ORIGINAL ARTICLE

Exploring Users' Lived Experiences of School-Built Environments: Evidence from Ghanaian Basic Education Context

Wisdom K. Agbevanu◯

Dr. Agbevanu is a Senior Research Fellow and currently teaches graduate courses in educational planning and administration at the Institute for Educational Planning and Administration (IEPA), a UNESCO Category II Centre of Excellence at the University of Cape Coast (UCC), Ghana.
ORCID: https://orcid.org/0000-0002-4305-7598

Ethical Statement
Ethical board approval was granted, and consent forms were distributed.

Conflict of Interest
No conflict of interest is present in the conduction or the reporting of this study.

ABSTRACT

This phenomenological research investigates the lived experiences and interpretations of learners, teachers, and head teachers as users of school-built environments (SBEs) in the context of basic education in Ghana. Ten participants (four learners, four teachers, and two school leaders) were sampled purposively from two basic education schools (one public and one private). To explore the meanings attributed to these spaces, the study used qualitative interviews, photo elicitation, physical observations and thematic analysis to shed light on the often-overlooked aspects of users' lived experiences. The findings revealed that SBEs elicit both positive and negative emotions and convey messages of support or neglect, influenced by physical, functional, psychosocial, and aesthetic factors. Positive and supportive SBEs provide conducive and safe instructional and non-instructional spaces, whereas negative and neglectful SBEs contribute to inequities in teaching and learning outcomes. This research emphasizes the importance of policymakers and designers taking user perspectives into account to address SBE inequities and promote justice within educational settings.

Keywords: School built environments, users, lived experiences, phenomenology, basic education

*Corresponding Author
Wisdom K. Agbevanu , University of Cape Coast Ghana, Cape Coast, Ghana
Email: wisdom.agbevanu@ucc.edu.gh

INTRODUCTION

The school-built environments (SBEs) serve as vital arenas of human activity, designed to facilitate users' pursuits and enhance their well-being (Agbevanu, 2014, 2015; Bartuska, 2007; Rapoport, 1990; Sallis & Glanz, 2006; Skantze, 1996; Vischer, 2008). Despite their significance, scant attention has been paid to how users perceive, interpret, and derive meaning from their experiences within SBEs, particularly in the context of basic education. While children and adults spend considerable time within school premises (El-Nemr & Cash, 2022; Rafiei & Gifford, 2023; Wingspread Declaration on School Connections, 2004), certain SBEs fail to adequately support the diverse needs and well-being of all users (Holt, 1974). Furthermore, there is limited research on how users navigate and attribute significance to their interactions with these environments. This oversight neglects the pivotal role of users' perceptions in shaping the design and functionality of educational spaces (Pasalar, 2001). Consequently, there is a notable dearth of empirical studies examining how users conceptualize and derive meaning from their lived experiences within SBEs.

The current body of literature lacks substantive empirical research elucidating how users of SBEs construe their lived experiences in these environments. Although SBEs are intended to support users' activities and convey meaningful messages, disparities in their design and maintenance may inadvertently communicate positive or negative messages to users (Baird, 2015; Chan et al., 2021; Lee & Rubin, 2007; Pasalar, 2001; Rapoport, 1990). Consequently, the understanding of users' lived experiences and the meanings they attribute to SBEs is essential for informing effective design, maintenance, and utilization strategies (Manca et al., 2020; Sheets, 2011). This study aims to address this gap by examining users' lived experiences within SBEs in the context of basic education in Ghana.

This paper defines school-built environments (SBEs) as spaces comprising instructional and non-instructional areas established or adapted by individuals or institutions to facilitate the activities and welfare of their users (Agbevanu, 2014, 2015). Instructional spaces encompass areas specifically designated or utilized for activities such as teaching, learning, and recreation, including classrooms, libraries, laboratories, ICT centres, and playgrounds. As classified by Holt (1974), non-instructional (ancillary) spaces are constructed areas aimed at enhancing users' comfort and well-being within the school settings. The term 'users' encompasses the school community, comprising school administrators, educators, and students, who directly engage with instructional and non-instructional spaces in SBEs. Users' lived experiences of SBEs denote their immediate, pre-reflective awareness (van Manen, 1990) as well as their responses or feedback regarding their perceptions and expectations (Vischer, 2008) resulting from their interactions with or utilization of SBE spaces.

Conceptual and Theoretical Review

Conceptualizing SBEs as spaces of human experience and meaning necessitates an exploration of the phenomenology of place (Casey, 2001; Tuan, 1977) inspired by Edward Relph's ideas (Relph, 1985; Seamon & Sowers, 2008). Relph posited that place holds intrinsic significance in human existence, manifesting as feelings of attachment or estrangement (Relph, 1976). Additionally, Heidegger's concept of 'being-in-the-world' underscores the existential relationship between individuals and their environments (Heidegger, 1962). These theoretical frameworks offer valuable insights into users' experiential descriptions of SBEs, elucidating their feelings of 'belongingness' or 'alienation'.

