



Choose Your Own Adventure: Promoting Social and Emotional Development Through Outdoor Learning

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Abstract

Primary school (i.e., Kindergarten to Grade 3) educators typically support students' social and emotional learning (SEL) through targeted lessons delivered in the classroom; however, integrating SEL strategies into other subject areas both within and outside the classroom context can expand their ability to support students' SEL. Research suggests that outdoor learning (OL) can help promote students' social and emotional development. Thus, this study explored qualitative data generated through focus group interviews with 36 Canadian primary school educators who implemented OL to understand their perspectives on the benefits of OL for primary school students, including whether SEL promotion was perceived as a key benefit. Most of the themes generated through thematic analysis pertained to students' social and emotional development and aligned with SEL competencies defined in a dominant SEL framework. One overarching theme suggested that educators perceived the emergent, unstructured nature of OL as driving the SEL-related benefits. Findings suggest that educators can leverage the OL context to help integrate SEL more deeply into their teaching practice.

Keywords Social and emotional learning · Outdoor learning · Primary level · Educator perspectives

Educational researchers and practitioners agree that learning experiences in school should address all aspects of children's healthy development—social, emotional, academic, and physical (e.g., Darling-Hammond et al., 2019; Immordino-Yang et al., 2018). Meeting the needs of the whole child has garnered significant attention (e.g., Lewallen et al., 2015; Noddings, 2005); however, the challenges educators face in achieving this end are also recognized (Ladson-Billings, 2011). Outdoor learning (OL) is a pedagogical approach that is being increasingly recognized as beneficial for children's developmental health and well-being (Becker et al., 2017; Gustafsson et al., 2012; Mann

et al., 2021, 2022; Mygind et al., 2019). Researchers are beginning to explore the benefits of OL for children's social and emotional development, and how it may be employed to support social and emotional learning (SEL; Lohr et al., 2020). However, more research is needed to determine to what extent OL can be a viable strategy to support school-based SEL with children in primary school settings.

Outdoor Learning: A Promising Context to Promote Children's Health and Well-Being

School-based OL is a teaching practice that is gaining worldwide attention (Waite, 2020). The research base supporting the potential for the pedagogy and practice of OL to improve developmental outcomes for children is growing steadily (Becker et al., 2017; Gustafsson et al., 2012; Mann et al., 2021, 2022; Mygind et al., 2019). From udeskoles in Denmark (Barfod et al., 2016) to Forest Schools in the United Kingdom (Austin et al., 2015), educators are embracing the outdoor classroom despite its continued marginalization from traditional, mainstream approaches to teaching and learning (Mann et al., 2021; Marchant et al., 2019). Indeed, research exploring the benefits of OL and

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its various pedagogical approaches are only now making visible what colonial educational practices have previously rendered invisible (Tuck & Yang, 2012).

Despite its absence from formalized provincial curricula, Canada is experiencing a practitioner-driven expansion of OL (Boileau & Dabaja, 2020; Oberle et al., 2021). This growing interest by Canadian educators may be related to the benefits they ascribe to OL. For example, Canadian Forest School educators reported benefits of OL for children such as improved self-confidence, social and physical skills, and creativity; and increased nature appreciation (Boileau & Dabaja, 2020). Furthermore, a recent systematic review of reported outcomes from 13 studies of school-based outdoor education programs revealed benefits across social, health, and learning domains (Becker et al., 2017). Outdoor learning has also garnered favourable attention during the COVID-19 pandemic as a strategy to increase physical distancing and reduce transmission of the SARS-COV-2 among school-aged children (Thampi et al., 2021), while supporting their mental and physical health (Burke et al., 2021).

Promoting the Process of Social and Emotional Learning Outdoors

Social and emotional learning (SEL) is integral to social, emotional, and academic thriving across the lifespan (Hawkins et al., 2005; Jones et al., 2015; Moffitt et al., 2011). Typically delivered through school-based programs by educators in the classroom, SEL is associated with numerous positive outcomes (Durlak et al., 2011). The past decade has been marked by a shift in SEL implementation from specific programs to strategies that can be integrated into educational practice throughout the school day (Dyson et al., 2021; Jones & Bouffard, 2012; Jones et al., 2017). Outdoor learning offers as a viable context within which SEL can be implemented and supported (Lohr et al., 2020). Especially given the potential for OL to yield benefits to children's social and emotional development (Becker et al., 2017; Mann et al., 2021, 2022; Miller et al., 2021; Mygind et al., 2019), this strategy presents as a promising avenue of research attention; however, little research has fully explored the potential of this pairing in the primary school context.

Miller and colleagues (2022) argued that primary schools are “an ideal setting to realise the potential of nature-based play and learning as a health promotion tool,” (p. 2) and called for more research to determine educators' perceptions of the benefits of OL for primary school children. In their cross-sectional survey of 50 South Australian educators, respondents reported many social and emotional benefits of

OL including mental health (98%), well-being (90%), social development (90%), and emotional development (88%) (Miller et al., 2022). Clearly, social and emotional development is emerging as a perceived benefit of OL (Becker et al., 2017; Burke et al., 2021; Kuo et al., 2019; Mann et al., 2021, 2022; Marchant et al., 2019; Miller et al., 2022; Mygind et al., 2019) but more research is needed to understand if and how primary school educators perceive OL as promoting students' healthy social and emotional development (Miller et al., 2022). Much of the research conducted thus far has explored the benefits of OL through the lens of science or environmental education (e.g., Detweiller et al., 2015), or physical education and fitness (Pagels et al., 2014). Moreover, research that has explored the social and emotional benefits of OL specifically is more often conducted in preschool contexts (e.g., McCree et al., 2018), within the European context (e.g., Jørring et al., 2020), or through research conducted with outdoor-focused independent schools (e.g., Kane & Kane 2011). Thus, the current study aimed to advance our understanding of educators' perceptions of the benefits of OL and its potential as a strategy to promote SEL in the primary school context by analyzing qualitative data generated through in-depth focus group discussions with primary school educators from public school districts of varying sizes in three Canadian provinces.

