIZE_6				
	Now think about people your age who have experienced depression and use the sliders to answer the questions below.			
ROMANTICIZE_1	People my age with depression are…	-2 = Very uninteresting -1 = Somewhat uninteresting 0 = Neither uninteresting nor interesting 1 = Somewhat interesting 2 = Very interesting	Developed by researcher	
ROMANTICIZE_2	People my age with depression are…	-2 = Very shallow -1 = Somewhat shallow 0 = Neither shallow nor deep 1 = Somewhat deep 2 = Very deep	Developed by researcher	
ROMANTICIZE_3	People my age with depression are…	-2 = Very unimaginative -1 = Somewhat unimaginative 0 = Neither unimaginative nor imaginative 1 = Somewhat imaginative 2 = Very imaginative	Developed by researcher	

ROMANTICIZE_4	People my age with depression are…	-2 = Very dull -1 = Somewhat dull 0 = Neither dull nor fascinating 1 = Somewhat fascinating 2 = Very fascinating	Developed by researcher	
ROMANTICIZE_5	People my age with depression are…	-2 = Very uncreative -1 = Somewhat uncreative 0 = Neither uncreative nor creative 1 = Somewhat creative 2 = Very creative	Developed by researcher	
ROMANTICIZE_6	People my age with depression are…	-2 = Very boring -1 = Somewhat boring 0 = Neither boring nor captivating 1 = Somewhat captivating 2 = Very captivating	Developed by researcher	
BLOCK: DEPRESSION LITERACY				
Randomize items LITERACY_1 – LITERACY_10				
	We now would like to know more about your mental health attitudes and beliefs. Please rate your agreement about each of the following statements below about **symptoms of depression**.			
LITERACY_1	I believe that **feeling down or sad most of the time** is a symptom of depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree	Swannell and McDermott (2015)	

		4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree		
LITERACY_2	I believe that **little interest in doing pleasurable activities most of the time** is a symptom of depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Swannell and McDermott (2015)	
LITERACY_3	I believe that **feelings of worthlessness or guilt** is a symptom of depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Swannell and McDermott (2015)	
LITERACY_4	I believe that **fixating on past failures or self-blame** is a symptom of depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree	Swannell and McDermott (2015)	

		7 = Strongly agree		
LITERACY _5	I believe that **trouble thinking, concentrating, making decisions, or remembering things** is a symptom of depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Swannell and McDermott (2015)	
LITERACY _6	I believe **that sleep disturbances, including sleeping too little or sleeping too much** is a symptom of depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Swannell and McDermott (2015)	
LITERACY _7	I believe that **tiredness or lack of energy** is a symptom of depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Swannell and McDermott (2015)	
LITERACY _8	I believe that **reduced appetite and weight loss** is a symptom of depression.	1 = Strongly disagree 2 = Disagree	Swannell and McDermott (2015)	

		3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree		
LITERACY_9	I believe that **increased cravings for food and weight gain** is a symptom of depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Swannell and McDermott (2015)	
LITERACY_10	I believe that **slowed thinking, speaking, or body movements** is a symptom of depression.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Swannell and McDermott (2015)	
BLOCK: MUSIC LISTENING QUESTIONS				
	Please rate your level of agreement with the following statements about your music listening habits.			
FAV_SONGS_DEP	In the past two weeks, I've been listening to songs that mention feelings of depression	1 = Strongly disagree 2 = Disagree	Kam et al. (2014)	

	(i.e., sadness, hopelessness, feeling worthless).	3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree		
FAV_SONGS_HELP_SELF	My favorite songs help me to deal with my own mental health issues.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Kam et al. (2014)	
GENRE_POP	I enjoy listening to **Pop** music.	1 = Strongly dislike 2 = Dislike 3 = Slightly dislike 4 = Neither dislike nor like 5 = Slightly like 6 = Like 7 = Strongly like	Marshall and Naumann (2018)	
GENRE_RAP	I enjoy listening to **rap/hip-hop** music.	1 = Strongly dislike 2 = Dislike 3 = Slightly dislike 4 = Neither dislike nor like 5 = Slightly like 6 = Like 7 = Strongly like	Marshall and Naumann (2018)	
GENRE_ROCK	I enjoy listening to **rock/alternative** music.	1 = Strongly dislike	Marshall and	

		2 = Dislike 3 = Slightly dislike 4 = Neither dislike nor like 5 = Slightly like 6 = Like 7 = Strongly like	Naumann (2018)	
GENRE_RNB	I enjoy listening to **R&B/soul** music.	1 = Strongly dislike 2 = Dislike 3 = Slightly dislike 4 = Neither dislike nor like 5 = Slightly like 6 = Like 7 = Strongly like	Marshall and Naumann (2018)	
BLOCK: MUSIC MOOD QUESTIONS				
Randomize all 7 MOOD items.				
MOOD_Intro	Now please rate your level of agreement with the following statements about your reasons for listening to music.			
MOOD_Entertain	I like to listen to music when I can to make my atmosphere more pleasant, often as background music.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Saarikallio and Erkkilä (2007)	
MOOD_Revival	I listen to my favorite music to get new energy after a rough day.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree	Saarikallio and Erkkilä (2007)	

		5 = Slightly agree 6 = Agree 7 = Strongly agree		
MOOD_StrongSen	Music evokes strong emotional experiences in me.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Saarikallio and Erkkilä (2007)	
MOOD_Diversion	For me, listening to music is a way to forget about my worries.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Saarikallio and Erkkilä (2007)	
MOOD_Discharge	I listen to music to release complicated feelings.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Saarikallio and Erkkilä (2007)	

MOOD_MentalWork	Music helps me to understand different feelings in myself.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Saarikallio and Erkkilä (2007)	
MOOD_Solace	I listen to music to feel understood and comforted.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Saarikallio and Erkkilä (2007)	
BLOCK: INDIVIDUAL STIMULI QUESTIONS				
	Before we finish, we have a few questions on the messages you viewed from the ***@FindYourVoice*** campaign.			
	Please rate your level of agreement with the following statements about the four Instagram posts below. [Insert D-PSAs 1-4]			
MANIPCHECK_CELEBRITY	The @FindYourVoice spokespeople in the four Instagram posts **<u>are celebrities that I know of</u>**.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree	Developed by the researcher.	

		4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree		
MANIPSELF_REFERENT	The @FindYourVoice spokespeople in the four Instagram posts were encouraging me to seek depression support **for myself** if I was depressed.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Developed by the researcher.	
MANIPOTHER_REFERENT	The @FindYourVoice spokespeople in the four Instagram posts were encouraging me **to help someone else** seek depression support if I thought they might be depressed.	1 = Strongly disagree 2 = Disagree 3 = Slightly disagree 4 = Neither agree nor disagree 5 = Slightly agree 6 = Agree 7 = Strongly agree	Developed by the researcher.	
DEMOGRAPHICS				
	To finish, we have just a few questions about you and your experiences with depression.			
DEP_THINKCURRNT	Do you think you are currently depressed?	0 = No 1 = Yes		
DEP_KNOWSOMEONE	Have you personally known someone who has been depressed?	0 = No 1 = Yes		

ID_1_AGE	What is your age in years? (Whole numbers only, please)	Open-ended		
ID_2_Gender	How do you describe your gender identity?	1 = Male 2 = Female 3 = Transgender 4 = Do not identify as male, female, or transgender		
ID_3_Hisp	Are you of Hispanic, Latino, or Spanish origin?	0 = No 1 = Yes		
ID_4_Race	Which one of these groups best represents you?	1 = White 2 = Black or African American 3 = American Indian or Alaska Native 4 = Asian 5 = Native Hawaiian or Pacific Islander 6 = Latinx/Hispanic 7 = Mixed race 8 = Race not listed		
ID_5_Education	What is the highest degree or level of education you have completed?	1 = Less than a high school degree 2 = High school graduate (or GED) 3 = Some college or technical school 4 = Associate's degree 5 = Bachelor's degree 6 = Graduate or professional degree		

ID_6_Employ	"What is your current employment status?"	1 = Employed full time (40 or more hours per week) 2 = Employed part time (up to 39 hours per week) 3 = Unemployed and currently looking for work 4 = Unemployed and not currently looking for work 5 = Student 6 = Self-employed 7 = Unable to work		
ID_7_Father_Education	What is the highest degree or level of school <u>your father or male guardian</u> has completed?	1. Less than high school 2. High school graduate (or equivalent, such as GED) 3. Some college 4. Associate degree 5. Bachelor's degree 6. Master's degree 7. Doctorate degree 8. I don't know	Adapted from GFK	
ID_8_Mother_Education	What is the highest degree or level of school <u>your mother or female guardian</u> has completed?	1. Less than high school 2. High school graduate (or equivalent, such as GED) 3. Some college	Adapted from GFK	

		4. Associate degree 5. Bachelor's degree 6. Master's degree 7. Doctorate degree 8. I don't know		
ID_7_Income	"What is your annual household income?"	1 = Less than $20,000 2 = $20,000 to $34,999 3 = $35,000 to $49,999 4 = $50,000 to $74,999 5 = $75,000 to $99,999 6 = Over $100,000		
BLOCK: DEBRIEF				
DEBRIEF_REGULAR	**IRB Study #** **Title of Study**: Instagram Study **Principal Investigator**: Alex Kresovich **Principal Investigator Phone number**: 607-227-1690 **Principal Investigator Email Address**: akk28@live.unc.edu Thank you for your participation in this research study. For this study, it was important that I withhold some information from you about some aspects of the study. Now that your participation is completed, I will describe the withheld information to you, why it was important and answer any of your questions.			

