Early Adolescent Social Isolation, Hope, and Well-being during a Pandemic

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EARLY ADOLESCENT SOCIAL ISOLATION, HOPE, AND WELL-BEING

DURING A PANDEMIC

BY

ALICEN HAUCK

A thesis submitted in partial fulfillment of the requirements for the

Master of Science

Major in Counseling and Human Resource Development

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2020
This thesis is approved as a creditable and independent investigation by a candidate for the master’s degree and is acceptable for meeting the thesis requirements for this degree. Acceptance of this does not imply that the conclusions reached by the candidate are necessarily the conclusions of the major department.

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<table>
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<th>Abbreviation</th>
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<td>Strengths and Difficulties Questionnaire</td>
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ABSTRACT

EARLY ADOLESCENT SOCIAL ISOLATION, HOPE, AND WELL-BEING DURING A PANDEMIC

ALICEN HAUCK

2020

Social isolation is often divided into two subcategories of objective and subjective. The COVID-19 pandemic has led to an increase in objective social isolation in the form of social distancing and fewer social events. Research delineating the relationship between social isolation and adolescent well-being utilize measures of subjective social isolation. Whereas, measures of objective social isolation are more commonly used with geriatric populations. Therefore, there is a lack of information specific to the impact of objective social isolation on adolescent well-being, particularly during a pandemic. The effects of social isolation due to COVID-19 will not be short lived. Deciphering the relationship between adolescent social isolation, hope, and well-being will not only shed light on a gap in the literature but also identify techniques and approaches that may mitigate the effects of this pandemic for adolescents.

The present study sought to examine the relationship between adolescents’ experience of social isolation and hope as well as the moderating effect of hope on the relationship between social isolation and well-being in adolescents. Our study used a convenient sample of adolescents who responded to social media posts and emails from their school counselors. From our sample we collected demographic and pandemic information as well as self-reports of hope, strengths and difficulties, and both subjective and objective social isolation.
Our final sample consisted of 41 adolescents between the ages of 12 and 14. Bivariate correlations and hierarchical regression analyses were used to assess the significance of our research questions. Our results revealed that higher hope scores were related to less subjective social isolation. Greater levels of subjective social isolation predicted higher scores of internalizing symptoms. Whereas, greater levels of objective social isolation predicted higher externalizing scores. Within our study, there was no moderating effect of hope found on the relationship of social isolation and well-being in adolescence. Our study has found significant and measurable effects of the pandemic on adolescents in our community. To mitigate the effects of this pandemic, we posit that adolescent health/service providers consider utilizing compassion, understanding, and empathy in response to increased internalizing and externalizing symptoms to encourage hope and connection.
INTRODUCTION

Adolescence is marked with an increase in vulnerability due to a multitude of transitions. During this stage of development, adolescents experience behavioral, emotional, cognitive, and psychosocial changes. They begin to seek situations that are increasingly risky, become more impulsive, show increased emotional instability, and desire to spend more time with peers. Similarly, adolescence is a time of notable shifts in motivational and reward-related brain regions (Doremius-Fitzwater et al., 2010; Spear, 2007). Collectively, these changes make adolescence one of the most critical time periods in a person’s life. The motivational and reward sensitivities are the foundation of adolescents’ need to seek out novel sensations and exhibit greater social awareness. In humans, as in other species, adolescents require the development of new skills and abilities in order to survive without their caregivers. Therefore, increased risk-taking and social engagement are a function of this evolutionary necessity to find nutrition, water, and a mate (Doremius-Fitzwater et al., 2010).

