



BUDDHIST VALUES IN OUTDOOR LEARNING: A QUALITATIVE STUDY ON MINDFULNESS AND BEHAVIORAL DEVELOPMENT IN EARLY CHILDHOOD EDUCATION

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Abstract

Early childhood development faces significant challenges due to sedentary lifestyles and excessive screen time, affecting not only motor skills but also behavioral regulation and mindfulness. TK Nava Dhammasekha Dhamma Bakti Jaya has implemented Outdoor Learning since 2024; however, preliminary observations indicated that many children in group B still showed limitations in behavioral regulation and awareness during activities. This study aims to analyze the integration of Buddhist values in Outdoor Learning and its impact on mindfulness and behavioral development in early childhood education. This research employed a qualitative approach with an instrumental case study design conducted over five months (July–November 2024). The participants included 13 children in group B, 3 teachers, and 1 principal. Data were collected through participatory observation, semi-structured interviews, and documentation. Data analysis was carried out using reflective thematic analysis, with source and technique triangulation to ensure validity. The findings reveal that: (1) The integration of Buddhist values was implemented through three main mechanisms: breathing awareness before activities (*sati*), emphasis on effort rather than outcomes (*virīya*), and calm acceptance of failure (*upekkhā*); (2) Improvements in mindfulness and adaptive behavior were observed in 10 out of 13 children (76.9%), particularly in emotional regulation, attention focus, and calmness during activities; (3) Supporting factors included the availability of natural environments as learning affordances and strong teacher commitment, while inhibiting factors involved extreme weather conditions and parental safety concerns. In conclusion, integrating Buddhist values into Outdoor Learning effectively enhances mindfulness and adaptive behavior in early childhood through embodied awareness practices and the cultivation of perseverance. This model is particularly relevant for faith-based early childhood education, especially in rural contexts with limited resources.

Keywords: *Buddhist Values, Mindfulness, Behavior Development*

Abstrak

Perkembangan anak usia dini menghadapi tantangan serius akibat gaya hidup sedentari dan dominasi *screen time*, yang berdampak tidak hanya pada aspek motorik tetapi juga pada regulasi perilaku dan kesadaran diri (*mindfulness*). TK Nava Dhammasekha Dhamma Bakti Jaya telah menerapkan *Outdoor Learning* sejak tahun 2024, namun observasi awal menunjukkan sebagian besar anak kelompok B masih mengalami keterbatasan dalam regulasi perilaku dan kesadaran saat beraktivitas. Penelitian ini bertujuan untuk menganalisis proses integrasi nilai-nilai Buddhis dalam *Outdoor Learning* serta dampaknya terhadap perkembangan *mindfulness* dan perilaku anak usia dini. Penelitian ini menggunakan pendekatan kualitatif dengan desain studi kasus



instrumental yang dilaksanakan selama lima bulan (Juli–November 2024). Subjek penelitian terdiri dari 13 anak kelompok B, 3 guru, dan 1 kepala sekolah. Teknik pengumpulan data meliputi observasi partisipatif, wawancara semi-terstruktur, dan dokumentasi. Analisis data menggunakan analisis tematik reflektif dengan triangulasi sumber dan teknik untuk menjamin keabsahan data. Hasil penelitian menunjukkan bahwa: (1) Integrasi nilai Buddhis dilakukan melalui tiga mekanisme utama, yaitu praktik kesadaran napas sebelum aktivitas (*sati*), penguatan pada usaha daripada hasil (*viriyā*), dan penerimaan kegagalan secara tenang (*upekkhā*); (2) Terjadi peningkatan kemampuan *mindfulness* dan perilaku adaptif pada 10 dari 13 anak (76,9%), terutama dalam aspek regulasi emosi, fokus perhatian, dan ketenangan saat beraktivitas; (3) Faktor pendukung utama meliputi ketersediaan lingkungan alam sebagai sumber belajar dan komitmen guru, sedangkan faktor penghambat mencakup cuaca ekstrem dan kekhawatiran orang tua terhadap keselamatan anak. Kesimpulan penelitian ini menunjukkan bahwa integrasi nilai Buddhis dalam *Outdoor Learning* efektif dalam mengembangkan *mindfulness* dan perilaku adaptif anak usia dini melalui praktik kesadaran tubuh dan pembentukan ketekunan. Model ini relevan diterapkan pada pendidikan anak usia dini berbasis keagamaan, khususnya di wilayah rural dengan keterbatasan sumber daya.

