

Youth-Led Blue–Green Space Development and Meaning-Making in Rural Appalachia: A Photovoice Study

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ABSTRACT:

Background: Youth in rural Appalachian communities face disproportionate mental health risks and limited access to supportive environments. A longstanding community–academic partnership between a northeastern U.S. School of Nursing and a rural Appalachian high school identified the need for a youth-centered wellness space. Youth leadership was elevated through collaborative blue and green space design and concurrent exploration of how adolescents interpret supportive outdoor environments.

Objectives: Guided by Community-Based Participatory Research (CBPR), this project aimed to co-develop a multifunctional blue and green space and explore adolescents’ perceptions of wellness and meaning related to blue and green spaces using Photovoice.

Results: Thematic analysis generated the overarching concept of Situated Strength, reflecting adolescents’ interpretations of resilience within their rural context. Participant-driven analysis revealed the interrelated concepts of Healing and Restoring. Shared themes included risk, transitions, renewal, spiritual grounding, nature as healing, nostalgia, belonging, and home, offering insight into place-based meaning-making and rooted resilience.

Conclusions: Youth-led CBPR coupled with Photovoice generated contextually grounded understandings of adolescent wellness associated with blue and green spaces in rural Appalachia. Situated Strength emerged as a place-based expression of resilience shaped by healing, restoration, belonging, and spiritual grounding in blue and green spaces. Photography and storytelling strengthened adolescent agency and voice in community wellness initiatives. The Social Ecological Model served as an interpretive framework illustrating interconnected

individual, relational, community, and environmental influences. Centering adolescent meaning-making alongside environmental development contributes to community health partnership scholarship and informs sustainable, youth-driven approaches to rural wellness.

KEYWORDS: Rural Health, Community-Based Participatory Research, Appalachian Region, Health disparities, Power sharing, Photovoice, Community-Academic Partnership, Adolescent, Blue and Green Space, Public Health

Introduction

The Appalachian region spans 13 states and is home to approximately 26.3 million residents, many of whom experience persistent socioeconomic disadvantage and disproportionate burdens of chronic disease, substance use, overdose, and mental health challenges compared with the broader United States (US).¹ West Virginia (WV), located entirely within Appalachia, consistently ranks among the least healthy states across multiple indicators, including overdose mortality, chronic disease prevalence, and suicide rates.^{2; 3; 4} Adolescents in economically distressed Appalachian communities face elevated risks of psychological distress, substance use, and social isolation, highlighting the need for community-engaged, youth-centered approaches to wellness promotion.⁵

Clay County, WV reflects structural vulnerabilities common across Central Appalachia, including geographic isolation, persistent poverty, limited access to mental health services, transportation barriers, and high rates of foster and kinship care associated with parental substance use.^{6;7} Since 2017, faculty and graduate nursing students from Georgetown University Berkley School of Nursing partnered with Clay County community stakeholders through service-learning, public health initiatives, and capacity-building efforts. The local public high school participated in Project AWARE, a Substance Abuse and Mental Health Services Administration (SAMHSA) funded initiative to enhance school-based mental health services. Through this initiative, students formed Gen C (Generation Connect), a youth-led organization focused on reducing adolescent isolation and increasing access to peer-level mental health support. Members of Gen C conducted a school-wide wellness needs assessment that identified gaps in youth-centered resources and informed the present project. This work builds on sustained academic–

community relationships and was supported by university funding that required authentic community and stakeholder engagement throughout both development and implementation.

The results of the Gen-C assessment identified the absence of welcoming, youth-centered spaces and articulated a desire for an outdoor environment to support stress reduction, reflection, and peer connection. Guided by Community-Based Participatory Research (CBPR) principles, adolescents collaborated with academic partners, school personnel, and community leaders to co-design and construct a multifunctional blue and green space on the high school campus. The need for such a space is supported by the literature. While rural health inequities are often framed in terms of healthcare access, adolescents' well-being is profoundly shaped by community environments that influence social connection, identity development, and stress regulation.^{8,9} In geographically isolated communities, opportunities for safe gathering, peer support, and restorative outdoor engagement are limited. Therapeutic blue and green spaces, natural environments incorporating water and vegetation, have been associated with improved psychological well-being and social connectedness among young people, yet such resources are often scarce in under-resourced rural settings.¹⁰ Limited research has examined how rural adolescents engage and interpret blue–green environments within school-based partnerships, particularly using concurrent participatory approaches.