Method

Participants

Data analyzed in the present study were generated through focus group interviews with 36 primary school (i.e., Kindergarten to Grade 3) educators from 16 different school districts in the provinces of British Columbia ($n=32$), Alberta ($n=2$), and Ontario ($n=2$). The average age of participants was 43.48 ($SD=10$) with a range from 23 to 60. All participants identified as female and their reported ethnic backgrounds were European (92%), Asian (8%), Arab/West Asian (3%), and Hispanic (3%). The majority of participants were in full-time classroom teaching positions ($n=29$). Other participants were in part-time or job-share positions, administrative positions, or non-enrolling positions (e.g., resource teacher). Years of teaching experience ranged from 5 years ($n=4$) to 16 years ($n=13$), with the remainder ($n=11$) falling between 6 and 15 years of teaching experience. Regarding educators' experience with OL, eight educators reported participating in professional development for OL and 34 reported currently teaching some academic content outdoors. Only one participant had no experience implementing OL. Participants' educational backgrounds included a preservice teacher education program ($n=36$)

and some educators held a master's degree ($n=8$). All participants provided their consent to participate in the study.

Procedure

Recruitment procedures included postings in professional networks and social media platforms that invited educators to participate in focus groups about outdoor learning. Specifically, educators were invited to discuss their experiences with implementing outdoor learning, including their attitudes and perceptions of facilitating and supporting outdoor play in schools. To be included, educators needed to meet two inclusion criteria: currently teaching Kindergarten to Grade 3 in a public elementary school and available to participate in focus groups held via Zoom. Educators who met these criteria were then invited to provide their consent to participate in the research, complete a brief, online demographic survey, and select one of five prescheduled focus groups they were able to attend. Six to eight educators were then assigned to a focus group date based on their availability, a group size that is consistent with recommendations for virtual focus groups (Forrestal et al., 2015). Facilitated by the second author, a university researcher and experienced teacher and outdoor play facilitator, the focus groups took place in June and July 2020. Data saturation was reached after five focus groups discussions ($N=36$ educators). This is consistent with previous research suggesting that focus groups with a clear theme and participants who have met explicit inclusion criteria can reach data saturation in as few as five sessions (Namey et al., 2016).

A standardized research protocol was used to conduct the focus group discussions. The facilitator began each discussion with a summary of the study purpose. This was followed by a reminder that there were no right or wrong answers and no expectation that educators were advocates for OL. It was further emphasized that the researchers were interested in learning about all perspectives on the topic. Then, the facilitator asked identical semi-structured questions in the same order. The questions were posed verbally and displayed on the screen shared with participants (e.g., "What are your experiences supervising outdoor play and learning at school?" "What do you notice when children play and learn outdoors?"). The facilitator employed follow-up prompts and questions as appropriate and documented her observations after each discussion was completed. Remuneration for participation was 50 CAD. This research was approved by the Behavioural Ethical Research Board of The University of British Columbia.

Analytic Approach

This study was part of a larger study examining educators' perspectives on the benefits of OL in addition to approaches to OL, and barriers and supports to OL. The focus group discussions were digitally recorded, transcribed verbatim, and prepared for thematic analysis (Braun & Clarke, 2006). Analyses for this study focused on portions of the transcripts in which educators discussed their perspectives on the benefits of OL when prompted with the following questions: How do you define outdoor play? What do you notice when you observe children play outdoors? Do you think outdoor play is an important part of the school day? What value might exist in outdoor play for your students? What are your experiences supervising children's unstructured play outdoors? To begin, transcripts were entered into NVivo 12 software (QSR International Pty Ltd, Melbourne, Australia). Then, we undertook the six phases of thematic analysis: familiarization with the data, generating codes, constructing themes, revising themes, defining themes, and final reporting (Braun & Clarke, 2006). During the familiarization phase, we read the transcripts in their entirety and took note of sections of content in which educators related their perceived benefits of OL. Then, using an inductive approach, we developed codes for these data and, through discussion, reached consensus on a list of codes that reflected the perceived benefits of OL reported by educators. These codes were entered as free nodes and used to code the transcripts wherever reference to the benefits of OL occurred. Subsequent discussion and analysis resulted in the construction of hierarchical codes arising from the coded data. The hierarchical codes were interpreted further and developed into themes. Importantly, although an inductive approach was used, our backgrounds in educational and developmental psychology, and pedagogy and curriculum development, shaped the development of the codes and themes, and our interpretation of how they were related. Thus, we expected educator-participants to identify benefits of OL consistent with key aspects of thriving in childhood as defined in a developmental health perspective (i.e., social, emotional, physical, and cognitive benefits).

