

**FOSTERING COMMUNITY WELLBEING THROUGH FOREST-
BASED "BAHAY-BAHAYAN" IMMERSIVE THEATER:
AN ETHNOGRAPHIC STUDY OF
"PAG-AKYAT SA BUNDOK MAKILING"**

Ana Katrina P. de Jesus*

University of the Philippines Los Baños, College, Los Baños, Laguna

*Corresponding author: apdejesus2@up.edu.ph

ABSTRACT – The weakening connection between human communities and forest ecosystems has become a critical issue of our time, simultaneously causing environmental harm and diminished community wellbeing. This research investigates a community-based approach that integrates immersive theater, multi-sensory forest experiences, and wellbeing practices to address these interconnected problems. It explores how participation in the immersive *Bahay-bahayan* play "*Pag-akyat sa Bundok Makiling*" fosters community wellbeing and environmental connection by analyzing participant experiences across simulated and authentic forest environments, examining how different settings shape these experiences, and identifying community response patterns to forest-based immersive theater interventions. A mixed-methods ethnographic investigation was conducted at three community venues in Laguna Province: Santa Cruz, Biñan, and Los Baños. Approximately 120 participants from various age groups participated in immersive sessions lasting 3 to 5 hours. Data were collected through participant observation, semi-structured group interviews with select participants, audio-visual recording, and reflective writing exercises. Key themes were identified through thematic analysis using Braun and Clarke's (2006) analytical approach. Four major interrelated themes emerged: (1) transformative participatory engagement through multi-sensory forest experiences, (2) intergenerational knowledge sharing, (3) holistic integration of self-nature-society connections, and (4) openness to emotional healing and forgiveness. All three settings proved beneficial for fostering wellbeing, with authentic forest immersion eliciting elevated emotional experiences through tree interaction, stronger ecological learning motivation, and value system shifts. Immersive *Bahay-bahayan* theater set in forest environments shows strong potential as an intervention that builds environmental connections, while fostering wellbeing. The immersive simulation offers practical options for urban settings lacking access to forest ecosystems. Integrating healing practices with immersive theater creates a culturally relevant, adaptable framework for community wellness programs.

Keywords: environmental connection, forest therapy, immersive theater, Mount Makiling, wellbeing

To cite this paper: de Jesus, A.K.P 2025. Fostering Community Wellbeing through Forest-Based "Bahay-bahayan" Immersive Theater: An Ethnographic Study of "Pag-akyat sa Bundok Makiling". *Journal of Nature Studies*. 24(1), 15-39.

INTRODUCTION

The growing separation between communities and natural environments has become a major challenge for modern society, threatening both environmental health and human wellbeing (Louv, 2008; Clayton & Manning, 2018). This separation, which Louv (2008) terms "nature deficit disorder," manifests in several ways: people have less direct contact with natural environments, lose traditional ecological knowledge, show weaker environmental stewardship behaviors, and experience more mental health challenges as urbanization and technology dominate their lives (Soga & Gaston, 2016). These disconnections reflect how communities have moved away from meaningful relationships with natural ecosystems.

Mount Makiling, located in Laguna Province in the CALABARZON region of the Philippines, represents a unique and culturally significant intersection of biodiversity conservation, cultural heritage, and community identity. An inactive volcano rising 1,130 meters above sea level in southern-central Luzon, Makiling spans across Laguna and Batangas provinces and supports diverse forest ecosystems ranging from lowland rainforest to mossy forest despite its relatively modest elevation. Originally designated as one of the Philippines' first national parks in 1933, the mountain was later reclassified as Mount Makiling Forest Reserve in 1990, with its 4,224-hectare forest area transferred to the University of the Philippines Los Baños for management as a scientific training laboratory and biodiversity conservation site (Magcale-Macandog et al., 2021).

Beyond its ecological significance, Mount Makiling holds strong cultural and spiritual meaning for local communities. The revered guardian spirit of Mount Makiling in Filipino folklore is Maria Makiling, believed to protect the mountain's natural abundance and provide for local communities who depend on its resources, with some legends extending her protective domain to include Laguna de Bay and its fisheries (Clark, 2016). The rich oral tradition surrounding Maria Makiling has generated numerous literary variations and cultural beliefs, reflecting her deep significance in local Filipino spirituality and environmental stewardship practices.

Scientific understanding of forest-human relationships has evolved significantly in recent decades, with mounting evidence supporting the wellbeing potential of forest environments for human health. Forest wellbeing practices, most extensively developed through the Japanese practice of *shinrin-yoku* or "forest bathing," have shown measurable physiological and psychological benefits including reduced cortisol levels, enhanced immune function, decreased blood pressure, improved mood regulation, and enhanced cognitive performance (Park et al., 2010; Li, 2010; Hansen et al., 2017).

Systematic reviews indicate *shinrin-yoku's* effectiveness in reducing anxiety and other mental health symptoms in the short term across studies conducted in Asia and Europe (Kotera et al., 2022). However, existing research has predominantly examined direct forest contact experiences using various approaches such as breathing exercises, walking, and yoga, leaving a significant gap in understanding how "simulated" or "constructed" forest environments might achieve similar wellbeing outcomes. This limitation is particularly important for urban populations who may lack access to forest ecosystems, but could benefit from carefully designed forest simulation experiences that replicate the sensory and wellbeing elements of direct forest immersion.

Community-based participatory arts offer valuable opportunities for promoting wellbeing and strengthening environmental bonds. Applied theater and participatory performance have shown potential for promoting collective wellbeing, strengthening social connections, preserving cultural heritage, and empowering communities (Sajnani et al., 2017). When arts-based educational methods incorporate

environmental content, they fulfill multiple wellbeing and learning purposes simultaneously. Artistic practices can reawaken people's natural curiosity about the environment through sensory engagement and renewed ways of seeing, while simultaneously offering safe spaces to work through environmental anxiety and climate-related fears (van Boeckel, 2009).

Hence, the focus of this study is participants' experiences in "*Pag-akyat sa Bundok Makiling*" (Climbing Mount Makiling), an immersive theater designed using the *Bahay-bahayan* system and philosophy. In the play, forest simulation, wellbeing practices, intergenerational storytelling, and community participation are systematically and creatively combined. This intervention, conducted at multiple locations in Laguna Province, creates a space for exploring how culturally rooted, extended, multi-sensory forest experiences can enhance community wellbeing while building environmental relationships and promoting ecological understanding.

This study sought to investigate how participation in the immersive *Bahay-bahayan* play "*Pag-akyat sa Bundok Makiling*" fosters community wellbeing and environmental connection across different community settings. Specifically, this aims to 1) examine participant experiences in simulated and in authentic forest environments; 2) compare participant experiences across the different forest settings; and 3) explore patterns and themes of community responses to forest-based immersive theater interventions.

METHODOLOGY

Study Design

This research used an ethnographic study design with mixed-methods to examine community responses to the immersive theater intervention "*Pag-akyat sa Bundok Makiling*." Ethnography, described as "the study of social interactions, behaviors, and perceptions that occur within groups, teams, organizations, and communities" (Reeves et al., 2008), was chosen for several important reasons. The intervention's focus on community wellbeing and shared meaning-making required research methods that could capture complex social interactions and cultural processes emerging from group activities. The incorporation of wellbeing practices required culturally respectful research approaches that could honor knowledge systems while documenting their practical application. The multi-sensory, physical nature of the forest theater experience needed observational techniques that could document non-verbal reactions, emotional displays, and embodied wellbeing responses that interviews or surveys alone might miss.

The research framework was designed to capture both individual wellbeing experiences and group community processes, understanding that forest-based wellbeing occurs across personal, social, and community dimensions.

