AMERICAN PSYCHOLOGICAL ASSOCIATION

Journal of Rural Mental Health

ISSN: 1935-942X

2022, Vol. 46, No. 4, 237–248
https://doi.org/10.1037/rmh0000216

Adverse Experiences and Positive and Negative Responses Among Appalachian Young People

Nicole P. Yuan[1], Nidal Azreg Zakaria Kram-Brooks[1], Alexis Ellsworth-Kopkowski[2], and Sherry Hamby[3]

[1] Department of Health Promotion Sciences, University of Arizona

[2] Department of American Indian Studies, University of Arizona

[3] Life Paths Appalachian Research Center, Sewanee: The University of the South

There is limited research on adverse childhood experiences among rural communities in the United States. The purpose of the study was to identify the types of events that Appalachian young people self-identified as low-point life experiences and examine how they responded and coped with those experiences. The study analyzed narratives collected from 71 young people, aged 12–24, who participated in a mixed-methods study on resilience and psychosocial strengths among Southern Appalachian communities. Interviews were recorded, transcribed, and coded using qualitative data analysis software. Young people reported several types of adversities, including loss and death, violence exposure and victimization, parent separation and divorce, school difficulties, and physical and mental health problems. Some young people reported "compounded" low-point experiences, similar to polytrauma, with the occurrence of multiple negative events either from two or more types of adversities or involving multiple people. Young people described a variety of positive and negative responses to their low-point experiences. Positive responses involved leisure activities, coping strategies, religious coping and spirituality, and support from family, friends, and professionals. Some positive strategies were tied to Appalachian culture and values. Negative responses included risky and aggressive behaviors, suicidal ideation, and social isolation. A few young people described a transition from using negative to positive strategies, supporting a dynamic process of resilience building. Findings inform the development of strength-based and resilience-focused interventions for Appalachian young people and families.

Public Health Significance Statement

Many Appalachian young people in the present study displayed resilience in their abilities to navigate through self-identified low-point experiences by utilizing individual strengths, coping strategies, relationships, and community resources. Several positive coping strategies were tied to Appalachian culture and values, such as family, kinship, and land. Initiatives to promote the health and well-being of Appalachian young people should include culturally adapted, strength-based, and resilience-focused interventions.

This article was published Online First September 8, 2022.

Nicole P. Yuan https://orcid.org/0000-0002-2441-4692

Alexis Ellsworth-Kopkowski https://orcid.org/0000-0002-4197-5002

Sherry Hamby https://orcid.org/0000-0002-1197-0534

Sherry Hamby received funding from the John Templeton Foundation (Grant 40965). The opinions expressed in this article are those of the authors and do not necessarily reflect the views of the John Templeton Foundation. The authors thank the individuals who shared their life stories for this study. The authors thank the Life Paths Appalachian Research Center for their assistance with the study and dissemination activities. Findings from this study were presented at the 2018 American Public Health Association Annual Meeting & Expo, San Diego, CA.

Correspondence concerning this article should be addressed to Nicole P. Yuan, Department of Health Promotion Sciences, University of Arizona, 1295 North Martin Avenue, P.O. Box 245219, Tucson, AZ 85724, United States. Email: nyuan@arizona.edu

Keywords: adverse childhood experiences, coping, resilience, rural, Appalachia

Supplemental materials: https://doi.org/10.1037/rmh0000216.supp

There has been significant attention on adverse childhood experiences (ACEs; family problems such as child abuse or parental substance abuse), largely due to evidence that ACEs are related to a wide variety of health conditions, health risk behaviors (Felitti et al., 1998; Hughes et al., 2017; Kalmakis & Chandler, 2015), and increased health care utilization (Kalmakis & Chandler, 2015). Despite the abundance of ACEs research, gaps in the literature remain. There are few studies on ACEs among rural and impoverished communities and even fewer conducted with the rural Appalachian population, which is one of the largest regions of the United States. Most ACEs studies use quantitative methods. Few investigations apply qualitative methods to understand and empower the voices and narratives of the lived experiences of young people. The purpose of the current qualitative study was to address these gaps and examine ACEs and coping strategies among a sample of young people living in Southern Appalachian communities.

Research With Rural and Impoverished Communities

Research with rural and impoverished communities has documented the prevalence of ACEs and other adversities. One study found that 55.4% of individuals who lived in rural areas reported experiencing ACEs (Chanlongbutra et al., 2018). Although the prevalence was lower than among those who lived in urban areas (59.5%), the negative impacts of ACEs among the rural sample were significant. Individuals who lived in rural areas and experienced at least one ACE had increased odds of reporting fair/poor general health, limitations in activities, and heart disease compared to rural respondents who never reported an ACE. A study on child poverty documented higher levels of child poverty among southern states compared to northern states (Pascoe et al., 2016). Children who lived in areas with concentrated poverty were more often exposed to environmental hazards, poor schools and childcare centers, community violence, and limited community and social support.