To gain insight into adolescent perceptions, Photovoice methodology was used to center adolescents as co-researchers in documenting and interpreting the meanings of blue and green spaces and their influence on mental and emotional well-being. This participatory approach aligns with CBPR commitments to shared knowledge generation, empowerment, and action-oriented research. Photovoice was selected not only for its participatory alignment with CBPR,

but because image-based, dialogic inquiry is uniquely suited to eliciting adolescents' sensory, relational, and symbolic interpretations of environmental space in ways that traditional survey or interview methods may not capture.^{11;12;13} By integrating youth-led environmental design with participatory engagement, this study contributes to community health partnership scholarship by examining how adolescents conceptualize and experience therapeutic outdoor spaces within an economically distressed rural context. This study demonstrates how concurrent Photovoice embedded within youth-led CBPR infrastructure development produces both environmental change and meaning-generating processes that extend beyond exposure-based models of green space and mental health.

The aims of the study were to (1) co-develop a youth-designed blue and green space through a CBPR partnership and (2) explore adolescents' perceptions of the impact of blue and green spaces on mental and emotional well-being using Photovoice. Through this collaborative process, the project sought to strengthen youth voice in community decision-making, expand access to supportive environments, and generate actionable knowledge to inform future community-based wellness initiatives in Appalachia and similar rural settings.

Methods

Study Design and Setting

This youth-led project was guided by Community-Based Participatory Research (CBPR) principles to design and build a blue and green space. CBPR emphasizes shared decision-making and equitable collaboration between academic and community partners. Photovoice methodology was intentionally chosen as a way to explore meaning ascribed to blue and green spaces through

the experiences and perspectives of adolescents who would have access to the space once completed. Adolescents and community stakeholders participated in problem identification, project development, data generation, interpretation, and dissemination. The study was conducted at a public high school in Clay County, West Virginia, a rural Appalachian community. The school enrolls approximately 533 students in grades 9–12.

The project consisted of two interrelated components over a nine-month period: (1) participatory design and construction of a multifunctional blue and green space and (2) a concurrent Photovoice inquiry exploring adolescents' perceptions of environmental influences on mental and emotional well-being. Construction of the blue and green space and Photovoice activities occurred in parallel. Photovoice was not designed as a post-construction evaluation of the newly developed space; rather, it served as a youth-centered exploration of meaning and wellness, interpreted through prompts that elicited adolescents' broader experiences of blue and green spaces within their rural context.

Community Engagement and Partnership Structure

A Community Engagement Council (CEC) guided the project and included representatives from the county board of education, county health department, school personnel, community stakeholders, and students from Gen C, a youth-led organization formed through a prior school-based mental health initiative. The CEC met monthly over nine months to co-design the space, refine recruitment and data collection procedures, and plan dissemination. A Memorandum of Understanding between the university and Board of Education formalized roles and responsibilities. Governance emphasized shared authority, with adolescents participating directly in decision-making processes.

Development of the Blue and Green Space

The project involved collaboratively designing and constructing a multifunctional blue and green space on campus. The site was a previously unused concrete pad located between two school wings and adjacent to a forested landscape and riverbank. The river provided direct visual and auditory exposure to flowing water, constituting the primary “blue” element, while surrounding vegetation and tree canopy provided integrated “green” elements consistent with blue–green environmental health literature.

Through participatory planning sessions, youth identified features to promote psychological restoration, social connection, and informal learning. The space included covered picnic tables, custom-built waste receptacles, outdoor games, a storage unit, a mobile instructional whiteboard, and native plantings selected to enhance restorative qualities. The youth-led and community-integrated nature of the project was reinforced by the school’s shop class supporting construction, and the horticulture class participating in preparation of planting areas, mulching, and installing plants. Researchers facilitated coordination and secured essential building and planting materials. The development process was documented through detailed field notes and community meeting minutes.

Photovoice Recruitment and Participation

The Photovoice phase included 12 adolescents aged 14–18 years recruited through Gen C following an informational session and peer outreach. Participation was voluntary and did not require Gen C membership, though recruitment occurred within this engaged youth group due to its leadership role in the initiative. Some adolescents participated in both blue and green space development and Photovoice. This overlap reflected continuity of youth engagement rather than

evaluative self-assessment, as the inquiry focused on perceptions of wellness and environmental meaning rather than appraisal of construction outcomes. The sample included students involved in the prior school-wide wellness needs assessment as well as Gen C members.