Human beings are innately driven for social interaction and connectedness. Within middle schools, educational research has found that higher levels of connectedness and school belonging correlate with better school performance, motivation, and behavior (London & Ingram, 2018). Often times, the limiting or restriction of social interaction is a punishment for middle schoolers because they desire social connection. During this stage of development, where social connection and a sense of belonging are crucial, adolescents are experiencing greater amounts of social isolation as a result of the coronavirus (COVID-19) pandemic.
Social isolation has been defined as “the distancing of an individual, psychologically or physically, or both, from his or her network of desired or needed relationships with other persons” (Biordi & Nicholson, 2013, p.85). Zavaleta and Samuel (2014) expanded on this stating that social isolation should be conceptualized by the quantity and quality of social connection deprivation. Both of these definitions differentiate social isolation as an objective and subjective experience. Objective social isolation has also been defined as external or actual social isolation. Objective social isolation describes a lack of social resources or having a limited social network. While subjective social has been described as internal or perceived social isolation. The experience of subjective social isolation can feel lonely or disconnected regardless of connection to their social network (Hawkley, 2019; Holt-Lunstad et al., 2015; Zavaleta et al., 2017). Similarly, social isolation has been associated with physical (mortality, blood pressure, and cardiovascular disease) and psychological/emotional (stress, anxiety, and depression) health characteristics (Hawkley, 2019; Zaveleta & Samuel, 2014). Therefore, pandemic induced social isolation may pose serious health risks to the adolescents within our community.

At the time of this writing (March/April 2020), schools, sporting events, and other daily activities have been cancelled for the foreseeable future. Adolescents are completing coursework from home and are encouraged to “social distance” from anyone not considered family. There is a shortage of basic necessities such as toilet paper, food, and cleaning supplies. Numerous businesses have been forced to close their doors due to inability to work remote or pay employees. Events and activities that would have been helpful in alleviating the stress of the pandemic have been cancelled — such as support
groups, graduations, weddings, and funerals (Stevenson et al., 2009). Similarly, people may be experiencing an increased sense of danger, fear of infection, panic attacks, anxiety, depression, and in some cases suicide (Xiang et al., 2020). However, in the midst of this chaos, many are going above and beyond for their community. Restaurants are offering free food to children who relied on the meals provided at school; people are shopping for the elderly and immunocompromised to help keep them safe and healthy; counselors are offering greater accessibility through mediums such as telehealth; and some people have taken up crafting face masks to help ease hospital scarcity. With this peculiar blend of disaster and hope, we sought to examine how adolescents are experiencing the COVID-19 outbreak, increased social isolation, and hope.

The COVID-19 pandemic has created a unique experience of social isolation for adolescents in the United States. The encouragement of “social distancing” has prompted greater objective social isolation as well as potentially subjective social isolation. The majority of research on objective social isolation involves older adults who, due to residency in assisted living and other similar facilities, lack connection to loved ones. Whereas, research analyzing social isolation in adolescence focuses on the subjective experience. To fully evaluate the impact of the pandemic on adolescents, we utilized a combination of both subjective and objective measures of social isolation. Specifically, the present study sought to delineate the relationship between adolescent social isolation and well-being. We also explored the moderating effect of hope on the relationship between adolescent social isolation and well-being.
**Snyder’s Hope Theory**

The colloquial definition of hope revolves around a sense of trust or desire for something good to happen (Merriam-Webster, 2020). After more than 25 years of research, Snyder and his colleagues define hope as “the process of thinking about one’s goals, along with the motivation to move toward those goals (agency), and the ways to achieve those goals (pathways)” (Snyder, 1995, p.355). Snyder (1995) also noted that rather than an emotion, hope should be conceptualized as a dynamic cognitive motivational system. Hope is adaptive and looks different across child development. Infanthood is where hope is first established, hinging off of external stimuli perception, formation of goals, and self-recognition. By preschool, children begin to take the perspectives of others while experiencing an enormous growth of vocabulary. Throughout middle childhood, children have a much better memory, transition from learning to read to reading to learn (about models of hope through stories), and begin to focus on peer relationships. Lastly, during adolescence, they are motivated by peer relationships, sexuality, and identifying their own unique personality (Snyder, 2000). Similarly, in adolescence, greater hope has been shown to predict higher grades, better behavioral adjustments, lower depressive symptoms as well as satisfaction with family, friends, school, living environment, and self-image (Esteves et al., 2013; Lagacé-Séguin & d'Entremont, 2010; Snyder et al., 2002;). All of which make hope an invaluable component of well-adjusted adolescents.