Vischer's (2008) user-centered theory further underpins this study, positing that a built environment exists to support users' activities and well-being. By systematically exploring users' experiences, Vischer's framework facilitates a

nuanced understanding of how SBEs support or hinder users' needs across physical, functional, and psychological (Vischer, 2008), and aesthetic dimensions (Barraza, 2021). While existing scholarship often focuses on the relationship between SBE conditions and academic outcomes, little attention has been paid to users' subjective experiences and interpretations of these environments (Earthman, 2002; Sheets, 2011). This study seeks to address this gap by investigating how learners, teachers, and school administrators in basic education settings describe and make sense of their lived experiences in SBEs.

Basic education serves as a cornerstone for individuals' future educational pursuits and societal engagement, comprising the primary and lower secondary education stages (Ministry of Education, 2018a, 2018b; UNESCO Institute for Statistics, 2023). In Ghana, basic education encompasses kindergarten, primary, and junior high school, providing a crucial foundation for lifelong learning and social participation (GoG, 2008; MoE, 2010b). Despite its pivotal role, challenges such as inequities in teaching and learning opportunities persist, affecting the quality of basic education provision (Ghana Education Service, 2013). Consequently, understanding users' lived experiences in SBEs is imperative to address these challenges and foster inclusive educational environments.

It is against this backdrop that the PhD study reported in this paper was undertaken. This paper presents findings from a qualitative research project exploring users' lived experiences with SBEs in Ghanaian basic education schools. Employing a hermeneutic phenomenological approach, this study utilized open-ended interviews, photo-elicitation, and observation methods to uncover users' subjective interpretations and lived experiences within SBEs (Frechette et al., 2020; Hagedorn, 1994). To address the knowledge regarding users' perceptions of SBEs, this study aims to inform policy, design, and practice interventions aimed at optimizing educational environments for all stakeholders.

Research Question

The central research question guiding this study is: How do learners, teachers, and school administrators in basic education schools describe and understand their lived experiences within SBEs as primary users? This inquiry seeks to fill a critical gap in the literature by foregrounding users' voices and experiences in SBEs with a specific focus on the basic education context. Through this exploration, this study aims to generate insights into the nuanced ways in which users navigate and attribute meaning to their interactions with educational spaces, thereby informing future research, policy, and practice endeavors.

Overall, this study contributes to the growing field of environmental psychology by shedding light on the subjective experiences of users in educational environments. By elucidating users' lived experiences and meanings within SBEs, this study offers valuable insights for enhancing the design, utilization, and management of educational spaces, ultimately fostering more inclusive and supportive learning environments.

METHODOLOGY

Research Design

An interpretive research approach, employing a hermeneutic phenomenological strategy, was undertaken to delve into the lived experiences of users within School-Built Environments (SBEs) across two basic education schools. This strategy, deeply rooted in interpretive understanding (or Verstehen), fosters a nuanced comprehension of users' experiences, in contrast to quantitative methods that focus on behavior explanation (Ajjawi & Higgs, 2007; Bryant,

2018; Creswell, 2009; Morse & Field, 1995). Grounded in hermeneutics and phenomenology, this approach prioritizes openness to meaning and experiences, unveiling phenomena through participants' interpretations and attributions of significance (Henriksson & Friesen, 2012; Mohammadi, 2007; van Manen, 1990).

Setting and Participants

Conducting the research in two basic education schools—one public and one private—within the Komenda Edina Eguafo Abirem (KEEA) Municipality of Ghana's Central Region provided diverse perspectives. Public schools lacked certain instructional amenities, while private schools boasted comprehensive facilities, illustrating a spectrum of SBE conditions. Participants, comprising two school principles, four teachers, and four pupils from each school, were chosen based on their direct involvement with SBEs, ensuring a comprehensive insight into varied experiences. Purposive random sampling (Patton, 2002) was employed to select schools and participants, ensuring variation in academic performance (Agbevanu et al., 2016; Agbevanu, 2014, 2015; Dare & Agbevanu, 2012).

Instruments

Qualitative data collection tools, namely, conversational interviews, photo-elicitation interviews, and close observation guides, were used. The conversational interview guide helped in free-flowing discussions, which were suitable for detailed information but lacked structure (van Manen, 1990). In addition to the conversational interview guide, the photo-elicitation interview guide supported the use of photos to prompt discussions, enhancing emotional expressions, but was time-consuming (Magno & Kirk, 2008). Finally, a close observation guide offered detailed data on the physical environments of the schools and required skilled observation but ensured comprehensive insights (Sarantakos, 2013; van Manen, 1990). The choice of these depended on the research purpose, questions, and context.

Procedure

Ethical considerations were paramount, and approval was obtained from the University of Cape Coast Institutional Review Board. Informed consent was acquired from all participants, emphasizing their rights, potential benefits, and confidentiality (Head, 2020). Interviews and observations were meticulously conducted, with participants' convenience and privacy prioritized. Data collection involved conversational interviews, photo-elicitation, and close observations, offering rich textual and visual insights into participants' experiences within SBEs (Creswell & Poth, 2018; Creswell, 2013; Creswell, 2009; Magno & Kirk, 2008; Manzo, 2005; Sarantakos, 2013; Woolner et al., 2007).

