

## Original Research Article

# Developing a Comprehensive Framework for Socio-Environmental and Educational Support to Enhance Student Learning

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### ABSTRACT

**Aims:** This research aims to comprehensively explore the intricate concepts surrounding Socio-Environmental and Educational Support for student learning. Grounded in an extensive analysis of open-access databases, the study leverages reputable platforms such as Sage Journals, Scopus, Google Scholar, ERIC, JSTOR, Emerald, Science Direct, SpringerLink, Taylor and Francis, and DOAJ to provide an overarching perspective on socio-environmental and educational support.

**Study Design, Place, and Duration:** Utilising strategically crafted keywords, the investigation delves into pivotal dimensions of socio-environmental and socio-educational support within student learning. Conceptually framed within Bronfenbrenner's socio-ecological theory (1979, 1995), the study synthesises secondary data and contemporaneous literature reviews from diverse perspectives. The research proposes a nuanced framework with four integral components—home environmental support, school environmental support (including teacher and peer support), community support, and virtual environmental support.

**Methodology:** The research adopts a comprehensive approach, synthesising secondary data and contemporaneous literature reviews. Employing Bronfenbrenner's socio-ecological theory as a conceptual framework, the study utilises strategically crafted keywords to explore pivotal dimensions of socio-environmental and socio-educational support for student learning. A systematic review of 158 studies closely aligned with the core theme was conducted, incorporating both published and unpublished sources. The grey literature technique was employed to enhance the study's robustness, allowing for in-depth analysis and conceptualisation of insights not readily available in commercial publications.

**Results:** The research comprehensively explains the dynamic interplay between socio-environmental factors and educational support in optimising student learning experiences. The proposed framework, encompassing home environmental support, school environmental support (including teacher and peer support), community support, and virtual environmental support, offers a nuanced perspective on effective strategies for fostering an environment conducive to student learning.

**Conclusion:** In conclusion, this study thoroughly explores Socio-Environmental and Educational Support for student learning. By embracing diverse sources and employing a systematic approach, the research offers valuable insights into the complex interrelationships among socio-environmental factors, educational support, and student learning experiences. The proposed framework serves as a foundation for future discussions and the development of effective strategies to enhance the learning environment for students.

*Keywords: Socio-Environmental Support, Socio-Educational Support and Student Learning.*

## 1. INTRODUCTION

In the dynamic landscape of education, fostering optimal learning experiences requires a multifaceted approach that goes beyond traditional classroom settings. Recognising the interconnected nature of various factors influencing student development, this research explores the intricate concepts of Socio-Environmental and Educational Support as integral components in shaping a conducive learning environment. Grounded in a comprehensive analysis of open-access databases such as Sage Journals, Scopus, Google Scholar, ERIC, JSTOR, Emerald, Science Direct, SpringerLink, Taylor and Francis, and DOAJ, this study aims to provide a holistic perspective on the dynamic interplay between socio-environmental factors and educational support.

The conceptual framework of this research is rooted in Bronfenbrenner's renowned socio-ecological theory (1979, 1995), which posits that individuals' development is influenced by the interactive relationships between various systems within their social environment. Bronfenbrenner's theory, consisting of the Microsystem, Mesosystem, Exosystem, and Macrosystem, provides a lens through which to analyse the layers of influence that shape students' learning experiences. The study synthesises secondary data and contemporaneous literature reviews from diverse perspectives, enriching our understanding of the complex dynamics inherent in the support systems surrounding student learning.

Socio-environmental support, a critical facet in socio-educational and socio-psychological studies, is examined through various dimensions, including home environmental support, school environmental support (including teacher and peer support), community support, and virtual environmental support. By employing strategically crafted keywords, the investigation delves into pivotal aspects of socio-environmental and socio-educational support within the context of student learning. Home environmental support, encapsulating parental educational support, emerges as a foundational element in a child's educational journey. The research explores how positive parental involvement, ranging from homework assistance to emotional encouragement, significantly influences students' engagement, academic achievement, and overall well-being. The school environment, viewed as a microsystem, plays a central role in shaping students' intellectual and social development. Teacher support, with its multifaceted dimensions encompassing emotional, informational, and instrumental aspects, is examined for its impact on student engagement and success. Peer support, as students transition toward independence, is explored for its role in providing academic, emotional, and social assistance, contributing to adolescents' motivation and sense of school belonging. Beyond the immediate home and school contexts, the study delves into the significance of community and virtual environmental support. Communities are recognised as crucial microsystems contributing to educational success through financial support, resource provision, parental involvement, and innovative community-based learning approaches. The virtual environment, facilitated by the Internet, is investigated for its transformative role in education, offering diverse learning paths and collaborative opportunities.