Consistent with participatory Photovoice methodology, emphasis was placed on iterative dialogue and collective meaning-making rather than statistical representation. The six-week engagement supported analytic depth and rich reflection. Parental consent and adolescent assent were obtained for participants under 18 years of age; participants aged 18 provided self-consent. Individuals appearing in photographs provided written release consent.

Photovoice Procedures

The Photovoice phase occurred over approximately six weeks. An initial recruitment and information session describing the purpose of the research, examples of blue and green spaces that already exist, and the shared nature of co-created understanding. Those who chose to participate attended a subsequent training session introducing Photovoice methodology, photo ethics, and the first discussion prompt. Subsequent prompts were introduced weekly over four weeks, resulting in four one-week photo collection cycles. Six small-group Photovoice discussion sessions were conducted during students' lunch periods and lasted approximately 50 minutes. Sessions were facilitated by nurse researchers and a Board of Education representative and conducted in person or via Zoom as needed. Lunch was provided to support participation.

Participants were given access to a school owned digital device that could be checked out and returned or used their own device to take photographs. Participants captured photographs in response to prompts such as: "Wellness looks like...", "When I am in this space, I feel...", "What in this space helps me feel calm or relaxed?" and "What in this space makes me anxious

or upset?” Prompts were intentionally designed to explore what defines wellness and the spaces that support it, identify existing spaces that participants sought out for reflection, and encourage reflection on the experience of being in those spaces.

Discussions were guided by the SHOWED technique,¹⁴ which prompts participants to move from description to critical reflection through structured questions and group discussion (e.g., What do you **see** here? What is really **happening**? How does this relate to **our lives**? **Why** does this situation **exist**? What can we **do** about it?). The iterative structure allowed participants to revisit ideas across sessions and engage in real-time member checking. Detailed field notes were recorded during each session. Attention was given to the possibility of students experiencing any emotional distress or anxiety as a result of the discussion. On-site counselors were available should they be needed at any time during or after the discussion.

Data Management and Security

Participants uploaded photographs to a password-protected digital folder accessible only to the research team. Images were deleted from school devices following upload. Printed copies were used during discussions and returned to the participants after analysis, consistent with the concept of participant-owned data. Optional reflective journals were offered at participants’ discretion. All data were de-identified and stored in a secure, encrypted cloud-based system. Participants were assigned unique study identification numbers. Only nurse researchers had access to raw data.

Data Analysis

Data analysis occurred in two complementary phases: (1) researcher-led inductive thematic analysis and (2) participant-generated themes, analysis, and refinement. The resulting researcher and participant narratives were then analyzed for commonalities and unique themes.

Researcher analysis was conducted using a six-step systematic inductive, thematic analysis process, guided by the constant comparative method, used to analyze field notes generated during group discussion and debriefing.¹⁵ Research team members familiarized themselves with the data, independently coded the field notes, identified keywords, developed initial codes, and then met to discuss and synthesize convergent themes. Codes were refined through consensus meetings, and an audit trail was maintained to ensure trustworthiness of the analysis and findings. The research team engaged in ongoing reflexive discussion regarding positionality and interpretive influence.

Participant analysis occurred concurrently through three participant-led phases in which adolescents selected representative photographs, contextualized meaning during group dialogue, and collaboratively identified emergent themes. Member checking occurred during and across sessions to enhance the trustworthiness of the findings. Figure 1 reflects participant-led contextualization and theme generation. Final conceptual development integrated researcher and participant-generated themes into a collaboratively derived thematic model. Figure 2 illustrates the parallel data analysis process.