	As a reminder: your responses were **completely anonymous** and the information obtained by the investigator is being recorded in such a manner that your identity **cannot** readily be ascertained, directly or through identifiers linked to you. **What you should know about this study** This experiment was designed to assess if celebrity status and referent language manipulations would help depression public service announcements be more effective in persuading at-risk U.S. youth to seek depression support from a close friend. This experiment consisted of five conditions: five between-subject experimental conditions: (a) celebrity pop music artist spokespeople D-PSAs with a mistargeted message (four messages); (b) celebrity pop music artist spokespeople D-PSAs with a direct message (four messages); (c) non-celebrity spokespeople D-PSAs with a mistargeted message (four messages); (d) non-celebrity spokespeople D-PSAs with a direct message (four messages); or (e) no treatment control group (no D-PSAs). The stimuli order was randomized to control for and ideally rule out any order effects. You were misled about the true			

	nature of the study because I'm interested in exploring if celebrity pop music artists who openly disclose depression difficulties would be effective role models in a mental health intervention aimed at at-risk youth and young adults. The goal of misleading you of the procedures was the intent to not skew the research results. By not truly knowing the purpose of the study, your responses were hopefully not influenced in any way that would affect the results. Specifically, this study created stimuli in the form of a fictional PSA campaign (@FindYourVoice) and you were either assigned to the condition with celebrity pop music artist spokespeople, non-celebrity spokespeople, or you did not see any messages at all (the control condition). After seeing the PSA messages (or no messages), I wanted to see if that at all influenced support-seeking intentions for depression support. The study introduction does not mention asking about your depression-related attitudes and behavioral intentions in order to avoid biasing your responses. According to the CDC, suicide rates for teens and young adults in the U.S. (ages 15 – 24) are the highest since 2000. Ultimately, I hypothesize that celebrity musicians who			

	discuss mental health are an extremely underutilized tool in public health interventions and could be effectively used to encourage proactive mental health behaviors in populations where mental health stigma remains a significant barrier to seeking treatment. Your answers will help to determine the potential effectiveness of this type of campaign. **If you have any questions** The main researcher conducting this study is Alex Kresovich, a graduate student in the Hussman School of Journalism and Media at the University of North Carolina – Chapel Hill. Please ask any questions you have now. If you have questions later, you may contact Alex Kresovich at akk28@live.unc.edu or at 607-227-1690. If you have any questions or concerns regarding your rights as a research participant in this study, you may contact the Institutional Review Board (IRB) Chairperson at 919-966-3113 or irb_questions@unc.edu. If you would like to talk to someone about depression or learn more about depression, please use one of the following avenues: the SAMHSA National Helpline (1-800-662-HELP [4357]), the National Suicide Prevention Lifeline (1-800-273-TALK [8255]), the Depression & Bipolar Support			

	Alliance website (http://www.dbsalliance.org), or the American Foundation for Suicide Prevention website (http://www.afsp.org/).			
DEBRIEF_ ATRISK	Many people feel depressed, but there are places you can get help. Depression is treatable if you are willing to seek help. Your responses suggest that you should consider talking to a family member or a mental health professional in your area. You could also contact the National Suicide Prevention lifeline (1-800-273-TALK [8255]), the SAMHSA National Helpline (1-800-662-HELP [4357]), the Depression & Bipolar Support Alliance website (http://www.dbsalliance.org), or the American Foundation for Suicide Prevention website (http://www.afsp.org/). Help is available. **IRB Study #** **Title of Study**: Instagram Study **Principal Investigator**: Alex Kresovich **Principal Investigator Phone number**: 607-227-1690 **Principal Investigator Email Address**: akk28@live.unc.edu Thank you for your participation in this research study. For this study, it was important that I withhold some information from you about some aspects of the study. Now that your participation is completed, I will describe the withheld information to you,			

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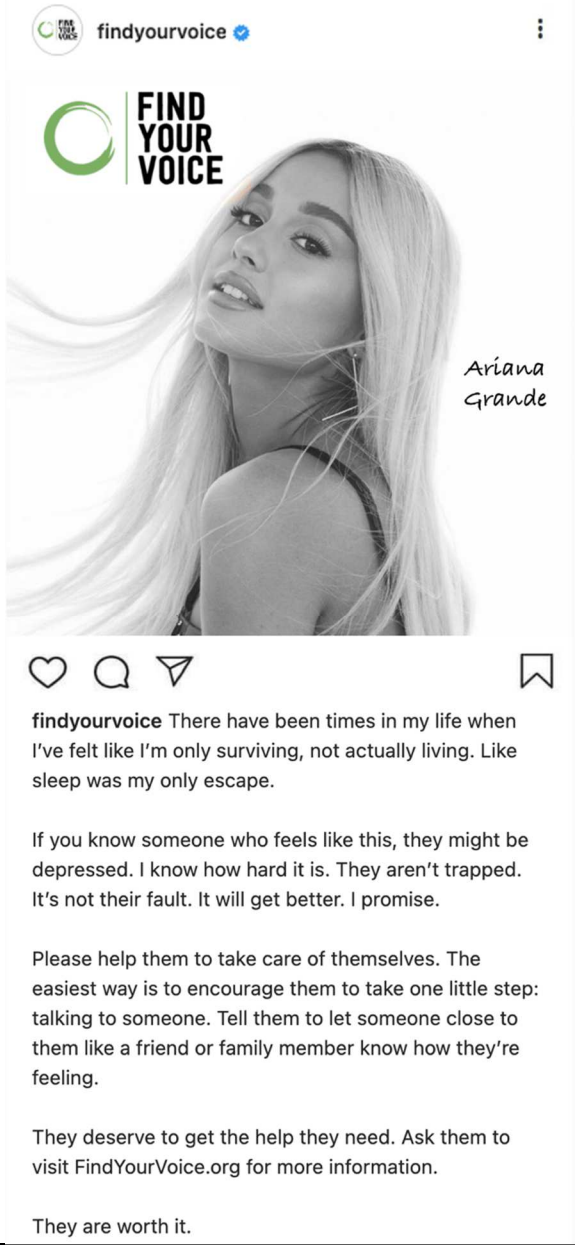
	You were misled about the true nature of the study because I'm interested in exploring if celebrity pop music artists who openly disclose depression difficulties would be effective role models in a mental health intervention aimed at at-risk youth and young adults. The goal of misleading you of the procedures was the intent to not skew the research results. By not truly knowing the purpose of the study, your responses were hopefully not influenced in any way that would affect the results. Specifically, this study created stimuli in the form of a fictional PSA campaign (@FindYourVoice) and you were either assigned to the condition with celebrity pop music artist spokespeople, non-celebrity spokespeople, or you did not see any messages at all (the control condition). After seeing the PSA messages (or no messages), I wanted to see if that at all influenced support-seeking intentions for depression support. The study introduction does not mention asking about your depression-related attitudes and behavioral intentions in order to avoid biasing your responses. According to the CDC, suicide rates for teens and young adults in the U.S. (ages 15 – 24) are the highest since 2000.			

	Ultimately, I hypothesize that celebrity musicians who discuss mental health are an extremely underutilized tool in public health interventions and could be effectively used to encourage proactive mental health behaviors in populations where mental health stigma remains a significant barrier to seeking treatment. Your answers will help to determine the potential effectiveness of this type of campaign. **If you have any questions** The main researcher conducting this study is Alex Kresovich, a graduate student in the Hussman School of Journalism and Media at the University of North Carolina – Chapel Hill. Please ask any questions you have now. If you have questions later, you may contact Alex Kresovich at akk28@live.unc.edu or at 607-227-1690. If you have any questions or concerns regarding your rights as a research participant in this study, you may contact the Institutional Review Board (IRB) Chairperson at 919-966-3113 or irb_questions@unc.edu. If you would like to talk to someone about depression or learn more about depression, please use one of the following avenues: the SAMHSA National Helpline (1-800-662-HELP [4357]), the National Suicide Prevention Lifeline (1-800-273-TALK [8255]), the			

	Depression & Bipolar Support Alliance website (http://www.dbsalliance.org), or the American Foundation for Suicide Prevention website (http://www.afsp.org/).			

APPENDIX C: EXPERIMENTAL STIMULI (D-PSA SOCIAL MEDIA POSTS)

Celebrity 1 (Mistargeted):	Celebrity 1 (Direct):



Non-Celebrity 1 (Mistargeted):

Non-Celebrity 1 (Direct):

Celebrity 2 (Mistargeted):

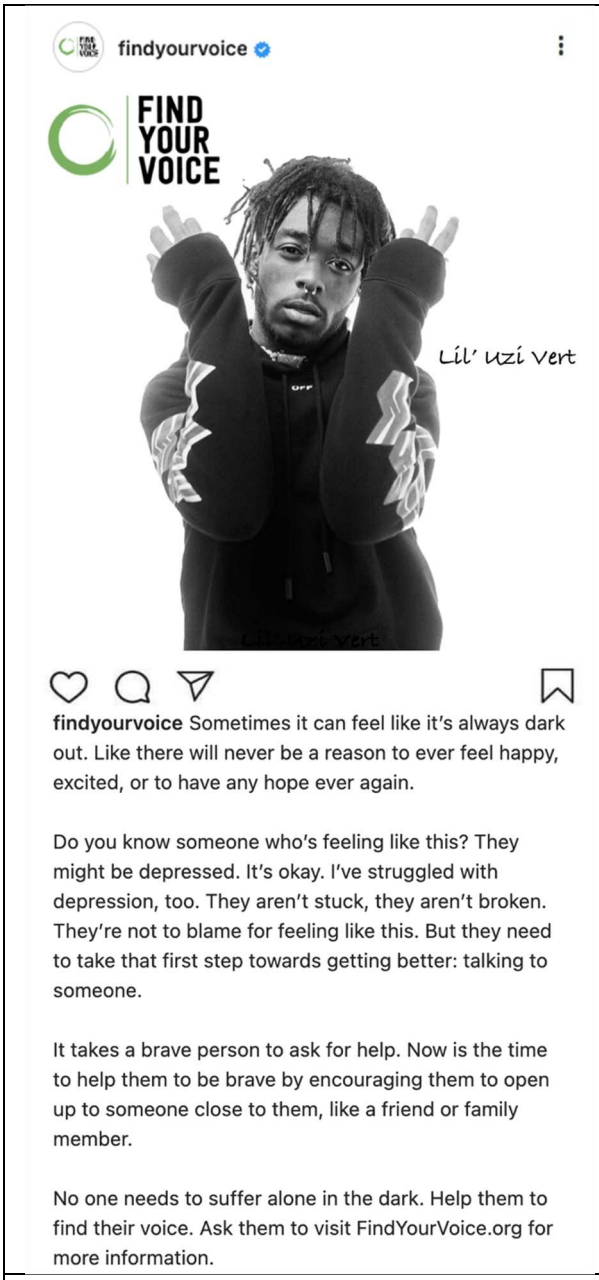
Celebrity 2 (Direct):

Non-Celebrity 2 (Mistargeted):

Non-Celebrity 2 (Direct):

Celebrity 3 (Mistargeted):

Celebrity 3 (Direct):

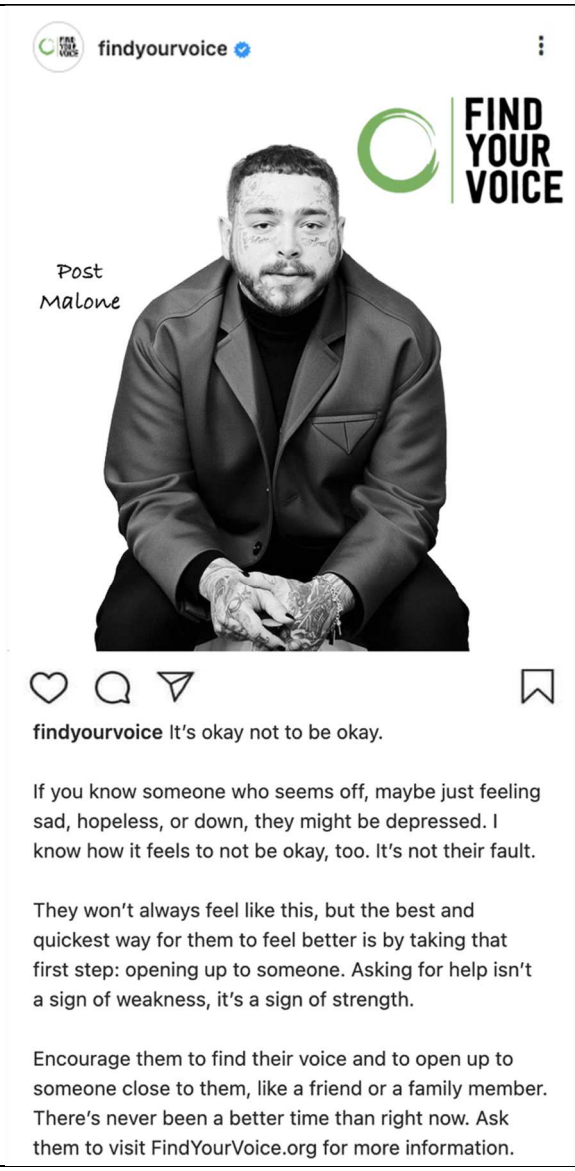


Non-Celebrity 3 (Mistargeted):