Study Setting and Cultural Context

The study was conducted across three strategically selected sites in Laguna Province, each representing different levels of connection to Mount Makiling Forest Reserve and varying degrees of urban-rural characteristics.

Santa Cruz, Laguna represented a community setting with strong connections to Mount Makiling's forest ecosystems, though farther from the immediate urbanization of Manila. The municipality serves as the capital of Laguna and functions as a business and commercial center in the eastern part of the province, making it ideal for examining intergenerational knowledge sharing dynamics within a simulated forest context.

Biñan, Laguna is a component city that, based on a 2024 population census, is the most populous city in the province. The city serves as a suburban residential area for Manila and functions as a major industrial center housing large industrial estates and export processing zones. As a more urbanized community with younger demographic concentrations and potentially weaker connections to traditional forest practices, this setting allowed examination of how forest-based interventions might engage communities with limited direct forest experience.

Los Baños, Laguna served as the third site, specifically the Makiling Botanic Gardens, which offered a unique opportunity for immersion within the actual forest ecosystem that formed the cultural and ecological foundation for the entire project. Located within the Mount Makiling Forest Reserve itself, this site allowed comparison between simulated and direct forest contact while maintaining the same intervention structure and community-based approach.



Figure 1. Map showing the three study setting.

Inset: Map of the Philippines showing Mount Makiling's location (delos Angeles and Buot, 2015)

Participant Recruitment and Demographics

Participants were recruited through community-based purposive sampling strategies developed in collaboration with local community leaders, socio-civic organizations, and theater groups. Across the three performance sites, approximately 120 participants engaged with the intervention, representing diverse age demographics from children to elders and varying levels of forest familiarity and traditional ecological knowledge.

Tables 1 and 2 present the detailed age distribution and geographic representation of participants, illustrating the intervention's reach across diverse age groups, from children to elders. This demographic diversity proved essential for understanding how different community profiles responded to both simulated and authentic environmental interventions.

Table 1. Age Group Distribution by Location.

Age Range	Biñan		Los Baños		Sta. Cruz		Total	
	n	%	n	%	n	%	n	%
10-20 years	13	43.3	13	21.7	4	13.3	30	25.0
21-30 years	7	23.3	17	28.3	8	26.7	32	26.7
31-40 years	3	10.0	15	25.0	7	23.3	25	20.8
41-50 years	2	6.7	10	16.7	4	13.3	16	13.3
51-60 years	3	10.0	3	5.0	3	10.0	9	7.5
61-70 years	2	6.7	2	3.3	4	13.3	8	6.7
Total	30	100%	60	100%	30	100%	120	100%

Table 2. Overall Participant Distribution Across All Three Areas.

Location	Number of Participants	Percentage of Total
Los Baños	60	50.0%
Biñan	30	25.0%
Sta. Cruz	30	25.0%
Total	120	100%

Detailed Description of the Intervention

The immersive play "*Pag-akyat sa Bundok Makiling*" represents an integration of multiple carefully-designed community experiences focused on simulating and honoring the journey to Mount Makiling's forest ecosystems, situated within different versions of Makiling folklores across historical periods. Each performance began with careful preparation of the performance space to create a "sacred space" using traditional Filipino "*dap-ayan*" community gathering patterns in circular configuration. Agcaoili (2019) described "*pagdadap-ayan*" as gathering places in Ilokano culture in traditional times.

The intervention design drew upon the *Bahay-bahayan* (child's imaginative play) framework, a Filipino educational approach theorized by cultural creative Gian Carlo U. de Jesus. *Bahay-bahayan* transforms conventional audience engagement through the interplay of three elements: the *facimuno* (facilitator), *kalaro* (co-players), and *espasyo* (space), activated by *kwento* (story) and *kumwari* (what-if scenarios). This framework, previously documented in educational settings (de Jesus et al., 2017), emphasizes reframing conventional teaching methods by creating learning environments where play naturally facilitates learning and any venue can be transformed into a meaningful learning space.

The *Bahay-bahayan* approach proved particularly relevant for the forest theater intervention because it invites active co-creation rather than passive observation, allowing the intervention to emerge organically through dialogue and reflection with community members. This participatory framework helped ensure that the forest wellbeing experience remained culturally grounded, embodying the principle that meaningful learning occurs through collaborative meaning-making rather than passive reception of predetermined content.

The design of "*Pag-akyat sa Bundok Makiling*" incorporated insights from previous research on the *Bahay-bahayan* framework, which identified key social processes that emerge in participatory and immersive theater experiences. Called the "Wari Yari: Process of Reflexive Dialogue" (de Jesus, 2020), this framework represents the interconnected processes that participants experience, including *pagpapasigla* (activating), *pagtatauli* (reacting), *pagmamasid* (observing), *paggaya* (imitating), *pagsubok* (testing), *paglubog* (immersing), *pagtugon* (responding), *pagsasakatawan* (embodying), *pag-angkin* (owning), and *pagpapadayon* (lingering). These processes are permeated by two overarching actions: *pakikiramdam* (sensing)—where participants attune themselves to co-players to accommodate each other's meaning-making—and *pagbabanyuhay* (transforming)—where participants experience changes in how they think, feel, and act.

Wari (Discern) and *Yari* (Design) represent how players make sense of the immersive experience through imagination and engage in dialogic interactions to co-construct possibilities and realities within the safety of *kunwari* (make believe). This theoretical framework informed the design of "*Pag-akyat sa Bundok Makiling*" by emphasizing the importance of creating environments where participants could move through these natural processes of engagement, immersion, and transformation, aligned with Filipino participatory practices akin to "*dap-ayan*".

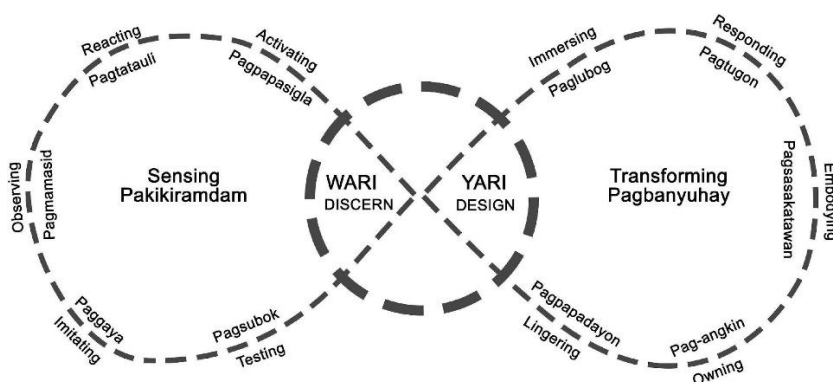


Figure 2. *Wari at Yari: Proseso ng Pakikipag-dayalogo* (de Jesus, 2020) Discern and Design: Process of Reflexive Dialogue

Pintigan Ritual and Community Attunement

The formal beginning involved the *pintigan*, a collaborative music-making ritual using traditional Filipino percussion instruments including *kubing* (bamboo jaw harp), tambourines, wooden claves, coconut husks, and various drums. Participants selected instruments based on personal preference,

with facilitators providing brief instruction while emphasizing exploration and listening over technical proficiency. The entire *pintigan* was conducted with participants in Biñan and Sta. Cruz wearing blindfolds, heightening auditory sensitivity and reducing visual distractions. Los Baños' experience did not see the need for blindfolds because participants were enveloped in Makiling itself.

Multi-Sensory Forest Journey Simulation

Following the *pintigan*, participants embarked on the experience of ascending Mount Makiling through its various ecological zones. This journey integrated auditory, tactile, olfactory, and kinesthetic elements designed to create authentic sensory experiences of forest environments.