Results

Analyses revealed that educators perceived benefits of OL for students across all major domains of children's development: social, emotional, physical, and cognitive. Specifically, we constructed eight themes: (1) learning about one's self, (2) managing one's self, (3) learning about and caring for others, (4) getting along with others, (5) evaluating one's impact, (6) inquiring into interests, (7) being active,

Table 1 Themes and sub-themes summarizing educators' perceptions of the benefits of outdoor learning (OL)

Themes	Sub-Themes	Examples
Learning about one's self	Developing interests	Discovering different insects and beginning to explore and learn about them in a self-directed way
	Experiencing self-efficacy	Gaining confidence to take risks like running down a challenging hill
Managing one's self	Having a growth mindset	Persevering towards mastery of climbing a big rock
	Demonstrating personal and collective agency	Deciding who they collaborate with and how
	Managing stress and emotions	Coping with sadness of an igloo melting, and realizing they can rebuild it
Learning about and caring for others	Demonstrating motivation and self-discipline	Applying themselves to self-directed pursuits like building a fort
	Taking others' perspectives	Noticing when others do not want to climb as high as them
	Connecting to place	Bringing family to important places in nature they have come to know and care for
Getting along with others	Showing care and concern	Being gentle with living things such as insects or plants
	Developing positive relationships	Telling stories to each other and enjoying shared play and exploration
	Working collaboratively	Forming large groups to meet a goal like dragging large logs for use in a building project
Evaluating one's impact	Resolving conflicts constructively	Working out differences of opinion without adult intervention
	Considering consequences	Navigating risks like balancing on logs and determining what is safe for them
	Promoting environmental well-being	Sharing outdoor learning experiences and importance of environmental care with family
Inquiring into interests	Demonstrating curiosity	Noticing features of natural world, like the presence of slugs, asking questions, and exploring ideas
	Using imagination	Developing games to play and stories to act out with each other
	Thinking creatively	Pretending to be different characters or animals
Being active	Developing gross motor skills	Jumping, climbing, running, and balancing on logs
	Reducing sensory overload	Experiencing natural light, sounds, and other gentle sensory stimulation
	Using whole body	Using all the senses, limbs, muscle groups to navigate outdoor terrain
Experiencing emotional well-being	Experiencing positive emotions	Feeling joy and excitement while outside
	Elevating mood	Carrying positive energy and ability to focus back into the classroom

Note. The examples provided in this table are brief summaries derived from participants' descriptions of their observations of students in the OL context. Complete, direct quotes are incorporated into the expanded descriptions of the themes and sub-themes

and (8) experiencing emotional well-being. These major themes were developed from two or three sub-themes each based on their interconnections. Table 1 summarizes the major themes, their related sub-themes, and brief examples summarized from the focus group data. Direct quotes from participants are incorporated into the description of each theme to enhance the trustworthiness of our findings. All the quotes featured in this section include participants' identification number (PID), full- or part-time status (FT/PT), grade(s) taught, and the size of the district in which they taught (small/large).

Importantly, educators across all the focus groups often presented complex descriptions of the benefits of OL that included multiple themes interwoven into one story or reflection about their experience and perceptions. These rich,

multi-layered descriptions of the benefits of OL reflected not only multiple themes, but also captured educators' meaning-making regarding the underlying essence of student autonomy and agency they perceived as unique to the OL context. Educators described this opportunity for children to experience autonomy and agency as driving the social, emotional, cognitive, and physical benefits they identified. This perception was not captured in any of the eight themes, thus, we constructed the overarching theme. "Choose your own adventure." Inspired by the popular *Choose Your Own Adventure*® children's book series in which the reader is a protagonist in the story who makes choices that advance the storyline and conclude at one of several possible endings, this theme captured the importance educators placed on the autonomy and agency afforded by the OL context and how

they perceived it as facilitating children's healthy development across domains.

Developing Social and Emotional Skills

Educators spoke at length about how OL afforded students opportunities to practice and apply social and emotional skills. The development of social and emotional skills as a benefit of OL was evident in five of the eight major themes we found. As one educator summed it up: “[S]o much social, emotional development happens in that time [spent in nature],” (PID 35, FT, KG, large district). The results related to social and emotional development as a benefit of OL and sub-themes in each area are also described below.

Learning About One's Self: “It gives students the chance to be more authentic.”

Educators recognized several ways that OL experiences can help contribute to students' growing sense of self. There were three prominent sub-themes that demonstrated educators' perception that OL can contribute to the development of students' self-awareness: developing interests, experiencing self-efficacy, and having a growth mindset. The most prominent of the three sub-themes, opportunities for students to develop their own interest and purpose was consistently mentioned across the focus groups. For example, one educator commented:

I noticed they're often drawn to things maybe I wouldn't have guessed to play with, or have thought they would have been interested in. And they find the most random things to play with, or bring or collect or show me...things that I maybe would not have thought would be interesting for them to look at for 45 minutes. (PID 23, PT, KG, large district)

Educators described this opportunity for students to pursue what interests them as an avenue for students to discover their passions: “[T]hey might discover a passion they never knew they had...Anything that is inspired when they're out there, they might just discover a new passion for something and that could lead who knows where down the road,” (PID 11, FT, Grade 2, large district). Educators related this experience of freedom and autonomy in the OL context to students' experience of self-efficacy:

The kids feel freedoms that they may not have in their daily lives...They have autonomy...they can...be autonomous in what they're doing, and that reinforces that freedom feeling. They can have personal

successes that are defined by themselves, by them alone. (PID 8, FT, Grade 3, small district)

Educators also related these mastery experiences to students' expression of a growth mindset:

[T]hey were trying something new. All the time...I saw huge leaps into what my students were able to do. From something as simple as like running down a hill. You know, at the beginning so many of them were saying, ‘I can't’ or ‘I'm scared.’ [W]hat I was really working on is changing that mindset and being able to allow them to try something new and get out of being scared with themselves and outside. So what I observe a lot is kids becoming more comfortable, more confident and trying new things. (PID 35, FT, KG, large district)

Managing One's Self: “Kids are more regulated.”