A lot of research is deficit-oriented with an emphasis on risk factors and negative outcomes, which reinforces societal low expectations for individuals living in impoverished communities (Canvin et al., 2009). Some researchers have countered this body of literature with studies on positive coping strategies and resilience among individuals from disadvantaged communities. A qualitative study conducted with individuals living in poor areas in Britain found the evidence of "hidden resilience" (Canvin et al., 2009). Participants reported coping with various difficult situations and making transitions in their lives. The transitions were assisted by family and community support, respectful attitudes and behaviors from service providers, and activities that enhanced self-esteem. A qualitative study conducted in New York state identified resiliency factors among young people who lived in rural poverty and received special education services (Curtin et al., 2016). The researchers found that resilience was tied to individual positive qualities, including positive attitude, perseverance, and help-seeking. Resilience was also tied to positive social conditions, such as a positive school environment and adult role models.

The Appalachian Region

The Appalachian region is a unique setting for research on ACEs, coping strategies, and resilience among rural young people in the United States. Appalachia consists of 205,000 square miles that follow the Appalachian Mountains from southern New York to northern Mississippi. The region includes the entire state of West Virginia and parts of 12 other states which are Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, and Virginia. Appalachia is primarily rural, with 42% of the population being rural compared to 20% of the national population (Appalachian Regional Commission, 2021). Historically, the economy focused primarily on mining, agriculture, forestry, chemical, and heavy industries (Appalachian Regional Commission, 2021).

The region later expanded into manufacturing and professional service industries.

Data from the 2014–2018 American Community Survey document some improvements in trends in social determinants of health but some conditions in the Appalachian region remain less positive compared to the entire country (Pollard & Jacobsen, 2020). For example, in 2009–2013, Appalachian residents living in poverty dropped by 1.2% points to 15.8% in 2014–2018 (Appalachian Regional Commission, 2021), but the rate was higher than the U.S. poverty rate in 2018 (11.8%; Semega et al., 2019).

Despite these social conditions, there are few investigations on ACEs and how Appalachian young people respond to such experiences. There is a study on interpersonal violence among adolescents from two Appalachia high schools in western North Carolina (Martz et al., 2016). The researchers found similar rates of physical and sexual intimate partner violence among the Appalachian high school students compared to national data. Another quantitative study examined risk and protective factors and resilience among Appalachian adolescents (Markstrom et al., 2000). For the sample of Appalachian female adolescents, family social support and problem-focused coping strategies were positively associated with resilience. For the sample of male adolescents, problem-focused coping strategies were positively associated with resilience. For both female and male adolescents, avoidance coping strategies were negatively associated with resilience. A qualitative study with rural Appalachian adolescents revealed the complexity of youth behaviors and related outcomes (Moreland et al., 2013). For some Appalachian adolescents, time spent with family protected them from risky behaviors like substance abuse, but for others, closeness to family resulted in exposure to family members' risk behaviors and increased risks for adolescents. Similarly, for some adolescents, strong connections to the community contributed to having positive role models among school teachers, school leaders, coaches, police officers, and neighbors. For other adolescents, community connectedness increased exposure to negative influences. These findings highlight the need for more qualitative research to obtain a deeper understanding of how Appalachian young people experience their lives, especially during times of adversity.

The Present Study

This was a phenomenological qualitative study that focused on narratives collected from 71 individuals, aged 12–24. Phenomenology is a type of qualitative research that examines an individual's lived experiences and the significance of events as understood by the individual (Neubauer et al., 2019). Participants of the present study were part of a larger mixed-methods investigation on resilience and psychosocial strengths among Southern Appalachian communities. The narratives focused on self-identified low-point experiences, which were defined as personal events that showed how individuals dealt with difficult times. The purpose of the present qualitative study was to describe the types of events that Appalachian young people self-identify as low-point life experiences and examine how they responded to those experiences, including positive and negative responses.

Method

Participants

The main study consisted of 202 individuals who completed a computer survey and in-depth individual interviews on different types of life experiences (Hamby et al., 2018). The present study analyzed the narratives of self-identified low-point experiences among 71 conveniently sampled participants aged 12–24 at the time of data collection. A wide age range was included to capture the experiences of young people. According to the United Nations Population Fund, young people include adolescents aged 10–19 and young people aged 15–24 years (United Nations Population Fund, n.d.). The average age was 18 ($SD = 3.5$) of whom 56% were female. The majority of the sample was White/European American (80%). Ten percent were Black/African American, 4% were Latino, and 6% were multiracial. A third of the sample had graduated from high school (33%). Twenty-eight percent were currently enrolled in middle/high school, 7% had completed some high school but did not graduate, 4% had a General Educational Development (GED) diploma, 20% had completed some college, 7% had a bachelor's degree, and 1% had a master's degree. About half of the participants were students (49%), 18% were

unemployed and looking for work, 14% were employed part-time, 9% were employed full-time, 4% were a homemaker, 3% were laid off, and 3% were disabled or too ill to work. Among the 61 participants who reported total income, 56% reported a total income of less than $20,000; 21% reported a total income of $20,000–$50,000; and 23% reported a total income of more than $50,000. Most of the sample lived in small towns with populations of 2,500–20,000 people at the time of data collection (73%). Nineteen percent lived in rural areas with populations under 2,000 people, 5% lived in large cities with populations over 300,000, and 3% lived in smaller cities with populations between 100,000 and 300,000.