Data Analysis

A rigorous analytical process followed, guided by thematic, image, and hermeneutic circle analysis strategies (Gadamer, 2004; Hagedorn, 1994; Magno & Kirk, 2008; van Manen, 1990). Data were transcribed, managed, and analysed iteratively, ensuring saturation and coherence. Themes and interpretations were cross-checked with research experts to validate their relevance and fidelity to participants' experiences. Reflexivity was maintained throughout, acknowledging the researcher's biases and perspectives, thus enriching the analytical process (Alsaigh & Coyne, 2021; Gadamer, 2004; van Manen, 1990; Whitehead, 2004).

Trustworthiness was ensured through data triangulation, member-checking, and thick description, fortifying the validity and credibility of findings (Creswell, 2009; Guba & Lincoln, 1989; Hays & Singh, 2012). Finally, the utilization of ChatGPT facilitated grammatical refinement, enhancing the clarity and coherence of the manuscript

(OpenAI, 2023).

RESULTS

The study aimed to delve into users' perceptions and experiences within SBEs in basic education schools, elucidating how these encounters shape their understanding. Through data analysis, one overarching theme and four main themes emerged, coalescing into an overarching theme termed 'realities of being in SBEs.' These themes encapsulated users' experiences and their associated meanings, supported by pertinent quotations and images reflecting participants' lived encounters with SBEs. The overarching theme 'being-in-the-world of SBE' found support in four main themes: 'physical realities of SBEs,' 'functional realities of SBEs,' 'psychosocial realities of SBEs,' and 'aesthetic realities of SBEs.'

Physical realities of SBEs

Regarding the physical realities of SBEs, participants' experiences were shaped by tangible attributes such as temperature, ventilation, lighting, and spatial arrangements. Both positive and negative experiences were documented, with participants expressing concerns over inadequate facilities and discomfort. For instance, Cole, a school head, expressed the challenge of lacking essential amenities like sick bays and well-furnished staff rooms, hindering effective teaching and learning. Similarly, Yaw, a teacher, highlighted the absence of facilities such as a library and ICT lab, affecting the overall learning environment. Observational data further revealed shortcomings in SBEs, with insufficient instructional spaces and poorly maintained environments characterizing Basic Education School A. Conversely, participants from Basic Education School B, including Zuki, a school head, Abeeku, a teacher, and Lily, a pupil, praised the school's well-equipped facilities, contributing to positive user experiences. The following quotes support this theme:

> We don't have a sick bay here... When someone is not well, I only ask him or her to go home. ... We do not have a well-furnished staffroom for the teachers (Cole, School Principle).

> Apart from the classrooms, the school lacks other school facilities such as a library, ICT lab and so on (Yaw, Teacher).

> The canteen we don't have ... and it affects us because people eat anywhere they'd like" (Ika, Pupil).

The observational data uncovered that the school compound was predominantly covered with grass, particularly around the JHS block, giving the school an unappealing appearance. Furthermore, the JHS classrooms were equipped with honeycomb windows, resulting in persistent dust accumulation. Moreover, the classrooms lacked ceilings, electrical fixtures for lighting, and ceiling fans, leading to inadequate ventilation, diminished natural light, and soiled floors and desks. Figure 1 illustrates the JHS block within the Basic Education School A compound, comprising only three classrooms and an office.

Figure 1. JHS block of Basic Education School A compound.

The field notes revealed shortcomings in the instructional areas of the SBE, notably the absence of essential facilities like a school library, designated spots for private reading, and tranquil zones for individual study outside classrooms. Moreover, the inadequacy extended to crucial amenities such as a science laboratory and an ICT resource centre, compounded by the insufficiency of teaching aids. Furthermore, the school lacked properly delineated outdoor areas for sports and physical education activities. Conversely, the narratives shared by participants from Basic Education School B presented a stark contrast.

We are provided with the needed facilities or environment to perform academically well (Zuki, School Head).

We have everything [facilities] here. Therefore, we can boast of so many things [facilities]... I can say that the facilities are underutilized. However, we can boast of classrooms, science lab, playgrounds, ICT centre, canteen, etc. This is a very good place to send your children (Abeeku, Teacher). It is a very nice school because we have good facilities, almost all the facilities ...we have a dining hall, a library, and many facilities. ... The [school-built] environment is good for learning. ... The classrooms ... are good, spacious, and comfortable. ...You would not find any school where classrooms have tiles on the floor and even tiles on the wall. There is enough space. Even we have louvre windows for fresh air ... it is nice (Lily, Pupil).

A photograph in Figure 2 highlights participants' descriptions of their SBEs in Basic Education School B.

Figure 2. JHS block of Basic Education School B compound.