Educators perceived OL as a context in which students could learn not only about themselves, their individual interests and abilities, but also a context in which they can learn to manage themselves, especially in pursuit of their own goals. Three prominent sub-themes generated from the data showed how educators perceived experiences in the OL context as supporting students' development of self-management: demonstrating personal and collective agency, managing stress and emotions, and demonstrating motivation and self-discipline. Regarding personal and collective agency, educators noted the opportunities for risky play available in the context of OL as ripe for agentic action. For example, one educator commented:

[S]etting their own agenda.....working on that critical thinking and...figuring out, you know, what types of risks they're willing to take instead of that being imposed on them, and told, no, you can't do that, or whatever. And it's like, well, why, why can't I try? (PID 35, FT, KG and Grade 1, large district)

Furthermore, educators noted that students needed to deal with the adversity that comes with risky play, and cope with the attendant stress: “[W]hen they get hurt, their resiliency...do they fall apart if do they go, oh, I'm okay. You know, I'll get a band-aid when I get to the classroom...and how they can self-regulate in an unstructured situation,” (PID 36, FT, KG, large district). These risky situations were perceived as opportunities for students to demonstrate self-discipline and make safe choices while still exploring their boundaries. As one educator stated:

So I put the onus, the responsibility on them to make sure that they can see an adult...I really encourage risk-taking when the kids are outside, but we have a lot of talks in the classroom before we go, about ...they are responsible for making the choices themselves, and that they decide what's risky enough for them... So they're really responsible for their risk-taking and then they're responsible for making sure they can see us. (PID 11, FT, Grade 2, large district).

Opportunities to practice self-discipline and emotion management were also evident in educators' descriptions of students learning to interact with nature respectfully. As one educator remarked,

I think kind of underlying the whole idea and it connects with that respect of nature, is just because you're in an outdoor environment, it's just establishing that baseline of the interaction and respect of natural things. So, like we don't pick things, we don't pull branches off the trees...You don't need to run away screaming when you see a bee. (PID 29, FT, multiple, large district)

Learning About and Caring for Others: "When we're outside, they really take care of one another."

Educators perceived the potential for OL to foster children's social and emotional development extending beyond the self. They noted several ways students can develop skills that help them learn about others' perspectives and foster caring connections. Three sub-themes generated from the focus group data included taking others' perspectives, connecting to place, and showing care and concern. One educator's comment provides evidence for all three sub-themes:

I think outdoor play fosters so many skills that we want kids to develop and bring with them as they grow up. Like, problem-solving and making compromises, putting their ideas into practice and respecting nature and the world around them, and taking into account different perspectives, and taking care of their peers. (PID 32, FT, Grade 1, large district)

Although many educators spoke about students demonstrating care and concern for each other (e.g., "And what we find when we're outside is that they really care for one another. So they've got each other's backs, they help each other,... they really protect each other," PID 33, FT, KG, large district) much of the care and concern educators spoke of was

directed towards the environment itself, and this grew out of opportunities to connect with place:

I find that if they're going to the same place over and over, I also see that they start to take more care and interest in their environment. So, they're a lot more careful when they're around plants or insects or nature, that they're taking much more interest in the stewardship of it, too. (PID 26, FT, Grade 1 and 2, large district)

Importantly, educators noted that this connection to place and developing care and concern for the environment also helped students understand that they are a part of that environment. For example, one educator commented:

It allows them to understand that they're part of the environment...that they are part of this whole system, and that nature is...not just another place to go. So they feel connected and then that can influence their choices and their perspective on the environment, on...the choices they make right now and what they'll make as an adult. (PID 13, FT, Grade 1 and 2, large district)

Getting Along with Others: "The friendships expand a little bit more."

Educators offered numerous examples of how the OL context affords students with the opportunity to practice skills related to getting along with others such as successful communication, collaboration, and conflict resolution with peers. Three sub-themes generated from the data comprised the majority of educators' discussion regarding the development of skills that help them get along with others: developing positive relationships, working collaboratively, and resolving conflicts constructively. Across the focus groups, educators consistently described ways in which OL provides a rich context for students to develop positive relationships with their peers. In fact, educators reflected that in this context students were more likely to extend their friendship networks beyond their typical groupings. For example, one educator commented: "It's also often in a natural space I see different mixing of kids that don't normally play together at school, but one they're in that forest space, they seem to mix differently," (PID 11, FT, Grade 2, large district). Another educator offered a similar reflection:

[T]hey often will play with more kids than they would otherwise maybe choose to play with. Because it's not, I'm going to the car centre, and I'm going to play with

cars, and this is how you play with cars. And so I feel like the friendships maybe expand a little bit more. (PID 23, PT, KG, large district)