Figure 1. Participant-led contextualization and theme generation

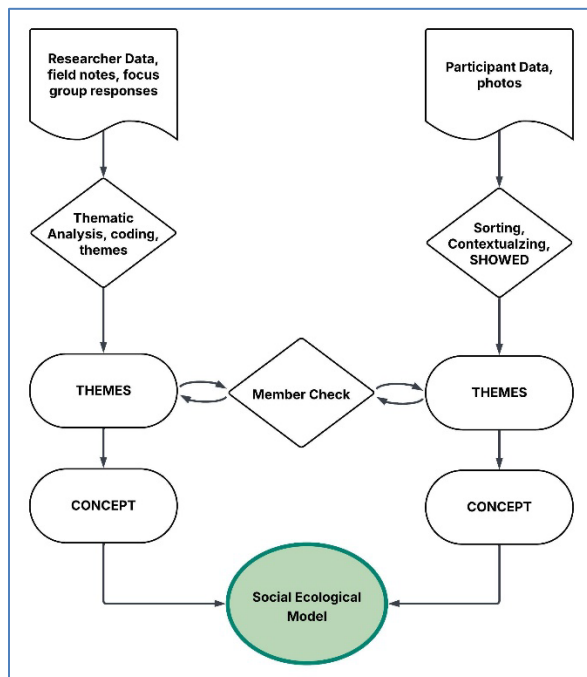


Figure 2. Parallel data analysis process

Community Dissemination

Adolescents led dissemination through a school-based exhibition attended by approximately 300 community members, including school administrators and local leaders. Participants developed posters highlighting key themes and presented their narratives publicly. Findings were also shared during a school assembly, reinforcing youth leadership and community engagement. Figure 3 is an example of a participant poster developed for the Photovoice exhibition.

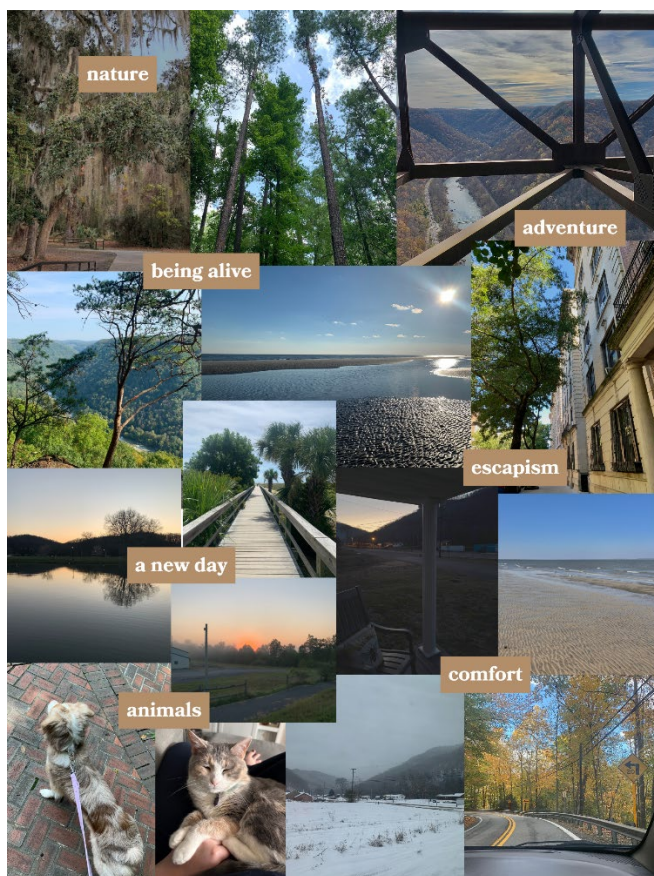


Figure 3. Participant poster representing self-identified themes

Ethical Considerations

The study was approved by the university Institutional Review Board. Risks were minimized through photo ethics training, trauma-informed facilitation, and availability of school-based mental health support. Community partners contributed technical resources and labor to support implementation. The project was funded through a university grant supporting community-engaged research.

Results

The use of Photovoice was intentional, amplifying youth agency and voice. Consistent with the study's participatory aims, Photovoice findings illuminate how adolescents interpreted and experienced blue and green space, with particular attention to perceived influence on well-being, usability, and meaning. Although discussions elicited broad reflections on identity, memory, and emotion, themes were analytically grounded in participants' perceived impact of blue and green spaces. The collective findings represent interpretations of how the natural environment functions psychologically, socially, and symbolically for adolescents.

Parallel analysis offered complementary etic (researcher) and emic (participant) perspectives: (1) researcher-led thematic analysis generating the concept of *Situated Strength*, and (2) participant-led analysis generating the concept of *Healing and Restoring*. Together, these analyses characterize adolescents' evaluations of the acceptability, experiential qualities, and perceived wellness functions of blue and green spaces (see Figure 4).