Functional realities of SBEs

Functional realities of SBEs pertained to the practical efficacy of built environments in supporting users' activities and well-being. In Basic Education School A, deficiencies in infrastructure, such as inadequate ventilation and lack of amenities, posed challenges to both students and teachers. Adjoa, a teacher, and Yaw, a teacher, voiced concerns about the discomfort and limitations imposed by subpar facilities. Conversely, participants in Basic Education School B, including Zuki, a school head, and Abeeku, a teacher, lauded the conducive learning atmosphere and well-maintained facilities, attributing their positive experiences to the school's commitment to creating an enabling environment. The following quotes exemplify participants' experiential descriptions of SBEs in Basic Education School A.

> The performance of the children at the BECE level is not the best … I think part of the problem … is due to the lack of good facilities in the school. For example, the absence of a school library is affecting the children (Cole, School Head).

> The windows to the classrooms do not provide good ventilation. You see the children sweating and the teacher is equally sweating in class (Adjoa, Teacher).

> The type of windows [honeycombs] we have do not enhance ventilation. I think it is not the best. During the afternoons, we [teachers and pupils] suffer in the classrooms because of heat … and there are no electric fans in the classrooms (Yaw, Teacher).

A participant's photograph as shown in Figure 3 exemplifies the participants' experiences of classroom space in Basic Education School A.

**Figure 3**. A classroom in the JHS block of Basic Education School A.

Conversely, participants at Basic Education School B recounted distinct narratives. Their positive encounters with both instructional and non-instructional spaces conveyed optimistic messages to the users. The subsequent quotations underscore how they perceive and interpret their SBEs.

> Looking at the classrooms, they are very spacious but the number in all is 40, so it is enough and very comfortable for the students so controlling the students because the space is enough for us, I think we can control the students well. Because the place is very neat, and the students behave well in class (Zuki, School Head).

The classrooms are well ventilated. They create some sort of serene atmosphere for children to grasp whatever the teacher teaches [be attentive in class]. In addition, we are not crowded … which to me is not bad. … When it comes to teaching and supervision of individual work in the classroom, you can move freely … We do not have dual desks in this school … All children have their tables and chairs … The chairs and tables in the classrooms are in good condition. The classroom floors and the walls are tiled and with ceilings making the rooms very bright and cool (Abeeku, Teacher).

A participant's photograph in Figure 4 typifies the participants' experiences of classroom space in Basic Education School B.

Figure 4. A classroom in the JHS block of Basic Education School B.
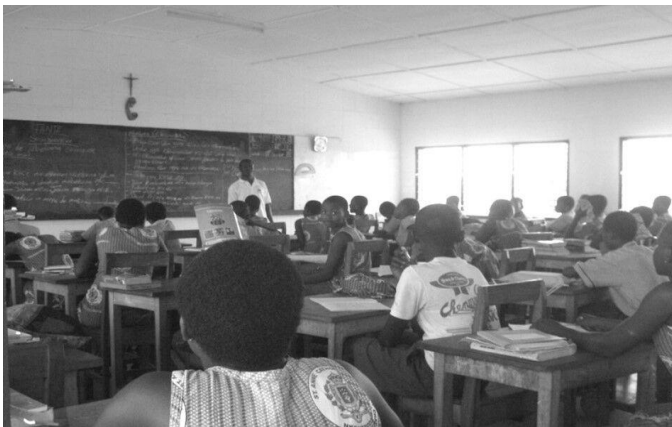
Psychosocial realities of SBEs

Psychosocial realities of SBEs explored the psychological and social dimensions of users' experiences, encompassing their attitudes, values, and interactions within built environments. Participants in Basic Education School A, including Ika, a Pupil, and Cole, a school head, lamented the discomfort and lack of motivation stemming from subpar facilities, with some contemplating leaving the institution. Furthermore, Yaw, a teacher, highlighted the demoralizing effect of the unappealing environment on both students and teachers. Conversely, those in Basic Education School B, including Zuki, a School Head, expressed satisfaction with the conducive learning atmosphere and well-maintained facilities, attributing their positive experiences to the school's commitment to creating an enabling environment. This theme is gleaned from the following participants' quotes:

The place [/SBE/] is not comfortable. I don't know … the desks in the classrooms are not comfortable (Ika, Pupil, School A).

I do not think you will be comfortable teaching or working here … it is difficult working here (Cole, Headteacher, School A).

Look at where we are sitting … it is because we do not have a proper or comfortable staffroom which is why we are sitting here on the corridor… I do not feel happy here. It is as if what we do here is not appreciated. Nothing

is motivating about this place … I am even thinking of leaving the school to go and further my education. … You saw what the place is like … the female teachers sitting there [in the staff common room] are always complaining, and because they do not have any choice they are sitting there (Yaw, Teacher, School A).

Figure 5 illustrates the participants' experiences of eating space or canteen in Basic Education School A. The figure supports participants' descriptions of the non-instructional spaces in their SBEs in the school.

Figure 5. A canteen or dining area in Basic Education School A.

However, the SBE as experienced and reported by participants in Basic Education School B contrasted with that of those in Basic Education School A. The following quotes from the participants explain their experiences of the SBE:

Looking at the classrooms, they are comfortable for the students. Because the place is comfortable and neat, the students are well behaved … I just feel happy about being in a school with this environment. Very imposing … well-structured and painted … it is just attractive. This shows how the school cares about its image (Zuki, School Head).