In this context of expanded peer networks, educators also described frequent opportunities to work collaboratively and solve problems. For example, one educator recalled how students gathered to work together on a project:

I think also the inclusiveness, but the collaboration that naturally comes because they want to start building a fort and then they need more people to do it, and so that excitement and joy as they're dragging the logs across the lift up to build their fort or to join them on this base that they're creating,...or ...so I just find it's...very, very collaborative. (PID 26, FT, Grade 1 and 2, large district)

Opportunities to collaborate were echoed by other educators as well, and how in the context of collaboration students organically formed hierarchies in which leaders emerged: “[W]hen they’ve got a project they’ve got a hierarchy kind of, of who, you know, who’s got the idea, who’s contributing,...they all have little roles and I let them run with that, and just monitor and listen,” (PID 18, FT, KG, large district). Educators discussed how in this context of collaboration conflict did arise, but students were able to resolve conflicts independently and constructively. For example, one educator described how in the OL context, her role was to step aside and give students the opportunity to practice solving conflict on their own:

[T]he role of the educator...is just to help navigate any conflict, but allow them to work through their conflict. So instead of help...if they do have a conflict, it's listening and asking them open-ended questions on how they would navigate through...I've just seen that they're...when they're unstructured outdoor play the conflicts are actually resolved quite quickly, because they have the freedom...they're not constricted to our rules and regulations and expectations. (PID 17, FT, Grade.1 and 2, large district)

Similar to other areas of social and emotional skill development, the autonomy and agency afforded by the OL context surfaced as a catalyst for practicing skills that help students build their overall relational competence.

Evaluating One's Impact: “Kids manage their own risk and take responsibility.”

Educators also identified the OL context as affording opportunities for students to practice considering the consequences of their actions, making responsible choices, and evaluating one's overall impact on the environment. There were two prominent sub-themes generated from the focus group data that related to this theme: considering consequences and promoting environmental well-being. Across the focus groups, educators recounted ways in which the OL context can help students develop an awareness of the consequences of their actions, and how this can help them learn to make reasoned, responsible decisions that promote their own and others' safety and well-being. One educator summarized this relationship:

[T]hat awareness is also just the awareness of their relationship with the environment around them, you know, so, like everybody's outdoor space I think looks different, like some of us have not really a lot of green space or woodsy areas and stuff but just making them aware of, like what's around them and how they can be respectful of the outdoors, as well. ‘Cause I don't want to be telling them, like, no you can't do that, but making them aware of their own responsibility when they're outside so that they can hopefully transfer that when they're outside with their families as well. Like, not just ripping off branches...how to safely, like break branches...not waving things, like, in the air, you know...a lot of my role sometimes is just making them aware, not telling them exactly, like, that's not safe, but making them aware and realize, like, what are safe ways to use the outdoors and to be respectful of others around them. (PID 20, FT, Grade 2 and 3, large district)

Educators also reflected on the how the OL context provided students with opportunities to support the well-being of living things in the environment. For example, one educator related the story of a student's caring behaviour towards a spider:

I had a student and she brought me a spider. A really, really large spider. I'm not the largest fan of spider. But I tried to like, you know, temper my reaction to the fact that she's super excited that she found this little creature and she's not scared of it. So, like, the value of them, like not only appreciating and caring for it but like, they get to see these little ants and they want to keep them and they're friends...I'm like, oh, you're developing like a softness and gentleness towards

things that are smaller than you or that you could easily step on or crush. (PID 23, PT, KG, large district)

Clearly educators perceived students having the opportunity to consider their impact on the environment, and the outcomes of their choices in the OL setting, as a great benefit to students' overall social and emotional development.

Developing the Whole Child

Although educators' discussion largely centered on the benefit of OL for students' social and emotional development, additional themes were reflected in the data that captured other aspects of children's development and well-being. Specifically, three major themes indicated that educators perceived OL as a context in which students' cognitive, physical, and emotional health and well-being are fostered.

Inquiring into Interests: "Outside they were much more focused."

Across all focus groups, educators consistently highlighted ways in which the OL context provided opportunities for students to practice skills related to learning and cognitive development. The most prominent sub-themes generated from educators' rich descriptions included demonstrating curiosity, using imagination, and thinking creatively. Educators also related these sub-themes to evidence of increased engagement in and motivation for learning in the OL context, and connected this to the emergent and student-led nature of learning in an outdoor setting. For example, one educator noted, "It's just letting them go and be free and use their imagination and, you know, play with who they want to play with, and tell stories and just share in experiences, you know, completely student-led," (PID 24, FT, KG, small district). In the OL context, educators remarked how students can lead their own learning and use their imaginations to determine their play:

I noticed that it stretches, they stretch their creativity and imagination. Like, in the classroom a lot of the material that they play with sort of has a purpose and often is used for what it is. Whereas outside a stick can be so many different things and becomes so many different things. (PID 22, FT, KG and Grade 1, small district)

Indeed, educators noted how this freedom sparked students' curiosity and encouraged agency in learning:

I think it's that sense of curiosity...and the questioning. So they're not just looking for the answer but they're asking the questions, like, why is this happening, how the exploring and observing are naturally happening. And it keeps them quite curious rather than just, you know, waiting for all the answers to just be given to them. (PID 26, FT, Grade 1 and 2, large district)

Evidently, educators perceived students' autonomous engagement with the environment as helping to spark their interest and pique their curiosity in ways that allowed them to sustain their focus on a learning experience.

