



## REVIEW ARTICLE

# Ecosystemic Wellness (ESW) in Young Children within the Context of Educational Therapy (EdTx)

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## ABSTRACT

This article investigates the concept of Ecosystemic Wellness (ESW) in young children (ESW-YC), particularly in the realm of educational therapy (EdTx). The concept of ESW-YC concerns children's overall well-being, influenced by the interconnected environments they engage with. Within EdTx, this approach strives for a comprehensive strategy, considering a child's ties to various settings, including family dynamics, social interactions, school, and community support, to holistically foster their development. The ESW in EdTx highlights the interconnectedness of a child's well-being with the environment and support systems. This innovative approach recognizes the multi-dimensional nature of a child's growth - cognitive, conative, socio-emotional, and sensory elements. By integrating customized interventions that account for each child's unique ecosystem, educational therapists strive to cultivate resilience, self-regulation, and a positive self-concept in young learners. Ultimately, this method establishes a robust base for supporting children, especially those with special needs, enabling them to flourish academically, emotionally, and socially amidst their intricate web of relationships and environments.

**Keywords:** Ecological Systems Theory, Ecosystemic Wellness (ESW), Educational Therapy (EdTx), Young Children

## 1. INTRODUCTION

Ecosystemic wellness (ESW) in young children (ESW-YC) refers to their overall well-being influenced by the interconnectedness of various environments they experience. When the term *ecosystemic wellness for young children* (ESW-YC) is put within the context of educational therapy (EdTx), it refers

to fostering a holistic approach that considers the interconnectedness between a child and their environment through the process of providing supportive, nurturing environments within educational settings that address not only the child's individual needs but also the broader context - family dynamics, social interactions, school environment, and community support - to promote the child's overall well-being and development. This approach acknowledges the impact of various systems on a child's growth and aims to optimize their learning experiences within these interconnected systems.

ESW is just a part of the Wellness Science, which "is an interdisciplinary field that comprises the study and promotion of holistic well-being, encompassing every aspect of life" (Camulli, 2023, p. 3). Wellness Science aims to comprehend the complex relationship between different elements influencing an individual's well-being and contentment. It is grounded in scientific principles and real-world uses, often examining four primary wellness aspects: physical, mental, emotional, and social health. Camulli (2023) added, "This burgeoning field integrates knowledge from psychology, biology, nutrition, exercise physiology, and other disciplines to develop a comprehensive understanding of what it means to live a balanced and fulfilling life" (p. 3). As the value of proactive health management and preventive actions gains traction within societies, Wellness Science becomes pivotal in both research and application. It directs individuals and communities toward optimal health results and an improved quality of life.

## **2. APPLICATION OF ECOSYSTEMIC THEORY ON WELLNESS IN YOUNG CHILDREN**

Bronfenbrenner's (1977, 1989, 2000) ecological systems (or ecosystemic) theory offers a comprehensive framework for understanding the multifaceted influences on an individual child's development (also see Liu, Xie, & Deng, 2023, pp. 59-67). In the case management system of educational therapy, this theory is instrumental as it recognizes the interplay between various environmental systems impacting a child's learning journey (Liu, Xie, & Deng, 2023).

When the ecosystemic theory is applied in the field of wellness or what is termed as ecosystemic wellness (ESW), there is a profound impact on various ecological subsystems as briefly described below:

1. Microsystem (Intrapersonal & Interpersonal): The ESW influences a young child's well-being (intrapersonal) as well as his/her relationships (interpersonal) within the child's immediate environment. A healthy ecosystem fosters positive mental health and relationships.
2. Mesosystem: This relates to connections and interactions between different microsystems. The ESW enhances the quality of these connections, leading to smoother transitions and support across various settings like home, school, and community.
3. Exosystem: External environments indirectly affecting young children. The ESW in this context might involve supportive policies, access to resources, and community services, thereby positively impacting these children' experiences.
4. Macrosystem: Societal and cultural norms, values, and systems. The ESW can influence broader social attitudes towards the environment, sustainability, and the well-being of all living beings including these young children.
5. Chronosystem: This refers to changes and transitions over time. The ESW can influence the impact of historical events or developmental changes, contributing to the overall stability and resilience of the system across time.
6. Technosystem: Though not a part of Bronfenbrenner's (1989) ecological systems theory (see Figure 1), technological aspects can also impact a young child's ecosystemic well-being (see Liu, Xie, & Deng,

2023, for more detail). The ESW might involve leveraging technology responsibly to support sustainability, minimize environmental impact, and enhance the overall well-being of the ecosystem.