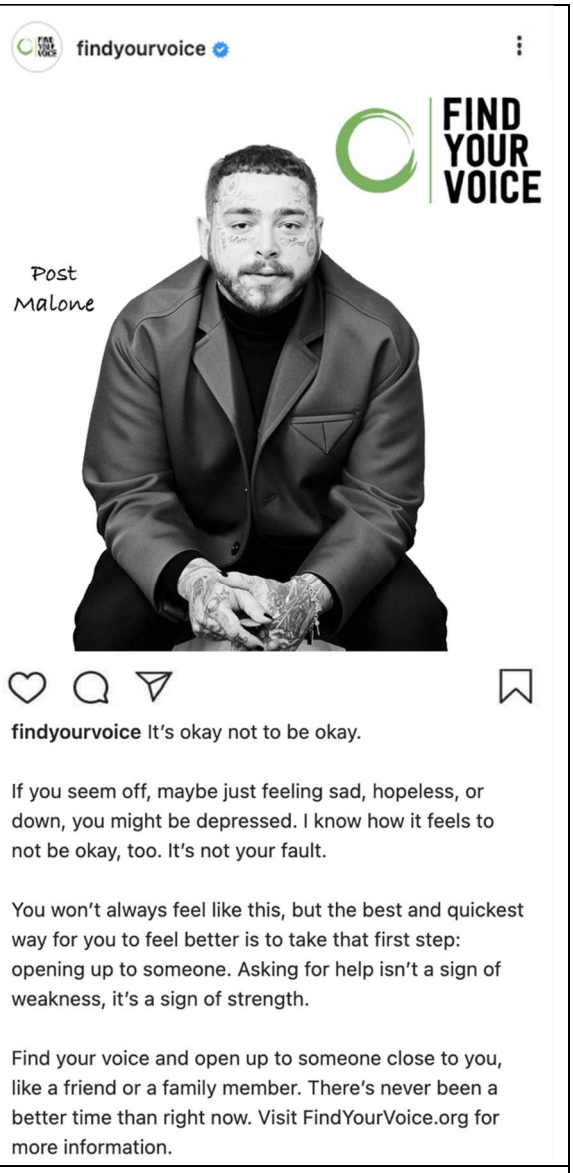
Non-Celebrity 3 (Direct):

Celebrity 4 (Mistargeted):

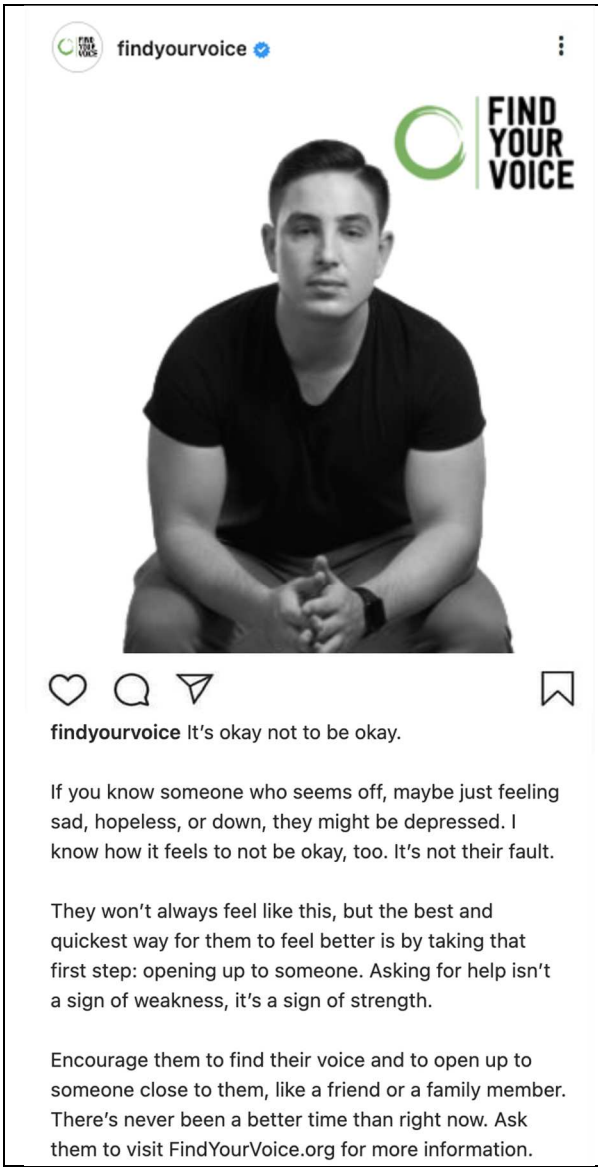
Celebrity 4 (Direct):

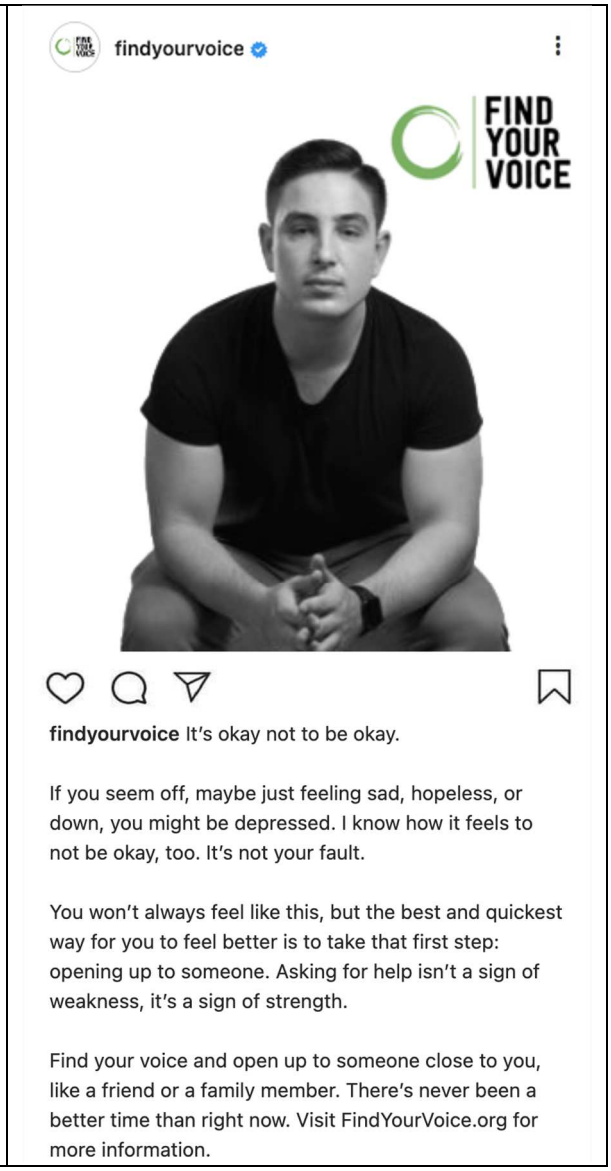


Non-Celebrity 4 (Mistargeted):



Non-Celebrity 4 (Direct):


findyourvoice
FIND YOUR VOICE
findyourvoice It's okay not to be okay.
If you know someone who seems off, maybe just feeling sad, hopeless, or down, they might be depressed. I know how it feels to not be okay, too. It's not their fault.
They won't always feel like this, but the best and quickest way for them to feel better is by taking that first step: opening up to someone. Asking for help isn't a sign of weakness, it's a sign of strength.
Encourage them to find their voice and to open up to someone close to them, like a friend or a family member. There's never been a better time than right now. Ask them to visit FindYourVoice.org for more information.


findyourvoice
FIND YOUR VOICE
findyourvoice It's okay not to be okay.
If you seem off, maybe just feeling sad, hopeless, or down, you might be depressed. I know how it feels to not be okay, too. It's not your fault.
You won't always feel like this, but the best and quickest way for you to feel better is to take that first step: opening up to someone. Asking for help isn't a sign of weakness, it's a sign of strength.
Find your voice and open up to someone close to you, like a friend or a family member. There's never been a better time than right now. Visit FindYourVoice.org for more information.

APPENDIX D: STIMULI MESSAGES (D-PSA MESSAGE CAPTIONS)

	Mistargeted	Direct
D-PSA Message 1 **Billie Eilish**	Do you know someone feeling down, sad, or hopeless? They might be depressed. I know how they feel, I've been where they are. It's not their fault they're depressed. They won't be depressed forever, but they need to take the first step toward recovery: talking to someone. It doesn't make them weak to ask for help, it doesn't. Please ask them to talk to someone close to them, like a friend or a family member. The longer they wait, the harder it gets. Ask them to visit FindYourVoice.org for more information. It doesn't matter where they start, it just matters that they start.	Are you feeling down, sad, stressed, or hopeless? You might be depressed. I know how you feel, I've been where you are. It's not your fault you're depressed. You won't be depressed forever, but you need to take the first step toward recovery: talking to someone. It doesn't make you weak to ask for help, it doesn't. Please talk to someone you're close to, like a friend or a family member. The longer you wait, the harder it gets. Visit FindYourVoice.org for more information. It doesn't matter where you start, it just matters that you start.
D-PSA Message 2 **Post Malone**	It's okay not to be okay. If you know someone who seems off, maybe just feeling sad, hopeless, or down, they might be depressed. I know how it feels to not be okay, too. It's not their fault. They won't always feel like this, but the best and quickest way for them to feel better is by taking that first step: opening up to someone. Asking for help isn't a sign of weakness, it's a sign of strength.	It's okay not to be okay. If you seem off, maybe just feeling sad, hopeless, or down, you might be depressed. I know how it feels to not be okay, too. It's not your fault. You won't always feel like this, but the best and quickest way for you to feel better is to take that first step: opening up to someone. Asking for help isn't a sign of weakness, it's a sign of strength.