Procedure

Participants were recruited using local community events, word-of-mouth, and other strategies, including flyers, newspaper and radio ads, and direct mail. Individuals who completed a computer survey on resilience and strengths were invited to participate in an individual qualitative interview until 200 interviews were completed. The interviews were conducted by research staff in 2013 and 2014 and lasted about 1 hr. Only the interviewer and participant were present in the room during the interview. Participants selected the location of the interviews and most of them were conducted in a research office or the participant's home. For young people aged 18–24, informed consent was obtained from the young people. For young people aged 12–17, informed consent was obtained from a parent or guardian and written assent from the young people. Participants received a $50 gift card upon completing the entire qualitative interview. The institutional review board of the study's home institution approved all procedures.

The qualitative interviews were semistructured and involved an interview guide with questions and prompt about several different life "stories." Participants were asked to share stories about things that happened to them in the past and describe the contexts of those experiences. Participants were also asked about things they imagine for their future, life challenges, and current concerns. They were also asked to describe their values, personal strengths, and personal weaknesses. All interviews were audio recorded and transcribed verbatim. The recordings were destroyed after the transcription was completed. Names and identifying information were removed from the transcripts.

For the present study, the research team focused specifically on participants' responses to questions about a "scene that stands out as a low point," particularly one that showed how they dealt with tough times (see Appendix, for interview guide). Participants were asked to describe details about what happened in the event, where, and when it occurred, who was involved, and what they were thinking and feeling during the event. They were also asked to describe how they handled what happened and how it showed how they cope with challenges.

Data Analysis

The analysis team for the current project consisted of a faculty member and doctoral student who had training in qualitative research and analysis. The team performed the qualitative analysis using ATLAS.ti 8 (Scientific Software Development., 2018). The first step consisted of the team creating a codebook of deductive and inductive codes. Deductive codes were based on the interview questions, relevant literature, and conceptual frameworks for qualitative data analysis (Miles & Huberman, 1994). Inductive codes were based on emergent themes from the interviews. For the second step, the team established that two coders used the codebook in similar ways using a qualitative paradigm. Both individuals coded five transcribed interviews separately. Then they compared their coding and discussed differences until consensus was obtained. After comparing the third transcription, the team determined that there was sufficient consistency across the two coders, and comparisons were not made with the two remaining transcripts. The team enhanced the distinctions between certain codes and created one new code for impacts of the low-point experiences. The team did not conduct intercoder reliability, defined as a numerical measure of agreement between different coders (O'Connor & Joffe, 2020), because they took the position that intercoder reliability contradicts the agenda of qualitative research. Their position was supported by the side of the debate about intercoder reliability that argues that quantitative research focuses on a single, objective reality, whereas qualitative research focuses on multiple realities and perspectives influenced by different contexts (O'Connor & Joffe, 2020). The team

obtained confidence in how the coders used the codebook from the process conducted in this second step. For the third step, the team assigned 30 transcripts to the doctoral student to code and 36 to the faculty member. Upon completion of coding, the team merged the ATLAS.ti files and created a master file of 71 coded transcripts. Then the team created reports for each code that was selected for analysis. In the fourth step, both team members analyzed each code report separately and identified categories, themes, and patterns (Bradley, 1993). Afterward, they compared their findings and identified emergent themes, patterns, and illustrative quotes.

Results

Types of Low-Point Events

Several types of low-point events emerged from the young people's narratives. They included: (a) loss and death, (b) violence exposure and victimization, (c) parent separation and divorce, (d) school difficulties, and (e) physical and mental health problems.

Loss and Death

Many young people identified low-point events that involved loss or death. Losses included friends moving away and parents losing their jobs and homes. Young people also spoke about the deaths of their grandparents. An 18-year-old male participant described the death of his grandmother, "It was a pretty big hit to all my family, my mom, and my sisters especially. I just tried to talk it out." Young people also shared stories about the deaths of other individuals that were important to them, including a parent, friend, sibling, and someone who was a role model. Deaths were mostly due to illnesses or natural causes, but some were the result of suicide, including a brother who committed suicide.

Violence Exposure and Victimization

Violence exposure and victimization were also common low-point experiences reported by young people. Several young people reported witnessing domestic violence and abuse in the home. A 15-year-old female participant stated, "I remember coming out and my dad had hit my mom in the chest. It knocked her down and she couldn't breathe, and it scared me half to death." In some cases, young people reported being a victim of domestic violence. A 15-year-old female participant described how she suffered abuse from her mother's boyfriend, "If my mom's boyfriend was beating on them [siblings], I would lock them in a room. Instead of them taking a beating, I would because I didn't want to see them get hurt." Violence exposure also included witnessing and hearing about others being abused. One 24-year-old male participant reported that his stepfather repeatedly raped his sister. A 24-year-old female participant described their father's self-harm behaviors and suicide, "And all I remember is him running to the railroad tracks and then [us] not finding him for three days. He killed himself."