In Santa Cruz and Biñan, the forest journey was structured around specific "stations" representing different elevations and ecological zones, with tactile elements including water spray to simulate stream crossings, different textural materials such as dried leaves and twigs representing forest floor conditions, aromatic elements including essential oils, and audio recordings of mountain sounds and hikers' movements. At Los Baños, participants moved through actual forest stations with authentic nature sounds including bird calls, insect choruses, rustling leaves, and flowing water from streams.

Story and Historical Integration

At specific stations, participants encountered narrative presentations and experiential activities. These historical components were designed as opportunities for intergenerational dialogue, rather than academic lessons. Table 3 shows the integration of Mariang Makiling legend story elements, with social issue contexts, and the meditation practices that served as transitional community rituals.

Table 3. Mariang Makiling Legend Integration with Emotional Processing.

Emotion	Contemporary Context	Legend Story Element	Meditation/Ritual Practice
Grief	People mourning due to effects of floods and environmental disasters	The sky darkened and floods came because Mariang Makiling became angry	Remembering disaster victims and offering prayers, candles, and incense
Worry	People abuse natural resources due to anxiety about scarcity and poverty	People stopped returning borrowed items to Makiling; envy arose over golden turmeric gifts from Makiling	Silent meditation on abundance and gratitude
Anxiety	Deep worry transforms into anxiety and depression	Gradual forgetting of traditional rituals in desire to accumulate material possessions; disruption of natural rhythms; stopped offering white flowers (<i>puting dumalaga</i>)	Mindfulness exercises
Fear	Anxiety and depression deepening into fear	Mariang Makiling became dismissed as mere imagination or folklore	Guided soul dance with letting go practices
Anger	Intense fear transforming into anger, hate, and suffering	Mariang Makiling never returned due to human abuse of her mountain home	Forgiveness practice

Wellbeing Elements

Each station incorporated traditional wellbeing concepts, particularly correspondences between natural elements (earth, water, fire, metal, air) and human body systems. Participants were invited to focus attention on specific body systems as they encountered corresponding elemental stations. Each element aligns with a specific body organ, representing distinct human emotions in both balanced and imbalanced states. Table 4 shows the interrelationships of the five elements, organs, and emotions.

Table 4. Five Element-Organ-Emotion Correspondences.

Element	Organ System	Imbalanced Emotion (Signal)	Balanced Emotional State (Needed Response)
Wood	Liver	Anger	Kindness to Yourself and Others (Assertiveness)
Fire	Heart	Anxiety	Joy and Love
Earth	Spleen	Worry	Openness to the New
Metal	Lungs	Grief	Courageously Choosing What is Right for You
Water	Kidneys	Fear	Gentleness Towards Yourself

The intervention concluded with wellbeing rituals including guided meditation, memorial creation using natural materials, flower offerings, collective chanting, written reflection exercises, and candle lighting ceremonies accompanied by incense burning.

Data Collection

To capture both individual experiences and collective community dynamics throughout the intervention process, data collection employed multiple methods as detailed in Tables 5 to 7. Using structured observation protocols (Table 5), participant observation was conducted during the immersive theater performances, systematically documenting participant behaviors, emotional responses, engagement patterns, group interactions, and facilitator-participant dynamics.

Immediately following each performance, semi-structured focus group discussions were facilitated among purposively-selected participants representing diverse demographic groups. Using the question framework outlined in Table 6, participants' interpretations of their experiences, emotional responses to different intervention components, insights about environmental connections, and perceived impacts on community relationships were systematically explored.

Audio-visual documentation, conducted only with explicit informed consent, captured key moments of collaboration and community interaction. Additionally, participants engaged in guided written reflection exercises during healing ritual segments, responding to structured prompts detailed in Table 7 about personal insights, emotional responses, connections among community, environmental awareness shifts, and intentions for future action, with participants maintaining full control over privacy and sharing preferences.

Table 5. Participant Observation Protocol - Behaviors Monitored.

Observation Category	Specific Behaviors/Indicators	Data Collection Method
Participant Behaviors	<ul style="list-style-type: none">• Active participation in activities• Physical positioning and movement• Verbal contributions• Non-verbal communication (gestures, posture)• Initiative-taking behaviors	Field notes Structured observation checklist
Emotional Responses	<ul style="list-style-type: none">• Facial expressions and body language• Vocal tone and inflection changes• Spontaneous reactions to specific moments• Signs of emotional engagement/disengagement	Real-time observation notes Audio-visual documentation (with consent)
Engagement Patterns	<ul style="list-style-type: none">• Level of focus during different segments• Participation consistency throughout performance• Response to facilitator prompts• Peer-to-peer interaction	Structured observation protocol Field notes
Group Interactions	<ul style="list-style-type: none">• Collaborative behaviors• Inclusive/exclusive behaviors• Cross-generational interactions	Field notes
Facilitator-Participant Dynamics	<ul style="list-style-type: none">• Response to guidance and instruction• Question-asking behaviors• Trust-building indicators	Interaction analysis notes

Table 6. Focus Group Discussion Guide - Questions Framework.

Theme Area	Questions	Probing Follow-ups
Experience Interpretations	<ul style="list-style-type: none">• How would you describe your overall experience today?• What moments stood out most to you during the performance?	<ul style="list-style-type: none">• Can you elaborate on that feeling?• What specifically made that moment significant?• How did that compare to other participants' reactions?
Emotional Responses	<ul style="list-style-type: none">• What emotions did you experience during different parts of the play?• Which activities or moments triggered the strongest emotional responses?• How comfortable did you feel sharing emotions with the group?	<ul style="list-style-type: none">• Can you describe that emotion more specifically?• What do you think caused that emotional response?• How did those emotions change throughout the experience?
Environmental Connections	<ul style="list-style-type: none">• How has this experience affected your relationship with nature/the forest?• How do you see the connection between community and environmental health?	<ul style="list-style-type: none">• How might this change your daily practices?

Table 6 (Continued). Focus Group Discussion Guide - Questions Framework.

Theme Area	Questions	Probing Follow-ups
Community Relationships	<ul style="list-style-type: none">• How did this experience affect your sense of connection to other participants?• What did you learn about your community through this process?	<ul style="list-style-type: none">• What was it like relating to people of different ages and backgrounds?

Table 7. Written Reflection Exercise Prompts.

Reflection Category	Key Prompts
Personal Insights	What did you discover about yourself today?
Emotional Responses	Describe the emotions you experienced.
Community Connections	How does this relate to your community realities?
Environmental Awareness	What did you realize about your relationship with nature?
Future Actions	What steps will you take based on today?

Note: Participants maintained full control over sharing reflections - could keep private, share anonymously, or discuss with the group.

Scope and Limitations

This study's ethnographic approach provides rich qualitative insights while limiting generalizability to other populations and cultural contexts. The intensive, small-group intervention format allows for detailed observation but limits ability to reach larger community populations. By design, it is not within the study's intent to present quantitative measures of stress reduction, environmental attitude change, or long-term behavioral outcomes, since the focus is on understanding participant experiences.

Ethical Considerations

All research activities followed ethical guidelines for community-based participatory research, emphasizing cultural sensitivity and community benefit. Informed consent was obtained from all participants in both written and verbal formats, adapted for different literacy levels and language preferences. Participants were clearly informed of their right to withdraw from activities or discussions at any time without consequence.

The research posed minimal risks to participants, primarily limited to potential emotional responses during historical processing and wellbeing activities. Support mechanisms were available throughout the intervention to address any distress. Benefits included immediate wellbeing value through the intervention itself, community bonding opportunities, and contribution to knowledge that could benefit other communities facing similar challenges.

All participants were assured of anonymity in research outputs, with identifying information removed and pseudonyms used for direct quotations. Participants maintained control over audio-visual

recordings, including the right to request deletion of specific content. The research emphasized reciprocal benefit, ensuring that communities received value from their participation beyond academic outputs.

