Original Paper

Hope and Mental Health: An Investigation of Loneliness, Depression, Stress, and Hope in University Students amid COVID-19

Terrell L. Strayhorn, PhD[1*]

[1] College of Education, Illinois State University, Normal IL, USA; Center for the Study of HBCUs and Department of Psychology, Virginia Union University, Richmond VA, USA

[*] Terrell L. Strayhorn, PO BOX 604, Normal, IL 61761, USA, tlstray@ilstu.edu, @tlstrayhorn

Abstract

This quantitative study explored the relationship between hope, a psychological construct (Snyder, 2000), and college students' mental health outcomes during the COVID-19 pandemic, as measured by their loneliness, depression, and stress levels. Analyzing survey data from a non-random probability sample of 257 college students, results indicate that hope was inversely related with loneliness, depression, and stress suggesting that greater presence of hope is associated with lower levels of such symptoms (r's ranging -0.15 to -0.23). Noteworthy, hierarchical linear regression tests show that hope was significantly related to depressive symptoms in college students during the COVID-19 pandemic, nearly twice the strength of other predictors. Implications of the study's findings for public policy, professional practice, and future research are discussed.

Keywords

hope, mental health, loneliness, post-traumatic stress, COVID-19

1. Introduction

The number of college students experiencing stress, frequent worrying, depression, and even suicidal ideation continues to rise in the United States (U.S.), with rates hitting record highs due to the onset of the global coronavirus (COVID-19) pandemic (also known as "The Great Pandemic") and political unrest (Simon, 2021). COVID-19 posed an existential threat to U.S. higher education, forcing colleges and universities to pivot teaching and learning operations online virtually overnight (Sohrabi et al., 2020). Many students were forced to work or study from home, physically distance, and wear facial

coverings, which kept them away from family, friends, supportive campus networks, and even clinic-based therapies professionally prescribed to help manage depression, stress, and anxiety (Strayhorn, 2021b). Social isolation resulting from pandemic-induced domicile confinement or *quarantine* has been linked with chronic depression and suicide (Rubin, 2020). Consequently, the National Institutes of Health (NIH) have indicated a clear need to evaluate these trends among college-aged populations and the role of protective factors at the community- and psychological level that might be associated with lowering the likelihood of problematic outcomes or reducing the negative impact of COVID-related risks on college students' mental health (Kumar & Nayar, 2020).

One such protective factor is hope, which has been posited as an "overall perception that [future] goals can be met" (Snyder et al., 1991, p. 570), a mindset that implies a positive outlook on achieving a desired or *improved* outcome while preserving a realistic view of the present (Mattes & Sloane, 2015). Indeed, hope is a major focus in studies exploring physical and psychological outcomes in children and adults (e.g., Anderson, Turner, & Clyne, 2017; Chang & DeSimone, 2001). However, it has not been studied exhaustively at the postsecondary level in terms of its association with prevalence of college students' loneliness, depression, and stress levels. To our knowledge, very few studies fully explore the influence of hope in terms of college students' mental health amid COVID-19 as well. This is the gap addressed by the present study.

2. Purpose

The purpose of this exploratory quantitative multivariate study was to assess the relationship between hope, a psychological construct (Snyder, 2000), and college students' mental health outcomes during the COVID-19 pandemic, as measured by their loneliness, depression, and stress levels.

3. Review of Literature

To conduct this study, it was necessary to examine the literature in three primary areas. First, it was useful to review prior research about hope and its core definitions. Second, previous scholarship on hope's components and correlates was relevant for this study, particularly any studies including college-aged students. Lastly, I appraised the literature for studies exploring linkages between hope and college students' mental health outcomes. Thus, the literature review is organized around these topics, although page limits will not permit exhaustive coverage as presented in published systematic reports (Hernandez & Overholser, 2021).