Young people were also victims of different forms of violence, including school bullying and sexual assault. Some young people reported being bullied and teased in schools. A 12-year-old female participant recounted that she was bullied repeatedly with no efforts by administrators to prevent it, "They started bullying me. They would just call me names. It would hurt because I'd have to go to the principal. . . . And there was nothing I could do about it because nobody would listen." A 20-year-old female participant reported being sexually assaulted by someone who was supposed to watch her, "She [my mom] left me with this boy. He was probably sixteen, seventeen. He molested me and stuff."

Parent Separation and Divorce

Low points also included parent separation and divorce. Young people, especially those who were young at the time of the event, were impacted by parent separation and the conflict that often surrounded it. A 12-year-old male participant stated, "My mom and dad had a fight about them divorcing. It was pretty rough for me and [name] because my dad had gotten mad at my mom." Young people often experienced the loss of a relationship with the parent whom they no longer lived with, which typically was the father. Their experiences with the parent whom they stayed with, usually the mother, were sometimes characterized by additional hardships. The challenges included financial and housing instability and parental mental health and substance use problems, as described by a 20-year-old female participant, "I was 10 years old and my parents

separated. My mom got hooked on drugs really bad. I had to take care of my brothers and stuff." Another story of financial hardship was reported by a 23-year-old female participant, "Our parents divorced, and we had to move. My mother and my sister and me. We didn't have a bed. We moved to this apartment and one of the neighbors. They threw out a bed. My mother is like, 'Oh my gosh, a free bed!'"

School Difficulties

Some low-point experiences were tied to academic difficulties, including problems with schoolwork and grades. A 19-year-old male participant described difficulties with assignments and lack of assistance, "I was living with my dad. I was having a hard time in school, doing schoolwork. He couldn't help me with my work. There was nobody who understood it." A few young people described challenges with transitioning from one educational stage to another and experiences with depression, social isolation, and low self-esteem. A 12-year-old female participant stated, "When I came to middle school, all my friends went to [school]. I had to get to know the people at [different school]. That was kind of depressing because I didn't have any friends in there." An 18-year-old male participant reported struggling with self-esteem during the beginning of high school, "I just felt like I wasn't good enough for people." Other young people reported difficulties with the transition from high school to college as stated by a 20-year-old female participant, "I felt like I had to be like them to make it through college. I realized that I didn't, but that was like my low point because I felt like I didn't belong."

Physical and Mental Health Problems

Physical and mental health problems were the focus of some low-point experiences. Physical health problems included head injuries and concussions. Mental health problems were diverse and included loneliness, self-harming behaviors, mental health conditions, and psychiatric hospitalizations. A 20-year-old male participant described his experiences with bipolar disorder, "I was 16 at the time. I had really bad problems with anger back then. I kind of found that I had bipolar [disorder]."

Compounded Low-Point Experiences

One emergent finding was that several young people identified low-point experiences that were *compounded* by the occurrence of multiple negative events. There were two types of compounded low points. One type consisted of multiple linked negative events, referred to as "related compounded events." An example was a female participant who experienced parent separation followed by housing difficulties when she lived with her mother. The other type consisted of negative events that occurred independently but in close proximity to each other, referred to as "unrelated compounded events." An example was a female participant's experience of receiving news about her cousin's death right after she attended her uncle's funeral.

Responses to Low-Point Experiences

Young people responded to low-point life experiences in a variety of ways. Several young people described positive coping behaviors and resources, including participating in leisure activities, using coping strategies, engaging in religious coping and spirituality, and seeking support from family, friends, and professionals. Some young people recounted negative responses to low-point life experiences. They included conducting strong emotional reactions, risk and aggressive behaviors, suicidal ideation, and social isolation and avoidance coping behaviors.

Positive Responses

Participating in Leisure Activities

Many young people reported that they responded to low-point life events by participating in activities that they typically enjoyed. Young people described engaging in sports, going on walks/hikes, hunting, and fishing. A 20-year-old female participant responded to their low-point experience by spending time by a lake. Some young people tried new activities and met new people after their low-point experiences, as indicated by a 20-year-old female participant, "I try to get out and try new things. I went on a hike for the first time here. Just hanging out with different people that forces you to see things in a different way." Other young people participated in existing and new hobbies, including playing video games,

watching television, coloring, painting, and creating new music. For some young people, hobbies and interests served as positive coping tools for subsequent life challenges, as described by a 23-year-old female participant, "Usually to deal with things, I would turn to drugs and alcohol and everything when I was younger. But now coloring if I've got an important decision I've got to make and I'm not sure which way to go."

Using Coping Strategies

Young people also described using various coping strategies to minimize the impact of low points. Some engaged in goal setting and writing in a journal or diary, such as described by a 21-year-old female participant, "I would make goals for myself every day because I'm very driven. I made lists of things that I would like." Young people spoke of accepting their negative experiences and moving past them. A 20-year-old female participant said, "I just had to learn to live past it because there's not really nothing you can do about the past other than let it go." A 21-year-old male participant stated, "What good can this bring for me to sit here and think I'm out of control? We could all die at any moment ... I figured the best way to get through was just to not think about it."