Disadvantage, trauma, and adversity have been correlated with diminished levels of hope (Snyder, 2000). Lower levels of hope have been associated with higher amounts of anxiety, substance use, and internalizing and externalizing behaviors (Esteves et al.,
Conversely, studies have found that hope can act as a protective factor against maladjustment and stress in adolescence (Esteves et al., 2013; Snyder et al., 1997). Esteves and colleagues (2013) reported that, according to nine separate studies, hope is significantly associated with social support or a sense of a supportive community. Therefore, in adolescents, social support or social connection is a robust variable in relation to hope and its absence may pose significant effects on adolescents’ well-being. Our project aimed to define the relationship between hope and social isolation due to the pandemic.

**Influential Aspects of Mental Health Services**

![Figure 1. Lambert’s Pie](image)

According to Lambert’s pie, the biggest and most influential piece in determining the success of mental health services is clients’ individual differences and variables (Asay & Lambert, 1999). Examples of client variables and extra-therapeutic events that Asay and Lambert provided include “disorders, histories, current stressors, social support..."
networks, and the like” (Asay & Lambert, 1999, p.30). In our adolescent population, their experience of hope, social isolation, and the pandemic all fall within this sector of client variables and extra-therapeutic events which make up 40% of what influences the effectiveness of mental health services. This demonstrates that it is imperative to seek understanding of adolescents’ unique experience of this pandemic, as it will inform future treatments and interventions used with adolescents who have experienced the COVID-19 pandemic as well as adolescents who feel like outsiders in their community.

A collaboration between Lopez, Floyd, Ulven, and Snyder (2000) yielded a therapy based on Snyder’s theory of hope. Hope therapy is rooted in encouraging the formation of clearer goals, discovering pathways to attain those goals, determining what it will take to maintain the goals, and reframing obstacles to goals as challenges to overcome. The effectiveness of hope therapy has been empirically studied for 2 decades and has been shown to reduce symptoms of distress and increase physical and psychological well-being. Utilizing hope-focused interventions has increased the effectiveness of various other forms of treatments as well (Cheavens & Guter, 2018; Lopez et al., 2000). This theory of counseling follows Lambert’s pie in emphasizing client variables, specifically hope, to bolster health, well-being, and more successful forms of treatment.

To date, there are multiple studies identifying the importance of hope in adolescents’ well-being. These studies have examined hope’s impact on academic performance, behavioral concerns, life satisfaction, and depressive symptoms (Carbonell et al., 2002; Halama, 1999; Lagacé-Séguin et al., 2010; Snyder, 1995; Snyder, 2000; Snyder et al., 2002). However, none have assessed hope’s relationship with both
objective and subjective social isolation in adolescence. Similarly, few studies have addressed the impact that a pandemic outbreak can have on adolescents’ well-being. Specifically, our study sought to examine the relationship between social isolation and hope as well as the moderating effect of hope on the relationship between social isolation and well-being. This study will provide unique and relevant information that can help professionals implement effective treatments and interventions for adolescents who have or are currently experiencing a pandemic. Similarly, this information will be useful in other situations when adolescents may feel or be socially isolated.

METHODS

This study was submitted to South Dakota State University’s Institutional Review Board and was approved April 9th, 2020. The survey was open for 20 days during which school, sports, and social events were cancelled in our Midwestern state. The survey closed once limits began to be lifted and social gatherings became more frequent. The survey took approximately 11 minutes for the adolescents to complete.

Participants

The proposed study posted invitations to social media explaining the qualification for participation and provided a link to the survey. An email was also sent to school counselors in the area with information about our project to be sent to parents or posted on the school website. Adolescents between the ages of 12 and 14 living in our frontier midwestern state were invited to participate in the study. Every state has experienced the pandemic to different degrees. For the fidelity of this project, we solely collected research from adolescents within this state. Once the survey was completed, adolescents were
given the option to be submitted in a drawing for a chance to win one of two $50 gift cards.

MEASURES

Demographic & Pandemic Information. We collected demographic information such as age, gender, race, ethnicity, and socioeconomic status. This is essential to obtain and later control for confounding factors that could influence the experience of social isolation and hope. Many families and individuals have isolated to different degrees; some worked outside of the home and engaged with peers while others self-quarantined and had very little social interaction. Therefore, we found it critical to identify aspects of the pandemic that our sample of adolescents had experienced. The pandemic information we gathered included social media exposure, whether or not they left the house, duration they had been schooling from home, and their fear of loved ones becoming infected.