In conclusion, this research aims to contribute a nuanced framework that comprehensively explores the multifaceted dimensions of Socio-Environmental and Educational Support, emphasising the dynamic interplay between these factors in optimising student learning experiences. By drawing on a diverse array of sources and employing a systematic approach, the study aspires to enrich the discourse on effective strategies for fostering a holistic environment conducive to student learning and development.

## **2. METHODOLOGY**

This study seeks to provide a comprehensive overview of socio-environmental and educational support for student learning by leveraging open-access databases. The research draws from a diverse array of reputable platforms, including Sage Journals, Scopus, Google Scholar, Educational Resource Centre (ERIC), JSTOR-Journal Storage, Emerald, Science Direct, SpringerLink, Taylor and Francis, and Directory of Open Access Journal (DOAJ). Employing a systematic approach, the investigation focuses on both published and unpublished sources, such as conference presentations and technical reports.

The keywords employed in the search strategy encompassed crucial dimensions of socio-environmental support, socio-educational support and student learning. This meticulous selection of keywords ensured a nuanced exploration of the multifaceted aspects of the chosen theme. The initial search yielded a vast pool of articles, ranging from unpublished conference presentations to peer-reviewed journal articles and book chapters. To streamline the investigation, the research team meticulously screened the abstracts of several hundred articles, narrowing down the focus to 158 studies that were deemed closely aligned with the core theme.

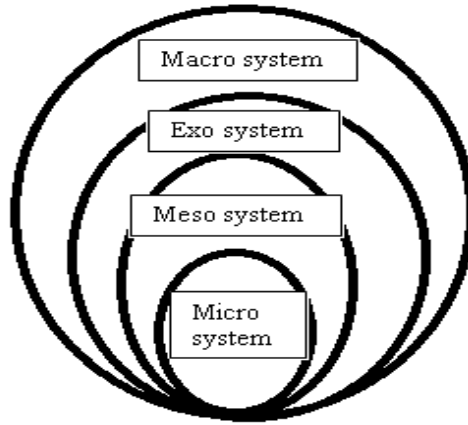
To enhance the robustness of the study, a grey literature technique was employed for in-depth analysis and conceptualisation. Grey literature, as defined by Paez (2017), encompasses academic papers, research and committee reports, conference papers, theses, dissertations, government reports, and ongoing research, among other valuable sources. This approach was particularly instrumental in capturing insights that could be more readily available in commercial publications. The systematic review of grey literature allowed for a comprehensive exploration of the conceptual foundations underpinning socio-environmental and educational support for student learning. By embracing a diverse array of sources, the study aims to contribute a nuanced understanding of the subject matter, thereby enriching the discourse on effective strategies for fostering an environment conducive to student learning.

## **3. BRONFENBRENNER'S ECOLOGICAL FRAMEWORK**

The Ecological viewpoint considers the social-ecological model as a conceptual framework used in the social sciences to examine the interactive relationship between individuals and their social environment (Bronfenbrenner, 1979). This theory examines the effect of immediate and distal environments on the learning and development of individuals explicitly. This theory represents the social contexts as layered systems. It stresses the impact of the interaction between these contexts and the person in the key developmental outcomes, including social and emotional adjustment (Taylor & Gebre, 2016). In Bronfenbrenner's view, a relationship between two elements can be affected by the relationship that one of these elements has with yet another aspect; the kind of relationship existing between a child's family and their teacher, for instance, indirectly acts upon the teacher-pupil relationship (Gurtner et al., 2001).