	Encourage them to find their voice and to open up to someone close to them, like a friend or a family member. There's never been a better time than right now. Ask them to visit FindYourVoice.org for more information.	Find your voice and open up to someone close to you, like a friend or a family member. There's never been a better time than right now. Visit FindYourVoice.org for more information.
D-PSA Message 3 **Lil' Uzi Vert**	Sometimes it can feel like it's always dark out. Like there will never be a reason to ever feel happy, excited, or to have any hope ever again. Do you know someone who's feeling like this? They might be depressed. It's okay. I've struggled with depression, too. They aren't stuck, they aren't broken. They're not to blame for feeling like this. But they need to take that first step towards getting better: talking to someone. It takes a brave person to ask for help. Now is the time to help them to be brave by encouraging them to open up to someone close to them, like a friend or family member. No one needs to suffer alone in the dark. Help them to find their voice. Ask them to visit FindYourVoice.org for more information.	Sometimes it can feel like it's always dark out. Like there will never be a reason to ever feel happy, excited, or to have any hope ever again. Do you feel like this? You might be depressed. It's okay, I've struggled with depression, too. You aren't stuck, you aren't broken. You're not to blame for feeling like this. But you need to take that first step towards getting better: talking to someone. It takes a brave person to ask for help. Now is the time to be brave and to reach out to someone close to you, like a friend or family member. No one needs to suffer alone in the dark. Find your voice. Visit FindYourVoice.org for more information.
D-PSA Message 4 **Ariana Grande**	There have been times in my life when I've felt like I'm only surviving, not actually living. Like sleep was my only escape. If you know someone who feels like this, they might be depressed. I know how hard it is. They aren't trapped. It's not their fault. It will get better. I promise.	There have been times in my life when I've felt like I'm only surviving, not actually living. Like sleep was my only escape. If you feel like this, you might be depressed. I know how hard it is. You aren't trapped. It's not your fault. It will get better. I promise.

	Please help them to take care of themselves. The easiest way is to encourage them to take one little step: talking to someone. Tell them to let someone close to them like a friend or family member know how they're feeling. They deserve to get the help they need. Ask them to visit FindYourVoice.org for more information. They are worth it.	Please take care of yourself. The easiest way is to take one little step: talking to someone. Let someone close to you like a friend or family member know how you're feeling. You deserve to get the help you need. Visit FindYourVoice.org for more information. You are worth it.

REFERENCES

Adkins, D. E., Wang, V., Dupre, M. E., Van den Oord, E. J., & Elder Jr, G. H. (2009). Structure and stress: Trajectories of depressive symptoms across adolescence and young adulthood. *Social forces, 88*(1), 31-60.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (DSM-5®)*. American Psychiatric Pub.

American Psychological Association. (2019). *STRESS IN AMERICA™ 2019*. https://www.apa.org/news/press/releases/stress/2019/stress-america-2019.pdf

Andersen, S. M. (1990, 1990/06/01). The Inevitability of Future Suffering: The Role of Depressive Predictive Certainty in Depression. *Social Cognition, 8*(2), 203-228. https://doi.org/10.1521/soco.1990.8.2.203

Andersen, S. M., & Schwartz, A. H. (1992, 1992/09/01). Intolerance of Ambiguity and Depression: A Cognitive Vulnerability Factor Linked to Hopelessness. *Social Cognition, 10*(3), 271-298. https://doi.org/10.1521/soco.1992.10.3.271

Anglin, D. M., Alberti, P. M., Link, B. G., & Phelan, J. C. (2008, 2008/07/09). Racial Differences in Beliefs About the Effectiveness and Necessity of Mental Health Treatment. *American journal of community psychology, 42*(1), 17. https://doi.org/10.1007/s10464-008-9189-5

Anxiety & Depression Association of America. (2021). *Facts & Statistics*. Retrieved April 7, 2021 from https://adaa.org/understanding-anxiety/facts-statistics

Arah, O. A. (2008, 2008/02/26). The role of causal reasoning in understanding Simpson's paradox, Lord's paradox, and the suppression effect: covariate selection in the analysis of observational studies. *Emerging Themes in Epidemiology, 5*(1), 5. https://doi.org/10.1186/1742-7622-5-5

Armstrong, T., & Olatunji, B. O. (2012, 2012/12/01/). Eye tracking of attention in the affective disorders: A meta-analytic review and synthesis. *Clinical Psychology Review, 32*(8), 704-723. https://doi.org/https://doi.org/10.1016/j.cpr.2012.09.004

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American psychologist, 55*(5), 469.

AudienceNet. (2018). *Audio Monitor U.S. - 2018*. https://musicbiz.org/wp-content/uploads/2018/09/AM_US_2018_V5.pdf

Bandura, A. (2001). Social Cognitive Theory of Mass Communication. *Media Psychology, 3*(3), 265-299. https://doi.org/10.1207/S1532785XMEP0303_03

Barker, G., Olukoya, A., & Aggleton, P. (2005). Young people, social support and help-seeking. *International Journal of Adolescent Medicine and Health, 17*(4), 315-336. https://doi.org/doi:10.1515/IJAMH.2005.17.4.315

Barney, L. J., Griffiths, K. M., Jorm, A. F., & Christensen, H. (2006, 2006/01/01). Stigma about Depression and its Impact on Help-Seeking Intentions. *Australian & New Zealand Journal of Psychiatry, 40*(1), 51-54. https://doi.org/10.1080/j.1440-1614.2006.01741.x

Bayer, J. K., & Peay, M. Y. (1997, 1997/01/01). Predicting intentions to seek help from professional mental health services. *Australian and New Zealand Journal of Psychiatry, 31*(4), 504-513. https://doi.org/10.3109/00048679709065072

Beauchemin, M. (2019, 2019/02/25/). How Mental Health Became Pop Music's Unlikely Muse - Grace & Lightness. *Grace & Lightness*. https://graceandlightness.com/pop-music-mental-health

Beck, A. T. (1979). *Cognitive therapy of depression*. Guilford press.

Beck, C. S., Aubuchon, S. M., McKenna, T. P., Ruhl, S., & Simmons, N. (2014). Blurring personal health and public priorities: An analysis of celebrity health narratives in the public sphere. *Health Communication, 29*(3), 244-256.

Bennett, A., & Nikulinsky, L. (2019). Wellbeing, young people, and music scenes. In K. McFerran, P. Derrington, & S. Saarikallio (Eds.), *Handbook of Music, Adolescents, and Wellbeing*. Oxford University Press.

Boas, T. C., Christenson, D. P., & Glick, D. M. (2020). Recruiting large online samples in the United States and India: Facebook, Mechanical Turk, and Qualtrics. *Political Science Research and Methods, 8*(2), 232-250. https://doi.org/10.1017/psrm.2018.28

Bring Change 2 Mind. (2022). *Bring Change to Mind - Let's Talk Mental Health*. https://bringchange2mind.org

Britt, T. W., Bennett, E. A., Crabtree, M., Haugh, C., Oliver, K., McFadden, A., & Pury, C. L. S. (2011, 2011/01/01). The Theory of Planned Behavior and Reserve Component Veteran Treatment Seeking. *Military Psychology, 23*(1), 82-96. https://doi.org/10.1080/08995605.2011.534417

Brock, T. C., & Becker, L. A. (1965). Ineffectiveness of" overheard" counterpropaganda. *Journal of personality and social psychology, 2*(5), 654.

Brown, W. J. (2015). Examining Four Processes of Audience Involvement with Media Personae: Transportation, Parasocial Interaction, Identification, and Worship. *Communication Theory, 25*(3), 259-283. https://doi.org/10.1111/comt.12053

Brown, W. J., & Basil, M. D. (2010). Parasocial interaction and identification: Social change processes for effective health interventions. *Health Communication, 25*(6-7), 601-602.

Calear, A. L., Christensen, H., Freeman, A., Fenton, K., Busby Grant, J., van Spijker, B., & Donker, T. (2016, 2016/05/01). A systematic review of psychosocial suicide prevention interventions for youth. *European Child & Adolescent Psychiatry, 25*(5), 467-482. https://doi.org/10.1007/s00787-015-0783-4

Calhoun, A. J., & Gold, J. A. (2020). "I Feel Like I Know Them": the Positive Effect of Celebrity Self-disclosure of Mental Illness. *Academic Psychiatry, 44*(2), 237-241. https://doi.org/10.1007/s40596-020-01200-5

Cappella, J. N., Kim, H. S., & Albarracín, D. (2015, 2015/07/03). Selection and Transmission Processes for Information in the Emerging Media Environment: Psychological Motives and Message Characteristics. *Media Psychology, 18*(3), 396-424. https://doi.org/10.1080/15213269.2014.941112

Carver, C. S., & White, T. L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: the BIS/BAS scales. *Journal of personality and social psychology, 67*(2), 319.

Casey, B. J., & Caudle, K. (2013). The teenage brain: Self control. *Current directions in psychological science, 22*(2), 82-87.

Cauce, A. M., Domenech-Rodríguez, M., Paradise, M., Cochran, B. N., Shea, J. M., Srebnik, D., & Baydar, N. (2002). Cultural and contextual influences in mental health help seeking: A focus on ethnic minority youth. *Journal of Consulting and Clinical Psychology, 70*(1), 44-55. https://doi.org/10.1037/0022-006X.70.1.44

Caulfield, K. (2020, 2020/01/09/). 'Hollywood's Bleeding' Is Nielsen Music/MRC Data's Top Album of 2019, 'Old Town Road' Most-Streamed Song. *Billboard*. https://www.billboard.com/articles/business/chart-beat/8547651/post-malone-hollywoods-bleeding-nielsen-music-mrc-data-top-album-2019?utm_campaign=2020-01-09&utm_source=Sailthru&utm_medium=email&utm_term=biz_breakingnews

Chan, A. (2021). Musicians Who Have Talked About Their Mental Health. *Billboard*. https://www.billboard.com/music/music-news/musicians-mental-health-struggles-9367924

Chan, K., & Zhang, T. (2019, 2019/12/01). An exploratory study on perception of celebrity endorsement in public services advertising. *International Review on Public and Nonprofit Marketing, 16*(2), 195-209. https://doi.org/10.1007/s12208-019-00225-3

Chang, C. (2011, 2011/03/01). Enhancing Self-Referencing to Health Messages [https://doi.org/10.1111/j.1745-6606.2010.01196.x]. *Journal of Consumer Affairs, 45*(1), 147-164. https://doi.org/https://doi.org/10.1111/j.1745-6606.2010.01196.x

Cheong-Clinch, C. (2019). My iPod, YouTube, and our playlists: Connections made in and beyond therapy. In *Handbook of Music, Adolescents, and Wellbeing*. Oxford University Press. https://doi.org/10.1093/oso/9780198808992.003.0021

Cheong-Clinch, C., & McFerran, K. S. (2016). Musical diaries: Examining the daily preferred music listening of Australian young people with mental illness. *Journal of Applied Youth Studies, 1*(2), 77.

Christensen, H., Leach, L. S., Barney, L., Mackinnon, A. J., & Griffiths, K. M. (2006, 2006/04/05). The effect of web based depression interventions on self reported help seeking: randomised controlled trial [ISRCTN77824516]. *BMC psychiatry, 6*(1), 13. https://doi.org/10.1186/1471-244X-6-13

Clark, D. A., & Beck, A. T. (2010, 2010/09/01/). Cognitive theory and therapy of anxiety and depression: Convergence with neurobiological findings. *Trends in Cognitive Sciences, 14*(9), 418-424. https://doi.org/https://doi.org/10.1016/j.tics.2010.06.007

Clarke, E., DeNora, T., & Vuoskoski, J. (2015). Music, empathy and cultural understanding. *Physics of life reviews, 15*, 61-88.

Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., Morgan, C., Rüsch, N., Brown, J. S. L., & Thornicroft, G. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine, 45*(1), 11-27. https://doi.org/10.1017/S0033291714000129

Cohen, J. (2001). Defining identification: A theoretical look at the identification of audiences with media characters. *Mass communication & society, 4*(3), 245-264.

Copeland, W. E., Adair, C. E., Smetanin, P., Stiff, D., Briante, C., Colman, I., Fergusson, D., Horwood, J., Poulton, R., Jane Costello, E., & Angold, A. (2013, 2013/07/01). Diagnostic transitions from childhood to adolescence to early adulthood [https://doi.org/10.1111/jcpp.12062]. *Journal of Child Psychology and Psychiatry, 54*(7), 791-799. https://doi.org/https://doi.org/10.1111/jcpp.12062

Corrigan, P. W., Kundert, C., & Laique, A. (2021, 2021/07/16). The Impact of Contact and Fame on Changing the Public Stigma of Mental Illness. *Community Mental Health Journal*. https://doi.org/10.1007/s10597-021-00870-1

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *u. Chi. Legal f.*, 139.

Crockett, L. J. (1997). Cultural, historical, and subcultural contexts of adolescence: Implications for health and development. *Health risks and developmental transitions during adolescence, 23*.

Cruz, R. E., Leonhardt, J. M., & Pezzuti, T. (2017, 2017/08/01/). Second Person Pronouns Enhance Consumer Involvement and Brand Attitude. *Journal of Interactive Marketing, 39*, 104-116. https://doi.org/https://doi.org/10.1016/j.intmar.2017.05.001

Curtin, S. C., & Hedegaard, H. (2021). Provisional numbers and rates of suicide by month and demographic characteristics: United States, 2020.

DeNora, T. (1999). Music as a technology of the self. *Poetics, 27*(1), 31-56.

Desai, S., & Alva, S. (1998). Maternal education and child health: Is there a strong causal relationship? *Demography, 35*(1), 71-81. https://doi.org/10.2307/3004028

Dillman Carpentier, F. R., & Parrott, M. S. (2016). Young adults' information seeking following celebrity suicide: Considering involvement with the celebrity and emotional distress in health communication strategies. *Health Communication, 31*(11), 1334-1344. https://www.tandfonline.com/doi/full/10.1080/10410236.2015.1056329

Doyle, J. A., & Paludi, M. A. (1991). *Sex and Gender the Human Experience*. WCB/McGraw-Hill.

Dozois, D. J., & Dobson, K. S. (2001). Information processing and cognitive organization in unipolar depression: specificity and comorbidity issues. *Journal of abnormal psychology, 110*(2), 236.

Dunham, K. (2004). Young adults' support strategies when peers disclose suicidal intent. *Suicide and Life-Threatening Behavior, 34*(1), 56-65.

Dunn, E. R. (2017). Blue is the New Black: How Popular Culture is Romanticizing Mental Illness.

DuPont-Reyes, M. J., Villatoro, A. P., Phelan, J. C., Painter, K., & Link, B. G. (2020). Adolescent views of mental illness stigma: An intersectional lens. *American Journal of Orthopsychiatry, 90*(2), 201.

Eaton, L. (2009). Celebrities help promote campaign to destigmatise mental illness. *BMJ, 338*, b309. https://doi.org/10.1136/bmj.b309

Eisenberg, D., Downs, M. F., Golberstein, E., & Zivin, K. (2009). Stigma and help seeking for mental health among college students. *Medical Care Research and Review, 66*(5), 522-541.

Elvers, P. (2016, 2016-January-20). Songs for the Ego: Theorizing Musical Self-Enhancement [Hypothesis and Theory]. *Frontiers in Psychology, 7*(2). https://doi.org/10.3389/fpsyg.2016.00002

Erikson, E. H. (1968). Identity youth and crisis, New York (WW Norton) 1968.

Farrer, L., Leach, L., Griffiths, K. M., Christensen, H., & Jorm, A. F. (2008, 2008/04/20). Age differences in mental health literacy. *BMC Public Health, 8*(1), 125. https://doi.org/10.1186/1471-2458-8-125

Ferrari, A. (2016, 2016/10/01). Using Celebrities in Abnormal Psychology as Teaching Tools to Decrease Stigma and Increase Help Seeking. *Teaching of Psychology, 43*(4), 329-333. https://doi.org/10.1177/0098628316662765

Ferrari, A. (2020, 2021/07/01). The Persistence of Stigma Reduction After Teaching Abnormal Psychology Using Celebrity Narratives. *Teaching of Psychology, 48*(3), 191-196. https://doi.org/10.1177/0098628320979886

Francis, D. B. (2018). Young black men's information seeking following celebrity depression disclosure: Implications for mental health communication. *Journal of health communication, 23*(7), 687-694.

Franssen, G. (2019, 2020/02/01). The celebritization of self-care: The celebrity health narrative of Demi Lovato and the sickscape of mental illness. *European Journal of Cultural Studies, 23*(1), 89-111. https://doi.org/10.1177/1367549419861636

Friedlander, J. P. (2020). *MID-YEAR 2020 RIAA REVENUE STATISTICS*. https://www.riaa.com/wp-content/uploads/2020/09/Mid-Year-2020-RIAA-Revenue-Statistics.pdf

Frith, S. (1978). Youth and music. In S. Frith (Ed.), *Taking popular music seriously: selected essays* (pp. 1-30). Routledge.

Frith, S. (1987). Towards an aesthetic of popular music. *Music and society: The politics of composition, performance and reception*, 133-149.

Frith, S. (1998). *Performing rites: On the value of popular music*. Harvard University Press.

Gabrielsson, A. (2010). Strong Experiences with Music. In *Handbook of Music and Emotion: Theory, Research, Applications*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199230143.003.0020

Gabrielsson, A., & Wik, S. L. (2003). Strong experiences related to music: adescriptive system. *Musicae Scientiae, 7*(2), 157-217.

Garland, A. F., & Zigler, E. F. (1994, 1994/10/01). PSYCHOLOGICAL CORRELATES OF HELP-SEEKING ATTITUDES AMONG CHILDREN AND ADOLESCENTS [https://doi.org/10.1037/h0079573]. *American Journal of Orthopsychiatry, 64*(4), 586-593. https://doi.org/https://doi.org/10.1037/h0079573

Goldston, D. B., Daniel, S. S., Erkanli, A., Heilbron, N., Doyle, O., Weller, B., Sapyta, J., Mayfield, A., & Faulkner, M. (2015). Suicide attempts in a longitudinal sample of adolescents followed through adulthood: Evidence of escalation. *Journal of Consulting and Clinical Psychology, 83*(2), 253-264. https://doi.org/10.1037/a0038657

Greene, J. (2018). *Are We Having Fun Yet? On Pop's Morose New Normal*. https://pitchfork.com/features/overtones/are-we-having-fun-yet-on-pops-morose-new-normal

Griffiths, K. M., Crisp, D. A., Barney, L., & Reid, R. (2011, 2011/12/15). Seeking help for depression from family and friends: A qualitative analysis of perceived advantages and disadvantages. *BMC psychiatry, 11*(1), 196. https://doi.org/10.1186/1471-244X-11-196

Groarke, J. M., & Hogan, M. J. (2015, 2016/07/01). Enhancing wellbeing: An emerging model of the adaptive functions of music listening. *Psychology of music, 44*(4), 769-791. https://doi.org/10.1177/0305735615591844

Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: a systematic review. *BMC psychiatry, 10*(1), 113.

Halle, T. G. (2003). Emotional development and well-being. In *Well-being: Positive development across the life course.* (pp. 125-138). Lawrence Erlbaum Associates Publishers.

Hargrove, T. W., Halpern, C. T., Gaydosh, L., Hussey, J. M., Whitsel, E. A., Dole, N., Hummer, R. A., & Harris, K. M. (2020, 2020/08/01). Race/Ethnicity, Gender, and Trajectories of Depressive Symptoms Across Early- and Mid-Life Among the Add Health Cohort. *Journal of Racial and Ethnic Health Disparities, 7*(4), 619-629. https://doi.org/10.1007/s40615-019-00692-8

Hayes, A. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. The Guilford Press.

Hemming, J. (2013). Is there a peak in popular music preference at a certain song-specific age? A replication of Holbrook & Schindler's 1989 study. *Musicae Scientiae, 17*(3), 293-304.

Hernan, A., Philpot, B., Edmonds, A., & Reddy, P. (2010, 2010/06/01). Healthy minds for country youth: Help-seeking for depression among rural adolescents [https://doi.org/10.1111/j.1440-1584.2010.01136.x]. *Australian Journal of Rural Health, 18*(3), 118-124. https://doi.org/https://doi.org/10.1111/j.1440-1584.2010.01136.x

Hernandez, M. Y., & Organista, K. C. (2013). Entertainment–education? A fotonovela? A new strategy to improve depression literacy and help-seeking behaviors in at-risk immigrant Latinas. *American journal of community psychology, 52*(3-4), 224-235.

Hoffman, S. J., & Tan, C. (2015, 2015/01/19). Biological, psychological and social processes that explain celebrities' influence on patients' health-related behaviors. *Archives of Public Health, 73*(1), 3. https://doi.org/10.1186/2049-3258-73-3

Hoffner, C. (1996, 1996/06/01). Children's wishful identification and parasocial interaction with favorite television characters. *Journal of Broadcasting & Electronic Media, 40*(3), 389-402. https://doi.org/10.1080/08838159609364360

Hoffner, C., & Buchanan, M. (2005, 2005/11/01). Young Adults' Wishful Identification With Television Characters: The Role of Perceived Similarity and Character Attributes. *Media Psychology, 7*(4), 325-351. https://doi.org/10.1207/S1532785XMEP0704_2

Hoffner, C. A. (2018). Responses to Carrie Fisher's Mental Health Disclosures: Identification, Humor, and Perceived Influence on Public Stigma [Article]. *Conference Papers -- International Communication Association*, 1-33.

Hoffner, C. A. (2019). Responses to Celebrity Mental Health Disclosures: Parasocial Relations, Evaluations, and Perceived Media Influence. In *Communicating Mental Health: History, Concepts, & Perspectives*. Lexington Books.

Hoffner, C. A., & Cohen, E. L. (2018, 2018/12/02/). Mental health-related outcomes of Robin Williams' death: The role of parasocial relations and media exposure in stigma, help-seeking, and outreach. *Health Communication, 33*(12), 1573-1582. https://doi.org/10.1080/10410236.2017.1384348

Holbrook, M. B., & Schindler, R. M. (1989). Some exploratory findings on the development of musical tastes. *Journal of consumer research, 16*(1), 119-124.