Engaging in Religious Coping and Spirituality

Young people described using religion and spirituality to overcome their low-point experiences. Some talked to religious leaders and engaged in prayer, as described by a 12-year-old male participant, "We just prayed that something would happen and that they wouldn't move because that had happened twice before." A 15-year-old female participant shared the importance of God and forgiveness as strategies for overcoming her lowest point experience, "God would always forgive you. You should forgive people because that's what He would want." A 20-year-old male participant described forgiving his father who left the family, "We still have everything that we need. We're able to afford everything that we need that's going on right now. I guess I just kind of forgave him."

Seeking Support From Family, Friends, and Professionals

Young people sought support from a variety of people including family, friends, and professionals. Some young people talked about receiving support from parents, grandparents, siblings, and other family members. In describing how they responded to the loss of a grandparent an 18-year-old male participant stated, "I really just tried to talk it out and relive the funny and happy times that we had with my grandma, instead of dwelling on the bad." A 17-year-old female participant stated, "They're [my family] the main support you can really get. They've helped me through everything." Spending time and talking with friends was helpful for some participants, as shared by a 12-year-old- female participant, "I have some really great friends. They're really nice. They understand what I go through.... If I hadn't have met them, then I wouldn't have had the life that I have now."

A few young people sought professional help to manage their low-point experiences and related consequences, including from psychiatrists and counselors. A 20-year-old male participant stated, "I went and started going to a therapist and a psychiatrist. It really kind of helped me out. I got on my medicines." Some young people received assistance from school tutors, as described by an 18-year-old male participant, "I was struggling. I went and signed my own self up for a tutor."

Negative Responses

Some young people described strong emotional reactions to their low-point experiences and negative coping responses. A 21-year-old male participant stated that his reaction included a long period of crying, "Just breaking down and crying for 3 hours before and after. But it did just offer a new sense of closure. The mourning was a necessary part of really bringing it to completion." A 24-year-old male participant shared what happened after a crying spell, "I [was] just sitting in the psych ward cell with a blank stare on my face. I couldn't even cry. I'd already cried too much." Some young people spoke about aggressive and risky behaviors, including alcohol and drug use. A 21-year-old male participant said, "I had a really, really hard time. I was really, really depressed. I acted out at home a lot. My mom and I fought all the time." Suicidal ideation was also documented, as shared by an 18-year-old female participant, "At the time I wanted to die. I didn't understand what was going on." A few young people engaged in social isolation and avoidance

behaviors, as indicated by an 18-year-old female participant, "I didn't want to talk about it to anybody. I didn't want to bring it up anymore, I just wanted to forget all about it. It didn't work too well."

Discussion

The present study contributed to a deeper understanding of adverse life experiences and positive and negative coping strategies among young people living in rural Appalachia. By using a narrative approach, young people were provided the opportunity to reflect on self-identified low-point experiences. The young people reported several different types of adversities, including loss and death, violence exposure and victimization, parent separation and divorce, school difficulties, and physical and mental health problems. It was noteworthy that some young people's narratives of low-point experiences consisted of multiple adverse events. The impact of one event appeared to be compounded by subsequent events that followed it. This is similar to the concept of polytrauma, which is exposure to multiple types of trauma (Kassing et al., 2020). The present study provided insights into other characteristics that might contribute to the negative impact of multiple adversities. Among the Appalachian young people, several reported multiple adversities, either related or unrelated but occurring in a relatively brief time frame.

Some adversities identified by this study were similar to those documented among other rural communities (Behavioral Risk Factor Surveillance System; Radcliff et al., 2018); however, the interview prompt of identifying a particular low-point elicited life experiences that are missing from some ACEs measures. This included the death of other family members, which was reported by many Appalachian young people. In addition, school difficulties, which might not be considered as severe as some of the other adversities, were reported as some of the most negative life experiences among young people. This finding suggests that academic challenges deserve more consideration in ACEs research. Indeed, efforts to revise ACEs measures have found that peer experiences add significantly to young people's trauma burden (Finkelhor et al., 2015).

The current findings underscored the potential benefits of leisure activities for helping Appalachian young people cope with adverse life experiences. A previous study found that adolescents with a high breadth of participation in organized and unstructured leisure activities had better educational, psychological, and behavioral outcomes compared to adolescents with a low breadth of involvement (Sharp et al., 2015). In the present study, Appalachian young people described participating in both types of leisure activities, including sports, unstructured outdoor activities, art, music, and video games. Some young people tried new activities that resulted in meeting new people during difficult times in their lives. Some new hobbies and interests, like art, became positive coping tools that young people used to cope with experiences later in their lives.

Appalachian young people also used different coping strategies, some that involved cognitions and some that involved behaviors. Some young people described making decisions to "let it go" and "move on" from their low-point experiences. A few young people used journal writing and goal setting to help them cope. The present study did not compare the effectiveness of different coping strategies; however, other research found that cognitive coping strategies, like a positive outlook and taking things day by day, were more important than material resources (Canvin et al., 2009).