The classrooms are tiled, with enough windows to allow ventilation that helps in learning. All these are set in place. There is a lighting system. … I can say that the classrooms are very bright, comfortable, and attractive …We have a very beautiful canteen; the set-up is beautiful, with tables and chairs arranged for the pupils, tiled floor and ventilation is very good (Pat, Teacher, School B).

A photograph in Figure 6 illustrates the participants' experiences of eating space or canteen in Basic Education School B. The figure supports participants' descriptions of the non-instructional spaces in their SBEs.

Figure 6. A canteen or dining area in Basic Education School B.

Aesthetic realities of SBEs

Aesthetic realities of SBEs delved into users' visual experiences and perceptions of built environments, highlighting the impact of aesthetics on their overall experience. Participants in Basic Education School A, including Adjoa, a teacher, and Paster, a pupil, described the unattractive and unkempt surroundings, which adversely affected their morale and teaching/learning outcomes. Similarly, Yaw, a teacher, emphasized the negative impact of the dilapidated environment on users' well-being and academic performance. In contrast, those in Basic Education School B, including Pat, a teacher, and Zuki, a school head, appreciated the school's aesthetic appeal, noting the positive influence of well-maintained spaces on their well-being and academic performance.

The findings underscored the multifaceted nature of users' experiences within SBEs, with physical, functional, psychosocial, and aesthetic factors collectively shaping their perceptions and interactions with these environments. While deficiencies in infrastructure were associated with negative experiences and diminished well-being, well-equipped and aesthetically pleasing environments fostered positive outcomes and enhanced user satisfaction. These findings highlight the critical role of SBEs in supporting educational endeavors and underscore the need for equitable access to conducive learning environments. The following participants' quotes explicate the theme:

> The environment is not attractive … the place is not good. The place is waterlogged so any time it rains we have problems accessing the classrooms and other things especially the route to the JHS building is very bad … This environment does not befit a school (Adjoa, Teacher).

> I feel shy because the school is not attractive …The compound is weedy. Sometimes they ask us to bring cutlasses to school to weed the compound …we have to learn but we use that period to weed. This is affecting our learning and us… (Paster, Pupil).

> If you work or teach in an environment like this, you cannot give your best because no one cares about the place. The place is not attractive … just look around (Yaw, Teacher).

A photograph in Figure 7 illustrates the participants' experiences of the playing field in Basic Education School A. The figure supports participants' descriptions of non-instructional space (playing field) in their SBEs.

Figure 7. A playing field in Basic Education School A.

However, in Basic Education School B, participants' data painted a different picture of the attractiveness of their SBE. The following quotes are examples of their experiential descriptions of their SBEs:

Look at this place … flowers, hedges, and dustbins are all located at vantage points making the environment look decent and attractive. … All I can say is that this is a good school … well structured, very clean, and attractive (Pat, Teacher).

It is just attractive. This shows how the school cares about its image … We have a very neat and beautiful canteen. … The set-up is beautiful, with tables and chairs arranged for the pupils, tiled floor, and ventilation very good. Then we have a kitchen, the kitchen set-up too is very good. This is where the cooking and the dishing out of food are done. The pupils sit according to classes at the dining hall…. In addition, all is neatly set up. The tables are good (Zuki, School Head).

A photograph in Figure 8 illustrates the participants' experiences of eating space or canteen in Basic Education School B. The figure supports participants' descriptions of non-instructional space (playfield) in their SBEs.

Figure 8. A playing field in Basic Education School A.

DISCUSSION

The research embarked on a journey to elucidate the lived experiences of users in School Built Environments (SBEs) in the basic education context of Ghana. Our exploration aimed to unveil the intricacies of users' encounters with SBEs and decipher the meanings they derive from these experiences. The findings underscored that users' lived experiences of SBEs manifest along a spectrum of positivity and negativity, contingent upon the physical, functional, psychosocial, and aesthetic attributes of these spaces (Pasalar, 2001). Moreover, these experiences conveyed either a sense of support or neglect, deeply influenced by the conditions prevalent within the respective SBEs. However, amidst this diversity, participants across the settings shared a common aspiration for SBEs that foster positivity and support, essential for their activities and well-being.

Users' Lived Experiences of SBEs

The participants' descriptions of their lived experiences, rooted in immediate, pre-reflective consciousness, unveiled a consistent dichotomy between negative and positive encounters across the two research settings. Basic Education School A participants narrated predominantly negative experiences, whereas those in Basic Education School B recounted positive encounters. This finding resonates with existing literature, which suggests that users' experiences of the built environment tend to lean towards either positive or negative trajectories (Bartuska, 2007; Kjævrang, 2003). Indeed, as Bartuska (2007) contends, every facet of the SBE contributes either positively or negatively to the overall user experience (Agbevanu, 2014, 2015), emphasizing the contextual nature of these encounters. Consequently, decisions regarding SBEs should integrate users' lived experiences and interpretations, recognizing their profound influence on users' engagement and well-being.