Hope is a frequently misinterpreted virtue or characteristic. Evidence clearly suggests that hope helps one imagine something different, but it is significantly correlated with growth-mindedness (Dixson, 2020) or one's beliefs that changes required to produce the desired outcome are possible—the ability to imagine something other than what is (Snyder, 2000). Some scholars ascribe hope to wishful thinking or a creative capacity that's so important for future visioning (e.g., Standish, 2019), but such

conceptualizations underestimate the depth and substance of hope. More than a positive, aspirational emotion to be acquired, hope has been defined as a dispositional trait and refers to one's propensity to imagine better outcomes *because* change is possible (Bernier, 2015). Hope, then, is defined as "perceived capability to derive pathways to desired goals, and motivate oneself via agency thinking [i.e., goal-directed determination] to use those pathways" (Snyder, 2002, p. 18).

While some have underestimated and undertheorized hope, considerable work has been done in recent decades on what hope is, its correlates, and how it can be nurtured, particularly in the fields of positive psychology and education (Hernandez & Overholser, 2021; Snyder et al., 2002). For instance, Gallagher and Lopez (2018) published the *Oxford Handbook of Hope* cataloging evidence-based studies that provide an understanding of hope as more than an emotional and spiritual attribute. Hope has shown to be a vital coping resource against adversity and despair, a phenomenon known as *hopelessness* in the literature (Herth, 1992; Kwon, 2002; Lazarus, 1999).

The weight of empirical evidence suggests that hope is inversely related with mental health outcomes such as depression and suicide (Grewal & Porter, 2007; Vincent et al., 2004), but positively correlated with self-efficacy, esteem, and optimism (Snyder et al., 2002). Prior research also indicates that the presence of hope plays an important role in shaping behaviors, thought patterns (or mindsets), and perceptions, especially among school-aged children (Lopez et al., 2009), athletes (Curry & Snyder, 2000), and even rehabilitating cancer patients (Chan, Wong, & Lee, 2019), although very few studies examine identity-based group differences. In sum, higher hope scores are consistently correlated with improved outcomes in academics, mental and physical health, well-being, and psychological adjustment, including depression and loneliness. For instance, Worrell and Hale (2001) analyzed data from 97 students placed at-risk for non-completion in an urban school context. They found that hope significantly predicted dropout for participants. Changes in hope produced positive physical and psychological gains in rehabilitating cancer patients as well (Chan et al.).

A growing line of scholarship focuses on psychological differences in individuals resulting from varying level of hope. For instance, Chang and DeSimone (2001) found that hopeful college students were less likely to suffer the negative effects of depression and more likely to cope well with negative appraisal. Furthermore, hope has been positively correlated with resilience and coping (Ong et al., 2006), managing mental illness (Chen & Park, 2016), and life satisfaction in a longitudinal study of youth (Valle et al., 2006). A major takeaway from this line of studies is, other conditions being equal, hope leads to a 12% boost in school outcomes (Lopez, 2013).

Despite differences in dominant definitions, scholars generally agree that hope is evoked and ascends in relative importance (at the individual or collective/group level) depending on one's circumstances. For instance, hope manifests in response to conflict in groups threatened by discrimination, trauma, and racial stereotypes (Dixson & Stevens, 2018; Somasundaram & Sivaokan, 2013). Practices that encourage mindfulness, goal-directed thinking, and agency create awareness that can lead to attitude

15

changes, positive beliefs, and behaviors tracking hope, according to research (Snyder, 2002; Van der Kolk, 2014).

Since hope is vital to the satisfaction of basic human needs (Maslow, 1943; Standish, 2019), as one must be hopeful to strive toward fulfilling physiological needs (e.g., food, shelter, love), then it seems reasonable to hypothesize that hope might buffer against threatening forces like loneliness (Snyder, 2000, 2002). For instance, hope and hopeful thinking might mitigate against college students' (dis)stress, worry, and feelings of loneliness—as alarming rates have been reported by the NIH amid the global COVID-19 pandemic (Kumar & Nayar, 2020). There is clear evidence that this is an area in need of further investigation, which is the focus of the present study.