Being Active: "We probably don't even realize how much more movement they're doing outside!"

With its features of open spaces, fresh air, and varied terrain, it followed that the theme of OL promoting students' physical health and well-being through various forms of physical activity was generated from the focus group data. Educators connected students' experience in the OL context to the development of gross motor skills such as climbing, balancing, and running, and to sensory development such as tactile and auditory senses. In addition, educators noted how being in the OL context helped reduced sensory overload allowing students' bodies to relax. For example, one educator commented, "What I noticed when I observe children playing outside, or outdoors, is that there is relaxation. Their body is physically relaxing," (PID 8, FT, Grade 3, small district). As well, educators noted the benefits of the whole-body nature of the OL experience:

I also see how rich the outdoor learning experience is, and how that can drive so much of what students are doing...it's just so much more powerful and stays with them so much more because it's a full-body experience when they're outside...I notice they're a lot calmer when they come back, like they're a lot more able to focus. So, I think it has those benefits of providing input, and stimulus for all of your other learning, and the benefit of calming them so that they are able to focus when they go back in the class. (PID 21, FT, multiple, large district)

Experiencing Emotional Well-Being: "Everything is more positive when we're outside."

Alongside physical and cognitive development, educators also highlighted ways in which OL experiences fostered students' emotional well-being. Specifically, educators across focus groups described how in the context of OL, students

experienced a range of positive emotions, from feeling calm and relaxed to excited and joyful. It was clear that educators perceived OL as inspiring joy and wonder in their students, and contributing to their overall emotional well-being and resilience. For example, one educator described a shift she saw in students after some weeks of consistent exposure to OL:

I think you see kids that aren't familiar with being outside...And they are the ones that complain the most about going outside and they don't...they feel lost outside, and I find that doing that weekly and going to the same familiar forest or whatever, they become more relaxed and more confident, and they actually start to enjoy where we are what we are doing. (PID 27, FT, KG, large district)

Another educator offered a similar reflection noting how students' moods changed when they went outside:

I've noticed that the children are generally more relaxed when we're outside. No matter what kind of day we might be having in the classroom, once we go outside, it seems like, it's just a breath of fresh air and the children are just much more happy and engaged and curious. We always are inspired by something that they've found or discovered outside, and so it's just been that source of wonder and excitement. (PID 25, FT, Grade 1, large district)

Educators attributed this experience of engagement, joy, and excitement to the unstructured nature of OL:

[O]ur relationship improves with the students when we're outside. Because instead of telling them to stop yelling or whatever, you can talk to them about other things. I feel like everything is just more positive when we're outside. There's a lot less interaction for negative things and negative behaviours, because so much more is permitted, and they can be themselves a little bit more, without the confinements of the classroom. (PID 6, FT, Grade 3, large district)

An important avenue to emotional well-being was how being outdoors transformed relationships between educators and students. Educators across focus groups felt it was easier to develop positive relationships with students within the context of freedoms afforded by the OL experience.

Interconnecting Themes

Across all five focus groups, educators consistently described ways in which the OL context affords students the opportunity to practice and apply skills related to their social and emotional development. Further, educators described how OL also provides a context in which students can develop in other important areas including cognitive and physical health, and emotional well-being. Although the eight themes constructed from the data were treated separately in the results described above, an important finding from this research was how these themes presented in interconnected, complex ways in many educators' accounts. For example, all five themes related to social and emotional development are evident in the following excerpt in which an educator describes how she prepares students to negotiate learning outside.

So, like, with my kids we just talked about hazards versus risks. And, like, as a teacher, I feel like I'm out there looking for hazards, like, giant metal rods sticking out the ground or things that are like actual hazards, as opposed to like, the risk of climbing up the slide, or maybe you're, like, climbing up a fence. That's more of a risk that kids can then judge. Or then, like training them on, like with the conflict, how our body language, when we're playing, our hands are open and we're smiling and we have a happy tone of voice, and when kids start getting angry our fists are clenching and our body language sort of changes and showing kinder kids what that is, so that they can when they're playing a game with someone they can be like, oh, you're not having any fun anymore, are you? You don't look like you're having fun and... being able to work through that I think is really important. Yeah, I think we play a big role before even sending them out, on what we need to do to make sure it's safe and fun for everyone. (PID 29, FT, KG, small district)

In another example, an educator's description of OL shows evidence of three themes—cognitive development, physical health and well-being, and emotional well-being—and extends into social and emotional development more broadly:

For me, I think of it, it's not necessarily how I define it, but I think of it as just time spent in nature, where kids are able to use their curiosity and just go what feels innate with them. And so much social, emotional, development happens in that time, so that's kind of how, when I hear 'unstructured outdoor play,' that's what I think of happening. I also think of being

physically active. We probably don't even realize how much movement they're doing, going from up and down and... moving their bodies. So I think the physical literacy is also a huge component that goes hand-in-hand without even probably realizing it. (PID 35, FT, KG, large district)

In another example that evidences nearly every theme generated from the data, an educator recounts her experience of OL with her students:

There's moments of such joy when you're so excited to see them conquer something new or be brave, or... just interact with a new student, or have, like, a really imaginative moment, or really gentle moment. Or really... sometimes their comments are just so beyond their years. And then there's also moments of, like, questioning things and going, like, is this okay? Should we be doing this? Or talking to a person beside you, like, how do you feel about this? Are we comfortable with this? Or, are you good with that? Kind of holding your breath for a few things, and pushing yourself out of your comfort zone too and trusting the kids. (PID 5, FT, KG, small district)

That educators often described the benefits of OL in ways that joined together three or more themes reflects the connections between and among all domains of child development. Indeed, children do not experience development in any one domain siloed from the others, so it was not surprising that educators' descriptions also did not treat these domains as entirely separate or distinct from the others. Moreover, this finding reflects the complexity of educators' experiences observing children in the OL context and describing the developmental benefits they perceived.