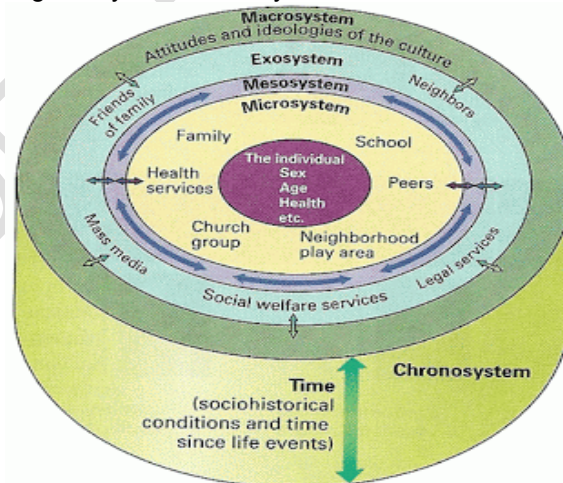
Bronfenbrenner initially proposed the Ecological Systems Theory in 1979, relating to an environmental taxonomy consisting of a hierarchy of systems at four levels - the Microsystem, Mesosystem, Exosystem and Macrosystem (Neal & Neal, 2013). The Microsystem is the immediate environment of the individual, including the home, school, peer group, and workplace, which directly interacts with the environment. The Mesosystem refers to the connections between two or more Microsystems (e.g., the relationship between home and school). Meanwhile, the Exosystem comprises the larger social context, such as the surrounding community that impacts children directly through parents. Finally, the Macro system, which consists of the Micro, Meso, and Exo systems, includes the cultural values,

economic conditions, and ideologies that flow back to the inner levels to influence the child (Bronfenbrenner, 1992; Etekal & Mahoney, 2017; Neal & Neal, 2013). The Ecological Systems Theory represents the various levels as a sequence systems nested around an individual that simulate a set of concentric circles. Figure 1 shows a nested model of an ecological system in Bronfenbrenner's Ecological Systems Theory.



**Figure 1 Nested Model of Ecological Systems in Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1979)**

Bronfenbrenner then revised this model by introducing another system, namely the chronosystem and proposed the bioecological theory, which hypothesised human development as the joint product of four factors: personal, contextual, process, and time factors (Bronfenbrenner, 1995; Etekal & Mahoney, 2017). The chronosystem includes developmental changes induced by life events and experiences that originated from both the external environment (e.g., school, workplace and home) and the internal characteristics of the individuals (e.g., puberty and illness). Bronfenbrenner argues that these events influence the relationship between the individual and the environment and, eventually, the development of the person. Figure 2 shows the revised model of the ecological systems in Bronfenbrenner's Ecological Systems Theory.



**Figure 2 Revised Model of Ecological Systems in Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1995)**

Ecological systems theory represents the various levels as a series of systems that simulate a set of concentric circles nested around a focal individual. This theory that emphasises the pressure exerted by members of the various systems in their environment towards the focal person and theory of wellbeing development is more relevant to this study, which

investigates the relationship between socio-environmental factors and student educational learning.

## **Results and discussion**

### **3.1 Socio-Environmental Support**

Social support, a critical element in socio-educational and socio-psychological studies (Awang et al., 2014), encompasses social networks and resources that individuals can utilise for assistance, approval, protection, and advice (Cobb, 1976). Demaray et al. (2005) conceptualise socio-support as "socio-environmental support," arising from various sources and types, contributing to improved student adjustment and outcomes. Zakaria et al. (2012) assert that environmental support influences student behaviour through social learning patterns such as modelling, feedback, and encouragement. Bronfenbrenner (1979) emphasises that the socio-environment, including home, school, community, and culture, contributes significantly to a child's development and psychological capabilities. In the context of learning, parental, teacher, and peer support significantly impact student engagement and educational achievement. Chen (2005) found that perceived academic support from these sources indirectly correlated with academic achievement, with perceived teacher support having the strongest association. Jelas et al. (2016) demonstrated that parental, teacher, and peer support influenced cognitive engagement, while behavioural engagement was negatively related to academic achievement. Ansong et al. (2017) found classmate support to be the most robust for student engagement, followed by parental support, with no correlation between teacher support and engagement. Sidik (2019) emphasises the importance of a conducive environment at home, school, and in the community to support student involvement in learning.