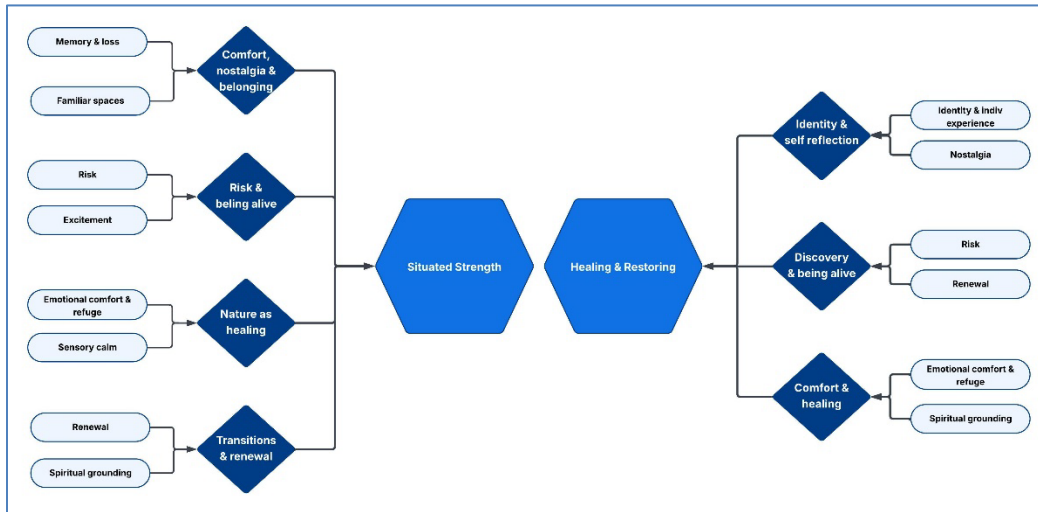


Figure 4. Adolescents’ evaluations of the acceptability, experiential qualities, and perceived wellness functions of blue and green spaces

Researcher Analysis: Situated Strength

The concept of *Situated Strength* captures adolescents’ perspectives of blue and green space as supporting resilience, emotional regulation, and relational meaning through interactions with the physical environment. Four interconnected themes contributed to this construct.

Comfort, Belonging, and Familiarity

Participants frequently associated the space with feelings of safety, calm, and connection. Narratives emphasized parallels between the outdoor environment and personally meaningful locations such as home, porches, or family gathering areas. These interpretations emerged primarily from responses to the prompt: “When I am in this space, I feel...”

Illustrative reflections included: “*All my memories are here.*”, “*My porch exists to comfort; it is a meeting place.*”, “*It reminds me of home, which is calming and relaxing.*” These reflections reveal a perception of the space as psychologically welcoming and socially accessible. Figure 5 represents comfort and a meeting place.



Figure 5. Comfort and a meeting place

Risk and the Experience of Being Alive

Participants described blue and green space as enabling autonomy, exploration, and self-directed engagement. Importantly, “risk” was framed not as physical danger, but as opportunities for growth, experimentation, and vitality facilitated by the environment’s openness and informality. This theme emerged primarily from the prompts: “Wellness looks like... to me” and “When I am in this space, I feel...”. Illustrative reflections included: “Into the woods alone... it is a big place.” and “Things are scary until you try them.” One participant reflected: “Everything is hard before it is easy” while discussing photographs of social interaction and engaging in “risky” recreational activities. These findings suggest that adolescents valued the capacity to support gradual emotional ease and self-regulated participation. See Figure 6.



Figure 6. Capacity to support gradual emotional ease and self-regulated participation

Nature as a Source of Healing

Participants consistently attributed restorative qualities to natural elements. Vegetation, natural light, quiet, and proximity to water were described as facilitating stress reduction and cognitive decompression. Associated prompts included: “What in this space helps me feel calm or relaxed?” and “When I am in this space, I feel...”. Illustrative quotes included: “Sunsets, waterfalls, flowers. It’s relaxing to be in nature, in a quiet place,” and “I feel things more deeply in nature.” These narratives reflected that being in nature is supportive of emotional well-being. See Figure 7.



Figure 7. Attribution of restorative qualities to natural elements

Transitions and Renewal

Participants described blue and green space as facilitating psychological transitions during the school day, particularly shifts from stress, social pressure, or cognitive fatigue toward calm or re-centering. Narratives highlighted the space’s perceived role in emotional reset and restoration. Example reflections included: “Even in hardship, there is beauty,” and “I don’t have to think.” These interpretations indicate that adolescents experienced blue and green space as functionally valuable for mood regulation and mental recovery.