Kata Kunci: *Nilai Buddhis, Mindfulness, Perilaku Anak*

A. Introduction

The development of behavior and self-regulation skills in early childhood plays a strategic role as the foundation for executive function maturity, emotional regulation, and academic readiness (Purwanti, 2025). In this context, learning experiences that involve physical activity and self-awareness are essential, aligning with the recommendations of the World Health Organization WHO (2019) which advocates at least 180 minutes of daily physical activity for preschool-aged children, with an adequate proportion of gross motor movement. However, empirical evidence reveals a concerning trend: the average screen time of preschool children in Indonesia reaches 3.2 hours per day, far exceeding WHO recommendations (Nurhamida et al., 2023). This condition not only affects motor development but also negatively correlates with behavioral development, particularly in attention, self-control, and social interaction, where 34.7% of children aged 5–6 years demonstrate limitations in balance and coordination that further influence their behavioral responses (Simanjuntak, 2023)

A paradox emerges when limited physical activity and direct experiences occur in regions rich in natural potential. The natural environment serves as a “first teacher,” providing affordances opportunities for action that stimulate exploration, interaction, and spontaneous awareness of the body and surroundings (Gibson, 1979). International studies indicate that Outdoor Learning not only improves balance and visual-motor coordination but also supports the development of adaptive behaviors such as cooperation, perseverance, and emotional regulation (Ramsden et al., 2025 ; Riyanto et



al., 2023). However, most of these studies have been conducted in temperate countries with adequate facilities, while research in tropical rural contexts that integrates spiritual dimensions remains limited (Lee et al., 2025)

TK Nava Dhammasekha Dhamma Bakti Jaya in Pesanggaran, Banyuwangi, represents a unique context as a vihara-based institution with an open natural environment that has implemented Outdoor Learning since 2024. However, preliminary observations conducted by the researcher (November–December 2024) reveal phenomena that require deeper investigation: 61.5% of Group B children (8 out of 13) are still categorized as “not yet developed” or “beginning to develop” in indicators related to behavioral readiness, such as concentration, perseverance, and responses to challenges. Despite the high intensity of outdoor activities, these findings indicate that behavioral stimulation has not been optimally achieved. This is presumably related to: (a) the lack of systematic integration of Buddhist values into learning activities; (b) the underutilization of environmental affordances in fostering awareness (mindfulness); and (c) the absence of continuous reflection and evaluation mechanisms regarding children’s behavioral development.

The integration of Buddhist values, particularly *sati* (mindfulness), *virīya* (perseverance), and *upekkhā* (equanimity), offers a promising approach to developing mindfulness and adaptive behavior in young children. The concept of *kāyagatā-sati* (mindfulness of the body) in the *Kāyagatāsati Sutta* (MN 119) emphasizes full attention to bodily sensations and movements as the foundation for cultivating inner calm and self-control (Bhikkhu, 2007). In early childhood contexts, this practice can be adapted into simple forms, such as mindful breathing before activities, accepting failure or falling with calmness, and habituating repeated effort with awareness. This approach aligns with green exercise theory, which suggests that physical activity in natural environments provides dual benefits enhancing both physical and psychological well-being (Pretty et al., 2005) including the formation of positive behavior.

Based on this background, this study is relevant in addressing the gap in the literature on outdoor learning based on spiritual values within tropical rural contexts. The focus of this research is directed at the process of integrating Buddhist values into Outdoor Learning, particularly in developing mindfulness and early childhood behavior, as well as the contextual factors influencing the effectiveness of its implementation.