Some young people spoke about engaging in prayer, believing in God, and granting forgiveness, which is consistent with positive religious coping patterns documented in the literature. Positive religious coping is associated with reduced psychological distress in contrast to negative religious coping (Pargament et al., 1998). Some research suggests that religious coping may be particularly relevant and beneficial to rural young people. Findings from the main study for this project, consisting of surveys completed by 2,565 adolescents and adults, indicated that religious and spiritual meaning-making was associated with posttraumatic growth (Hamby et al., 2018).

Support from various individuals, including family, friends, religious leaders, and professionals, were important resource for some Appalachian young people. Young people spoke about spending time with and talking with family and friends. Research on rural adolescents has documented the benefits of perceived social support from family, specifically as a protective factor against alcohol use (Hamdan-Mansour et al., 2007). Some young people in the present study

sought help from psychiatrists, counselors, and school tutors. Young people's relationships with all adults are important because they contribute to social capital. Social capital plays a role in the health and well-being of young people. This was highlighted by a study that found that low-income young people had reduced smoking frequency and body mass if they lived in a rural community with increased social capital (Evans & Kutcher, 2011).

Some Appalachian young people reported risk and aggressive behaviors, suicidal ideation, and social isolation. Of particular interest were a few reports of transitioning from using negative coping strategies to positive ones and utilizing positive strategies with subsequent adverse situations. One female participant indicated that she initially used drugs in response to her life experiences, but later used coloring as an effective coping strategy. This finding provides some initial evidence of a dynamic process of resilience building among Appalachian young people. Some researchers argue that resilience is a process because it involves dynamic change over time and outcomes are tied to interactions between others and the environment over time (Brodsky, 1999). However, little is known about how this process occurs among different populations.

Limitations of Study

The present study had some limitations. The study used a convenient sample of 71 young people living in rural Appalachia. Young people who agreed to participate in the project, an investigation on resilience and psychosocial strengths, may have experienced more positive life experiences and engaged in more positive coping responses than others who lived in the communities. In addition, most participants were White and most lived in a small town with a population of 2,500–20,000 people when the data were collected. The rural Appalachian area is unique regarding some social determinants of health and health disparities. It would be valuable to replicate this research with other rural communities. Another limitation was that the researchers asked general questions about how the young people responded to their self-identified low-point experiences. They did not inquire directly about specific types of coping strategies and did not assess resilience or aspects of a resilience-building process. However, the approach used was similar to those used by other researchers who emphasize the importance of listening to the voices of people who experienced adversities and determining what they considered as positive outcomes rather than using "externally imposed" measures (Canvin et al., 2009).

Implications for Practice

The present findings may be used to inform strength-based and resilience-focused interventions among Appalachian young people at the individual, interpersonal, and community levels of the social–ecological model. Appalachian communities may benefit from developing more programs and initiatives that support structured and unstructured leisure activities for young people. If there are limited resources for after-school and other structured programming, Appalachian communities may want to focus their attention on natural resources and local scenery. Like another study with rural young people (Sharp et al., 2015), the present study found that young people coped with low-point experiences by engaging in walking, hiking, and fishing. Recommendations for health care professionals to promote outdoor nature-related activities include advertising local natural resources, places, events, and programs like rails to trails, parks and people, and national scenic trails (Mitten et al., 2016). Such recommendations might be used by a variety of community groups and organizations. Appalachian communities may also implement low-cost strategies for supporting other leisure activities, such as providing access to art supplies, musical instruments, and sheet music. Communities may also want to invest in small participatory community arts projects, applying established steps for making community arts interventions successful and sustainable (Cameron et al., 2013). Steps include, but are not limited to, selecting the artist, demystifying the artistic process, working with local structures, collaborative programming, building engagement, and evaluation.

The current findings also suggest that Appalachian communities may want to prioritize programs and activities for young people that involve participation by family members and other adults who work with young people. Shared activities focused on the outdoors, arts, or other interests may strengthen existing relationships, build new relationships, and provide opportunities for increased social support. Research on Appalachian

communities has shown that families and community participants and organizations play an important role in youth socialization (Templeton et al., 2008). Building on those strengths may promote the health of Appalachian young people, their families, and the broader community.

As recommended for other communities (Van Dyke et al., 2009), clinicians and religious and spiritual leaders may want to recognize the potential benefits of religious coping strategies and incorporate them in their work with Appalachian young people. Researchers recommend developing programs and training for clergy to increase access to mental health information, training, and referral resources for the community (Jones et al., 2012). In settings where clergy have limited time and resources, partnerships should be established with rural agencies to provide education and outreach directly to congregations (Jones et al., 2012). Other recommendations include the active engagement of youth group leaders (Li et al., 2016). Research has shown that religious youth groups have a social function that emphasizes social action, giving, and mutual respect which may help prevent relationship abuse (Li et al., 2016). The social functions, values, and activities of religious youth groups may also support positive coping with other adverse life experiences.