Hui, A., Wong, P. W.-C., & Fu, K.-W. (2015, 2015/03/18). Evaluation of an Online Campaign for Promoting Help-Seeking Attitudes for Depression Using a Facebook Advertisement: An Online Randomized Controlled Experiment. *JMIR Mental Health, 2*(1), e5. https://doi.org/10.2196/mental.3649

Hunt, J., & Eisenberg, D. (2010, 2010/01/01/). Mental Health Problems and Help-Seeking Behavior Among College Students. *Journal of Adolescent Health, 46*(1), 3-10. https://doi.org/https://doi.org/10.1016/j.jadohealth.2009.08.008

Ibrahim, N., Amit, N., Shahar, S., Wee, L.-H., Ismail, R., Khairuddin, R., Siau, C. S., & Safien, A. M. (2019, 2019/06/13). Do depression literacy, mental illness beliefs and stigma influence mental health help-seeking attitude? A cross-sectional study of secondary

school and university students from B40 households in Malaysia. *BMC Public Health, 19*(4), 544. https://doi.org/10.1186/s12889-019-6862-6

IFPI. (2020). *Music Listening 2019*. https://www.ifpi.org/wp-content/uploads/2020/07/Music-Listening-2019-1.pdf

Ipsos. (2019). *2019 Song of the Summer.* https://www.ipsos.com/sites/default/files/ct/news/documents/2019-06/summer-song-topline-2019-06-17-v1.pdf

Jadayel, R., Medlej, K., & Jadayel, J. J. (2017). MENTAL DISORDERS: A GLAMOROUS ATTRACTION ON SOCIAL MEDIA? *Journal of Teaching and Education, 7*.

Joho, J. (2021). How being sad, depressed, and anxious online became trendy. *Mashable*. https://mashable.com/article/anxiety-depression-social-media-sad-online

Kam, J. A., Wang, N., & Harvey, J. (2014). Latino and European American early adolescents' exposure to music with substance-use references: Examining parent–child communication as a moderator. *Journal of Adolescence, 37*(2), 185-196.

Katz, M. (2010). *Capturing sound: how technology has changed music*. Univ of California Press.

Kelly, C. M., Jorm, A. F., & Wright, A. (2007). Improving mental health literacy as a strategy to facilitate early intervention for mental disorders [https://doi.org/10.5694/j.1326-5377.2007.tb01332.x]. *Medical Journal of Australia, 187*(S7), S26-S30. https://doi.org/https://doi.org/10.5694/j.1326-5377.2007.tb01332.x

Kelman, H. C. (1958). Compliance, identification, and internalization three processes of attitude change. *Journal of conflict resolution, 2*(1), 51-60.

Kelman, H. C. (1961). Three processes of social influence. *Public Opinion Quarterly, 25*, 57-78.

Kenny, R., Dooley, B., & Fitzgerald, A. (2014, 2016/06/01). Developing mental health mobile apps: Exploring adolescents' perspectives. *Health Informatics Journal, 22*(2), 265-275. https://doi.org/10.1177/1460458214555041

Kim, H. K. (2016, 2016/10/01). Efficacy of value-expressive messages at improving attitudes toward psychiatric help seeking for depression treatment among young adults. *Journal of Communication in Healthcare, 9*(4), 288-297. https://doi.org/10.1080/17538068.2016.1248589

Kim, J. E., Saw, A., & Zane, N. (2015). *The influence of psychological symptoms on mental health literacy of college students* [doi:10.1037/ort0000074].

Kim, M., Shi, R., & Cappella, J. N. (2016, 2016/10/02). Effect of Character–Audience Similarity on the Perceived Effectiveness of Antismoking PSAs via Engagement. *Health Communication, 31*(10), 1193-1204. https://doi.org/10.1080/10410236.2015.1048421

King, K. A., Strunk, C. M., & Sorter, M. T. (2011, 2011/09/01). Preliminary Effectiveness of Surviving the Teens® Suicide Prevention and Depression Awareness Program on Adolescents' Suicidality and Self-Efficacy in Performing Help-Seeking Behaviors [https://doi.org/10.1111/j.1746-1561.2011.00630.x]. *Journal of School Health, 81*(9), 581-590. https://doi.org/https://doi.org/10.1111/j.1746-1561.2011.00630.x

Kisely, S., Campbell, L. A., Cartwright, J., Bowes, M. J., & Jackson, L. (2011). Factors associated with not seeking professional help or disclosing intent prior to suicide: A study of medical examiners' records in Nova Scotia. *The Canadian Journal of Psychiatry, 56*(7), 436-440.

Klimes-Dougan, B., Wright, N., & Klingbeil, D. A. (2016, 2016-July-15). Suicide Prevention Public Service Announcements Impact Help-Seeking Attitudes: The Message Makes a Difference [Original Research]. *Frontiers in psychiatry, 7*(124). https://doi.org/10.3389/fpsyt.2016.00124

Komiya, N., Good, G. E., & Sherrod, N. B. (2000). Emotional openness as a predictor of college students' attitudes toward seeking psychological help. *Journal of Counseling Psychology, 47*(1), 138.

Kotarba, J. A. (2017). *Understanding society through popular music*. Routledge.

Kresovich, A. (2020). The Influence of Pop Songs Referencing Anxiety, Depression, and Suicidal Ideation on College Students' Mental Health Empathy, Stigma, and Behavioral Intentions. *Health Communication*, 1-11. https://doi.org/10.1080/10410236.2020.1859724

Kresovich, A., & Noar, S. M. (2020). The Power of Celebrity Health Events: Meta-analysis of the Relationship between Audience Involvement and Behavioral Intentions. *Journal of health communication, 25*(6), 501-513. https://doi.org/10.1080/10810730.2020.1818148

Kresovich, A., Reffner Collins, M. K., Riffe, D., & Carpentier, F. R. D. (2021). A Content Analysis of Mental Health Discourse in Popular Rap Music. *JAMA Pediatrics, 175*(3), 286-292. https://doi.org/10.1001/jamapediatrics.2020.5155

Kroenke, K., & Spitzer, R. L. (2002). The PHQ-9: A New Depression Diagnostic and Severity Measure. *Psychiatric Annals, 32*(9), 509-515. https://doi.org/doi:10.3928/0048-5713-20020901-06

Krueger, J. W. (2011). Doing things with music. *Phenomenology and the Cognitive Sciences, 10*(1), 1-22.

Kupfer, D. J., Frank, E., & Wamhoff, J. (1996). Mood disorders: Update on prevention of recurrence.

Labouliere, C. D., Kleinman, M., & Gould, M. S. (2015). When self-reliance is not safe: associations between reduced help-seeking and subsequent mental health symptoms in suicidal adolescents. *International journal of environmental research and public health, 12*(4), 3741-3755.

Lam, L. T. (2014, 2014/09/25). Mental health literacy and mental health status in adolescents: a population-based survey. *Child and Adolescent Psychiatry and Mental Health, 8*(1), 26. https://doi.org/10.1186/1753-2000-8-26

Lamont, A. (2011, 2011/07/01). University students' strong experiences of music: Pleasure, engagement, and meaning. *Musicae Scientiae, 15*(2), 229-249. https://doi.org/10.1177/1029864911403368

Lamont, A., & Hargreaves, D. (2019). Musical preference and social identity in adolescence. In (pp. 109-118).

Laursen, B., & Hartl, A. C. (2013, 2013/12/01/). Understanding loneliness during adolescence: Developmental changes that increase the risk of perceived social isolation. *Journal of Adolescence, 36*(6), 1261-1268. https://doi.org/https://doi.org/10.1016/j.adolescence.2013.06.003

Le, L. K.-D., Sanci, L., Chatterton, M. L., Kauer, S., Buhagiar, K., & Mihalopoulos, C. (2019, 2019/07/22). The Cost-Effectiveness of an Internet Intervention to Facilitate Mental Health Help-Seeking by Young Adults: Randomized Controlled Trial. *J Med Internet Res, 21*(7), e13065. https://doi.org/10.2196/13065

Lee, J. H., Bhattacharya, A., Antony, R., Santero, N., & Le, A. (2021). Finding Home": Understanding how music supports listeners' mental health through a case study of BTS. Proc. of the 22 nd Int. Society for Music Information Retrieval Conf,

Lee, Y.-H., Yuan, C. W., & Wohn, D. Y. (2020). How Video Streamers' Mental Health Disclosures Affect Viewers' Risk Perceptions. *Health Communication*, 1-11. https://doi.org/10.1080/10410236.2020.1808405

Lienemann, B. A., & Siegel, J. T. (2016). State psychological reactance to depression public service announcements among people with varying levels of depressive symptomatology. *Health Communication, 31*(1), 102-116.

Lienemann, B. A., & Siegel, J. T. (2018). Increasing help-seeking outcomes among people with elevated depressive symptomatology with public service announcements: An examination of functional matching and message sidedness. *Journal of health communication, 23*(1), 28-39.

Lienemann, B. A., & Siegel, J. T. (2019). A mixed methods approach to creating depression public service announcements by collaborating with people with depressive symptomatology. *Journal of health communication, 24*(11), 801-820.

Lienemann, B. A., Siegel, J. T., & Crano, W. D. (2013). Persuading people with depression to seek help: Respect the boomerang. *Health Communication, 28*(7), 718-728.

Lindow, J. C., Hughes, J. L., South, C., Minhajuddin, A., Gutierrez, L., Bannister, E., Trivedi, M. H., & Byerly, M. J. (2020, 2020/07/01/). The Youth Aware of Mental Health Intervention: Impact on Help Seeking, Mental Health Knowledge, and Stigma in U.S. Adolescents. *Journal of Adolescent Health, 67*(1), 101-107. https://doi.org/https://doi.org/10.1016/j.jadohealth.2020.01.006

Liverpool, S., Mota, C. P., Sales, C. M. D., Čuš, A., Carletto, S., Hancheva, C., Sousa, S., Cerón, S. C., Moreno-Peral, P., Pietrabissa, G., Moltrecht, B., Ulberg, R., Ferreira, N., & Edbrooke-Childs, J. (2020, 2020/6/23). Engaging Children and Young People in Digital Mental Health Interventions: Systematic Review of Modes of Delivery, Facilitators, and Barriers. *J Med Internet Res, 22*(6), e16317. https://doi.org/10.2196/16317

Lueck, J. A. (2017). Matching message design and depressed cognition: an exploration of attention patterns for gain-and loss-framed depression help-seeking messages. *Journal of health communication, 22*(7), 593-603.

Lueck, J. A. (2018). Examining determinants of seeking help for depression: implications for effective health promotion messages. *Journal of Communication in Healthcare, 11*(1), 19-29.