Based on the above explanation, it can be understood that problems in children’s behavioral development are not solely related to the quantity of physical activity, but also to the quality of children’s interactions with their environment and the meaning constructed during the learning process. Therefore, a theoretical foundation is needed that can holistically explain the relationship between the environment, physical activity, and children’s self-awareness. This study employs Ecological Systems Theory as the main framework. Ecological Systems Theory proposed by Urie (1979) serves as the primary foundation for understanding child development as the result of complex interactions



within nested environmental systems. In this study, the development of mindfulness and behavior in early childhood is influenced by multiple interacting system layers.

At the microsystem level, direct interactions among children, teachers, and the natural environment in outdoor learning become the main space for internalizing Buddhist values such as *sati*, *viriya*, and *upekkhā*. This process occurs through proximal processes, namely repeated and increasingly complex activities between children and adults within culturally meaningful contexts. Furthermore, the mesosystem (the relationship between school and family) plays a role in strengthening the consistency of mindfulness practices and children's behavioral development at home. The exosystem, such as policies of the vihara foundation, determines the level of support for implementing Buddhist value-based learning. Meanwhile, the macrosystem reflects Buddhist values within the traditions of Indonesian Buddhists, serving as a normative foundation for shaping children's behavior. Thus, the development of mindfulness and children's behavior is not only determined by learning activities but also by the quality of interactions across the entire environmental system.

This framework is further supported by Affordance Theory proposed by James J. Gibson (1979) which explains that the environment offers action possibilities (affordances) that individuals perceive according to their perceptual-motor abilities. In the context of outdoor learning, the natural environment is not passive but actively "invites" children to move, explore, and learn. Natural elements such as uneven ground, wooden blocks, and rice field areas provide natural affordances that not only support motor development but also train body awareness (mindfulness) and children's behavioral responses to environmental challenges. Green Exercise Theory (Pretty et al., 2005; Coon et al., 2011) emphasizes that physical activity in natural environments provides dual benefits: improving physical fitness while reducing stress and enhancing intrinsic motivation. In this study, these benefits contribute to the development of positive behaviors in children, such as perseverance, calmness, and emotional regulation. This theory is reinforced by the Biophilia Hypothesis proposed by Wilson and Edward (1984) which states that humans have an innate affinity with the natural environment. This connection forms the basis for children's sense of comfort, focus, and engagement in nature-based learning.

In Buddhist teachings, Applied Theory explains how body and mind are understood as an integrated unity that mutually influences one another through the principle of *kamma* (karma), where repeated actions shape *saṅkhāra* (mental formations) (Bodhi, 1967). This perspective provides a foundation for understanding that children's behavior is formed through consistent and mindful practice. Teachings from the *Kāyagatāsati Sutta* (MN 119) emphasize the importance of *kāyagatā-sati*, or mindfulness rooted in the body through activities such as walking, standing, sitting, and moving with awareness (Bhikkhu, 2007). In early childhood contexts, this practice is adapted into simple mindfulness exercises integrated into outdoor learning. The three main Buddhist values emphasized in this study are:

Value	Definition	Implementation in Outdoor Learning
<i>Sati</i>	Full awareness of the present moment, body, and movement	Instructions such as “feel your breath and your feet” before moving; brief pauses before jumping
<i>Viriya</i>	Continuous effort and perseverance	Encouragement such as “try again” after failure; gradual challenges; emphasis on process
<i>Upekkhā</i>	Mental balance in facing experiences	Normalizing falling as part of learning; calm teacher responses; non-blaming approach

The integration of these values in outdoor learning creates a direct experiential learning process Cliffs & Englewood (2014) where children learn not only through physical activity but also through simple reflection that fosters mindfulness and positive behaviors such as patience, perseverance, and emotional control. The conceptual framework of this study can be formulated as follows:

Input	: Outdoor Learning + Buddhist Values (<i>sati</i> , <i>viriya</i> , <i>upekkhā</i>)
Process	: <ol style="list-style-type: none">1. Direct experiential stimulation in nature2. Mindfulness practice (awareness of body and emotions)3. Formation of behavioral habits through repetition
Output	: <ol style="list-style-type: none">1. Development of mindfulness2. Changes in children’s behavior (perseverance, emotional regulation, calmness)
Outcome	: <ol style="list-style-type: none">1. Social-emotional readiness2. Self-regulation3. haracter development based on Buddhist values

B. Method

This study employs a qualitative approach with an instrumental case study design (Johnson & Stake, 1996) TK Nava Dhammasekha was selected as the case to gain an in-depth understanding of the phenomenon of integrating Buddhist values into outdoor learning practices for early childhood. The research is naturalistic, meaning that observations were conducted in a natural setting without experimental intervention, with a primary focus on processes, meanings, and experiences that emerge during the activities.

In line with the characteristics of qualitative case studies, this research does not aim to test causal relationships or produce statistical generalizations. Instead, it seeks to obtain a deep contextual understanding of how Buddhist values are integrated into outdoor learning activities. Numerical data that emerged during the study (e.g., motor development scores) are positioned as descriptive support within a thick description framework, rather than as a basis for drawing causal conclusions. Thus, the claims of this study are limited to processual and contextual interpretations, particularly regarding how

interactions between Buddhist values, pedagogical practices, and the learning environment shape children's learning experiences.

The study was conducted at TK Nava Dhammasekha Dhamma Bakti Jaya, Pesanggaran, Banyuwangi, over a five-month period (July–November 2024). The research setting included three main zones: (a) the northern rice field area (soil, ditches, stones), (b) the eastern temple garden (trees, wooden blocks, grass), and (c) the front playground (sand, swings). The research period covered the transition from the dry season to the rainy season, providing variations in environmental conditions that enriched the observational context.

This study involved four groups of data sources selected purposively (purposive sampling) to obtain a comprehensive understanding of the phenomenon under investigation.

Data Source	Number	Criteria
Group B children	13	Aged 5–6 years, varied motor abilities, parental consent
Teachers	3	Involved in planning and implementing outdoor learning
Principal	1	Policy decision maker
Parents	5	Representative and willing to be interviewed

The main subjects of the study were 13 Group B children aged 5–6 years. The selection considered variations in motor abilities to capture diverse developmental dynamics. In addition, teachers, the principal, and parents were involved as informants to enrich perspectives and enable source triangulation. The involvement of multiple stakeholders aimed to enhance data depth and strengthen the credibility of the findings. Data collection techniques and instruments:

Research Focus	Technique	Instrument
Forms of integration of Buddhist values	Participatory observation (16 sessions, 45–60 minutes)	Structured Observation Guide
	Semi-structured interviews	Teacher Interview Guide
Gross motor development	Descriptive observation	Motor Development Checklist (12 indicators, scale 1–4)
Meaning of experience	Informal interviews with children	Child Interview Guide
	Documentation	Photos and videos
Supporting and inhibiting factors	In-depth interviews & FGD	Interview & FGD Guide

The gross motor development checklist was used as a descriptive tool to monitor children's developmental dynamics during the learning process, not as an inferential measurement instrument. The content validity of the instrument was strengthened through expert judgment to ensure the indicators aligned with early childhood development standards. Participatory observations were conducted repeatedly (16 sessions) to establish prolonged engagement, enabling the researcher to understand the context deeply and minimize bias. Data from various techniques were compared and confirmed through

triangulation to enhance the reliability of the finding. This study adopts the trustworthiness criteria proposed by Yvonna (1985), which include:

Criteria	Strategy
Credibility	Source and technique triangulation, member checking, peer debriefing
Transferability	<i>Contextual thick description</i>
Dependability	<i>Comprehensive audit trail</i>
Confirmability	Reflective journaling and theoretical triangulation

Credibility was achieved through triangulation of data from children, teachers, and parents, as well as the use of multiple data collection techniques. Member checking was conducted periodically to ensure the alignment of interpretations with participants' experiences. Transferability was addressed by providing rich contextual descriptions, allowing readers to assess the applicability of findings to other contexts. Dependability was maintained through systematic documentation of the research process, while confirmability was strengthened through researcher reflection and the use of multiple theoretical perspectives, such as Ecological Systems, Affordance, and Buddhist perspectives.