Future Research Directions

The present findings revealed several areas for future research. Future studies should examine the impact of proximity and connections between multiple adverse life experiences on health and health behaviors to achieve a deeper understanding of polytrauma. Further, the present study pointed to the complexity of responses to adverse experiences. Some young people responded with positive coping strategies, whereas others responded with negative coping strategies. Another group of young people engaged in a dynamic process of initially using negative coping strategies and then switching to positive ones. An important area for future research includes associations between different types of responses and health and academic outcomes among young people. It might be informative to examine if age at the time of the low-point experience impacts responses and related outcomes. Research with Appalachian young people should also include a broader examination of religious coping and spirituality. The present study only documented positive religious coping behaviors; however, the literature indicates that negative religious coping also exists (Pargament et al., 1998). Negative religious coping is associated with greater psychological distress (Van Dyke et al., 2009). Given the availability of standardized religious coping instruments, mixed-methods studies would improve understanding of the prevalence and impacts of religious coping among Appalachians and other rural populations.

Conclusion

Appalachian young people were exposed to many different types of adversities that they self-identified as low-point experiences. Sometimes the experiences consisted of multiple adversities that occurred in close proximity. Similar to research with other populations (Ungar, 2006), many Appalachian young people displayed resilience in their abilities to respond to the experiences using positive coping strategies. Naturally occurring, positive coping strategies involved individual strengths, relationships, and community resources. Some were tied to family, religion, and nature. Research has shown that Appalachian culture includes a value in family relationships and views that an individual is an extension of family (Lohri-Posey, 2006). Future initiatives to promote the health and well-being of Appalachian young people should include culturally adapted, strengths-based, and resilience-focused interventions.

References

Appalachian Regional Commission. (2021, June 29). *About the appalachian region*. https://www.arc.gov/about-the-appalachian-region/

Bradley, J. (1993). Methodological issues and practices in qualitative research. *Library Quarterly*, *63*(4), 431–449. https://doi.org/10.1086/602620

Brodsky, A. E. (1999). "Making it": The components and process of resilience among urban, African-American, single mothers. *American Journal of Orthopsychiatry*, *69*(2), 148–160. https://doi.org/10.1037/h0080417

Cameron, M., Crane, N., Ings, R., & Taylor, K. (2013). Promoting well-being through creativity: How arts and public health can learn from each other. *Perspectives in Public Health*, *133*(1), 52–59. https://doi.org/10.1177/1757913912466951

Canvin, K., Marttila, A., Burstrom, B., & Whitehead, M. (2009). Tales of the unexpected? Hidden

resilience in poor households in Britain. *Social Science & Medicine*, *69*(2), 238–245. https://doi.org/10.1016/j.socscimed.2009.05.009

Chanlongbutra, A., Singh, G. K., & Mueller, C. D. (2018). Adverse childhood experiences, health-related quality of life, and chronic disease risks in rural areas of the United States. *Journal of Environmental and Public Health*, *2018*, Article 7151297. https://doi.org/10.1155/2018/7151297

Curtin, K. A., Schweitzer, A., Tuxbury, K., & D'Aoust, J. A. (2016). Investigating the factors of resiliency among exceptional youth living in rural underserved communities. *Rural Special Education Quarterly*, *35*(2), 3–9. https://doi.org/10.1177/875687051603500202

Evans, G. W., & Kutcher, R. (2011). Loosening the link between childhood poverty and adolescent smoking and obesity: The protective effects of social capital. *Psychological Science*, *22*(1), 3–7. https://doi.org/10.1177/0956797610390387

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, *14*(4), 245–258. https://doi.org/10.1016/S0749-3797(98)00017-8

Finkelhor, D., Shattuck, A., Turner, H., & Hamby, S. (2015). A revised inventory of adverse childhood experiences. *Child Abuse & Neglect*, *48*, 13–21. https://doi.org/10.1016/j.chiabu.2015.07.011

Hamby, S., Grych, J., & Banyard, V. (2018). Resilience portfolios and poly-strengths: Identifying protective factors associated with thriving after adversity. *Psychology of Violence*, *8*(2), 172–183. https://doi.org/10.1037/vio0000135

Hamdan-Mansour, A. M., Puskar, K., & Sereika, S. M. (2007). Perceived social support, coping strategies and alcohol use among rural adolescents/USA sample. *International Journal of Mental Health and Addiction*, *5*(1), 53–64. https://doi.org/10.1007/s11469-006-9051-7

Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., Jones, L., & Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on health: A systematic review and meta-analysis. *The Lancet: Public Health*, *2*(8), e356–e366. https://doi.org/10.1016/S2468-2667(17)30118-4

Jones, D. L., Cassidy, L., & Heflinger, C. A. (2012). "You can talk to them. You can pray": Rural clergy responses to adolescents with mental health concerns. *Rural Mental Health*, *36*(1), 24–33. https://doi.org/10.1037/h0094777

Kalmakis, K. A., & Chandler, G. E. (2015). Health consequences of adverse childhood experiences: A systematic review. *Journal of the American Association of Nurse Practitioners*, *27*(8), 457–465. https://doi.org/10.1002/2327-6924.12215

Kassing, F., Alvis, L., Hill, R. M., & Kaplow, J. B. (2020). A person-centered approach to examining polytraumatization among traumatized and bereaved youth. *Journal of Loss and Trauma*, *26*(4), 352–365. https://doi.org/10.1080/15325024.2020.1783105