Overarching Theme: "Choose your own adventure"

A common thread found across educators' comments regardless the theme(s) being discussed was their perception that the unstructured, emergent, student-led nature of the OL context was driving the developmental benefits. That educators called attention to this unique feature of the OL context and highlighted its importance in relation to the benefits of OL is not reflected in the other themes we constructed from the data; thus, we captured this in a separate, overarching theme: "Choose your own adventure." This theme reflects not only the autonomy and agency afforded by the OL context (i.e., that students have a choice), but also the cognitive, behavioural, emotional, and physical engagement students

demonstrate when learning and playing in ways that capture and sustain their motivation to persist. For example:

And I believe outdoor play, true outdoor play, unstructured, is completely child-led. I... when I take my kids out to play, I don't have an agenda for them whatsoever, I don't have a lesson I'm trying to teach them, I just take them out and give them time and space to play on their own, develop their own games, their own rules for those games... without interference. And I will even only interfere, obviously, if I need to. If there's a significant conflict but I really encourage them to decide their play completely on their own. And of course, being outdoor play, it all happens outside, be it... whether it's on the school grounds or in our forest behind our school. There is no lesson, there is no end result that I'm aiming to get for the kids. It's about them learning on their own and through play. (PID 11, FT, Grade 2, large district)

Discussion

Our study explored ways primary school educators perceive OL as beneficial for students' development. Educators are key players in the promotion of new practices like OL, thus understanding their perceptions is vital to furthering the adoption of OL in the primary school context (Miller et al., 2022). Further, using an inductive approach ensured educators' opinions and insights regarding the benefits of OL in general, and for students' social and emotional development specifically, arose naturally and without direction from researchers. Through our analysis of qualitative data generated via focus groups discussions with primary school educators, we constructed eight major themes that reflect perceived developmental benefits across all domains of health and well-being (i.e., social, emotional, cognitive, and physical). These findings mirror the complexity of OL and the many intersecting elements of child development that can occur in this context. Six of the eight themes concerned students' social and emotional development, and well-being: learning about one's self, managing one's self, learning about and caring for others, getting along with others, evaluating one's impact, and experiencing emotional well-being. This suggests that educators participating in this study perceive outdoor learning as a viable context to promote SEL for primary students. Moreover, given the overarching theme *Choose your own adventure*, OL provides an emergent opportunity for primary school educators to integrate SEL into students' learning more holistically, and to ensure culturally relevant and responsive SEL experiences

for students. Our findings add to the limited research indicating that educators perceive OL as beneficial to students' social and emotional development and suggesting that OL can be a vehicle for SEL. Based on these findings, we recommend avenues for further research and professional development to optimize educators' ability to employ OL as a strategy to promote SEL.

Taking Social and Emotional Learning Outside

The majority of themes generated from the data align with capacities and abilities related to all five areas of social and emotional competence outlined in the Collaborative for Academic and Social and Emotional Learning (CASEL) 5 SEL framework (CASEL, 2019; 2020): self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. To promote the development of the knowledge, skills, and attitudes that can help students become competent in these five domains, school-based SEL typically entails the implementation of programs that include sequenced lessons organized around a defined scope of research- or evidence-based content and pedagogies (CASEL, 2017; Durlak et al., 2011; Jones & Kahn, 2017; Zins et al., 2007). This uniformity helps ensure that programs are delivered as intended by the developers, an important feature of implementation fidelity that can help ensure programs realize the intended positive outcomes for most students (Durlak & DuPre, 2008; Weare & Nind, 2011). However, SEL programs can be lengthy and challenging to implement with fidelity (Molyneux, 2021). Also, inconsistency in SEL program outcomes (Evans et al., 2015; Jones et al., 2019; McCormick et al., 2015; Rowe & Trickett, 2018; Shriver & Weissberg, 2020; Weare & Nind, 2011) and recognition of the burden imposed on teachers when asked to implement yet another program have prompted efforts to break SEL out of the program box (Jones & Bouffard, 2012; Jones et al., 2017). Moreover, educators play a pivotal role in effective SEL implementation (Beets et al., 2008; Low et al., 2016), so researchers and program developers are endeavouring to identify key strategies and practices that support SEL and can be delivered easily and in any context (Jones et al., 2017). Given the recognized benefits of OL for students' social and emotional development (Becker et al., 2017; Burke et al., 2021; Kuo et al., 2019; Lohr et al., 2020; Mann et al., 2021, 2022; Marchant et al., 2019; Mygind et al., 2019) including those discussed by educators in this study, OL presents as a promising strategy for SEL promotion that will allow for more flexible delivery.