Data Analysis

Qualitative data analysis followed Braun and Clarke's (2006) six-phase thematic analysis framework: (1) familiarizing with data through repeated reading and initial note-taking, (2) generating initial codes by systematically identifying features of interest across the dataset, (3) searching for themes by collating codes into potential overarching patterns, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report by selecting compelling examples and relating analysis back to research questions. A phenomenological lens was used to highlight participants' lived experiences and meaning-making processes throughout this analytical process. Cross-case comparison among the three performance sites revealed demographic and contextual influences while identifying consistent patterns across different community settings and forest experience modalities.

RESULTS

Ethnographic Analysis: Three Forest Communities

Analysis of participant observations and focus group discussions revealed distinct cultural patterns across the three performance sites, each offering unique insights into how groups engage with forest-based wellbeing interventions. The study's design created a natural comparison between simulated forest experiences (Sta. Cruz and Biñan) and authentic forest immersion (Los Baños), revealing both universal cultural themes and setting-specific community responses.

Site-Specific Ethnographic Portraits

Biñan: Youthful Discovery in Suburban Setting

The Biñan performance unfolded in a community park within a subdivision, transforming a familiar suburban space into a portal for forest connection. The demographic composition, heavily skewed toward younger participants (46.7% aged 10-20 years), created a distinctly energetic and exploratory atmosphere.

Initial engagement revealed participants' surprise at becoming participants rather than observers, manifesting in visible excitement through smiles and laughter during orientation. Several younger participants exhibited nervous energy through fidgeting and frequent glances at peers, suggesting both anticipation and uncertainty about the unfamiliar participatory format.

The community's relationship with Mount Makiling emerged as primarily academic, rather than experiential through focus group discussions. When asked about their relationship with nature, responses revealed school-based knowledge: one participant noted that Makiling "was a mountain in Laguna," while another shared learning "about Makiling from their Filipino subject." Follow-up probing revealed limited direct forest experiences, with most environmental knowledge coming from textbook learning, rather than embodied connection.

The simulated forest journey proved particularly transformative for this younger demographic. Initial resistance to blindfolding was evident through stiff postures and hesitant movements. However, as the musical elements began, participants demonstrated increasing physical relaxation and willingness to engage.

Participant K's reflection captured this progression: "*At first, naiilang ako na naka-piring. Para bang di ako mapakali. Pero nung nag-play na ng musical instruments, sabi nung leader, mag-play din daw kami kahit anong sound. Sinubukan ko lang. Then na-enjoy ko na kasi paganda ng paganda yung sound.*" (At first, I felt uncomfortable being blindfolded. It was like I couldn't stay still/calm. But when the music played, and the leader said we should also play any sound, I tried it. Then, I enjoyed it because the sound became more and more beautiful)." Observational notes documented this transformation from rigid body positioning to fluid movement, with participants gradually leaning into the soundscape and contributing their own percussive sounds.

The blindfolded mountain simulation generated authentic sensory immersion despite the suburban setting, with collaborative behaviors emerging organically. Participants began helping each other navigate the simulated terrain, with older participants naturally taking initiative in guiding younger ones through the tactile elements.

Sta. Cruz: Creative Community Expression in Simulated Forest

The Sta. Cruz performance elicited the most natural and unscripted community expression compared to other locations, as shown in the dynamic *pintigan*, and spontaneous community dancing. The age diversity of participants, with a fairly balanced spread across different generations and significant involvement from older adults (20% aged 50+), encouraged meaningful interactions between age groups. Also, since the site was an art gallery that houses artists and creatives, the invited participants also came from the cultural creative sector.

Participants consistently expressed surprise and delight at the participatory nature of the experience. Participant S's behavioral shifts were evident: beginning with arms crossed and peripheral positioning during orientation, moving to active leaning forward during activation, and culminating in full physical participation during activities.

Her reflection captured this transformation: "It's different when people are watching, and it's different when you're involved. Involve me, and I learn." She continued, "Since it's new to me, I am more of observing at first what's happening. *Bago siya sa akin. May ganung moment*, but I really like it. (It's new to me. There's that kind of moment, but I really like it.) While we were doing the play, so many things were running through my mind."

Toward the end of the performance, one participant stood up as music was being played and began to move rhythmically. This action triggered immediate responsive behaviors from others: several participants smiled widely, others began moving in their seats, and some reached for available musical instruments. Within moments, an impromptu celebration emerged with participants taking turns on instruments, and engaging in collaborative dancing. This organic emergence of dance and music, arising from the participatory nature of the experience rather than from prescribed activities, demonstrated how culturally appropriate interventions can activate community creative capacities, beyond the programmed learning outcomes.

Los Baños: Authentic Forest Immersion and the Proximity Paradox

The Los Baños performance within the actual Mount Makiling forest environment revealed enhanced depth of environmental connection through direct observation of participant behaviors. The authentic forest context generated distinct engagement patterns, emotional responses, and group dynamics that built upon and transcended the benefits observed in simulated experiences.

Unlike the carefully constructed narrative environment used in Sta. Cruz and Biñan, the Los Baños experience enveloped participants within authentic forest sounds that created observable differences in attention patterns and emotional responses. Field notes documented participants exhibiting heightened alertness to environmental sounds—birds, wind through trees, water movement—with frequent head turning and focused listening behaviors that persisted throughout the experience.

The authentic setting enabled direct physical contact with living trees, facilitating deeper emotional processing and release that was extensively documented through observational protocols. Participants exhibited different behaviors toward trees - initially tentative touching, progressing to extended contact, and culminating in full embracing postures during wellbeing exercises.

Participant D's reflection captured the wellbeing quality of this direct contact: "When our facilitator said that we can hug a tree, and tell the tree all our pains and hurts, and to ask and give forgiveness, I suddenly felt an opening up in my chest, and I let go. And I did not hold back. I hugged the tree, and whispered to it all my frustrations with the recent elections. I felt like I was able to tell a friend who would not judge and be resentful. It was a freeing feeling."

Paradoxically, many participants realized that their geographical proximity to Mount Makiling had not previously translated into meaningful environmental connection. Focus group discussions revealed that despite living near the forest, participants were in awe of forest sounds, and had limited knowledge of local plant species.

Participant J exemplified this pattern: "I now realized that I have been living in Los Baños, yet I did not get the chance to experience Makiling in this way. It's an amazing feeling to be able to get out of the office, the busy-ness of life, and to reconnect with nature."

Table 8 shows the distinct, yet complementary benefits of simulated versus authentic environmental interventions across three research sites. While the simulated environments in Sta. Cruz and Biñan employed carefully constructed sensory experiences, including blindfolded journeys, curated soundscapes, and imaginative exercises, to create immersive nature connections in urban settings; the authentic forest environment in Los Baños provided direct contact with living ecosystems. Both approaches were able to foster community engagement, emotional processing, and cultural expression, yet each revealed distinctive strengths. The comparative analysis below explores how these different environmental contexts shaped participant experiences across various dimensions. These yielded insights for designing nature-based interventions that can serve diverse communities and settings.

The comparative analysis reveals that simulated and authentic environmental interventions were complementary, rather than competing approaches, each offering distinct pathways to environmental connection and community wellbeing. Simulated environments demonstrate accessibility and structural advantages, enabling urban communities to experience meaningful nature-based activities through carefully designed sensory engagement and focused community building activities. Meanwhile, authentic forest settings generate irreplaceable opportunities for ecological consciousness, spontaneous emotional release, and knowledge sharing that emerge organically from direct environmental contact. The sustained engagement observed across both contexts, evidenced by participants' continuous five-hour participation without mobile device distraction, suggests that the quality of intentional design can significantly resemble the experiences generated in authentic settings. Simulated interventions may serve as accessible entry points for nature connection in urban contexts, while authentic experiences offer deeper transformational opportunities for communities with forest access. The integration of both approaches within community programming could maximize benefits, by meeting community members where they are at.