4. Methods

4.1 Sample

Participants include 257 students, ranging in age from 18 to 32 years, enrolled at 4-year public colleges and universities mostly in the southeastern region of the United States. Over half (58%) identify as women and the majority identify as heterosexual/straight (85%), while 9% as bisexual, 3% gay, and 1% lesbian. Reflective of the campus racial composition at the predominantly white institutions (PWIs) included in the study, 69% of the sample is White, 13% Latino, 10% Black, and 7% Asian Pacific Islander. Although 9% of the sample aspired to attain a high school diploma as their highest degree, most aspired for more education: 14% associates, 34% bachelors, 31% masters, and 12% doctoral. Individuals under the age of 18 years were excluded. Table 1 presents a summary.

Table 1. Demographics of Analytic Sample

Characteristic	*N*	*%*
Race		
White	176	69
Latinx/Hispanic	32	13
Black/African American	25	10
Asian Pacific Islander	18	7
All other	6	
Sex[1]		
Female	149	58
Male	108	42
Sexual Orientation		
Heterosexual	219	85
Bisexual	23	9
Gay	8	3

16

Lesbian	2	1
All other	5	
Degree Aspirations		
High School	23	9
Associates	37	14
Bachelors	88	34
Masters	79	31
Doctoral	30	12

[1] In this study, sex refers to one's biological assignment at birth to avoid conflation and confusion with gender, gender identity, and gender expression.

4.1.1 Data Collection

Participants were informed about the study via social media fliers and invitations through electronic mail. After signing up for the study, participants received a notice that outlined the study's purpose, procedures, confidentiality, any potential risks, benefits, and the intended use of all data collected. The notice included a link to the server on which the web-based survey was placed. More information about the parent project is published elsewhere (Strayhorn, 2021c).

4.1.1.1 Measures

Hope. The key variable in the present study, hope, was assessed using three survey items (each placed on a 5-point Likert-type scale) developed by researchers based on a dispositional theory of the construct (Snyder et al., 2000; Snyder et al., 1996). Responses were averaged to yield a single rating (*alpha* = 0.91), with higher scores indicating high(er) levels of hope, in keeping with prior studies (Martin & Stermac, 2010).

This 3-item scale has proven reliability and validity across several studies. In a previous study, 2-week test-retest reliability was 0.91. Criterion-related validity was demonstrated by correlating Hope index scores with measures of well-being ($r = 0.84$) and other Hope subscales ($r = 0.81$). Divergent validity was established between Hope and hopelessness ($r = -0.73$), in consonance with existing theory and research (Herth, 1992).

Loneliness. Three items were averaged from the *Revised UCLA Loneliness Scale (RULS)*, to measure one's subjective experience of loneliness or social isolation. Each item was rated on a 5-point Likert-type scale, with higher scores indicating greater loneliness (Ponzetti, 1990). Evidence of RULS' concurrent and discriminant validity were established elsewhere (Russell et al.), although in the present study the scale's coefficient alpha was 0.90.

Depression. The *Depression Scale (DEPS)*, a widely circulated depression questionnaire, was used to assess the frequency and nature of respondents' experience with depression, "feeling blue," and other depressive states according to research (Poutanen et al., 2010). To maintain comparability across other

scales employed in this study, DEPS response options were adjusted and averaged across a 5-point Likert-type scale, with higher scores indicating greater levels of depression. The DEPS was validated against existing scales like the *Present State Examination* (PSE) with primary care patients and had good predictive validity in prior studies (Poutanen et al., 2007; Salokangas et al., 1995). In the current sample, the coefficient alpha was 0.92.

Stress. The *Perceived Stress Scale (PSS)* measures the extent to which one views or interprets life situations as stressful (Cohen et al., 1983). The averaged scale is comprised of 7 items, rated on a 5-point Likert-type scale, with higher scores indicating greater perceived stress. Evidence of content, predictive, and concurrent validity was established in other studies (Cohen et al., 1983; Yarcheski et al., 2011). In the current sample, the coefficient alpha was 0.88.