With its open spaces and unstructured, student-led opportunities for learning and play, the OL setting also offers a

uniquely rich environment to promote students' SEL in ways not possible within the four walls of the classroom. For example, the emergent nature of the OL context holds promise for supporting more culturally relevant and sustaining SEL experiences for children. Recently, SEL has been receiving critical attention due to a perceived lack of cultural relevance (e.g., DeMartino et al., 2022; Mahfouz & Anthony-Stevens, 2020; Strong & McCain, 2020). Implementing SEL outside in the context of OL can allow students to practice and apply the SEL skills they need in the moment. Moreover, given the agency and autonomy afforded by the OL context, this setting can permit students to choose if and how they practice and apply SEL skills, thus potentially fostering a more culturally relevant and sustaining experience than may be available from prescriptive, sequenced, school-based SEL programs.

Social and emotional learning (SEL) is also receiving critical attention for its limited focus on opportunities to develop identity (Jagers, 2016; Simmons, 2021). Brush and colleagues (2022) created and applied a coding framework to explore similarities and differences in how SEL is conceptualized, measured, and translated into programs. Their coding framework included six domains: cognitive, emotion, social, values, perspectives, and identity. After coding 40 SEL frameworks, 34 measures, and 25 programs, they found that identity was among the least addressed domains. Supporting identity development is a key feature of culturally relevant and sustaining pedagogies (Ladson-Billings, 2021), thus that SEL frameworks, measures, and programs are lacking in this area may be contributing to SEL's perceived lack of cultural relevance. Our findings suggest that educators perceive the OL context as rich with opportunities for students to explore their identities including self-knowledge, self-efficacy, and growth mindset. This highlights another way in which OL is a promising strategy to promote SEL.

Implications and Recommendations for Practice

Finding evidence of the development of social and emotional competencies as a perceived benefit of OL suggests that educators perceive OL experiences as also promoting SEL. Understanding educators' perceptions regarding the relation between OL and SEL can inform how SEL is and can be integrated into existing pedagogies, thus supporting further integration of SEL into educators' existing practice. Given the growth in provincial- and state-level mandates to address students' SEL as part of the school curriculum (Dusenbury et al., 2020; Hymel et al., 2017), the integration

of SEL in the OL context can help educators meet this requirement.

Primary school educators' perception of OL as beneficial to students' social and emotional development is only one component of educators' capacity to address students' SEL in the context of OL. Supporting educators' ability to integrate SEL into OL effectively and without detracting from the emergent nature of OL will require professional development. Indeed, effective SEL implementation hinges on educators' ability to deliver it effectively, and this requires developing educators' knowledge about SEL, and their own SEL skills (Schonert-Reichl, 2017). Relatedly, educators' ability to take learning outside in the OL context effectively requires professional development and support (Oberle et al., 2021; Povilaitis et al., 2019). Educators who are both knowledgeable and skilled in SEL, and cognizant about how to support student-led learning and development in the OL context, will be better positioned to promote SEL through OL. Thus, realizing the potential for SEL integration into OL experiences to promote students' social and emotional development will require professional development opportunities that support and address both.

Advocating for the integration of SEL into OL can help remove barriers to OL that currently stall its recognition as a valid and viable approach to teaching and learning in schools. Outdoor learning is not part of the mandated curriculum, and yet its benefits are widely recognized by educators (Becker et al., 2017). Conversely, SEL is required programming in many states and provinces; therefore, demonstrating how SEL can be accomplished through OL can help spur the growth and acceptance of OL in schools as well. Indeed, it can help address multiple barriers to OL such as principal and school district support, and educational culture (Oberle et al., 2021). In sum, pairing OL and SEL can help advance the adoption and implementation of both, and strengthen the potential benefits to students' social, emotional, and academic development.

Limitations and Future Research Directions

The findings from this study add to the literature suggesting OL can be beneficial for young children's healthy development and well-being. Unique to this study is the finding that primary school educators perceive OL as especially supporting students' social and emotional development, and that these perceived benefits map onto a prominent framework for SEL. However, these contributions to the literature come with several limitations. First, the data capture educators' perspectives of students' experiences based on recollections of their observations. Therefore, the data reflect neither children's perspectives and experiences, nor first-hand

observations of students' behaviours. Our understanding of how OL supports the process of SEL can be enhanced by involving students in the research. Further, educator data can also be triangulated via observational data collection methods.

The homogeneity of this study's sample population is another limitation. Participants were female educators in Canada, most of whom were of European descent and some of whom were not in full-time classroom teaching positions, thus the findings are not generalizable to a broader, more diverse sample of educators. Moreover, the findings may reflect western, settler-colonial perspectives such as a romanticized view of nature as a place where children can be free and wild (Hull, 2000; Taylor, 2017). It will be important for future research to include participants with diverse onto-epistemologies concerning nature and humans' place in nature.

Similar to the emergent quality of learning in the OL context, educators' perceptions of SEL occurring in this setting were tied to unplanned, spontaneous events. While certainly a strength of this context, future research can explore if and how more intentional integration of SEL in OL is related to greater benefit to students' social and emotional development. Further research can explore how professional development opportunities in SEL knowledge and instruction can help prepare educators to engage in these behaviours to foster SEL in the OL context. Relatedly, exploring the relation between educators' experience and training in OL and their perceptions of its benefits was beyond the scope of this study. There is some evidence to suggest that educators' background in OL (i.e., experience and professional development) is related to both their perceptions of its benefits and their implementation of OL (Dring et al., 2020); thus, this is an area that warrants further research attention.

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