Socio-environmental support also influences students' motivation, contributing to their well-being. Careemdeen et al. (2020) showed that environmental support from parents, teachers, peers, and the community correlated with higher academic well-being. Bofah and Ntow (2017) demonstrated that perceived parent and teacher support influenced students' self-confidence and self-concept, with teacher support being the most influential predictor. Wentzel et al. (2017) highlighted differences in perceived support for student motivation based on the source. Teacher support related to outcomes like interest in the class and adherence to classroom norms. Parental support was associated with academic goal orientations, and peer support played a significant role in motivating cooperation in learning. In the context of student learning, socio-environmental support from home, school, community, and virtual platforms is crucial for enhancing student engagement, leading to educational achievement and well-being. This underscores the interconnectedness of support systems in fostering positive learning outcomes (Careemdeen et al., 2020; Wentzel et al., 2017).

#### **3.1.1 Home Environmental Support**

A family represents more than just legal or biological connections; it embodies an intangible bond rooted in relationships and relatedness (Woolley et al., 2009). Home environmental support, as defined by Ahmad and Noor (2017) and Suhaimi (2013), involves consistent and

meaningful contributions from both parents, aimed at encouraging and providing for their children's educational needs, fostering their development into essential individuals.

#### *3.1.1.1 Parental Educational Support*

Parents serve as the initial educators for their children, influencing their school performance and overall well-being (Cunsolo, 2017; Maina, 2016). Positive parental support includes creating a conducive learning environment at home, engaging in home-based learning activities, and encouraging students, all of which positively impact academic and personal well-being (Ahmad & Noor, 2017; Suhaimi, 2013). Kaspi-Baruch (2013) emphasizes the pivotal role of parents in guiding their children's academic careers, stating that parental support is linked to children's success in choosing and pursuing academic paths. Research demonstrates that parental educational support correlates with student involvement in learning across behavioral, cognitive, and socio-affective dimensions (Felizardo et al., 2016). Ruholt et al. (2015) found a significant relationship between parental educational support and involvement with academic self-esteem and self-efficacy.

Parental support for homework plays a crucial role in students' academic performance. Torrecilla and Hernández-Castilla (2019) demonstrated that parental assistance with homework positively influenced students' exam performance in mathematics and reading. Chohan and Khan (2010) highlighted the significant impact of parental support on academic achievement, with a focus on homework assistance. Núñez et al. (2015) found that perceived parental support for homework related to various homework behaviors and academic performance.

Ahmad and Awang (2016) explored parents' socio-educational support for aboriginal students, revealing the importance of parental motivation for supporting their children's education, including providing financial assistance and transportation support. Núñez et al. (2015) demonstrated that students whose parents provided basic needs performed better in classroom activities.

Parents' affectional and psychological support significantly influences student learning. Ahmad and Awang (2016) emphasized the need for psychological support in addition to providing educational materials. Olusiji (2016) highlighted the importance of parental encouragement in motivating students to learn, while Shukla et al. (2015) found that parental support influenced student motivation and persistence, particularly when oriented towards personal mastery goals.

In conclusion, parental educational support, encompassing various dimensions such as homework assistance, the provision of materials, financial aid, and psychological encouragement, plays a vital role in student involvement, academic achievement, and overall well-being. It reflects the interconnectedness of parental contributions to various aspects of a child's educational journey (Ahmad & Noor, 2017; Suhaimi, 2013).

#### **3.1.2 School Environmental Support**

The school, as a vital agent of socialisation, serves as a microsystem where students engage in intellectual and social experiences, shaping their soft skills, social skills, hard skills, competencies, knowledge, interests, and attitudes (Berns, 2012). Schooling, a ubiquitous institution, plays a crucial role in students' educational well-being, influencing their school reality, academic success, and social behavior.

In the school microsystem, students directly interact with teachers and peers, fostering their positive intellectual development (Berns, 2012). Mesosystem influences extend to various linkages, including school-child, school-family, school-peer group, school-media, and school-community relationships. Berns (2012) notes that chronosystem influences on the school involve adaptation to societal changes and specific developments such as technology, violence, and substance use.

The supportive educational system, encompassing teacher support and peer support, significantly impacts student involvement in education and educational achievement within the school environment (Dotterer & Lowe, 2011). Classroom environmental elements, including positive relationships with teachers and peers, predict student behavioral engagement, leading to improved academic performance (Dotterer & Lowe, 2011). Ratnik and Rütel (2017) emphasize the importance of positive teacher and peer relationships, highlighting their role in enhancing both behavioral and psychological engagement in learning.