Demographics. A final section of the survey consisted of short demographic questions used to characterize the sample. Variables included age, race/ethnicity, and sex.

4.1.1.1.1 Data Analysis

All scores generated from the online survey were double-checked for errors by a member of the author's research team and then data were entered into a database spreadsheet. Before statistical analysis began, key variables were inspected for missingness, outliers, skewness, kurtosis, and potential abnormalities, as recommended by experts (Allison, 2001). Overall, less than 2% of cases were missing so imputation was not necessary.

Descriptive statistics were computed for overall scores on the study's key measures. To assess the relation between loneliness, stress, depression and hope, bivariate Pearson correlation analyses were conducted. Lastly, hierarchical linear regression tests were conducted to estimate the relationship between three mental health factors (e.g., stress) and hope, controlling for differences in sex. Follow-up tests (e.g., $r_{partial}$) were used to assess the strength of statistical relationships.

5. Results

Using Pearson *R,* the correlation of respondents' scores for hope ($M = 3.93$, $SD = 0.83$) with loneliness ($M = 2.05$, $SD = 1.23$) was inverse ($r = -0.15$, $p < 0.01$), and with depression ($M = 2.61$, $SD = 1.27$) was inverse ($r = -0.23$, $p < 0.01$), and with stress ($M = 1.56$, $SD = 1.05$) was inverse ($r = -0.20$), based on a nonrandom sample of U.S. college students. As I hypothesized, results indicate that correlations were in the expected direction according to existing theory (Snyder, 2000). In general, greater presence of hope was correlated with lower levels of college students' loneliness, depression, and stress amid COVID-19, and vice versa. Table 2 presents a summary.

Table 2. Correlations of Key Variables

Variable(s)	[1]	[2]	[3]	[4]	*M(SD)*
[1] Loneliness	1	0.252**	0.295**	-0.145*	2.05 (1.23)
[2] Depression	0.252**	1	0.531**	-0.225**	2.61 (1.27)
[3] Stress	0.295**	0.531**	1	-0.196**	1.56 (1.05)
[4] Hope	-0.145*	-0.225**	-0.196**	1	3.93 (0.83)

* p < 0.05. ** p < 0.01.

Hierarchical linear regression results suggest that the sequential model is significant, $F(4, 246) = 4.52$, $p < 0.001$. The sample multiple correlation was 0.26, indicating approximately 7% of the variance in hope among COVID-impacted college students in the sample can be accounted for by three mental health measures. Depression was a significant predictor ($B = -0.093$), indicating that an *increase* in one's hope status corresponds, on average, to a *decrease* in depression score of 0.093 points. Additionally, among all four predictors, depression had the strongest relationship with hope ($\beta = -0.142$)—approximately twice that of sex and loneliness. Table 3 presents a summary of regression analyses.

Table 3. Hierarchical Linear Regression Results

Variable	*Unstd.* *B*	*SE*	*Std.* *β*
Constant	4.60	0.197	------
Sex	-0.129	0.105	-0.077
Loneliness	-0.053	0.044	-0.079
Depression***	-0.093	0.048	-0.142
Stress	-0.069	0.058	-0.089

Note. Unstd. = unstandardized. Std. = standardized. SE = standard error.

*** p < 0.001.

There is a small, negative association between hope and sex, partialling out all other effects, $r(252) = -0.078$. However, zero-order correlations between hope and mental health measures ranged from -0.151 to -0.221, indicating a modest influence of sex on the relationship. Tests examining if data met the assumption of collinearity indicated that multicollinearity was not a concern (*Tolerance* > 0.1; *VIF* < 10). Data met the assumption of independent errors (*Durbin-Watson value* = 2.31).