Lueck, J. A. (2019, 2019/08/01). Should We Activate Risk Perceptions in the Context of Suicide Prevention? Examining Fear Appeals, Help-Seeking Determinants, and Help-Seeking Sources Among University Employees Who Suffer from Depression. *Prevention Science, 20*(6), 884-893. https://doi.org/10.1007/s11121-019-0979-9

Lynch, J. (2018). Hip-hop passes rock to become most popular music genre for first time in history: Nielsen. *Business Insider*. Retrieved 2018/01/04/, from https://www.businessinsider.com/hip-hop-passes-rock-most-popular-music-genre-nielsen-2018-1

Mackenzie, C. S., Knox, V. J., Gekoski, W. L., & Macaulay, H. L. (2004, 2004/11/01). An Adaptation and Extension of the Attitudes Toward Seeking Professional Psychological Help Scale1 [https://doi.org/10.1111/j.1559-1816.2004.tb01984.x]. *Journal of Applied Social Psychology, 34*(11), 2410-2433. https://doi.org/https://doi.org/10.1111/j.1559-1816.2004.tb01984.x

Marshall, S. R., & Naumann, L. P. (2018). What's your favorite music? Music preferences cue racial identity. *Journal of Research in Personality, 76*, 74-91.

McCartney, T. (2019). *The Use of Celebrity and Non-celebrity Examples to Reduce Stigma in University Students* [Master's thesis, Seton Hall University].

McFerran, K., Derrington, P., & Saarikallio, S. (2019). *Handbook of Music, Adolescents, and Wellbeing*. Oxford University Press, USA.

McLaughlin, K. A., & King, K. (2015, 2015/02/01). Developmental Trajectories of Anxiety and Depression in Early Adolescence. *Journal of Abnormal Child Psychology, 43*(2), 311-323. https://doi.org/10.1007/s10802-014-9898-1

Mental Health America. (2021). *State of Mental Health in America Report, 2021*. https://mhanational.org/issues/state-mental-health-america

Miron, O., Yu, K.-H., Wilf-Miron, R., & Kohane, I. S. (2019). Suicide Rates Among Adolescents and Young Adults in the United States, 2000-2017. *JAMA, 321*(23), 2362-2364. https://doi.org/10.1001/jama.2019.5054

Mojtabai, R., & Olfson, M. (2020). National Trends in Mental Health Care for US Adolescents. *JAMA Psychiatry, 77*(7), 703-714. https://doi.org/10.1001/jamapsychiatry.2020.0279

Moran, M. B., Walker, M. W., Alexander, T. N., Jordan, J. W., & Wagner, D. E. (2017, 2017/03/01). Why Peer Crowds Matter: Incorporating Youth Subcultures and Values in Health Education Campaigns. *American Journal of Public Health, 107*(3), 389-395. https://doi.org/10.2105/AJPH.2016.303595

Muris, P., Schmidt, H., Lambrichs, R., & Meesters, C. (2001, 2001/05/01/). Protective and vulnerability factors of depression in normal adolescents. *Behaviour Research and Therapy, 39*(5), 555-565. https://doi.org/https://doi.org/10.1016/S0005-7967(00)00026-7

Nambisan, P. (2011). Information seeking and social support in online health communities: impact on patients' perceived empathy. *Journal of the American Medical Informatics Association, 18*(3), 298-304. https://doi.org/10.1136/amiajnl-2010-000058

National Institute of Mental Health. (2019). *Major Depression*. Retrieved April 7, 2021 from https://www.nimh.nih.gov/health/statistics/major-depression.shtml

Niederkrotenthaler, T., Tran, U. S., Gould, M., Sinyor, M., Sumner, S., Strauss, M. J., Voracek, M., Till, B., Murphy, S., Gonzalez, F., Spittal, M. J., & Draper, J. (2021). Association of Logic's hip hop song "1-800-273-8255" with Lifeline calls and suicides in the United States: interrupted time series analysis. *BMJ, 375*, e067726. https://doi.org/10.1136/bmj-2021-067726

Noar, S. M., Benac, C. N., & Harris, M. S. (2007). Does tailoring matter? Meta-analytic review of tailored print health behavior change interventions. *Psychological Bulletin, 133*(4), 673-693. https://doi.org/10.1037/0033-2909.133.4.673

Noar, S. M., Willoughby, J. F., Myrick, J. G., & Brown, J. (2014, 2014/05/28). Public Figure Announcements About Cancer and Opportunities for Cancer Communication: A Review and Research Agenda. *Health Communication, 29*(5), 445-461. https://doi.org/10.1080/10410236.2013.764781

Nock, M. K., Green, J. G., Hwang, I., McLaughlin, K. A., Sampson, N. A., Zaslavsky, A. M., & Kessler, R. C. (2013). Prevalence, Correlates, and Treatment of Lifetime Suicidal Behavior Among Adolescents: Results From the National Comorbidity Survey Replication Adolescent Supplement. *JAMA Psychiatry, 70*(3), 300-310. https://doi.org/10.1001/2013.jamapsychiatry.55

Ohanian, R. (1990, 1990/10/01). Construction and Validation of a Scale to Measure Celebrity Endorsers' Perceived Expertise, Trustworthiness, and Attractiveness. *Journal of Advertising, 19*(3), 39-52. https://doi.org/10.1080/00913367.1990.10673191

Olsson, D. P., & Kennedy, M. G. (2010, 2010/11/01). Mental health literacy among young people in a small US town: recognition of disorders and hypothetical helping responses [https://doi.org/10.1111/j.1751-7893.2010.00196.x]. *Early Intervention in Psychiatry, 4*(4), 291-298. https://doi.org/https://doi.org/10.1111/j.1751-7893.2010.00196.x

Ouvrein, G., Pabian, S., Machimbarrena, J. M., Erreygers, S., De Backer, C. J., & Vandebosch, H. (2019). Setting a bad example: Peer, parental, and celebrity norms predict celebrity bashing. *The Journal of Early Adolescence, 39*(7), 937-961.

Papinczak, Z. E., Dingle, G. A., Stoyanov, S. R., Hides, L., & Zelenko, O. (2015). Young people's uses of music for well-being. *Journal of Youth Studies, 18*(9), 1119-1134.

Park, S.-y., & Cho, M. (2015). Celebrity Endorsement for Nonprofit Organizations: The Role of Celebrity Motive Attribution and Spontaneous Judgment of Celebrity-Cause Incongruence. *Journal of Promotion Management, 21*(2), 224-245. https://doi.org/10.1080/10496491.2014.996802

Pearce, S. (2017). Therapy Is Gangsta: Hip-Hop's Views on Mental Health Are Evolving. *Pitchfork*. Retrieved 2017/09/05/, from https://pitchfork.com/thepitch/therapy-is-gangsta-hip-hops-views-on-mental-health-are-evolving

Pescosolido, B. A., Halpern-Manners, A., Luo, L., & Perry, B. (2021). Trends in Public Stigma of Mental Illness in the US, 1996-2018. *JAMA Network Open, 4*(12), e2140202-e2140202. https://doi.org/10.1001/jamanetworkopen.2021.40202

Piedmont, R. L. (2014). Inter-item Correlations. In A. C. Michalos (Ed.), *Encyclopedia of Quality of Life and Well-Being Research* (pp. 3303-3304). Springer Netherlands. https://doi.org/10.1007/978-94-007-0753-5_1493

Pirkis, J., Rossetto, A., Nicholas, A., Ftanou, M., Robinson, J., & Reavley, N. (2019). Suicide prevention media campaigns: a systematic literature review. *Health Communication, 34*(4), 402-414.

Post, R. M. (1992). Transduction of psychosocial stress into the neurobiology of recurrent affective disorder. *The American journal of psychiatry*.

Prescott, J., Rathbone, A. L., & Hanley, T. (2020). Online mental health communities, self-efficacy and transition to further support. *Mental Health Review Journal, 25*(4), 329-344. https://doi.org/10.1108/MHRJ-12-2019-0048

Pretorius, C., Chambers, D., Cowan, B., & Coyle, D. (2019, 2019/08/26). Young People Seeking Help Online for Mental Health: Cross-Sectional Survey Study. *JMIR Ment Health, 6*(8), e13524. https://doi.org/10.2196/13524

Racine, N., McArthur, B. A., Cooke, J. E., Eirich, R., Zhu, J., & Madigan, S. (2021). Global Prevalence of Depressive and Anxiety Symptoms in Children and Adolescents During COVID-19: A Meta-analysis. *JAMA Pediatrics, 175*(11), 1142-1150. https://doi.org/10.1001/jamapediatrics.2021.2482

Ram, D., Benny, N., & Gowdappa, B. (2016). Relationship between depression literacy and medication adherence in patients with depression. *Psychiatry and Behavioral Sciences, 6*(4), 183-188.

Rasmussen, E. E., Shannon, K. L., & Pitchford, B. (2020). Adolescents' Disclosure of Mental Illness to Parents: Preferences and Barriers. *Health Communication*, 1-10. https://doi.org/10.1080/10410236.2020.1839201

Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005, 2005/01/01). Young people's help-seeking for mental health problems. *Australian e-Journal for the Advancement of Mental Health, 4*(3), 218-251. https://doi.org/10.5172/jamh.4.3.218

Rickwood, D. J., Deane, F. P., & Wilson, C. J. (2007). When and how do young people seek professional help for mental health problems? *Medical Journal of Australia, 187*(S7), S35-S39. https://doi.org/https://doi.org/10.5694/j.1326-5377.2007.tb01334.x

Rifon, N. J., Choi, S. M., Trimble, C. S., & Li, H. (2004, 2004/01/01). CONGRUENCE EFFECTS IN SPONSORSHIP: The Mediating Role of Sponsor Credibility and Consumer Attributions of Sponsor Motive. *Journal of Advertising, 33*(1), 30-42. https://doi.org/10.1080/00913367.2004.10639151

Riles, J. M., & Adams, K. (2020). Me, myself, and my mediated ties: Parasocial experiences as an ego-driven process. *Media Psychology*, 1-22.

Saarikallio, S. (2019). Music as a resource for agency and empowerment in identity construction. *Handbook of Music, Adolescents, and Wellbeing*, 89.

Saarikallio, S., & Erkkilä, J. (2007). The role of music in adolescents' mood regulation. *Psychology of music, 35*(1), 88-109.

Saltzman, K. M., & Holahan, C. J. (2002). Social Support, Self-efficacy, And Depressive Symptoms: An Integrative Model. *Journal of Social and Clinical Psychology, 21*(3), 309-322. https://doi.org/10.1521/jscp.21.3.309.22531

SAMHSA. (2020). *National Survey on Drug Use and Health*. https://www.samhsa.gov/data/report/2018-nsduh-annual-national-report

Sawyer, M. G., Borojevic, N., Ettridge, K. A., Spence, S. H., Sheffield, J., & Lynch, J. (2012, 2012/03/01/). Do Help-Seeking Intentions During Early Adolescence Vary for Adolescents Experiencing Different Levels of Depressive Symptoms? *Journal of Adolescent Health, 50*(3), 236-242. https://doi.org/https://doi.org/10.1016/j.jadohealth.2011.06.009

Scarano, J., & Webster, K. (2018). The Stigmatization of Mental Illness Through Auditory and Visual Representations.