Moreover, our findings align with Vischer's (2008) conceptualization, which posits that users' perceptions of the built environment hinge on the adequacy or inadequacy of support provided. We extend Vischer's framework by demonstrating that users' comfort or discomfort, affinity, or aversion towards SBEs, are shaped by their physical, functional, psychosocial, and aesthetic dimensions (Agbevanu, 2014, 2015). This underscores the pivotal role of these attributes in shaping users' realities within SBEs (Nivala, 1997; Vischer, 2008). Furthermore, our study accentuates the notion that SBEs serve as conduits for conveying what Ulrich and Duffy (2022) aptly describe as 'anecdotal

experiences.' Thus, SBEs should be recognized as multifaceted entities that evoke varied sentiments and perceptions among users, extending beyond mere physical attributes to encompass personal and cultural dimensions.

Meanings of Users' Lived Experiences of SBEs

Delving deeper into the meanings inferred from users' lived experiences, our interpretation reveals a profound interplay between users and their SBEs. Participants in Basic Education School A construed their SBEs as symbols of neglect, indifference, or devaluation, contrasting sharply with the sentiments of Basic Education School B participants, who perceived their environments as nurturing, affirming, and validating. These observations echo Rapoport's (1990) and Maslow and Mintz's (1956) assertions that individuals attribute meanings to their built environments based on their subjective interpretations. Participants, as Pasalar (2001) elucidates, imbue their surroundings with values such as 'good' or 'bad,' 'unique' or 'common,' shaping their existential experiences within these spaces.

Furthermore, our analysis unveils the existential dynamics at play within users' perceptions of SBEs, drawing on Relph's (1976) and Seamon and Sowers's (2008) conceptualization of 'existential outsideness and insideness'. Basic Education School A participants grappled with a sense of existential alienation, viewing their environment as hostile and estranged, while Basic Education School B participants experienced a profound sense of existential belongingness, perceiving their environment as hospitable and accommodating. This dichotomy resonates with Heidegger's (1962) notion of presence-at-hand and readiness-to-hand, wherein Basic Education School A represents a mere 'being there,' which devoid of utility or resonance, while Basic Education School B embodies a 'being here,' characterized by functionality and relevance. Indeed, within the instructional and non-instructional spaces of SBEs (Agbevanu, 2014, 2015), users engage with these spaces as instrumental tools, focusing on their utility rather than contemplating their essence.

CONCLUSION AND RECOMMENDATIONS

This study illuminates the nuanced tapestry of user experiences within SBEs, delineating a spectrum of positivity and negativity informed by the physical, functional, and psychosocial dimensions of these environments. These experiences, perceived as either supportive or neglectful, wield profound implications for users' activities and well-being. Addressing these insights in policy and design contexts hold the potential to mitigate disparities in SBEs, fostering equitable and inclusive environments for all users. Furthermore, our findings offer valuable implications for practice and research, underscoring the need for a user-centered approach in SBE planning, design, and management. While our study enriches the understanding of SBE users' lived experiences, it also acknowledges its limitations and offers avenues for future research to explore the multifaceted dimensions of these encounters across diverse user groups and contexts.

The study's findings, which delineate both positive and negative experiences within SBEs, offer invaluable insights for practice and research, guiding efforts to enhance the quality of these environments and promote positive user outcomes. In foregrounding users' perspectives and experiences, this study advocates for a change in thinking towards a more user-centric approach in SBE planning, design, and management. Furthermore, the conceptual framework developed in this study serves as a foundational pillar for future research efforts, offering a robust theoretical foundation for exploring the complexities of user experiences within SBEs across diverse contexts and user groups. Additionally, the methodological approach, characterized by its interpretive depth and reflexivity, sets a

precedent for future studies seeking to unravel the intricate tapestry of user experiences within educational environments.

Limitations and Suggestions for Future Study

While our study contributes significantly to understanding of user experiences within SBEs, it acknowledges certain limitations that warrant consideration. The narrow focus on a specific user group and context limits the generalizability of our findings, underscoring the need for future research to encompass broader demographic and contextual variables. Furthermore, the potential for evolving interpretations over time and context necessitates longitudinal studies to capture the dynamic nature of user experiences within SBEs. Moving forward, interdisciplinary research initiatives that transcend disciplinary boundaries hold promise for unravelling the multifaceted dimensions of user experiences within educational environments, paving the way for more inclusive and equitable SBEs. Moreover, future research activities should attempt to develop standardized indicators for assessing user experiences within SBEs, facilitating comparative analyses and benchmarking efforts across diverse settings.

Acknowledgments

REFERENCES

Agbevanu, W. K. (2014). *Exploring lived experiences of users of school-built environments in the Ghanaian context of basic education* [Doctoral dissertation, University of Cape Coast]. https://ir.ucc.edu.gh/xmlui/handle/123456789/3829

Agbevanu, W. K. (2015). Understanding school-built environments in the Ghanaian context of basic education: A basic conceptual model. In A. Arigbaby, Y. A. Ankomah, N. Adetoro, M. B. A. Bakah, S. E. Oladipo, & K. Boadu (Eds.), *1st Interdisciplinary Conference of UCC-TASUED* (pp. 1219–1236). UCC-TASUED.