6. Discussion

In consonance with prevailing theory (Snyder, 2000), an inverse relationship was found between

loneliness, depression, stress and hope in a sample of college students in the US during COVID-19. Contrary to one study that found moderate correlations among predominantly white middle school students (Yarcheski et al., 2011), the present study yielded low to moderate correlations on a sample of college students studying during COVID-19, which may account for such differences. With today's college students struggling with elevated levels of loneliness, depression, and stress due, in part, to the pandemic, results of this study suggest they may need hope. To clarify the extent to which Snyder's theory is applicable to college, adult, and/or older populations, replication of this study across diverse groups is highly recommended. Using large-scale surveys like the *European Quality of Life Survey* may help overcome data quality issues.

The literature is replete with references that substantiate hope plays an important role in people's lives especially those who face unprecedented uncertainty about their future, like terminally ill patients and, as argued herein, students attending college amid COVID-19. Results from the present study suggest that higher levels of hope during COVID-19 may be associated with lower levels of depression, stress-related anxiety, and loneliness. Although correlational designs cannot determine causality (Cohen et al., 2003), prior studies lend support to this plausible flow of effects (Feldman & Snyder, 2005). Hope can be cultivated in several ways, such as drawing inspiration from motivational or sacred texts (Chan, 2018), discovering new strategies (i.e., pathways) for achieving one's goals, and building community through activities that require students to depend on each other for support. Self-disclosure and revealing negative thoughts or emotions appear to be a critical step in gaining motivation to engage in goal-setting, future-focused planning, and positive self-talk (Rathunde, 2000). Thus, classroom instructors, academic advisors, counselors, and coaches are encouraged to consider these results when working with students negatively impacted by COVID-related stress, depression or loneliness. Academic and social support services should incorporate activities for rapport-building and reframing negative scripts (e.g., *I can't → I can if...*), which hold promise for boosting students' hope and producing positive psychological benefits.

Hope has shown to be an important skill for getting through challenging times (Anderson, Turner, & Clyne, 2017). Results from the present study suggest that higher levels of hope are associated with reduced stress, alleviated depression, and less worrying in US college students amid COVID-19. Recognizing and expressing gratitude for good things, even in difficult times such as the pandemic, can foster hope (Snyder et al., 2000). Thus, COVID-impacted college students are encouraged to talk aloud or write reflections about current reasons for feeling gratitude. They might also engage in such activities via first-year seminars, clubs/organizations (e.g., fraternities), service-learning, study abroad, and other educationally purposeful activities. Daily affirmations can be effective resources for college counseling centers, crisis managers, advising websites, and micro-messaging campaigns (e.g., early alerts).

The results of this study also support recent data from national polls assessing the impact of the COVID-19 pandemic on higher education. That nearly half of all college students amid the Great Pandemic report feeling lonely, depressed, overwhelmed or stressed, and, thus, less hopeful is important to note (Kits, Berkenbosch, & Moyer, 2021; Simon, 2021). It can be said that these mental health issues "hang together," which many medical professionals refer to as comorbidity or the presence of two or more conditions in a person. Experiencing high levels of COVID-related stress or loneliness tends to be *co-related* (i.e., correlated) with high levels of depression, and vice versa, according to the present study, which resonates with prior research (Munoz et al., 2016). However, results presented herein, no matter how preliminary, suggest that improving college students' hopeful state may offset COVID-related stress, loneliness, and depression, leading to better overall outcomes. Prior studies have shown that hopelessness catalyzes depression and hijacks one's ability to set workable goals, maintain a positive outlook, and/or pursue pathways for achievement (Iacoviello et al., 2013). Consequently, college counseling center staff, working with students amid- and post-pandemic, should provide targeted interventions focused on nurturing hope in students, which may, in turn, help them stay positive, set forward-looking goals, find ways to achieve them, and activate their own agency. Such intentional steps will also likely reduce loneliness, stress, and worrying among pandemic-impacted students, according to the study. Results await additional empirical testing, including studies of theory-driven interventions.