Schartel Dunn, S., & Nisbett, G. (2020, 2020/06/01). If Childish Gambino Cares, I Care: Celebrity Endorsements and Psychological Reactance to Social Marketing Messages. *Social Marketing Quarterly, 26*(2), 80-92. https://doi.org/10.1177/1524500420917180

Seize the Awkward. (2018). *Seize the Awkward Talking Points* http://seizetheawkward.adcouncilkit.org/wp-content/uploads/sites/60/2018/09/Campaign-Talking-Points_Final.pdf

Shi, J., & Dai, Y. (2022, 2022/01/28). Promoting Favorable Attitudes Toward Seeking Counseling Among People With Depressive Symptomatology: A Masspersonal Communication Approach. *Health Communication, 37*(2), 242-254. https://doi.org/10.1080/10410236.2020.1834209

Siegel, J. T., Alvaro, E. M., Crano, W. D., Lienemann, B. A., Hohman, Z. P., & O'Brien, E. (2012, 2012/07/01). Increasing Social Support for Depressed Individuals: A Cross-Cultural Assessment of an Affect-Expectancy Approach. *Journal of health communication, 17*(6), 713-732. https://doi.org/10.1080/10810730.2011.635775

Siegel, J. T., Lienemann, B. A., & Rosenberg, B. D. (2017). Resistance, reactance, and misinterpretation: Highlighting the challenge of persuading people with depression to seek help. *Social and Personality Psychology Compass, 11*(6), e12322. https://doi.org/https://doi.org/10.1111/spc3.12322

Siegel, J. T., Lienemann, B. A., & Tan, C. N. (2015). Influencing Help-Seeking Among People With Elevated Depressive Symptomatology:Mistargeting as a Persuasive Technique.

Clinical Psychological Science, 3(2), 242-255. https://doi.org/10.1177/2167702614542846

Siegel, J. T., & Thomson, A. L. (2017). Positive emotion infusions of elevation and gratitude: Increasing help-seeking intentions among people with heightened levels of depressive symptomatology. *The Journal of Positive Psychology, 12*(6), 509-524.

Silvia, P. J. (2006, 2006/09/01). Reactance and the dynamics of disagreement: multiple paths from threatened freedom to resistance to persuasion [https://doi.org/10.1002/ejsp.309]. *European Journal of Social Psychology, 36*(5), 673-685. https://doi.org/https://doi.org/10.1002/ejsp.309

Singh, S., Zaki, R. A., & Farid, N. D. N. (2019, 2019/07/01/). A systematic review of depression literacy: Knowledge, help-seeking and stigmatising attitudes among adolescents. *Journal of Adolescence, 74*, 154-172. https://doi.org/https://doi.org/10.1016/j.adolescence.2019.06.004

Srebnik, D., Cauce, A. M., & Baydar, N. (1996). Help-Seeking Pathways for Children and Adolescents. *Journal of Emotional and Behavioral Disorders, 4*(4), 210-220. https://doi.org/10.1177/106342669600400402

Steele, A. (2021). *Armed With Data, Musicians Have Big Plans to Court Their Superfans*. The Wall Street Journal. https://www.wsj.com/articles/armed-with-data-musicians-have-big-plans-to-court-their-superfans-11638889212

Steinberg, L., & Monahan, K. C. (2007). Age differences in resistance to peer influence. *Developmental psychology, 43*(6), 1531.

Strunk, C. M., Sorter, M. T., Ossege, J., & King, K. A. (2013, 2014/10/01). Emotionally Troubled Teens' Help-Seeking Behaviors: An Evaluation of Surviving the Teens® Suicide Prevention and Depression Awareness Program. *The Journal of School Nursing, 30*(5), 366-375. https://doi.org/10.1177/1059840513511494

Suka, M., Yamauchi, T., & Yanagisawa, H. (2018). Comparing responses to differently framed and formatted persuasive messages to encourage help-seeking for depression in Japanese adults: a cross-sectional study with 2-month follow-up. *BMJ Open, 8*(11), e020823. https://doi.org/10.1136/bmjopen-2017-020823

Suka, M., Yamauchi, T., & Yanagisawa, H. (2019). Responses to persuasive messages encouraging professional help seeking for depression: comparison between individuals with and without psychological distress. *Environmental health and preventive medicine, 24*(1), 29.

Suka, M., Yamauchi, T., & Yanagisawa, H. (2020). Persuasive messages can be more effective when repeated: A comparative survey assessing a message to seek help for depression among Japanese adults. *Patient Education and Counseling, 103*(4), 811-818.

Swannell, E. J., & McDermott, M. R. (2015, 2015/10/20). Measuring and predicting mental health literacy for depression. *International Journal of Mental Health Promotion, 17*(5), 293-311. https://doi.org/10.1080/14623730.2015.1089010

Tarrant, M. (2002). Adolescent peer groups and social identity. *Social Development, 11*(1), 110-123.

Torgerson, T., Swayze, C., Sanghera, S., Cooper, C., Beaman, J., Hartwell, M., & Vassar, M. (2021). Public awareness of the National Suicide Prevention Lifeline following the release of a hip-hop song. *BMJ Evidence-Based Medicine, 26*(4), 191. https://doi.org/10.1136/bmjebm-2020-111509

Townsend, L., Musci, R., Stuart, E., Heley, K., Beaudry, M. B., Schweizer, B., Ruble, A., Swartz, K., & Wilcox, H. (2019, 2019/04/01/). Gender Differences in Depression Literacy and Stigma After a Randomized Controlled Evaluation of a Universal Depression Education Program. *Journal of Adolescent Health, 64*(4), 472-477. https://doi.org/https://doi.org/10.1016/j.jadohealth.2018.10.298

Traub, J. (2008, March 9). The celebrity solution. *The New York Times*. https://www.nytimes.com/2008/03/09/magazine/09CELEBRITY-t.html

Trew, J. L. (2011, 2011/11/01/). Exploring the roles of approach and avoidance in depression: An integrative model. *Clinical Psychology Review, 31*(7), 1156-1168. https://doi.org/https://doi.org/10.1016/j.cpr.2011.07.007

Twenge, J. M., Cooper, A. B., Joiner, T. E., Duffy, M. E., & Binau, S. G. (2019). Age, period, and cohort trends in mood disorder indicators and suicide-related outcomes in a nationally representative dataset, 2005–2017. *Journal of abnormal psychology, 128*(3), 185-199.

U.S. Department of Health and Human Services. (2021). *Protecting Youth Mental Health: The U.S. Surgeon General's Advisory*. https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf

Vogel, D. L., Wade, N. G., & Ascheman, P. L. (2009). Measuring perceptions of stigmatization by others for seeking psychological help: Reliability and validity of a new stigma scale with college students. *Journal of Counseling Psychology, 56*(2), 301-308. https://doi.org/10.1037/a0014903

Vogel, D. L., Wade, N. G., & Haake, S. (2006). Measuring the self-stigma associated with seeking psychological help. *Journal of Counseling Psychology, 53*(3), 325-337. https://doi.org/10.1037/0022-0167.53.3.325

Vogel, D. L., Wade, N. G., Wester, S. R., Larson, L., & Hackler, A. H. (2007). Seeking help from a mental health professional: The influence of one's social network. *Journal of Clinical Psychology, 63*(3), 233-245. https://doi.org/https://doi.org/10.1002/jclp.20345

Vogels, E. A. (2020). *Millennials stand out for their technology use, but older generations also embrace digital life*. https://www.pewresearch.org/fact-tank/2019/09/09/us-generations-technology-use

Walster, E., & Festinger, L. (1962). The effectiveness of" overheard" persuasive communications. *The Journal of Abnormal and Social Psychology, 65*(6), 395-402.

Wang, C., Cramer, K. M., Cheng, H.-L., & Do, K. A. (2019, 2019/12/01). Associations Between Depression Literacy and Help-Seeking Behavior for Mental Health Services Among High School Students. *School Mental Health, 11*(4), 707-718. https://doi.org/10.1007/s12310-019-09325-1

Wang, X., & Arpan, L. M. (2008, 2008/01/24). Effects of Race and Ethnic Identity on Audience Evaluation of HIV Public Service Announcements. *Howard Journal of Communications, 19*(1), 44-63. https://doi.org/10.1080/10646170701802019

Webb, M., Burns, J., & Collin, P. (2008). Providing online support for young people with mental health difficulties: challenges and opportunities explored [https://doi.org/10.1111/j.1751-7893.2008.00066.x]. *Early Intervention in Psychiatry, 2*(2), 108-113. https://doi.org/https://doi.org/10.1111/j.1751-7893.2008.00066.x

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Wilson, C. J., Deane, F. P., Ciarrochi, J. V., & Rickwood, D. (2005). Measuring help seeking intentions: properties of the general help seeking questionnaire.

Wilson, C. J., Rickwood, D., & Deane, F. P. (2007). Depressive symptoms and help-seeking intentions in young people. *Clinical Psychologist, 11*(3), 98-107. https://doi.org/https://doi.org/10.1080/13284200701870954

Wong, N. C., Lookadoo, K. L., & Nisbett, G. S. (2017). "I'm Demi and I have bipolar disorder": Effect of parasocial contact on reducing stigma toward people with bipolar disorder. *Communication Studies, 68*(3), 314-333.

Wong, Y. J., Ho, M.-H. R., Wang, S.-Y., & Miller, I. (2017). Meta-analyses of the relationship between conformity to masculine norms and mental health-related outcomes. *Journal of Counseling Psychology, 64*(1), 80.

World Health Organization. (2021). *Depression*. Retrieved April 7, 2021 from https://www.who.int/health-topics/depression#tab=tab_1

Yard, E., Radhakrishnan, L., Ballesteros, M. F., Sheppard, M., Gates, A., Stein, Z., Hartnett, K., Kite-Powell, A., Rodgers, L., Adjemian, J., Ehlman, D. C., Holland, K., Idaikkadar, N., Ivey-Stephenson, A., Martinez, P., Law, R., & Stone, D. M. (2021). Emergency Department Visits for Suspected Suicide Attempts Among Persons Aged 12-25 Years Before and During the COVID-19 Pandemic - United States, January 2019-May 2021. *MMWR. Morbidity and mortality weekly report, 70*(24), 888-894. https://doi.org/10.15585/mmwr.mm7024e1

Younglove, R. (2020). *Is Pop Music Tackling Mental Health, or Just Fetishizing Depression?* https://studybreaks.com/thoughts/mental-health-pop-music

Yzer, M., Kinzer, H., & Malone, M. (2021). A Reasoned Action Approach to Depression Help-Seeking Messaging for College Students: Implications of Cognitive Biases in Depression. *Health Communication*, 1-9. https://doi.org/10.1080/10410236.2021.1917744

Zisook, S., Lesser, I., Stewart, J. W., Wisniewski, S. R., Balasubramani, G. K., Fava, M., Gilmer, W. S., Dresselhaus, T. R., Thase, M. E., Nierenberg, A. A., Trivedi, M. H., & Rush, A. J. (2007, 2007/10/01). Effect of Age at Onset on the Course of Major Depressive Disorder. *American Journal of Psychiatry, 164*(10), 1539-1546. https://doi.org/10.1176/appi.ajp.2007.06101757