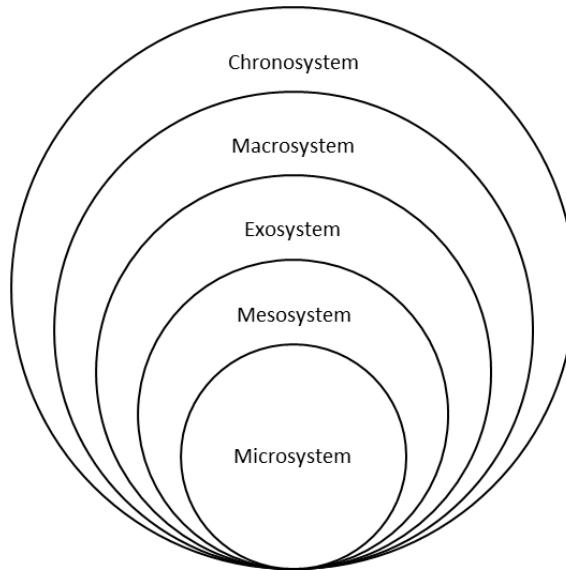


Figure 1. Bronfenbrenner's Ecological Systems Theory/Model

In essence, the ESW plays a crucial role in nurturing an individual child, his/her relational as well as societal well-being across various interconnected ecological subsystems (see Liu, Xie, & Deng, 2023, for more detail).

### 3. WHY ECOSYSTEMIC WELLNESS IS IMPORTANT FOR YOUNG CHILDREN

There is no doubt that wellness itself is essential for young children to grow up healthily. Fabin and Mould (2009) explore the pivotal phase in the early development of healthy young children by integrating crucial theories, policies, and practices relevant to professionals engaging with infants and toddlers. Central to their holistic view of young children's growth, Fabin and Mould (2009) have encompassed the four domains of wellness: physical, mental, emotional and social (see Figure 2).

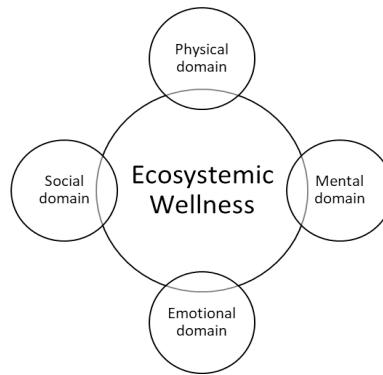


Figure 2. The 4 Domains of Ecosystemic Wellness

According to Xie and Chua (2020), for a young child to become a good or healthy all-rounder, s/he must grow up to become an *optimally developed* - coined by Frankl (1959) - or matured individual. Therefore, the authors of this paper have proposed seven reasons why ecosystemic wellness is crucial for a healthy development of young children:

1. Holistic Development (Lally, 2023; Wagner, 2009): Exposure to various natural environments helps in the holistic development of young children by engaging their senses, enhancing cognitive abilities, and nurturing creativity.
2. Physical Health (Chaddock-Heyman et al., 2014; Ortega, Ruiz, Castillo, & Sjöström, 2008): Interacting with nature encourages physical activity, reducing the risk of obesity and improving overall health.
3. Mental Well-being (McAuley & Davis, 2009; Renzaho & de Silva-Sanigorski, 2014): Being in natural settings promotes mental well-being, reducing stress, anxiety, and attention fatigue commonly seen in urban environments.
4. Environmental Awareness (Otto & Pensini, 2017; Summers et al., 2012): Early exposure to ecosystems fosters environmental awareness, teaching young children the importance of conservation and sustainability.
5. Social Skills (Bagdi & Vacca, 2005; Renzaho & de Silva-Sanigorski, 2014): Exploring natural environments encourages social interaction, teamwork, and cooperation among young children, fostering their social skills and empathy towards others and the environment.
6. Learning Opportunities (Ellyatt, 2022; Roffey, 2008): Ecosystems offer diverse learning opportunities, providing a hands-on approach to subjects like biology, ecology, and environmental sciences, fostering a love for learning.
7. Resilience and Adaptability (Krasny, Lundholm, & Plummer, 2010; Ungar, 2021): Interacting with nature teaches young children about resilience, adaptability, and problem-solving as they navigate natural challenges and changes in ecosystems, developing crucial life skills.

Encouraging ESW in young children creates a foundation for their overall well-being, education, and understanding of the world around them (Brown & Westaway, 2011).

### **3.1 How Ecosystemic Wellness can impact on Young Children**

The ESW-YC can impact on young children in the following four different domains, i.e., physical wellness (Chaddock-Heyman et al., 2014; Ortega, Ruiz, Castillo, & Sjöström, 2008), mental wellness (McAuley & Davis, 2009; Renzaho & de Silva-Sanigorski, 2014), emotional wellness (Bagdi & Vacca, 2005; Oattes, Kosmerly, & Rogers, 2018) and social wellness (Bagdi & Vacca, 2005; Renzaho & de Silva-Sanigorski, 2014), and are briefly described with three examples for each of the four domains as follows:

#### *Physical Wellness:*

1. Nutrition & Health: Access to a healthy ecosystem impacts their diet, reducing risks of obesity and illnesses, promoting physical growth.
2. Safety & Environment: A secure ecosystem ensures fewer accidents, allowing for physical activities that foster strength and development.
3. Sleep & Rest: A stable ecosystem encourages better sleep patterns, vital for growth and overall physical health.

#### *Mental Wellness:*

1. Stress Regulation: A supportive ecosystem aids in stress reduction, helping children develop coping mechanisms and resilience.
2. Cognitive Stimulation: Diverse and rich environments foster cognitive development, enhancing learning and problem-solving abilities.
3. Exploration & Curiosity: An encouraging ecosystem nurtures exploration, fueling curiosity and supporting mental growth and creativity.

*Emotional Wellness:*

1. Supportive Relationships: A nurturing ecosystem facilitates strong emotional bonds, fostering a sense of security and trust.
2. Emotional Expression: A safe ecosystem encourages emotional expression, aiding in emotional intelligence development and self-regulation.
3. Validation & Acceptance: A validating ecosystem promotes self-worth, boosting confidence and emotional well-being.

*Social Wellness:*

1. Peer Interaction: A well-balanced ecosystem allows for positive peer interactions, aiding in social skill development and teamwork.
2. Community Engagement: Involvement in a supportive community fosters a sense of belonging and social responsibility.
3. Cultural Diversity: Exposure to diverse ecosystems cultivates respect for different cultures, enhancing social adaptability and empathy.

The interconnectedness of these four domains, i.e., physical, mental, emotional and social, within a child's ecosystem significantly shapes their holistic well-being during their formative years.

### **3.2 Ecosystemic Theory offers Support to Young Children with Special Needs**

Bronfenbrenner's (1977, 1989, 2000) ecological systems theory (EST) offers a comprehensive framework to understand and support the development of young children with special needs in the context of educational therapy (EdTx). This theory delineates the multifaceted influences that shape a young child's growth within nested environmental systems. For young children with special needs, its application in ecosystemic wellness proves invaluable.

At the microsystem level, the immediate environment of a child with special needs plays a pivotal role and it includes his/her family, peers, and educators. Educational therapists can collaborate closely with families in what has been termed as 'therapeutic alliance' (Zetzel, 1956, 1970) to create tailored interventions that align with the child's unique needs. By fostering a supportive and inclusive microsystem, young children experience a nurturing environment crucial for their growth.