Participant Analysis: Healing and Restoring

Participant-led analysis generated the concept of *Healing and Restoring*, reflecting adolescents’ own interpretations of how the blue and green space influenced their internal experiences and well-being.

Identity and Reflection

Participants emphasized the space as supporting introspection, privacy, and self-awareness. Quiet sensory features were described as facilitating reflection and emotional

processing. Associated prompts: “When I am in this space, I feel...” and “Wellness looks like... to me”. Illustrative reflections: “I like the silence except for the birds,” and “A bond that does not require words.” These reflections evaluate the space as conducive to psychological safety and self-regulation.

Discovery and Being Alive

Adolescents described experiences of curiosity, exploration, and emotional vitality in blue and green space. Consistent with the researchers' findings, risk was framed as growth-oriented rather than threatening. Illustrative quotes include: “In nature I can be alone, but not lonely,” and “Walking outside makes me feel better.” These reflections suggest that the environment supported both autonomy and social comfort. See Figure 8.



Figure 8. The environment supported both autonomy and social comfort

Comfort and Healing

Participants described the space as emotionally restorative, emphasizing themes of forgiveness, release, and refuge. “I can forgive.” Such narratives highlight the perceived therapeutic and restorative functions of blue and green space.

Comparison of Researcher and Participant Analyses

Researcher and participant perspectives reflect an external perception of meaning-making while internally creating meaning reflective of experience. Both analytic perspectives converge in identifying blue and green spaces as contexts supporting emotional regulation, reflection, belonging, and vitality. While *Situated Strength* emphasizes relational and contextual dimensions of resilience, *Healing and Restoring* foregrounds internal processes of restoration and meaning-making. Together, these findings characterize adolescents’ interpretations of the environment as psychologically supportive, socially acceptable, and experientially meaningful (see Figure 9).

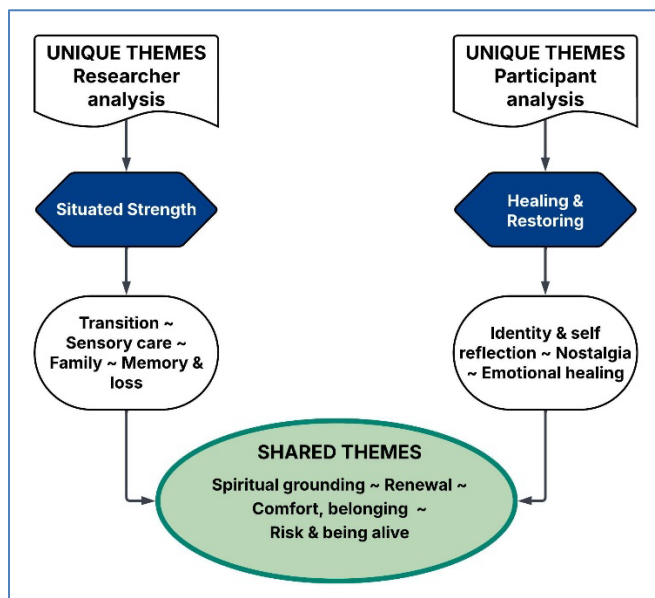


Figure 9. Shared themes

Integrated Insights

Across analyses, adolescents attributed wellness-supportive qualities to: Sensory and restorative properties of natural elements; Feelings of comfort, familiarity, and belonging; Capacity for emotional reset and cognitive decompression. Risk-oriented narratives reflected perceived freedom and vitality rather than unsafe conditions. Themes of renewal and transition suggest functional value during times of stress, elevated anxiety, sadness, or the need to decompress. Collectively, these findings indicate that adolescents experienced blue and green spaces as acceptable, usable, and supportive of well-being.

Discussion

This study examined how adolescents constructed meaning around a youth-designed blue and green space co-developed through a CBPR partnership in a rural Appalachian high school. Through Photovoice inquiry, adolescents described blue and green spaces broadly as supporting emotional regulation, reflection, autonomy, and social connection. Beyond its physical function, the environment was interpreted as evidence that adult stakeholders listened to and acted upon youth-identified needs. In a region characterized by persistent structural disadvantage and elevated adolescent mental health risk¹⁻⁶, these findings underscore the value of participatory, youth-centered environmental approaches to wellness promotion.

The project generated two complementary contributions strengthening the existing community partnership. First, CBPR guided the translation of a youth-articulated need to develop a welcoming, restorative blue and green space. Second, a concurrent Photovoice inquiry illuminated how adolescents interpret environmental influences on well-being. Participatory design and evaluation operated as an integrated partnership, producing both infrastructure change and shared meaning.