Table 8. Simulation vs. Authentic Environment: Comparative Analysis.

Dimension	Simulated Environment (Sta. Cruz & Biñan)	Authentic Environment (Los Baños)	Comparative Insights
Sensory Engagement	<ul style="list-style-type: none">• Carefully constructed soundscapes• Blindfolded journey required for immersion• Tactile elements (dried leaves, textures)• Controlled multi-sensory simulation <p>Observed: Heightened attention to constructed sounds, reliance on non-visual senses</p>	<ul style="list-style-type: none">• Natural forest sounds (birds, wind, water)• No blindfolding needed• Direct contact with living trees, water, nature• Authentic sensory immersion <p>Observed: Spontaneous alertness to environmental sounds, multi-modal engagement</p>	<p>Simulation: Sufficient Generated authentic sensory experience through careful construction</p> <p>Authentic: Enhanced Provided richer, spontaneous sensory engagement without artificial aids</p>
Physical Interaction	<ul style="list-style-type: none">• Imaginative tree contact• Simulated climbing movements• Role-play based engagement <p>Observed: Participants "reached" for imagined elements, exhibited climbing postures</p>	<ul style="list-style-type: none">• Direct tree hugging and touching• Real forest trekking and navigation• Water interaction <p>Observed: Sustained physical contact, letting go and embracing behaviors</p>	<p>Simulation: Sufficient Activated embodied responses through imagination</p> <p>Authentic: Elevated Enabled deeper emotional release through direct contact</p>
Community Dynamics	<ul style="list-style-type: none">• Enhanced focus on group interaction• Controlled environment for community building• Collaborative music-making central <p>Observed: Strong peer bonding, spontaneous creative expression (Sta. Cruz case)</p>	<ul style="list-style-type: none">• Natural clustering and exploration groups• Environmental challenges fostering cooperation• Peer-to-peer ecological knowledge sharing <p>Observed: Reciprocal helping, collaborative problem-solving</p>	<p>Simulation: Advantage Focused attention on community processes</p> <p>Authentic: Benefit Generated organic collaboration</p>
Emotional Processing	<ul style="list-style-type: none">• Writing and visualization exercises• Community-based healing rituals• Symbolic memorial making	<ul style="list-style-type: none">• Tree-hugging emotional release• View of natural environment as non-judgmental space• Openness to healing	<p>Simulation: Structured Facilitated openness to emotional processing</p> <p>Authentic: Emergent Facilitated deeper, more spontaneous emotional release</p>

Table 8 (Continued). Simulation vs. Authentic Environment: Comparative Analysis.

Dimension	Simulated Environment (Sta. Cruz & Biñan)	Authentic Environment (Los Baños)	Comparative Insights
	Observed: Visible relaxation during guided imagery	Observed: Sustained emotional release, emotions during tree-hugging, peaceful expressions during water contact	
Learning Outcomes	<ul style="list-style-type: none">• Knowledge sharing emphasized• Community learning observed• Participatory engagement evident <p>• Focus Group: Learned about working together, Discovered community connection</p>	<ul style="list-style-type: none">• Enhanced ecological curiosity• Spontaneous peer-to-peer knowledge exchange• Value transformation (material → natural wealth) <p>• Focus Group: Want to learn more about forest species, Realized natural abundance</p>	<p>Simulation: Social Emphasized community learning</p> <p>Authentic: Social and Ecological Generated environmental consciousness and value shifts</p>
Wellbeing Benefits	<ul style="list-style-type: none">• Stress relief through structured activities• Community connection and belonging <p>Participant Quotes: <i>"Nakalimutan ko yung stress," "Nabawasan yung bigat"</i></p>	<ul style="list-style-type: none">• Proximity paradox insights• Deeper communion with nature• Enhanced mindfulness states <p>Participant Quotes: <i>"Freeing feeling," "Deeper connection than expected"</i></p>	<p>Simulation: Accessible Served as accessible space for stress reduction and attunement with emotions</p> <p>Authentic: Elevated Generated profound shifts in feelings of wellbeing</p>
Cultural Expression	<ul style="list-style-type: none">• Spontaneous dancing and music (Sta. Cruz)• Creative adaptation of space• Community-generated celebrations <p>Observed: Organic emergence of community cultural practices</p>	<ul style="list-style-type: none">• Traditional ecological knowledge sharing• Cultural meaning-making around forest abundance• Intergenerational knowledge transmission <p>Observed: Elder teaching behaviors, cultural knowledge sharing</p>	<p>Simulation: Eliciting Activated performative traditions</p> <p>Authentic: Connecting Connected to indigenous ecological knowledge</p>

Table 8 (Continued). Simulation vs. Authentic Environment: Comparative Analysis.

Dimension	Simulated Environment (Sta. Cruz & Biñan)	Authentic Environment (Los Baños)	Comparative Insights
Accessibility & Implementation	<ul style="list-style-type: none">• Urban/suburban settings possible• Controlled conditions• Resource requirements: soundscape design, space preparation	<ul style="list-style-type: none">• Requires forest access• Transportation needs• Resource requirements: safety protocols, ecological guides	<p>Simulation: Practical Accessible to urban communities without forest access</p> <p>Authentic: Intensive Requires logistical support, but provides distinct benefits</p>
Engagement Duration	<ul style="list-style-type: none">• Sustained attention for 5 hours• Minimal to no mobile device checking observed• Consistent participation throughout <p>Observed: High engagement despite simulated setting</p>	<ul style="list-style-type: none">• Natural environment sustained attention• Extended exploration and discovery• Organic learning opportunities <p>Observed: Spontaneous extension of activities beyond formal schedule</p>	<p>Both Effective: Sustained engagement across both settings</p> <p>Authentic: Extended Natural environment invited continued exploration</p>

DISCUSSION

Weaving the Ethnographic Portraits: Emergent Themes

The systematic analysis across all three sites revealed four major themes characterizing participants' experiences in the immersive forest theater intervention. These themes demonstrate the multifaceted impact of the experience on wellbeing and environmental connection, with consistent patterns emerging across different environmental settings and community profiles. Table 9 shows codes and categories that led to the emergent themes.

Comparison across the three sites revealed participants' journeys of environmental connection and wellbeing through the carefully designed forest simulation and the enriched experiences in the Mount Makiling forest setting. Experiences related to wellbeing including stress reduction, community bonding, and historical processing occurred consistently across all sites, demonstrating that the *Wari and Yari* imaginative play can facilitate benefits for communities even without forest access.

Nonetheless, the Los Baños experience provided enhanced depth in several specific aspects: stronger emotional release through direct forest immersion, stronger ecological learning motivation, deeper sensory engagement through authentic soundscapes, and value system shifts through experiencing forest abundance.

Table 9. Major Themes with Supporting Codes and Categories Across Sites.