Children’s Hope Scale. The Children’s Hope Scale (Snyder et al., 1997) was administered to the adolescents in order to obtain information about their hope sum score. The reliability (internal consistency: 0.81, 95% CI = 0.79-0.82; test-retest: 0.71, 95% CI = 0.64-0.78) as well as construct and criterion validity of Snyder’s Children’s Hope Scale has been shown to be high with adolescents, which we believe made it the best method for evaluating the hope levels of our participants during the current pandemic (Hellman et al., 1999). The sum of the odd items reflects agency and the sum of the even items reflect pathways thinking. The total hope sum score was used for this study.

Strengths and Difficulties Questionnaire (SDQ). The SDQ, developed by Goodman (1997), was used to gather behavioral, social, and emotional competencies. Specifically, the SDQ is a 25-item self-report questionnaire that assesses for
internalizing, externalizing, total difficulties and their impact on several aspects of functioning. The SDQ measures pathology while also focusing on the adolescent’s strengths. The SDQ was the ideal method for our study, as it had been shown to be a highly reliable (internal consistency = 0.81 and test-retest = 0.71) and valid (strong support for the ability to distinguish psychopathology) measure of childhood and adolescent emotional, social, and behavioral well-being (Yao et al., 2009; Muris et al., 2003).

Social Isolation Questionnaire (SIQ). The SIQ was developed by Zavaleta, Samuel, and Mills (2017) as a response to the lack of a standardized measurement of social isolation. As stated before, to our knowledge, there is no succinct, validated, normalized measure of objective and subjective social isolation in adolescence. Although, this SIQ has yet to be validated, it clearly assesses for both subjective and objective social isolation. It pulls questions and items from the large amount of research on social isolation that have proven to be useful, reliable, and valid (Zavaleta et al., 2017). Thus, creating a sound questionnaire for measuring social isolation in its entirety. The final SIQ consists of 15 items measuring frequency of social contact, social network support, presence of a discussion partner, reciprocity and volunteering, satisfaction with social relations, need for relatedness, feeling of belonging to own neighborhood or community, loneliness, and trust (Zavaleta et al., 2017).

Statistical Analysis

After all of the data was collected and scored, t-tests were used to assess for any significant demographic differences between hope or well-being (as measured by SDQ). Bivariate correlations were used to assess for the strength of the relationship between
social isolation and hope as well as social isolation and well-being. Linear regressions were used to determine the moderating effect of hope on the relationship between social isolation and well-being. Demographic variables such as age, gender, socioeconomic status (SES), and cultural identities were controlled for in the regression analyses.

RESULTS

The final sample consisted of 41 adolescents between the ages of 12 and 14 (μ = 13, 65.8% Female). 93% of the sample identified as White or Caucasian, with 7.5% identifying as either Native American, Hispanic or Latino, or Native Hawaiian or other Pacific Islander. 17% of the sample population reported receiving free and reduced lunch at school. The adolescents that completed our survey had been schooling from home for 3-4 weeks. On average, they reported that, at the time of the survey, they left the house once a day and spent 1-3 hours a day on social media. 61.3% reported they are more concerned than usual about the health of a loved one and 12.9% said a loved one was infected with COVID-19. 80.6% of the adolescents reported their parents’ work was affected by the pandemic and 12.9% stated that their parents’ careers posed additional health concerns to their family.
Bivariate correlations are shown in table 1. Higher subjective social isolation was significantly correlated with greater internalizing ($r = 0.687$, $p < 0.01$) and externalizing ($r = 0.374$, $p < 0.05$) scores. Similarly, higher objective social isolation was significantly correlated with greater internalizing ($r = 0.409$, $p < 0.05$) and externalizing ($r = 0.524$, $p < 0.01$) scores. Higher hope sum scores were significantly correlated with lower amounts of subjective social isolation ($r = -0.428$, $p < 0.01$) and externalizing scores ($r = -0.521$, $p < 0.01$).