Research demonstrates that teacher and peer support, both academically and socially, contribute to a responsive learning environment, positively influencing adolescents' academic motivation, classroom engagement, and school belonging (Kiefer et al., 2015). Positive relationships with teachers and peers are crucial for student well-being in the school context, fostering a conducive atmosphere for learning and development (Ratnik and Rütel, 2017).

In conclusion, the school, as a microsystem, plays a central role in shaping students' intellectual and social development. The mesosystem influences, including relationships with teachers and peers, are essential components affecting students' behavioral and psychological engagement in learning, ultimately influencing their academic success and overall well-being within the school environment. Educational systems can adopt strategies to enhance positive socialization outcomes for children, contributing to their flourishing within the school context (Noble & McGrath, 2015).

#### *3.1.2.1 Teacher Support*

Teacher support can be viewed from both narrow and broad perspectives. The narrow perspective focuses on support within the classroom environment, including trust, friendship, help, and interest (Fraser, 1998). In contrast, the broad viewpoint encompasses support in any setting, with teachers offering instrumental, informational, appraisal, or emotional support to students (Tardy, 1985; Malecki & Elliott, 1999; Lei, Cui, & Chiu, 2018). Instrumental support involves providing resources, informational support offers advice, appraisal support gives evaluative feedback, and emotional support includes empathy, trust, and love.

Teaching strategies employed by teachers significantly impact students' engagement and interest in the learning process (Awang et al., 2013). Effective strategies, such as encouragement activities, positively influence student attention and participation (Awang et al., 2013). Teachers are encouraged to use praise to reinforce positive learning behaviors, reflecting on their teaching to enhance pedagogical skills (Awang et al., 2013). Innovative and creative teaching methods contribute to a more effective and engaging delivery system, stimulating student interest in learning (Arbaa et al., 2017).

Emotional support from teachers is crucial for positive student behaviors. Prosocial classroom behavior and social-emotional support strongly predict high-quality relationships between teachers and students (Prewett et al., 2018). Teachers perceived as providing emotional support lead to students reporting a high degree of consensus regarding the teacher's value for the subject matter and high levels of internalized value and effort (Wentzel et al., 2017).

Teacher educational support plays a vital role in students' school adjustment and belonging (Murdock & Bolch, 2005; Lei, Cui, & Zhou, 2018). Positive teacher-student relationships contribute to students' academic emotions, with a stronger correlation among students from American and Western European backgrounds (Lei, Cui, & Zhou, 2018). Teachers fostering good interpersonal relationships create effective and meaningful learning environments, positively impacting students' interest, engagement, and academic excellence (Brinkworth et al., 2018; Simirarily, Musa, & Abd Halim, 2015).

The relationship between parents and teachers is significant, as effective communication can reduce stress and pressure surrounding homework and improve students' attitudes toward learning (Voorhis, 2004). Interaction between teachers and parents positively influences the socio-ecological school environment, leading to improved student well-being (Voorhis, 2004; Chohan & Khan, 2010).

Successful teachers exhibit warm, enthusiastic, and generous traits, effectively communicating and responding to students (Chohan & Khan, 2010). Implementing student-centered teaching methods, fostering a democratic classroom, and providing relevant teaching materials enhance students' motivation and acquisition of life skills (Chohan & Khan, 2010). Teachers should assume roles as facilitators, mentors, assessors, planners, role models, information providers, and resource developers, influencing students' active involvement in lesson and school activities (Waugh & Waugh, 1999).

In conclusion, teacher support, encompassing various dimensions and strategies, significantly influences student engagement, well-being, and academic success. Effective teaching methods, emotional support, positive interpersonal relationships, and collaboration between teachers and parents contribute to a conducive learning environment, fostering students' active participation and development.

#### *3.1.2.2 Peer Support*

As children transition toward independence, the role of peers becomes increasingly significant, providing essential support in various dimensions. Peer support encompasses informational, emotional, and instrumental assistance (Evans-Whipp et al., 2017). Peers act as informal agents for social learning, offering experiences beyond the family or school context (Abd. Razak & Salleh, 2010). Their influence is particularly pronounced when parental involvement decreases during secondary school (Steinberg et al., 1995). Peers contribute to educational success through collaborative learning strategies, such as study groups, sharing materials, and mutual assistance (Mishra, 2019; Cole & Espinoza, 2008). Peer tutoring, group discussions, and online forums have proven effective in enhancing both academic and social skills (Wessel, 2015).