Data analysis employed the reflexive thematic analysis approach by Braun and Clarke (2006) through six stages: (1) data transcription and organization, (2) data immersion, (3) initial coding, (4) theme searching, (5) theme reviewing, and (6) thematic narrative construction. The analysis focused on interpreting processes and participant experiences, particularly how the integration of Buddhist values influences the quality of interactions in learning. Numerical data obtained during observations were used in a limited manner as part of contextual descriptions to enrich interpretation, rather than as a basis for generalization or causal inference. This study acknowledges the limitations of a case study design in isolating variables experimentally. Therefore, conclusions are focused on understanding how the integration of spiritual values contributes to shaping children's learning experiences within a specific context, rather than measuring universally generalizable impacts.

C. Results and Discussion

1. Participant Profile and Initial Developmental Conditions

This study involved 13 children in Group B, consisting of 7 girls and 6 boys aged between 5.3 and 6.1 years. Based on initial observations using a developmental checklist (particularly gross motor skills as a behavioral context), 5 children (38.5%) were categorized as *not yet developed*, 6 children (46.2%) as *beginning to develop*, and 2 children (15.4%) as *well developed*. No children were categorized as *very well developed*. Qualitatively, the initial condition indicated that most children still experienced limitations in self-regulation, such as lack of focus, easy frustration when facing failure, and a tendency to compete or struggle over turns during group activities. This baseline condition became an important foundation for integrating Buddhist values, particularly mindfulness, into the learning process.

2. Integration of Buddhist Values as Mindfulness Practices in Outdoor Learning

The findings indicate that Buddhist values integrated into outdoor learning function as concrete and contextual mindfulness practices. Three main values identified were *sati* (awareness), *viriya* (perseverance), and *upekkhā* (equanimity).

a. Sati (Awareness): The Foundation of Mindfulness in Physical Activity

Teachers consistently provided awareness-based instructions before children engaged in motor activities, such as:

“Before jumping, take a breath... in... out... feel the ground under your feet.”
(Teacher A, observation session 3)

This instruction reflects mindfulness practice emphasizing awareness of breathing and bodily sensations as a form of *embodied awareness*. Children were not only moving but also becoming aware of their bodily experiences. This was reinforced by children’s reflections:

“I felt my feet on the block, so I didn’t fall.” (Child I, post-session interview 7)

Behaviorally, children demonstrating indicators of *sati* tended to be more focused, cautious, and showed better body control. Observations indicated a lower frequency of falling (approximately 40%), although this finding cannot be interpreted as a direct causal relationship. Within the ecological developmental framework, *sati* functions as a mechanism that strengthens the relationship between the child and the environment (*person environment attunement*), enabling children to respond more adaptively to environmental challenges.

b. Viriya (Perseverance): Mindfulness in Process and Effort

The value of *viriya* was implemented through process-based reinforcement emphasizing effort rather than outcomes. Teachers consistently encouraged children:

“It’s okay to fall. Try again slowly. What matters is the effort, not being fast.”
(Teacher B, observation session 5)

This approach fostered resilience and increased children’s engagement in activities. Data showed that children receiving *viriya* reinforcement sustained engagement 2.3 times longer in challenging activities such as climbing. From a mindfulness perspective, *viriya* reflects *sustained attention* and *non-avoidance*, referring to the ability to remain present and engaged despite difficulties.

c. Upekkhā (Equanimity): Emotional Regulation in Social Interaction

The value of *upekkhā* emerged through calm and non-reactive teacher responses to children’s failures:

“Oh, you fell? That’s okay, your body is learning. Look, the ground is soft.”
(Teacher C, observation session 9)

Such responses modeled emotional regulation for children. Observed behavioral changes included:

- 1) Children not crying or becoming angry after falling (23 incidents),

2) A 60% reduction in conflicts over turn-taking (teacher FGD),

3) Increased patience and social acceptance:

“You go first, I’ll go later, we both can play.” (Child interview)

In mindfulness terms, *upekkhā* represents *emotional balance* and *non-reactivity*, which are crucial for early childhood social development.