\textit{Table 1.}

\textit{Bivariate correlations between all variables.}

<table>
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<th>Primary Variables</th>
<th>1</th>
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<th>5</th>
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<td>1. Adolescent Age</td>
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<td></td>
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<td>2. Children’s Hope Scale</td>
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<td>3. Objective - SIQ</td>
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<tr>
<td>4. Subjective - SIQ</td>
<td>-0.019</td>
<td>-0.428*</td>
<td>0.535**</td>
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<tr>
<td>5. Externalizing - SDQ</td>
<td>0.364*</td>
<td>-0.521**</td>
<td>0.524**</td>
<td>0.374*</td>
<td>--</td>
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<tr>
<td>6. Internalizing - SDQ</td>
<td>0.110</td>
<td>-0.304</td>
<td>0.409*</td>
<td>0.687**</td>
<td>0.310</td>
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**p<.01, *p<.05
Linear regressions were used to determine whether hope acts as a moderator in

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<th>Model 2</th>
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<td>p-value</td>
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<td>Hope</td>
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</tr>
<tr>
<td>Objective</td>
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<td></td>
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<tr>
<td>Subjective</td>
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<tr>
<td>Gender</td>
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<tr>
<td>SES</td>
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<tr>
<td>Age</td>
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Summary of Hierarchical Regression Analysis for Variables Loaded onto Examining
In the hierarchical regression analysis in table 2, when added separately, the hope

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<td>p-value</td>
<td>b-value</td>
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<td>Hope</td>
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<tr>
<td>Objective</td>
<td>0.064</td>
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<td>0.084</td>
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<tr>
<td>Subject x Hope</td>
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<td>0.218</td>
<td>0.829</td>
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<tr>
<td>Subject x Objective</td>
<td>0.034</td>
<td>0.005</td>
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Adj R²: 0.378
R²: 0.507
Adjusted R²: 0.398
R in R²: 0.017

Summary of Hierarchical Regression Analysis for Variables Loaded onto Hierarchical
Linear regressions were used to determine whether hope acts as a moderator in the relationship between social isolation and our well-being variables of externalizing and internalizing. Assumptions of linearity, normality, and consistency were all tested, and our data satisfied each. There were two leverage points that were not removed from our sample because they were not made in error and reflect a genuine social isolation score. Two hierarchical regression analyses were performed on both externalizing and internalizing variables from the SDQ. For each, our first step included loading all control variables and variables of interest. The second step was done twice, one adding the interaction of hope and subjective social isolation and the other including the interaction of hope and objective social isolation. The last model added both interactions terms from models 2a and 2b. These regression results are shown in tables 2 and 3.

In the hierarchical regression analysis in table 2, when added separately, the hope interaction terms showed marginal effects when explaining the variance in externalizing (B = 0.010, p < 0.1; B = 0.058, p < 0.1). In the final model from both table 2 and 3, none of the variables of interest significantly explained the variance of externalizing/internalizing, and the adjusted R²s were not significant.

DISCUSSION

As expected, higher hope scores were significantly associated with less subjective social isolation. However, there was not a significant correlation between hope and objective social isolation. During the COVID-19 pandemic, having a mindset of greater hope may be more protective against subjective or perceived social isolation than objective or external social isolation. There are many aspects of the COVID-19 pandemic that have the potential to create significant distress in adolescents. An example of this
could be feelings of loneliness or disconnection from their community. As stated previously, adolescence is a stage of development where social connection with peers becomes increasingly important. Our study found that those with a greater tendency to set goals and a belief that they can find ways to achieve them were less likely to feel lonely, unsatisfied, and disconnected from their community throughout the COVID-19 pandemic. Therefore, by bolstering adolescent hope, adolescent health/service providers can protect adolescents from the internal implications of social isolation. To encourage the formation of hope, adolescent health/service professionals may consider including aspects of hope therapy in their work with adolescents who have experienced the COVID-19 pandemic. These aspects could include emphasizing possibilities, facilitating consideration of life’s opportunities, fostering a positive culture, and promoting a community that encourages the formation of hope (Esteves et al., 2013).