Peer support, encompassing academic, emotional, and social dimensions, significantly impacts adolescents' motivation, engagement, and sense of school belonging (Kiefer et al., 2015). Positive peer relationships correlate with higher levels of participation, attendance, and completion of school (Noble & McGrath, 2015). The influence of peers on academic outcomes is evident in concurrent associations between peer relationship experiences and academic performance (Zitzmann, 2005). Positive peer acceptance, more friends, and less rejection correlate with better academic achievement.

Peer feedback emerges as a productive educational activity, facilitating learning through giving and receiving feedback (Cao et al., 2019). Students perceive benefits from both roles, with learning outcomes mediated by motivation, group dynamics, engagement, and within-group differences.

Proximity to peers, especially friends, plays a pivotal role in academic engagement and outcomes (Gremmen et al., 2018). When friends perform well academically, students' engagement and grades tend to be higher. Conversely, peer rejection leads to lower participation and negatively affects academic performance, increasing the risk of emotional and behavioral difficulties (French & Conrad, 2001; Gest et al., 2001). In shaping students' attitudes and behaviors, peer interactions significantly impact academic achievement (Alsagoff, 1983). Students tend to imitate and follow peers, fostering a sense of comfort and shared interests (Abu & Eu, 2017). In summary, peer support emerges as an indispensable factor contributing to children's educational involvement, academic achievement, and overall well-being, showcasing its multifaceted impact on various aspects of the learning experience.

#### **3.1.3 Community Environmental Support**

Community serves as a microsystem fostering socialization, development, and a sense of belonging. Defined by shared geography and laws, it involves friendly associations, mutual sharing, and common interests (Berns, 2004). Communities significantly contribute to educational success through various means. Alam (2015) identified factors like schools, educational status, financial position, communication, environment, unity, and cooperation, stressing the importance of community involvement. Poor community support, often due to poverty, can hinder learners' achievements, emphasizing the need for collaborative efforts.

Communities play a vital role in financing schools, providing resources, overseeing education, and offering educational spaces. They act as laboratories for learning, supporting educational programs through zoos, art stages, libraries, and museums (Hasbulloh, 2011). In Bangladesh, a study by M.S. Alam (2015) revealed parental perceptions on community factors affecting learner achievement. Poverty hindered community support, leading to lower educational engagement. Suggestions included enhanced cooperation through parent-teacher associations, improved communication, and financial assistance for disadvantaged families.

Pro-social organization within schools positively influences student well-being (Ratnik & Rütel, 2017). Community organizations contribute to school improvements, providing resources, enhancing curriculum, and securing funds (Henderson & Mapp, 2002). Businesses play a role by donating equipment, hosting field trips, offering apprenticeship training, and providing expert speakers. Such partnerships bridge the gap between school learning and the real world, exposing children to practical applications and role models (Swick, 1997).

Religious institutions indirectly impact education by instilling pro-education values, encouraging positive behaviors, and fostering a supportive environment (Sanders, 1998). Moral values and support from religious communities contribute to students' involvement in learning and resilience in facing challenges (Donahoo & Caffey, 2010).

Neighborhood factors independently influence kindergarten children's readiness to learn, particularly in language, communication, and cognitive aspects (Oliver et al., 2007). However, Novak et al. (2018) found a weak relationship between neighborhood and academic achievement. Residential and neighborhood communities significantly predict secondary education achievement (Nelson, 2019).

Philadelphia's "school without walls" experiment demonstrated a community-centric approach to education. Instead of traditional classrooms, students engaged in learning within the community, leading to a higher percentage of students attending college (Bremer & Von Moschzisker, 1971).

In conclusion, the community's multifaceted impact on education is evident in financial support, resource provision, parental involvement, religious influence, neighborhood effects, and innovative community-based learning approaches. A collaborative approach between schools and communities is essential for fostering holistic educational development.

#### **3.1.4. Virtual Environmental Support**

[(Detailed The The global integration brought about by the World Wide Web has transformed the world into a global village. The proliferation of the Internet and digital devices in education has significantly impacted the teaching and learning process. The virtual environment, facilitated by the Internet, has become a powerful tool for education, offering numerous functions and benefits. The Internet, in the virtual environment, serves various educational functions, including increasing interest in learning, enabling boundaryless communication, providing information storage, offering global education opportunities, fostering innovation, and supporting online interactive learning (Park, 2009). This has

revolutionized education by making it more child-centered and providing diverse learning paths (Abass & Ayo, 2012).