3. Children’s Behavioral Development in the Context of Outdoor Learning

Although motor development indicators were used as initial measures, the findings show that changes were not limited to physical aspects but also reflected broader behavioral development.

a. Focus and Self-Awareness

Children demonstrated improved ability to (1) Follow instructions calmly, (2) Maintain attention during activities, (3) Be aware of body position and movement. These improvements are closely related to the consistent practice of *sati*.

b. Perseverance and Resilience

Children became: (1) Less likely to give up, (2) More willing to try again, (3) More engaged in the learning process. Quantitative data indicated an increase in engagement duration (2.3 times longer), suggesting the development of *task persistence* as part of adaptive behavior.

c. Emotional and Social Regulation

Significant changes were observed in: (1) Reduced negative reactions to failure, (2) Increased patience in waiting turns, (3) Decreased social conflict. Overall, 10 out of 13 children (76.9%) showed improvement in at least one behavioral domain, while 3 children (23.1%) showed no significant change, influenced by irregular attendance and the need for more intensive intervention.

4. Contextual Factors Influencing Mindfulness Implementation

a. Supporting Factors

1) Natural Environment as a Mindfulness Medium

The rice field environment provided rich sensory experiences:

“Children are more enthusiastic in the fields because the challenges are different every day.” (Teacher A)

This environment allowed mindfulness to emerge naturally through direct interaction with nature.

2) Teacher Consistency in Value Integration

A total of 89% of sessions (14 out of 16) included Buddhist values, indicating that program success heavily depended on consistent teacher practices.

3) Institutional Support

Flexible school policies supported implementation:

“If the weather is good, we prioritize outdoor learning. I fully support it.” (Principal)

b. Inhibiting Factors

Factor	Impact	Adaptation Strategy
Extreme weather	25% of sessions canceled	Indoor nature-based activities
Parental concerns	Activity restrictions	Socialization and safety zoning
Limited equipment	Risk of boredom	Creative modification of tools

The findings indicate that integrating *sati*, *viriya*, and *upekkhā* in outdoor learning represents a concrete form of mindfulness practice in early childhood. These values contribute to behavioral development through three main mechanisms: (1) Awareness (*attention regulation*), (2) Perseverance (*persistence*), (3) Emotional balance (*emotional regulation*).

From an ecological developmental perspective, behavioral changes result from dynamic interactions between the child, pedagogical practices, and the natural environment as a learning context. However, these findings should be interpreted cautiously due to the limitations of a qualitative design without a control group. Therefore, the results are better understood as a contextual mindfulness-based practice model with potential for further development, particularly in value-based early childhood education. Practically, this study emphasizes that learning should not only focus on cognitive or motor outcomes but also on fostering awareness and adaptive behavior through meaningful learning experiences.

5. Integration of Buddhist Values as a Behavioral Stimulation Process in Outdoor Learning

The findings indicate that integrating Buddhist values in outdoor learning is not merely a moral addition but serves as a psychological mechanism that mediates children’s learning experiences. *Sati* (mindfulness) functions as an *attentional anchor*, stabilizing children’s focus before engaging in physical activities, allowing them to be fully present in their learning experiences. This practice contributes to reduced impulsivity and increased body awareness. *Viriya* (perseverance) appears as intrinsic motivation reflected in children’s persistence when facing physical challenges. Children showed a tendency to retry after failure, which aligns with *growth mindset theory* Carol (2006) where failure is interpreted as part of the learning process rather than a fixed limitation.

Upekkhā (equanimity) facilitates emotional regulation during outdoor activities. Children appeared calmer, less easily frustrated, and more confident in exploring their environment, indicating that emotional balance is essential for active engagement in movement-based learning. These findings align with *Embodied Cognition Theory*, which emphasizes that cognition is inseparable from bodily experience and context. The practice of *kāyagatā-sati* enables children to “understand” experiences through their bodies, reflected in increased awareness of movement, posture, and environmental interaction (Schmalzl et al., 2015). From the perspective of *Ecological Systems Theory*, Buddhist values transmitted by teachers function as *cultural tools* that mediate the relationship between children and environmental affordances.