According to our analyses, both subjective (internal) and objective (external) social isolation were significantly correlated with our measures of well-being. The strongest relationships existed between subjective social isolation and internalizing as well as objective social isolation and externalizing. This documents that, during the COVID-19 pandemic, adolescents who have higher subjective or perceived social isolation may experience greater internalizing difficulties such as emotion and peer problems. Conversely, adolescents with a low amount of social contact and emotional support from family and friends (objective social isolation) may experience externalizing behaviors at greater rates such as hyperactivity and conduct problems. This aligns with the literature in that involuntary social isolation and significant disconnection from the multileveled ecosystem predicts a greater likelihood of experiencing depression,
loneliness, or other social and cognitive impairments (Biordi et al., 2013). Likewise, other studies have found that both subjective and objective social isolation increases the risk of mortality greater than obesity, high blood pressure, and high cholesterol (Hawkley, 2019; Holt-Lunstad, et al., 2015).

Biordi and Nicholson (2014) along with Hawkley (2019) explored the biology of this relationship and found that the HPA system, which regulates cortisol, is more dysregulated in those with higher amounts of social isolation. Similarly, those with greater social isolation experienced consistently higher cortisol levels throughout the entire week, while those with less social isolation had levels that dropped during the weekends. Those individuals with greater social isolation also exhibited evidence of glucocorticoid insensitivity due to the dysregulated cortisol levels. Glucocorticoid insensitivity impacts the body’s ability to regulate inflammation which could lead to inflammatory diseases such as hypertension, cardiac diseases, and stroke. They found if inflammation reaches the brain it could lead to symptoms of social withdrawal which can then exacerbate the already high levels of social isolation adolescents are already experiencing as a result of the COVID-19 pandemic (Biordi & Nicholson, 2013; Hawkley, 2019). This cycle of social isolation leading to dysregulation of the HPA axis, leading to glucocorticoid insensitivity, which increases inflammation in the body, resulting in greater social isolation occurs when exposed to not only objective social isolation but subjective as well.

When assessing for a moderating effect of hope on the relationship between social isolation and well-being, we found that, during this pandemic with our adolescent sample, there is no moderating effect of hope on this relationship. It may be that, during
the COVID-19 pandemic, the chaos and uncertainty adolescents are experiencing may play a larger role than hope in influencing the relationship between social isolation and our measures of well-being. It is also essential to acknowledge that our sample population contained an age range of 12-14, and it may be that, during this developmental period, hope may not play as significant of a role in adolescent well-being as their need for peer interaction and social belonging. Lastly, our small and convenient sample size of 41 adolescents from our midwestern state does not represent all adolescents experiencing this pandemic. Future research should look into other environmental and relational factors that may be more influential in the relationship between social isolation and well-being such as family systems, attachment style, and childhood trauma.

**IMPLICATIONS**

Our study has shown that the COVID-19 pandemic has had relevant and measurable effects on adolescent well-being. Unfortunately, these effects will not be short lived. Adolescents who experienced the chaos and fear of this pandemic may respond differently to chaos and fear the rest of their lives. It will be important for health/service providers to understand how the adolescents they are working with have experienced the COVID-19 pandemic as well as the impact it’s had on their well-being.

Adolescent health/service providers will need to distinguish adolescents’ behaviors as trauma responses rather than a problem with the adolescent. This is essential because the emotion dysregulation, peer problems, hyperactivity, and conduct problems they display are a result of a normal response to the panic and fear they have experienced throughout this pandemic but could easily be mislabeled as problematic juvenile delinquency. If adolescent health/service providers categorize these behaviors as
inappropriate or problematic, this will only compound the effects of trauma rather than assuage them. Instead, it will be more beneficial for adolescent health/service providers to approach adolescents with compassion and understanding. Rather than punishing adolescents for their normal reaction to increased social isolation, health/service providers should attempt to understand each adolescent’s unique experience.

According to Lambert’s pie, understanding the experience of each individual adolescent will increase the effectiveness of mental health services greater than finding the perfect intervention or techniques to fix their problems. Especially for adolescents who have experienced greater levels of objective and subjective social isolation, a genuine therapeutic connection and intentional regard for their particular situation can not only protect against the consequences of social isolation but also encourage hope by fostering a positive environment and emphasizing possibilities. Therefore, an empathetic response to adolescents’ behaviors will be increasingly important as these adolescents will eventually become adult and the response that health/service providers show them today will shape their future and long-term well-being.
LITERATURE CITED


Lagacé-Séguin, D. G., & d'Entremont, M. R. L. (2010). A scientific exploration of positive psychology in adolescence: The role of hope as a buffer against the