During focus group discussions, adolescents characterized the need for blue and green space as distinct from academic environments perceived as emphasizing surveillance, evaluation, and performance pressure. Accessibility during the school day was central to its perceived value. Natural light, vegetation, and exposure to flowing water were associated with cognitive decompression and emotional regulation. Equally important was the ability to choose between peer interaction and restorative solitude. Photovoice participants interpreted blue and green space through relational and memory-based frames, invoking porches, home spaces, waterfalls, and family gathering areas. These comparisons clarified the environmental qualities adolescents associate with safety, familiarity, and belonging.

Ecological Interpretation

The Social Ecological Model (SEM) is typically a linear model used to identify hierarchies of interacting factors that influence health behaviors and outcomes. Although the SEM is commonly depicted as hierarchical, participant narratives in this study did not organize into discrete or sequential levels.¹⁶ The model was used in this study to provide a useful interpretive lens for understanding how these intersecting levels shaped wellness. Rather than mapping findings onto fixed layers, themes were derived inductively and reflected the interplay of individual, relational, organizational, and community influences. Accordingly, the SEM was articulated as a dynamic matrix representing the overlapping and mutually reinforcing influences described by adolescents. Findings suggest that adolescents experience well-being as dynamically embedded within their physical and social environments rather than within discrete ecological layers. See figure 10.

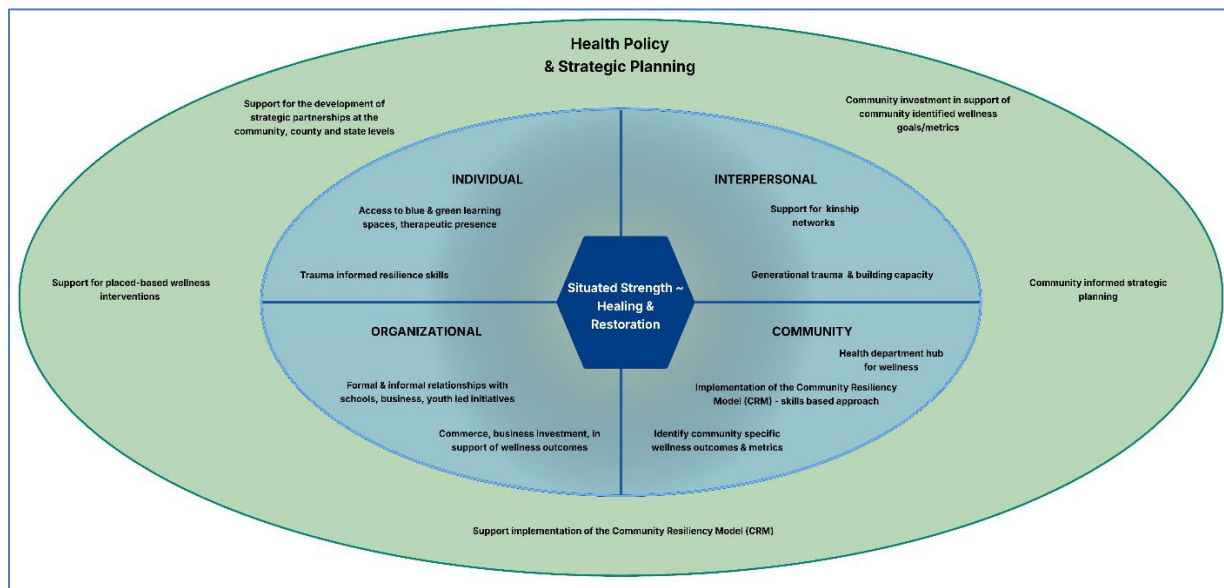


Figure 10. Health policy and strategic planning

At the individual level, participants described stress modulation and emotional release associated with environmental features such as flowing water, tree canopy, and visual openness, aligning with the literature linking exposure to green and blue spaces to psychological well-being.^{8;9;17} Interpersonally, the project space supported flexible social engagement, enabling both informal peer interaction and restorative solitude. Organizationally, embedding the project space within the school campus normalized its use and enhanced accessibility, consistent with socio-ecological perspectives on adolescent mental health promotion.¹⁶ At the community level, visible cross-sector collaboration reinforced perceptions of legitimacy and collective ownership, reflecting CBPR principles of shared authority and trust-building.¹⁸ At the policy level, creating and maintaining these healing places requires institutional backing and funding. The findings of this study demonstrate that when policies and resources align with the identified needs of both the community and individuals, the impact may be transformative and sustainable. Importantly, the perceived impact of the space cannot be attributed solely to environmental features. Youth

involvement in design and implementation was meaning-generating. Adolescents interpreted the space as evidence that their perspectives were valued by adult decision-makers.