Theme	Categories	Supporting Codes	Sta. Cruz Experience	Biñan Experience	Los Baños Experience
Transformative Participatory Engagement	Surprise at Participatory Format	<ul style="list-style-type: none"> • Initial surprise and delight • Transformation from passive to active 	Participant S: "It's different when people are watching, and it's different when you're involved..."	Surprise: Visible excitement, smiles and laughter during orientation	Enhanced by authentic environment: Direct physical engagement with trees and water
	Multi-sensory Immersion	<ul style="list-style-type: none"> • Rich sensory experiences 	Involve me, and I learn"	Participant K: <i>"At first, naiilang ako na nakapirang. Then, natuwa ako kasi pagandang paganda yung sound"</i>	Heightened mindfulness: Natural sounds eliminated need for blindfolding
	Creative Expression	<ul style="list-style-type: none"> • Authentic presence feelings 	Multi-sensory: "I really felt like I was climbing the mountain. I felt the cold, refreshing water"	Sustained: 5 hours without mobile device checking	Extended exploration: Activities continued beyond formal schedule
	Sustained Attention	<ul style="list-style-type: none"> • Spontaneous creative responses • Extended engagement without distraction 	Creative: Spontaneous dancing and music-making beyond structure		
Intergenerational Knowledge Sharing	Elderly Storytelling	<ul style="list-style-type: none"> • Spontaneous sharing of personal history 	Elder participant: <i>"Kaya pala ako dumalo dito, may kailangan ikwento"</i>	Limited due to younger demographic but respectful cross-generational interactions observed when adults present	Enhanced by natural setting: Organic educational exchanges about forest ecology
	Historical Education	<ul style="list-style-type: none"> • Martial Law experiences shared 	(That's why I came here, I have something that needs to be told)	Academic foundation: Knowledge from "Filipino subject" provided scaffolding for deeper learning	Peer-to-peer knowledge: Participant L: "my very knowledgeable groupmate told me about the plants and flowers"
	Cross-generational Dialogue	<ul style="list-style-type: none"> • Youth engagement with history • Respectful listening behaviors 	Youth response: Feelings of "anger and disbelief" learning about Martial Law		Reciprocal learning: Older participants shared ecological knowledge, younger offered physical assistance
	Cultural Memory Activation	<ul style="list-style-type: none"> • Educational moments creation • Cultural memory transmission 	Millennial observation: <i>"Maganda ito kasi natutunan namin na 'ah, importante pala ito"</i>		

Table 9 (Continued). Major Themes with Supporting Codes and Categories Across Sites.

Theme	Categories	Supporting Codes	Sta. Cruz Experience	Biñan Experience	Los Baños Experience
Holistic Self-Nature-Society Integration	Body-Nature Correspondences	• Forest-body system connections	Integration insight: <i>"Gustong gusto ko yung na-integrate natin yung on health, sa body, sa soul. Very holistic sya. Body, mind, nature, earth, that we are one"</i>	Participant A: <i>"Na-feel ko na nabawasan yung bigat ng mga iniisip ko... isipin na may liwanag sa puso ko, then sa lugar ko, sa bayan"</i>	Direct tree contact healing: Participant D: "I hugged the tree, and whispered to it all my frustrations... It was a freeing feeling"
	Healing Ritual Effectiveness	• Holistic health integration			
	Interconnection Understanding	• Healing ritual participation			
	Stress Relief and Wellbeing	• Stress reduction experiences • Mind-body-nature unity • Community-environment connections	Healing effectiveness: Participant with liver issues felt "discomfort gradually being relieved" during ritual	Stress relief: <i>"Andami rin kasi stress... Dito, kahit sandali, nakalimutan ko yung mga stress na yun"</i>	Enhanced ecological curiosity: Direct forest contact generated environmental learning Value transformation: "This gold from nature is the real gold"
Openness to Emotional Healing and Forgiveness	Forgiveness Challenges	• Difficulties with forgiveness	Participant J: Acknowledged forgiveness	Participant S: Writing hurts in notepad, then	Tree-based emotional release:
	Emotional Release	• Writing and visualization exercises	"does not come easy" but appreciated "efforts like this..." <i>Makabuluhan ang play ninyo</i>	"visualizing light as he gives and asks for forgiveness was a new feeling.. <i>Parang may nabuksan"</i>	Enhanced depth of processing through direct forest contact
	Liminal State Experience	• Emotional processing through rituals	Educational connection: Identified immersive experiences as "potent way" to bring about justice through education	Confusion to release: "It's like something has opened up" from focusing on light, rather than pain	Non-judgmental space: Trees provided therapeutic environment "like a friend who would not judge"
	Healing Ritual Participation	• Opening up to alternative possibilities • Pain and hurt release • Light visualization practices			Liminal state: Participant described play as "entering liminality... transitioning to fields of possibilities"

The extension from 3 to 5 hours proved crucial for achieving wellbeing experience depth across all sites. The longer duration allowed for more extensive storytelling, deeper ritual engagement, and sufficient time for community bonding to develop. Participants remained engaged throughout the extended sessions, with teenagers notably maintaining focus without technological distractions.

The comparison between simulated forest experiences (Sta. Cruz and Biñan) and authentic forest immersion (Los Baños) revealed that environmental authenticity serves as an amplifier, rather than a prerequisite for meaningful community engagement. All four major themes emerged consistently across sites, suggesting cultural resonance with participatory, holistic approaches to community wellbeing and environmental connection.

Theme 1: Transformative Participatory Engagement

The first major theme reveals how participants experienced profound shifts from passive observation to active participation, consistently generating surprise, delight, and sustained creative engagement across all sites. This transformation manifested through multiple dimensions of engagement that distinguished the intervention from conventional educational formats.

In Sta. Cruz, Participant S captured this shift: "It's different when people are watching, and it's different when you're involved. Involve me, and I learn." This reflection highlights how participatory engagement activated learning processes that mere observation could not achieve. The multi-sensory immersion created feelings of being present, with one participant noting, "I really felt like I was climbing the mountain. I felt the cold, refreshing water." This demonstrates how carefully constructed narrative environments could generate embodied experiences.

The Biñan site revealed how participatory format could overcome initial resistance, particularly among younger participants. The visible excitement, smiles, and laughter during orientation indicated smooth engagement with the format. Participant K's sharing showed a progression from discomfort to enjoyment. To quote, "*At first, naiilang ako na naka-piring. Para bang di ako mapakali. Pero nung nag-play na ng musical instruments, sabi nung leader, mag-play din daw kami kahit anong sound. Sinubukan ko lang. Then na-enjoy ko na kasi paganda ng paganda yung sound.* (At first, I felt uncomfortable being blindfolded. It was like I couldn't stay still/calm. But when the music played, and the leader said we should also play any sound, I tried it. Then, I enjoyed it because the sound became more and more beautiful)." This also shows how multi-sensory activation led to openness to new experiences, and eventual engagement.

Los Baños demonstrated how authentic environmental settings amplified participatory engagement through embodied experiences with forest elements. The natural soundscapes eliminated the need for blindfolding while maintaining immersive qualities, and activities naturally extended beyond the formal schedule as participants became absorbed in exploration and discovery.

The sustained attention documented across all sites, particularly the five-hour engagement without mobile device checking, challenges assumptions about attention spans and suggests that culturally resonant, meaningful activities can generate what educational researchers describe as "flow states" where participants become fully absorbed in activity. According to Csikszentmihalyi (2009), people in flow become so absorbed in the activity that they do not even notice time passing.

Theme 2: Intergenerational Knowledge Sharing

The second theme reveals how the intervention activated intergenerational dialogue, creating conditions for historical and ecological learning. This theme emerged consistently across sites despite varying demographic compositions, suggesting that the intervention framework itself facilitated intergenerational connection.

In Sta. Cruz, the most dramatic manifestation occurred when an elder participant spontaneously shared Martial Law experiences, reflecting: *"Kaya pala ako dumalo dito, may kailangan ikwento"* (That's why I came here, I have something that needs to be told). This moment captured how the intervention created psychologically safe spaces for sharing previously untold stories. Her vivid sharing of family experiences during Martial Law created educational moments that younger participants found both engaging and emotionally impactful. A teenager said that listening to stories of Martial Law experiences roused feelings of anger and disbelief. A millennial, in turn, shared an observation that the teens of this generation are no longer interested in history. In her own words, *"Feeling nila history ay boring. Maganda ito (the play) kasi natutunan namin na 'ah, importante pala ito. Napakita yung side 'nung panahong iyon (Martial Law)."* (For them, history is boring. The play is good because we realized that "yes, this is important." To be able to show the other side of that era (Martial Law).