Agbevanu, W. K., Dare, A. L., & Bosu, R. S. (2016). Cosmetic facility condition as a correlate of academic achievement of students in Greater Accra public senior high schools. *Journal of Educational Management*, *7*(2), 1–19.

Ajjawi, R., & Higgs, J. (2007). Using hermeneutic phenomenology to investigate how experienced practitioners learn to communicate clinical reasoning. *The Qualitative Report*, *12*(4), 612–638. https://doi.org/https://doi.org/10.46743/2160-3715/2007.1616

Alsaigh, R., & Coyne, I. (2021). Doing a hermeneutic phenomenology research underpinned by Gadamer's philosophy: A framework to facilitate data analysis. *International Journal of Qualitative Methods*, *20*. https://doi.org/10.1177/16094069211047820

Baird, G. (2015). Users' perceptions of sustainable buildings – Key findings of recent studies. *Renewable Energy*, *73*, 77–83. https://doi.org/10.1016/j.renene.2014.04.004

Barraza, G. (2021). *The role of aesthetics in classroom design: Implications for engagement and equity* [Master's thesis, University of San Francisco]. https://repository.usfca.edu/thes/1385

Bartuska, T. J. (2007). The built environment: Definition and scope. In W. R. McClure & T. J. Bartuska (Eds.), *The built environment: A collaborative inquiry into design and planning* (2nd ed., pp. 3–14). John Wiley & Sons, Inc.

Bryant, J. P. (2018). A phenomenological study of preschool teachers' experiences and perspectives on inclusion practices. *Cogent Education*, *5*(1), 1549005. https://doi.org/10.1080/2331186X.2018.1549005

Casey, E. S. (2001). J.E. Malpas's Place and Experience: A Philosophical Topography (Cambridge University Press, 1999) Converging and diverging in/on place. *Philosophy & Geography*, *4*(2), 225–230. https://doi.org/10.1080/10903770123141

Chan, E. T. H., Li, T. E., Schwanen, T., & Banister, D. (2021). People and their walking environments: An exploratory study of meanings, place and times. *International Journal of Sustainable Transportation*, *15*(9), 718–729. https://doi.org/10.1080/15568318.2020.1793437

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Sage Publications Inc.

Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among five approaches*. Sage Publications Inc.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research: Choosing among five approaches* (4th ed.). SAGE.

Dare, A. L., & Agbevanu, W. K. (2012). Structural facility condition and academic achievement of students in Greater Accra public senior high schools. *International Journal of Educational Leadership (IJEL)*, *4*(4), 263–273.

Earthman, G. (2002). School facility conditions and student academic achievement. *UCLA's Institute for Democracy, Education, and Access*. https://escholarship.org/uc/item/5sw56439

El-Nemr, K. W., & Cash, C. S. (2022). School building conditions' influence on student behaviour in a medium-sized division in Virginia. Educational Planning, *29*(2), 43–60. https://files.eric.ed.gov/fulltext/EJ1356892.pdf

Frechette, J., Bitzas, V., Aubry, M., Kilpatrick, K., & Lavoie-Tremblay, M. (2020). Capturing lived experience: Methodological considerations for interpretive phenomenological inquiry. *International Journal of Qualitative Methods*, *19*. https://doi.org/10.1177/1609406920907254

Gadamer, H.-G. (2004). *Truth and method* (3rd ed.). Continuum.

Ghana Education Service. (2013, n.d.). Ensuring quality basic education in the 21st century: Ghanaian perspective. http://www.ges.gov.gh

Guba, E. G., & Lincoln, Y. (1989). *Fourth-generation evaluation*. Sage.

Hagedorn, M. (1994). Hermeneutic photography. *Advances in Nursing Science, 17*(1), 44–50. https://doi.org/10.1097/00012272-199409000-00007

Hays, D. G., & Singh, A. A. (2012). *Qualitative inquiry in clinical and educational settings*. The Guilford Press.

Head, G. (2020). Ethics in educational research: Review boards, ethical issues and researcher development. European Educational Research Journal, *19*(1), 72–83. https://doi.org/10.1177/1474904118796315

Heidegger, M. (1962). *Being and time*. SCM Press.

Henriksson, C., & Friesen, N. (2012). Introduction. In N. Friesen, C. Henriksson, & T. Saevi (Eds.), *Hermeneutic phenomenology in education: Methods and practice* (Vol. 4) (pp. 1–14). Sense Publishers.

Holt, J. (1974). Involving the users in school planning. *The School Review, 82*(4), 707–730. https://doi.org/10.1086/443163

Kjævrang, U. (2003). *Power of aesthetics to improve student learning*. DesignShare Database

Lee, M., & Rubin, V. (2007). *The impact of the built environment on community health: The state of current practice and next steps for a growing movement*. PolicyLink and California Endowment.