Studies indicate that students actively use the Internet for educational purposes. Dogruer et al. (2011) found that students commonly use the Internet for e-encyclopedias, e-dictionaries, translation tools, and various sources of information. Similarly, Apuke and Iyendo (2018) noted that Nigerian undergraduate students believe the internet aids homework, reading, self-learning, peer learning, and exam preparation. In the new millennium, students extensively use social media platforms such as Facebook, WhatsApp, Instagram, and Twitter to enhance their learning experiences. Köse (2016) identified positive educational influences, including subject study, knowledge improvement, awareness of global issues, collaborative work, problem-solving, and increased study time through social media. Usluel (2016) found that almost all higher education students in Turkey use the internet and social networking sites for gaining up-to-date information and learning new knowledge. Faizi and El Fkihi (2018) reported that students heavily rely on Facebook for educational purposes, checking class-related information, discussing topics, accessing learning materials, and seeking assistance on academic-related matters. Social media platforms facilitate collaborative learning. Ansari and Khan (2020) demonstrated that social media use for collaborative purposes enhances interactions with teachers and peers, resulting in improved academic achievement. Chu et al. (2017) found that students participating in collaborative revisions on wikis produced more writing output, emphasizing the positive pedagogical value of wikis.

Social media also serves as a platform for interaction between teachers and students. Matzat and Vrieling (2016) found that teachers use social media with students for information sharing, both inside and outside the classroom. Talaue et al. (2018) observed that students discuss academic issues with peers on social networks, making it an essential part of their lives. The rise of tablet computers and mobile apps has further transformed education. Mobile apps are used for tutorial learning, reducing anxiety, and increasing student engagement (Yahaya & Zaini, 2020; Zhang et al., 2015; Ingram et al., 2016). Despite the numerous benefits, some studies suggest negative impacts of social media on student learning. Wakefield et al. (2020) found that students using social media perform poorly in academic subjects. Abu-Shanab and Al-Tarawneh (2015) reported a negative influence of Facebook on student performance, and Almu and Buhari (2014) found that mobile social networks negatively affected student involvement in school activities. In conclusion, the virtual environment and social media have become integral components of the education landscape, offering diverse opportunities for learning and collaboration. However, attention must be given to potential negative impacts, and strategies should be implemented to maximize the positive effects of technology on student well-being and academic achievement.

#### **4. CONCLUSION**

In conclusion, this research contributes a comprehensive framework for understanding and optimizing student learning experiences through Socio-Environmental and Educational Support. The study, grounded in Bronfenbrenner's socio-ecological theory, explores the multifaceted dimensions of support within the home, school, community, and virtual environments. Utilizing a systematic approach and a wide array of sources, the investigation synthesizes 158 studies to propose a nuanced framework with four integral components: Home Environmental Support, School Environmental Support (including Teacher and Peer Support), Community Support, and Virtual Environmental Support. The significance of Socio-Environmental Support, encompassing parental, teacher, and peer support, is evident in its impact on student engagement, motivation, and overall well-being.

Home Environmental Support, emphasizing parental educational support, plays a vital role in shaping students' involvement in learning, academic achievement, and self-concept. School Environmental Support, including positive teacher-student relationships and peer interactions, fosters a conducive learning environment that influences behavioral and psychological engagement in learning. The Community's multifaceted impact is highlighted in financial support, resource provision, parental involvement, religious influence, and community-based learning approaches. The virtual environment, an integral part of the modern educational landscape, offers diverse opportunities for learning and collaboration. The Internet and social media platforms, when used judiciously, contribute to increased interest in learning, boundaryless communication, global education opportunities, and innovation. However, attention must be given to potential negative impacts, such as the influence of social media on academic performance.

This research, conceptualized within Bronfenbrenner's ecological framework, enriches the discourse on effective strategies for fostering an environment conducive to student learning. By encompassing various levels of support within the socio-ecological system, the proposed framework provides a holistic perspective on optimizing student learning experiences. The study, leveraging a diverse array of sources and a robust methodology, aims to contribute valuable insights to educational practitioners, policymakers, and researchers seeking to enhance educational outcomes through a comprehensive understanding of Socio-Environmental and Educational Support.

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