Moving to the mesosystem, the interconnections between various microsystems become crucial. A trans-disciplinary collaboration (see Córdoba, 2009, for detail) between therapists, educators, and healthcare providers ensures a holistic case management approach to the child's development (Liu, Xie, & Deng, 2023). This coordination ensures that the needs of a child with special needs are

consistently addressed across different settings, promoting continuity and reinforcement of learning and support strategies.

The exosystem involves broader social structures indirectly influencing a child with special needs. Policies, community resources, and cultural beliefs significantly impact the accessibility and quality of services available. Interestingly, the exosystem, within ecological systems theory (EST), involves external settings that indirectly impact an individual or system. Nature, such as forests, waterfalls, or mountains, can influence the exosystem through recreational areas, tourism, natural resource policies, or even environmental regulations, all of which can have indirect effects on communities and individuals (including young children) within that ecosystem (Pedretti-Burles, 2007). Pedretti-Burles (2007) argues that “[H]umans’ need for nature is linked not just to the material exploitation of the environment but also to the influence of the natural world on our emotional, cognitive, aesthetic, and spiritual development” (p. 19). This assertion stems from Wilson’s (1984) Biophilia Hypothesis, positing that human identity and fulfillment are intertwined with our connection to nature. For the sake of readers’ interest, this hypothesis proposes the existence of an innate human requirement and inclination, rooted in genetics, to connect with living organisms beyond the human species. Educational therapists advocating for inclusive policies and promoting community awareness should enhance the support with available natural resources to these children with special needs (also see Lehohla & Hlalele, 2012).

Finally, the macrosystem encompasses cultural values, societal norms, and broader ideologies (Rogers et al., 2021). Embracing diversity (Ryan, 2013), fostering inclusivity (Liu, Xie, & Deng, 2023; Ryan, 2013), sustainability (Liu, Xie, & Deng, 2023; Sorkos & Hajisoteriou, 2021), and advocating for equitable educational opportunities (Smith et al., 2017) within this system are critical for the optimal growth and development of children with special needs.

In summary, Bronfenbrenner’s (1977, 1989, 2000) ecological systems theory (EST) serves as a guiding framework in educational therapy for children with special needs. By comprehensively addressing the micro-, meso-, exo-, and macro-system levels, educational therapists can create an ecosystemic approach that maximizes the potential for these young children’s wellness and development (Liu, Xie, & Deng, 2023).

#### **4. CONCLUSION**

Ecosystemic wellness (ESW) in young children (ESW-YC), within the realm of educational therapy (EdTx), embodies a holistic approach that intertwines a child’s environment, his/her social and emotional development, and the educational support s/he receives. Though ESW in EdTx is very new, this approach underscores the interconnectedness of a child’s well-being with his/her surroundings, emphasizing the symbiotic relationship between the child, his/her family, school, and broader community.

The EdTx that is focused on the ESW acknowledges the multifaceted nature of a child’s growth. It recognizes that addressing cognitive (mental/intellectual), conative (behavioral/volitional), socio-emotional (socio-affective), and sensory (sensorimotor) aspects simultaneously fosters a more comprehensive and sustainable path towards a child’s overall wellness. By nurturing a supportive ecosystem that encompasses educational interventions, family involvement, peer interactions, and community support, educational therapists create an environment conducive to a child’s flourishing.

This approach highlights the significance of personalized, tailored treatment programs and/or individualized education plans (intervention sessions) that consider each child’s unique ecosystem. By integrating various elements of a child’s life into therapeutic strategies, educational therapists can effectively cultivate resilience, self-regulation, and a positive self-concept in young learners.

Ultimately, the ESW within the EdTx context forms a robust foundation for fostering the growth of children with special needs, enabling them to thrive academically, emotionally, and socially within their intricate network of relationships and environments.

## 5. ACKNOWLEDGEMENT

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## 6. COMPETING INTERESTS

Authors have declared that no competing interests exist.

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## 8. ARTIFICIAL INTELLIGENCE DISCLOSURE

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