Methodological Contributions

This study extends youth Photovoice research in three ways. First, Photovoice was implemented concurrently with the development of blue and green space at the high school rather than as a retrospective evaluation, demonstrating its utility as an embedded meaning-making process during active intervention development.^{14;19} Second, analysis integrated participant-led interpretation with systematic thematic analysis,¹⁵ strengthening rigor while preserving youth voice. Third, findings highlight symbolic and relational dimensions of environmental interventions that are unlikely to be captured through exposure-based or survey measures alone. By integrating co-design and co-interpretation within a sustained academic–community partnership, this study contributes to scholarship at the intersection of environmental health, adolescent well-being, and participatory research practice.

Implications for Rural Community Health Partnerships

Findings suggest that youth-engaged, school-embedded environmental interventions may represent a promising strategy for supporting adolescent well-being in economically distressed rural communities. Participants associated perceived benefits with intentional design, accessibility, and social meaning rather than generalized exposure to nature alone.^{8;17} This distinction underscores the importance of participatory processes in shaping how environmental resources are experienced and sustained.

From a partnership perspective, the project illustrates how sustained academic–community collaboration can translate youth-identified needs into tangible environmental change. Such approaches may strengthen institutional trust and collective efficacy, core aims of community health partnership practice.¹⁸ Modest investments in youth-designed outdoor infrastructure, when embedded within authentic partnership structures, may offer a contextually responsive strategy for rural school-based wellness promotion.

Challenges and Limitations

Implementation challenges reflected structural constraints common in rural settings, including geographic isolation, procurement delays, weather variability, and coordination across stakeholders. Initial hesitancy regarding image sharing was mitigated through trauma-informed facilitation and sustained engagement. This study was conducted within a single rural Appalachian community using a small, non-random sample, limiting transferability. Because some adolescents participated in both the blue and green space development and the Photovoice phases, the findings reflect the perspectives of youth deeply engaged in the initiative and may not represent those of less-involved students. Group-based data collection and the presence of researchers may have influenced responses. Long-term impacts of the space were not assessed.

Future Research

Future research should examine longitudinal outcomes associated with youth-centered blue and green spaces, including potential effects on stress regulation, social connectedness, mental health, and academic engagement. Comparative studies across rural communities and integration of complementary quantitative measures may strengthen external validity and inform

policy application. Further investigation into how participatory design influences perceived institutional responsiveness may clarify mechanisms linking partnership practice to youth well-being.

Conclusion

In a rural Appalachian context marked by persistent health inequities, this study demonstrates how a CBPR partnership can translate youth-identified priorities into both physical infrastructure and shared meaning. The co-developed blue and green spaces functioned not only as environmental resources but also as symbols of responsiveness and collective investment in adolescent well-being. Concurrent Photovoice inquiry illuminated how adolescents interpret environmental features through relational and contextual lenses, reinforcing the importance of integrating participatory design with participatory evaluation.

Together, these findings suggest that youth-centered environmental interventions embedded in authentic community partnerships may represent a viable, contextually grounded strategy for promoting adolescent wellness in rural settings. By positioning adolescents as co-designers and co-interpreters, community health partnerships can advance both structural change and shared ownership of health-promoting environments.

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Table 1. Lessons Learned

Lesson Learned	Description
Youth Voice is Essential	Adolescents brought critical insight and creativity when given leadership roles in wellness infrastructure design.
Trust-Building Matters	Trauma-informed, youth-centered facilitation built trust and enabled authentic engagement.
Community Ownership Drives Sustainability	Shared decision-making and local leadership supported long-term investment, including new grant funding.
Nature Heals	Participants described nature as calming, reflective, and emotionally restorative—especially important in underserved settings.
Culture and Emotion Shape Space	Youth connected deeply with spaces tied to memory, identity, and cultural meaning.
CBPR Works for Youth Engagement	Photovoice and CBPR combined effectively to center adolescent experience and catalyze systems change.