Magno, C., & Kirk, J. (2008). Imaging girls: visual methodologies and messages for girls' education. *Compare: A Journal of Comparative and International Education, 38*(3), 349–362. https://doi.org/10.1080/03057920802066667

Manca, S., Cerina, V., Tobia, V., Sacchi, S., & Fornara, F. (2020). The effect of school design on users' responses: A systematic review (2008–2017). Sustainability, 12(8), 3453. https://doi.org/10.3390/su12083453

Manzo, L. C. (2005). For better or worse: Exploring multiple dimensions of place meaning. *Journal of Environmental Psychology*, *25*(1), 67–86. https://doi.org/10.1016/j.jenvp.2005.01.002

Maslow, A. H., & Mintz, N. L. (1956). Effects of esthetic surroundings: I. Initial effects of three esthetic conditions upon perceiving "energy" and "well-being" in faces. *The Journal of Psychology, 41*(2), 247–254. https://doi.org/10.1080/00223980.1956.9713000

Ministry of Education. (2018a). Education Strategic Plan 2018-2030. Ministry of Education

Ministry of Education. (2018b). National pre-tertiary education curriculum framework for developing subject curricula. https://nacca.gov.gh/wp-content/uploads/2019/04/National-Pre-tertiary-Education-Curriculum-Framework-final.pdf

Mohammadi, N. (2007). A hermeneutic phenomenological inquiry into the lived experience of Muslim patients in Australian hospitals. [Doctoral dissertation, University of Adelaide of South Australia]. https://digital.library.adelaide.edu.au/dspace/bitstream/2440/47562/8/02whole.pdf

Morse, J. M., & Field, P. A. (1995). *Qualitative research methods for health professionals* (2nd ed.). Sage.

Nivala, J. F. (1997). Saving the spirit of our places: A view on our built environment. *UCLA Journal of Environmental Law and Policy, 15*, 1–56.

OpenAI. (2023). ChatGPT [Large language model] (Mar 14 version). https://chat.openai.com/chat

Pasalar, C. (2001). The meaning and perception of school buildings. *EDRA 32-2001: Old World - New Ideas*, 97–103.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Sage.

Rafiei, S., & Gifford, R. (2023). The meaning of the built environment: A comprehensive model based on users traversing their university campus. *Journal of Environmental Psychology*, *87*, 101975. https://doi.org/10.1016/j.jenvp.2023.101975

Rapoport, A. (1990). *The meaning of the built environment: A non-verbal communication approach* (2nd ed.). University of Arizona Press.

Relph, E. (1976). *Place and placelessness*. Pion.

Relph, E. (1985). Geographical experiences and being-in-the-world: The phenomenological origins of geography. In D. Seamon & R. Mugerauer (Eds.), *Dwelling, place, and environment: Towards a phenomenology of person and world* (pp. 15–31). Martinu.

Sallis, J. F., & Glanz, K. (2006). The role of built environments in physical activity, eating, and obesity in childhood. *Future Child*, *16*(1), 89–108. https://doi.org/https://doi.org/10.1353/foc.2006.0009

Sarantakos, S. (2013). *Social research* (4th ed.). Red Globe Press.

Seamon, D., & Sowers, J. (2008). Place and placelessness, Edward Relph. In P. Hubbard, R. Kitchen, & G. Vallentine (Eds.), *Key texts in human geography* (pp. 43–51). Sage.

Sheets, M. G. (2011). The relationships between the conditions of school facilities and certain educational outcomes. *The ACEF Journal*, *1*(1), 51–65. https://texashistory.unt.edu/ark:/67531/metapth309022/

Skantze, A. (1996). Built environment and meaning: The architecture of a suburb from a user perspective. *IAPS 14 Conference Proceedings*, 277–282.

Tuan, Y.-F. (1977). *Space and place: The perspective of experience*. University of Minneapolis Press.

Ulrich, D., & Duffy, T. (2022, n.d.). The impact of the built school environment on student engagement and learning. https://essentials.edmarket.org/2022/04/the-impact-of-the-built-school-environment-on-student-engagement-and-learning/

UNESCO Institute for Statistics. (2023, n.d.). Basic education. In Glossary. UNESCO Institute for Statistics. https://uis.unesco.org/en/glossary-term/basic-education

van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. SUNY Press.

Vischer, J. C. (2008). Towards a user-centred theory of the built environment. *Building Research & Information*, *36*(3), 231–240. https://doi.org/10.1080/09613210801936472

Whitehead, L. (2004). Enhancing the quality of hermeneutic research: decision trail. *Journal of Advanced Nursing*, *45*(5), 512–518. https://doi.org/10.1046/j.1365-2648.2003.02934.x

Wingspread Declaration on School Connections. (2004). *Journal of School Health*, *74*(7), 233–234. https://doi.org/10.1111/j.1746-1561.2004.tb08279.x

Woolner, P., Hall, E., Wall, K., & Dennison, D. (2007). Getting together to improve the school environment: User consultation, participatory design and student voice. *Improving Schools*, *10*(3), 233–248. https://doi.org/10.1177/1365480207077846