Similarly, the older generation affirmed that indeed, Filipinos seem to have forgotten the lessons from the Martial Law years. One said, *"Napabaya natin. Akala ko nake-kwento, nabibigyang-aral sila. Pero wala pala. Mga kabataan, mga holders of truth. Kaso sila ay hindi na aware. Hindi na alam how to discern and how to look back sa mga lessons."* (We neglected it. I thought we are able to pass down the stories, and so they may learn. But no. The youth, the holders of truth. But now, they lack awareness. They don't know how to discern and how to look back on the lessons.) Such intergenerational sharing of stories and lessons emerged from the open-ended design of the immersive play, where participants are invited to co-create meanings of their experiences while inside the journey to Makiling.

Biñan, with its predominantly younger demographic, showed more limited intergenerational sharing but demonstrated how academic knowledge from "Filipino subject" provided scaffolding for deeper learning when combined with experiential engagement. The respectful cross-generational interactions observed when adults were present suggested readiness for intergenerational learning when opportunities arise.

Los Baños revealed how natural forest setting enhanced intergenerational knowledge sharing by organically unfolding opportunities to learn about biodiversity. Participant L's reflection "my very knowledgeable groupmate told me about the plants and flowers" exemplifies peer-to-peer knowledge transmission, while reciprocal learning occurred as older participants shared ecological knowledge and younger participants offered physical assistance during forest navigation.

Theme 3: Holistic Self-Nature-Society Integration

The third theme demonstrates how participants experienced connections between personal wellbeing, environmental relationship, and community belonging, suggesting that the intervention activated holistic wellbeing processes.

Sta. Cruz provided the most articulated expression of this integration through one participant's reflection: *"Gustong gusto ko yung na-integrate natin yung on health, sa body, sa soul. Very holistic sya. Body, mind, nature, earth, that we are one."* (I really like how we integrated the focus on health, with the body, with the soul. It was very holistic. Body, mind, nature, earth - that we are one.) This insight captures how the

intervention facilitated systems thinking about health and wellbeing that extended beyond individual symptoms to encompass environmental and social relationships.

The correspondence between forest elements and body systems created particularly meaningful connections for some participants. One participant with liver health issues described feeling initial discomfort when the liver was featured. He shared, "*Nung pinahawakan yung liver, at first, I felt a little discomfort.*" (When asked to touch the liver, at first, I felt a little discomfort.) He then shared that his father died of an illness related to the liver, and he was experiencing the same illness. He continued, "*Nung ginagawa na yung ritwal, and sabay-sabay na nagcha-chant, unti-unti rin nare-relieve yung discomfort.*" (When we did the ritual, and we started chanting in unison, I felt the discomfort gradually being relieved).

Biñan participants experienced stress relief and emotional release through the intervention. Participant A's reflection, "*Na-feel ko na nabawasan yung bigat ng mga iniisip ko... isipin na may liwanag sa puso ko, then sa lugar ko, sa bayan,*" (I felt that the weight of my thoughts was reduced... to think that there's light in my heart, then in my place, in my town.) reveals how personal wellbeing can be experienced by imagining positive thoughts and extending such to community and place-based connection. Another participant noted how the experience provided temporary relief from daily stressors: "*Andami rin kasi stress, at problema sa bahay. Dito, kahit sandali, nakalimutan ko yung mga stress na yun. Masaya siya.*" (There was also a lot of stress and problems at home. Here, at least for a moment, I forgot about those stresses. It was joyful.)

Los Baños demonstrated elevated emotional release and ecological learning. Participant D's tree-hugging experience, "I hugged the tree, and whispered to it all my frustrations... It was a freeing feeling," exemplifies how authentic environmental contact facilitated emotional processing. This finding aligns with research on forest bathing (*shinrin-yoku*) which demonstrates that direct physical contact with trees has positive effects on physical and psychological wellness, including reduced stress, improved mood, and immunity boost (Li, 2010; Hansen et al., 2017).

In addition, the sharing of one participant who experienced the direct forest immersion "This gold from nature (*referring to the turmeric gifted by Diwatang Makiling*) is the real gold," suggests a shift in understanding the meaning of wealth and abundance. This shift is aligned with what scholars term "nature relatedness." Being immersed in natural settings can catalyze a reorientation from consumer-focused mindsets toward values that prioritize ecological relationships and intrinsic well-being (Nisbet et al., 2009; Zelenski & Nisbet, 2014).

Theme 4: Openness to Emotional Healing and Forgiveness

The fourth theme reveals how the intervention served as a space for emotional processing and forgiveness practice. This theme manifested differently across sites but consistently demonstrated how supportive community contexts are generated through the immersive play..

Sta. Cruz participants engaged directly with forgiveness challenges while appreciating the intervention's educational potential. Participant J was honest enough to admit that forgiveness does not come easy for her. She described herself as very open, kind, and generous to others, but once someone causes her anger or pain, she remembers and she finds it difficult to forgive. This may be why she spoke very passionately about frustrations in the past elections, where the nation seemed to have forgotten so easily. She was adamant about seeking justice, and she identified education, and immersive experiences as a potent way to bring this about. To quote, "*Nakakatuwa na may efforts like this. Na hindi pala ako nag-iisa. Yung play na ito, ito ang kailangan ngayon. Ito ang dapat nae-experience ng mga bata, ng mga*

matatandang medyo matigas ulo. Makabuluhan ang play ninyo. Nakakapagpabago ng maling impressions." (It's good that there are efforts like this. That I'm not alone. This play, this is what is needed now. This is what children, even adults who are a bit stubborn, should experience. Your play is meaningful. It changes wrong impressions.)

In Biñan, one participant shared that he wrote in his notepad the hurts and pains experienced with a family member. For him, the act of writing it down, and then visualizing light as he gives and asks for forgiveness was a new feeling. He initially felt confused. Nonetheless, he chose to let go of the negative emotions, and focused on the light. In his own words, "*Parang may nabuksan. Na hindi lang pala puro bigat ang kaya kong maramdaman pag naiisip ko siya*" ("It's like something has opened up. It's not just heaviness that I feel when I think about the person.")

Los Baños demonstrated how authentic forest settings elevated emotional wellbeing. Trees provided non-judgmental therapeutic spaces described as "like a friend who would not judge," enabling sustained emotional release and processing. This resonated with one participant from Sta. Cruz who described the experience as "entering liminality, transitioning to fields of possibilities," suggesting that forest immersion facilitated liminal states conducive to transformation and openness to healing.

The consistency of emotional opening across sites, despite varying approaches to forgiveness practice, suggests that the design successfully created psychologically safe conditions for vulnerable emotional expressions. The community support and ritual structure appeared essential for enabling participants to engage with difficult emotions, while maintaining psychological safety.

CONCLUSION

This three-site ethnographic study demonstrates that forest-based immersive theater represents a culturally grounded method that contributes to community wellbeing and environmental connection. The "*Pag-akyat sa Bundok Makiling*" experience created wellbeing spaces in both simulated and authentic forest settings, showing both the positive responses to the well-designed forest simulation and the deeper benefits of authentic forest contact.

The research reveals four major interconnected themes that emerged consistently across all three performance locations: transformative participatory engagement through multi-sensory forest experiences; intergenerational knowledge sharing; holistic integration of self-nature-society connections; and openness to emotional wellbeing and forgiveness.

According to Michalski et al. (2023), community wellbeing can be viewed from four main themes: "(1) a sense of community belonging is cultivated through shared spaces, routines, support, and identities; (2) a community constitutes the amenities and social contexts that enable residents to thrive; (3) effective regional decision-making must be community-informed; and (4) the wellbeing of a community relies on equal opportunity for engagement and participation." These assertions about community wellbeing align closely with what was observed in the "*Pag-akyat sa Bundok Makiling*" immersive play, which built belonging through shared forest experiences, offered wellbeing opportunities for community members, and invited community voices in the shared storytelling, regardless of age and background.