6. Rural Context and Local Wisdom in Outdoor Learning

This study was conducted in TK Nava Dhammasekha, a rural setting utilizing natural elements such as rice fields, soil, stones, and wooden blocks as learning media. These elements provide rich affordances for exploration without requiring expensive or structured play facilities (Taylor et al., 2024). However, this practice is influenced by cultural dynamics. Parental concerns regarding cleanliness and safety reflect social constructions that perceive natural environments as “dirty” or risky. This can be understood as part of the *exosystem* influencing educational practices. In response, the school implemented adaptive strategies such as parent socialization and activity documentation. This demonstrates that value-based outdoor learning involves not only child environment interaction but also negotiation with the broader social context.

7. Limitations and Implications

This study has several limitations: (1) The relatively short duration (5 months) limits understanding of long-term developmental dynamics. (2) As a qualitative case study, it does not aim to establish causal relationships or measure effectiveness quantitatively. (3) Descriptive indicators (e.g., percentages) should be interpreted as observational tendencies rather than inferential statistical evidence. (4) The validity and reliability of observational instruments, including inter-rater reliability, were not thoroughly elaborated. Practical Implications:

- a. Integrating spiritual values can enrich early childhood learning, particularly in developing self-awareness and emotional regulation.
- b. Rural environments with limited resources hold strong potential as meaningful learning spaces through the optimization of natural affordances.
- c. Teachers play a critical role as value mediators and require skills to integrate mindfulness practices contextually and developmentally appropriately.

Nevertheless, generalization should be approached cautiously, as the findings are context-specific and closely tied to the characteristics of TK Nava Dhammasekha as a vihara-based institution.

D. Conclusion

The integration of Buddhist values particularly *sati* (mindfulness), *viriyā* (perseverance), and *upekkhā* (emotional balance) into outdoor learning has been shown to contribute positively to early childhood behavioral development, especially in terms of mindfulness, emotional regulation, and active engagement in activities. Using a qualitative approach, this study reveals that mindfulness practices in nature-based learning operate through three main mechanisms: (1) stabilizing attention before children engage in activities, (2) strengthening intrinsic motivation and perseverance in completing challenges, and (3) regulating emotions, enabling children to interact more adaptively and confidently with their environment.



The majority of children (76.9%) demonstrated significant behavioral improvement, particularly in their ability to manage emotions, enhance focus, and exhibit calmer and more confident attitudes during outdoor activities. These changes indicate that learning approaches integrating spiritual dimensions impact not only physical development but also the formation of self-awareness and character in young children. Key supporting factors in implementing this model include the availability of natural environments rich in affordances and teachers' commitment to consistently internalizing Buddhist values in their teaching practices. Meanwhile, inhibiting factors include unpredictable weather conditions and parental concerns regarding safety, which require adaptive learning strategies as well as effective communication and socialization.

These findings affirm that outdoor learning grounded in spiritual values is highly relevant for early childhood education, particularly in faith-based institutions and rural areas with limited resources. The success of learning is not solely determined by the availability of facilities, but by the quality of meaningful interactions integrated with life values. Future research is recommended to employ experimental or longitudinal designs to examine causal relationships and long-term impacts on mindfulness development, school readiness, and character formation in children.

This study contributes to enriching the understanding of how Buddhist values *sati*, *viriya*, and *upekkhā* are interpreted and practiced within the context of outdoor learning in early childhood education. The primary focus of this research is not on quantitatively measuring improvements in specific abilities, but rather on exploring how these values shape children's learning experiences, engagement, and behavioral patterns in their interactions with the environment. Accordingly, the novelty of this study lies in its exploration of the integration of spiritual values as an integral part of a contextual pedagogical process, rather than treating them as experimental variables to be measured.

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