Beyond individual counselors, campus professionals, and singular programs, results from the current study suggest how institutional policies and university-wide programs conspire to condition campus environments that can nurture hope for *all* (or most) students, not just a select few. For example, if hope is promoted through activities and tasks that involve goal-setting, pathway identification, and positive self-talk like service-learning, peer mentoring, career coaching, and video interventions (Strayhorn, 2021a), then perhaps administrators can ensure that *all* students engage in such opportunities by embedding them in the core (general education) curriculum, First-Year Experience, or major degree requirements. By increasing *all* students' hope, especially amid COVID-19, college educators help reduce stress, assuage depression, and calm anxiety in students both now and in the future.

Like all studies, this investigation has several limitations that deserve mention. First, data for the study's key variables were self-reported. Prior researchers have challenged the validity of self-report data, while others posit that such data are valid when the requested information is known by the respondent, questions are clear/understandable, and respondents believe questions are worthy of a credible response (Pace, 1985). Data used in this study satisfy these criteria. A second limitation relates to the study's design and methodology, which is neither sufficiently strong to generalize to national samples of college students per se, nor to make causal claims. In fact, the study's results warrant future studies with broader sets of students, testing the direction of causality and interrelatedness of the outcomes (e.g., stress, depression). A final limitation is that LGBTQIA+ students were significantly

underrepresented in this study, although they represent a larger proportion of college students in the U.S. than some ethnic minority groups. Future studies should adopt targeted campaigns to recruit more diverse students.

Acknowledgement

References

Allison, P. D. (2001). *Missing data*. Sage.

Bernier, M. (2015). *The task of hope in Kierkegaard*. Oxford University Press.

Chan, K. (2018). Is religious and existential well-being important in quality of life in Hong Kong Chinese? *The Social Science Journal*, *55*(3), 273-283.

Chan, K., Wong, F. K. Y., & Lee, P. H. (2019). A brief hope intervention to increase hope level and improve well-being in rehabilitating cancer patients: A feasibility test. *SAGE Open Nursing*, *5*, 1-13. https://www.doi.org/10.1177/2377960819844381

Chang, E. C., & DeSimone, S. L. (2001). The influence of hope on appraisals, coping, and dysphoria: A test of hope theory. *Journal of Social and Clinical Psychology*, *20*, 117-129.

Chen, R. K., & Park, J. (2016). Positive psychology and hope as means to recovery from mental illness. *Journal of Applied Rehabilitation Counseling*, *47*(2), 34-42.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. Erlbaum.

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, *24*, 385-396.

Curry, L. A., & Snyder, C. R. (2000). Hope takes the field: Mind matters in athletic performances. In C. R. Snyder (Ed.), *Handbook of hope: Theory, measures, and applications* (pp. 243-259). Academic Press.

Dixson, D. D. (2020). How hope measures up: Hope predicts school variables beyond growth mindset and school belonging. *Current Psychology*. https://doi.org/10.1007/s12144-020-00975-y

Dixson, D. D., & Stevens, D. (2018). A potential avenue for academic success: Hope predicts an achievement-oriented psychosocial profile in African American adolescents. *Journal of Black Psychology*, *44*(6), 532-561. https://doi.org/10.1177/0095798418805644

Feldman, D. B., & Snyder, C. R. (2005). Hope and the meaningful life: Theoretical and empirical associations between goal-directed thinking and life meaning. *Journal of Social and Clinical Psychology*, *24*, 401-421.

Gallagher, M. W., & Lopez, S. J. (2018). *The Oxford Handbook of Hope*. Oxford University Press.

Grewal, P. K., & Porter, J. E. (2007). Hope theory: A framework for understanding suicidal action. *Death Studies*, *31*(2), 131-154.

Hernandez, S. C., & Overholser, J. C. (2021). A systematic review of interventions for hope/hopelessness in older adults. *Clinical Gerontology*, *44*(2), 97-111. https://doi.org/10.1080/07317115.2019.171181

Herth, K. (1992). Abbreviated instrument to measure hope: Development and psychometric evaluation. *Journal of Advanced Nursing*, *17*, 1251-1259.