IMPLICATIONS AND RECOMMENDATIONS

This research has practical implications for both practice and policy. For community wellbeing advocacy, the study demonstrates how culturally relevant group-based interventions can effectively reduce

stress and feelings of disconnectedness in both urban and suburban settings. For environmental education and conservation, the research shows how both imaginative play and authentic forest experiences can promote environmental care through emotional and cultural connections.

The three-site study suggests several important future research directions. Long-term follow-up studies are needed to measure the lasting effects of different intervention types on wellbeing and environmental behaviors. Studies in different cultural and ecological settings would help determine how well the intervention adapts to various communities. Additionally, quantitative measures would provide empirical evidence for intervention effectiveness.

The "*Pag-akyat sa Bundok Makiling*," designed using the *Bahay-bahayan* immersive theater system, may serve as a replicable framework that communities can adapt to address collective wellbeing needs while intentionally building forest connections, whether or not they have direct forest access. As climate change and socio-cultural disruption increase worldwide, such approaches to community wellbeing and environmental connection become increasingly important for building resilient, sustainable communities that can thrive within their ecological and cultural settings.

ACKNOWLEDGEMENTS

The author extends profound gratitude to the communities of Santa Cruz, Biñan, and Los Baños, Laguna, whose generous participation and willingness to share personal and family memories made this research possible. Special recognition goes to the elder and young participants whose sharing of historical experiences provided invaluable opportunities for intergenerational knowledge sharing and collective wellbeing. I acknowledge with deep respect the theater practitioners, facilitators, and cultural experts who brought the vision of "*Pag-akyat sa Bundok Makiling*" to life through their creativity, cultural knowledge, and commitment to community wellbeing, foremost is the playwright - the late Manny Pambid.

Most importantly, recognition is extended to the Forest Foundation Philippines for the Dr. Perry S. Ong Fellowship Program, Conservation Arts Fellowship granted to Gian Carlo U. de Jesus, who creatively designed and led the co-creation of the "*Pag-akyat sa Bundok Makiling*" experience.

REFERENCES

- Agcaoili, A. S. (2019). Saan a maymaysat' aldaw: Education in democracy, social justice, and inclusion in Ilokano life. *Budhi: A Journal of Ideas and Culture*, 23(3), Article 4.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Clark, J. (2016, March 3). The DIWATA of Philippine mythology: Ancestors, spirits, & deities. *The Aswang Project*. <https://www.aswangproject.com/diwata/>
- Clayton, S., & Manning, C. (Eds.). (2018). *Psychology and climate change: Human perceptions, impacts, and responses*. Academic Press.
- Csikszentmihalyi, M. (2009). *Flow: The psychology of optimal experience*. Harper Row.
- de Jesus, A. K. P. (2020). *Communication and education: Reflexive dialogue through experiencing theater*

- as play* [Unpublished doctoral dissertation]. University of the Philippines Open University.
- de Jesus, A. K. P., de Jesus, G. C., Belano, Z., Maranan, N., & Luna, A. (2017). Ang Bahay-bahayan bilang isang sistema ng pagtutulong may lapit sa karanasan ng mga Pilipino. *UPLB Journal*. University of the Philippines Los Baños.
- delos Angeles, M. & Buot Jr, I. (2015). Diversity and Distribution of Pteridophytes along the Altitudinal Gradient of the Northeastern Slope of a Secondary Forest in Mt. Makiling, Philippines. *IAMURE International Journal of Ecology and Conservation*, 16. 10.7718/ijec.v16i1.1015.
- Gone, J. P. (2013). Redressing First Nations historical trauma: Theorizing mechanisms for indigenous culture as mental health treatment. *Transcultural Psychiatry*, 50(5), 683–706. <https://doi.org/10.1177/1363461513487669>
- Hansen, M. M., Jones, R., & Tocchini, K. (2017). Shinrin-yoku (forest bathing) and nature therapy: A state-of-the-art review. *International Journal of Environmental Research and Public Health*, 14(8), 851. <https://doi.org/10.3390/ijerph14080851>
- Kotera, Y., Richardson, M., & Sheffield, D. (2022). Effects of shinrin-yoku (forest bathing) and nature therapy on mental health: A systematic review and meta-analysis. *International Journal of Mental Health and Addiction*, 20, 337–361. <https://doi.org/10.1007/s11469-020-00363-4>
- Li, Q. (2010). Effect of forest bathing trips on human immune function. *Environmental Health and Preventive Medicine*, 15(1), 9–17. <https://doi.org/10.1007/s12199-008-0068-3>
- Louv, R. (2008). *Last child in the woods: Saving our children from nature-deficit disorder*. Algonquin Books.
- Lumber, R., Richardson, M., & Sheffield, D. (2017). Beyond knowing nature: Contact, emotion, compassion, meaning, and beauty are pathways to nature connection. *PLoS ONE*, 12(5), e0177186. <https://doi.org/10.1371/journal.pone.0177186>
- Magcale-Macandog, D. B., Rojo, M. J. A., Ramos, M. M. A., Quintos, G. R., Aggangan, N. S., Capistrano, R. C. G., Garcia, M. B., Zamora, P. M., & Tabaranza, D. G. E. (2021). Updating of Makiling Biodiversity Information System (MakiBIS) and analysis of biodiversity data. *Biodiversitas*, 22(1), 211–226. <https://doi.org/10.13057/biodiv/d220127>
- Michalski, C., Raganathan, A., Foster, A., Pagalan, L., Chu, C., Diemert, L. M., Bawagan, R., Brown, H. K., & Rosella, L. C. (2023). Towards a community-driven definition of community wellbeing: A qualitative study of residents. *PLoS ONE*, 18(11), e0294721. <https://doi.org/10.1371/journal.pone.0294721>
- Nisbet, E. K., Zelenski, J. M., & Murphy, S. A. (2009). The nature relatedness scale: Linking individuals' connection with nature to environmental concern and behavior. *Environment and Behavior*, 41(5), 715-740. <https://doi.org/10.1177/0013916508318748>
- Park, B. J., Tsunetsugu, Y., Kasetani, T., Kagawa, T., & Miyazaki, Y. (2010). The physiological effects of Shinrin-yoku (taking in the forest atmosphere or forest bathing): Evidence from field experiments in 24 forests across Japan. *Environmental Health and Preventive Medicine*, 15, 18–26. <https://doi.org/10.1007/s12199-009-0086-9>
- Reeves, S., Kuper, A., & Hodges, B. D. (2008). Qualitative research methodologies: Ethnography. *BMJ*,

337, a1020. <https://doi.org/10.1136/bmj.a1020>

Sajnani, N., Marxen, E., & Zarate, R. (2017). Critical perspectives in the arts therapies: Response/ability across a continuum of practice. *The Arts in Psychotherapy*, 54, 28–37. <https://doi.org/10.1016/j.aip.2017.01.007>

Soga, M., & Gaston, K. J. (2016). Extinction of experience: The loss of human-nature interactions. *Frontiers in Ecology and the Environment*, 14(2), 94–101. <https://doi.org/10.1002/fee.1225>

van Boeckel, J. (2009). Arts-based environmental education and the ecological crisis: Between opening the senses and coping with psychic numbing. In B. Drillsma-Milgrom & L. Kirstinä (Eds.), *Metamorphoses in children's literature and culture* (pp. 145–164). Enostone.

Zelenski, J. M., & Nisbet, E. K. (2014). Happiness and feeling connected: The distinct role of nature relatedness. *Environment and Behavior*, 46(1), 3–23. <https://doi.org/10.1177/0013916512451901>