Li, E., Freedman, L. R., Fernandez y Garcia, E., & Miller, E. (2016). Exploring the role of faith-based organizations in addressing adolescent relationship abuse. *Violence Against Women*, *22*(5), 609–624. https://doi.org/10.1177/1077801215608702

Lohri-Posey, B. (2006). Middle-aged Appalachians living with diabetes mellitus: A family affair. *Family & Community Health*, *29*(3), 214–220. https://doi.org/10.1097/00003727-200607000-00008

Markstrom, C. A., Marshall, S. K., & Tryon, R. J. (2000). Resiliency, social support, and coping in rural low-income Appalachian adolescents from two racial groups. *Journal of Adolescence*, *23*(6), 693–703. https://doi.org/10.1006/jado.2000.0353

Martz, D. M., Jameson, J. P., & Page, A. D. (2016). Psychological health and academic success in rural Appalachian adolescents exposed to physical and sexual interpersonal violence. *American Journal of Orthopsychiatry*, *86*(5), 594–601. https://doi.org/10.1037/ort0000174

Miles, M., & Huberman, A. (1994). *Qualitative data analysis: An expanded sourcebook*. Sage Publications.

Mitten, D., Overholt, J. R., Haynes, F. I., D'Amore, C. C., & Ady, J. C. (2016). Hiking: A low-cost, accessible intervention to promote health benefits. *American Journal of Lifestyle Medicine*, *12*(4), 302–310. https://doi.org/10.1177/1559827616658229

Moreland, J. J., Raup-Krieger, J. L., Hecht, M. L., & Miller-Day, M. M. (2013). The conceptualization and communication of risk among rural appalachian adolescents. *Journal of Health Communication*, *18*(6), 668–685. https://doi.org/10.1080/10810730.2012.743620

Neubauer, B. E., Witkop, C. T., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. *Perspectives on Medical Education*, *8*(2), 90–97. https://doi.org/10.1007/s40037-019-0509-2

O'Connor, C., & Joffe, H. (2020). Intercoder reliability in qualitative research: Debates and practical guidelines. *International Journal of Qualitative Methods*. Advance online publication. https://doi.org/10.1177/1609406919899220

Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion*, *37*(4), 710–724. https://doi.org/10.2307/1388152

Pascoe, J. M., Wood, D. L., Duffee, J. H., Kuo, A., Yogman, M., Bauer, N., Gambon, T. B., Lavin, A.,

Lemmon, K. M., Mattson, G., Rafferty, J. R., Wissow, L. S., Gitterman, B. A., Flanagan, P. J., Cotton, W. H., Dilley, K. J., Green, A. E., Keane, V. A., Krugman, S. D., … the Committee on Psychosocial Aspects of Child and Family Health, & the Council on Community Pediatrics. (2016). Mediators and adverse effects of child poverty in the United States. *Pediatrics*, *137*(4), Article e20160340. https://doi.org/10.1542/peds.2016-0340

Pollard, K., & Jacobsen, L. A. (2020, June 10). *The appalachian region: A data overview from the 2014–2018 American Community Survey*. https://www.arc.gov/report/the-appalachian-region-a-data-overview-from-the-2014-2018-american-community-survey/

Radcliff, E., Crouch, E., & Strompolis, M. (2018). Rural-urban differences in exposure to adverse childhood experiences among South Carolina adults. *Rural and Remote Health*, *18*(1), Article 4434. https://doi.org/10.22605/RRH4434

Scientific Software Development. (2018). *ATLAS.ti 8* [Computer software]. https://atlasti.com/

Semega, J., Kollar, M., Creamer, J., & Mohanty, A. (2019). *Income and poverty in the United States: 2018*. United States Census Bureau. https://www.census.gov/library/publications/2019/demo/p60-266.html

Sharp, E. H., Tucker, C. J., Baril, M. E., Van Gundy, K. T., & Rebellon, C. J. (2015). Breadth of participation in organized and unstructured leisure activities over time and rural adolescents' functioning. *Journal of Youth and Adolescence*, *44*(1), 62–76. https://doi.org/10.1007/s10964-014-0153-4

Templeton, G. B., Bush, K. R., Lash, S. B., Robinson, V., & Gale, J. (2008). Adolescent socialization in rural Appalachia: The perspectives of teens, parents, and significant adults. *Marriage & Family Review*, *44*(1), 52–80. https://doi.org/10.1080/01494920802185322

Ungar, M. (2006). Nurturing hidden resilience in at-risk youth in different cultures. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, *15*(2), 53–58.

United Nations Population Fund. (n.d.). *Adolescents and youth demographics: A brief overview*. https://www.unfpa.org/sites/default/files/resource-pdf/One%20pager%20on%20youth%20demographics%20GF.pdf

Van Dyke, C. J., Glenwick, D. S., Cecero, J. J., & Kim, S. K. (2009). The relationship of religious coping and spirituality to adjustment and psychological distress in urban early adolescents. *Mental Health, Religion & Culture*, *12*(4), 369–383. https://doi.org/10.1080/13674670902737723

Received October 6, 2021
Revision received July 7, 2022
Accepted August 8, 2022 ■