Iacoviello, B. M., Alloy, L. B., Abramson, L. Y., Choi, J. Y., & Morgan, J. E. (2013). Patterns of symptom onset and remission in episodes of hopelessness depression. *Depression & Anxiety*, *30*(6), 564-573.

Kits, G. J., Berkenbosch, R., & Moyer, J. M. (2021). Cultivating hope in the Christian university classroom. *International Journal of Christianity & Education*, *25*(1), 31-42.

Kumar, A., & Nayar, K. R. (2020). COVID-19 and its mental health consequences. *Journal of Mental Health*, *30*(1), 1-2. https://doi.org/10.1080/09638237.2020.1757052

Kwon, P. (2002). Hope, defense mechanisms, and adjustment: Implications for false hope and defensive hopelessness. *Journal of Personality*, *70*, 207-231.

Lazarus, R. S. (1999). Hope: An emotion and a vital coping resource against despair. *Social Research*, *66*(2), 653-678.

Lopez, S. J. (2013, October). Making hope happen in the classroom. *Kappan Magazine*, *95*(2), 19-22.

Lopez, S. J., Rose, S. J., Robinson, C., Marques, S. C., & Pais-Ribiero, J. (2009). Measuring and promoting hope in schoolchildren. In R. Gilman, E. S. Huebner, & M. J. Furlong (Eds.), *Handbook of positive psychology in the schools* (pp. 37-51). Lawrence Erlbaum.

Martin, K., & Stermac, L. (2010). Measuring hope: Is hope related to criminal behavior in offenders? *International Journal of Offender Therapy and Comparative Criminology*, *54*(5), 693-705. https://www.doi.org/10.1177/0306624X09336131

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*(4), 370-396.

Mattes, M. D., & Sloane, M. A. (2015). Reflections on hope and its implications for end-of-life care. *Journal of the American Geriatrics Society*, *63*(5), 993-996.

Munoz, R. T., Hoppes, S., Hellman, C. M., Brunk, K. L., Bragg, J. E., & Cummins, C. (2016). The effects of mindfulness meditation on hope and stress. *Research on Social Work Practice*, *28*, 696-707. https://doi.org/10.1177/1049731516674319

Ong, A. D., Edwards, L. M., & Bergeman, C. S. (2006). Hope as a source of resilience in later adulthood. *Personality and Individual Differences*, *41*, 1263-1273.

Pace, C. R. (1985). *The credibility of student self-reports*. Los Angeles: University of California, The Center for the Study of Evaluation, Graduate School of Education.

Ponzetti, J. J. (1990). Loneliness among college students. *Family Relations*, *39*(3), 336-340.

Poutanen, O., Koivisto, A., Joukamaa, M., Mattila, A., & Salokangas, R. K. R. (2007). The depression scale as a screening instrument for a subsequent depressive episode in primary healthcare patients. *British Journal of Psychiatry*, *191*, 50-54.

Poutanen, O., Koivisto, A., Kaaria, S., & Salokangas, R. K. R. (2010). The validity of the depression scale (DEPS) to assess the severity of depression in primary care patients. *Family Practice*, *27*(5), 527-534.

Rathunde, K. (2000). Broadening and narrowing in the creative process: A commentary on Fredrickson's "Broaden-and-Build" model. *Prevention & Treatment*, *3*, 1-6.

Rubin, J. G. (2020). The psychological effects of quarantining a city. *BMJ*, *368*, m313.

Salokangas, R. K. R., Poutanen, O., & Stengard, E. (1995). Screening for depression in primary care: Development and validation of the depression scale, a screening instrument for depression. *Acta Psychiatr Scand*, *92*, 10-16.

Simon, S. (2021). Nearly half of college students report being depressed or anxious. *Very Well Health News*. Retrieved December 30, 2021, from https://www.verywellhealth.com/college-students-mental-health-survey-5115273

Snyder, C. R. (2000). Hypothesis: There is hope. In C. R. Snyder (Ed.), *Handbook of hope: Theory, measures and applications* (pp. 3-21). Elsevier Science.

Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry*, *13*, 249-275.

Snyder, C. R., Feldman, D. B., Taylor, J. D., Schroeder, L. L., & Adams, V. H. (2000). The roles of hopeful thinking in preventing problems and enhancing strengths. *Applied and Preventive Psychology*, *9*(4), 249-269.

Snyder, C. R., Irving, L. M., & Anderson, J. (1991). Hope and health: Measuring the will and the ways. In C. R. Snyder & D. R. Forsyth (Eds.), *Handbook of social and clinical psychology* (pp. 285-305). Pergamon.

Snyder, C. R., Rand, K., & Sigmon, D. R. (2002). Hope theory: A member of the positive psychology family. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 257-276). Oxford University Press.

Snyder, C. R., Sympson, S. C., Ybasco, F. C., Borders, T. F., Babyak, M. A., & Higgins, R. L. (1996). Development and validation of the state hope scale. *Journal of Personality and Social Psychology*, *70*(2), 321-335.

Sohrabi, C., Alsafi, Z., O'Neill, N., Khan, M., Kerwan, A., Al-Jabir, A., ... Agha, R. (2020). World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19). *International Journal of Surgery*, *76*, 71-76. https://doi.org/10.1016/j.ijsu.2020.02.034

24

Somasundaram, D., & Sivaokan, S. (2013). Rebuilding community resilience in a post-war context: Developing insight and recommendations—A qualitative study in northern Sri Lanka. *International Journal of Mental Health Systems*, *7*(3), 1-24.

Standish, K. (2019). Learning how to hope: A hope curriculum. *Humanity & Society*, *43*(4), 484-504. https://www.doi.org/10.1177/0160597618814886

Strayhorn, T. L. (2021a). Analyzing the short-term impact of a brief web-based intervention on first-year students' sense of belonging at an HBCU: A quasi-experimental study. *Innovative Higher Education.* https://doi.org/10.1007/s10755-021-09559-5

Strayhorn, T. L. (2021b). Lessons learned from institutional responses to COVID-19: Evidence-based insights from a qualitative study of historically Black community colleges. *Community College Journal of Research & Practice*. https://doi.org/10.1080/10668926.2021.1975173

Strayhorn, T. L. (2021c). Measuring the effects of COVID-19 on women's daily lives and well-being: A national survey's preliminary results. *Academia Letters*, Article 4133. https://doi.org/10.20935/AL4133

Valle, M. F., Huebner, E. S., & Suldo, S. M. (2006). An analysis of hope as a psychological strength. *Journal of School Psychology*, *44*, 393-406.

Van der Kolk, B. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. Viking.

Vincent, P. J., Pradeep, B. P., & MacLeod, A. K. (2004). Positive life goals and plans in parasuicide. *Clinical Psychology and Psychotherapy*, *11*, 90-99.

Worrell, F. C., & Hale, R. L. (2001). The relationship of hope in the future and perceived school climate to school completion. *School Psychology Quarterly*, *16*, 370-388. http://dx.doi.org/10.1521/scpq.16.4.370.19896

Yarcheski, A., Mahon, N. E., & Yarchesski, T. J. (2011). Stress, hope, and loneliness in young adolescents. *Psychological Reports*, *108*(3), 919-922.

Notes

complete or partial. Responding to voluntary surveys for research purposes is always a major benefit to the research community but it's particularly noteworthy when people choose to respond amid a global pandemic. Special thanks to the author's graduate student research team for their assistance with data collection.

Note 3. At times, throughout the manuscript, "white" is written in lowercase with intention to reduce risks of subtly endorsing racist notions about racial privilege, power, and superiority, in keeping with my work.

Note 4. In Table 1, "Latinx" is a gender-neutral term most commonly used by young Americans of Latin American descent to refer to people of Latin American heritage. "Black" and "African American" are used interchangeably, through the article, to refer to people whose ancestral origins lie in any of the Black racial groups of Africa (e.g., Caribbean, West Indian, Haitian).