

Teachers' perspectives towards outdoor learning with local Year 3 students

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A dissertation presented in the Faculty of Education
for the degree of Master in Teaching and Learning
Early Childhood and Primary Education

University of Malta

May 2023



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ABSTRACT

This research study aims to evaluate the perspectives of Year 3 teachers in Maltese primary schools on the use of outdoor learning. The study investigates the effects of this practice on students and the challenges teachers face when implementing it. Furthermore, the study examines whether Year 3 educators make use of their schools' outdoor spaces. Hence, this study investigates the knowledge, perspectives, and behaviour of Year 3 educators towards outdoor learning practice. A mixed-method approach was used, with both quantitative and qualitative data collection tools. The researcher collected 127 questionnaires for quantitative data analysis using SPSS statistical tests. Based on the results, interview questions were formulated to interview six participants, two from each school sector. Thematic analysis was used on the interview transcripts to identify themes. Triangulation of the findings allowed the researcher to present more thorough results. Findings showed that the majority of Year 3 teachers show positive attitudes and have good knowledge of outdoor learning and are aware of the benefits that this practice brings to the students. However, various challenges limit this practice. The author responded to these findings by offering a number of suggestions that may be implemented in order to improve the implementation of outdoor education in the Maltese primary school setting.

Outdoor learning

Experiential learning

Hands-on

Environment

Primary teachers

Malta

Authenticity and research ethics form



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Dedication

To my parents who have always supported me throughout my academic journey.

Acknowledgements

I would like to show my gratitude towards a number of people that helped me through writing this dissertation:

- My tutor, Prof Mark C. Mifsud, B.Ed.(Hons), M.Sc., Ph.D. (Bath), M.I.E.E.M., M.I.Env.Sc., M.I.Biol., C.Biol., C.Env., C.Sci., A.R.P.S., A.M.P.S., for providing invaluable guidance and assistance throughout this research study. He was always ready to help me with any challenges that I faced throughout this experience by sharing his expertise and experience.
- The teachers who participated in this study, which also inspired me and contributed to my growth as an educator with their experiences on outdoor learning practices.
- My family, parents Silvio and Doreen and brother Luke, for their unwavering support and encouragement throughout my educational process.
- My boyfriend Russell, for being patient and supportive throughout this journey.
- My cousin Annalise and aunt Sarah, for always being available to assist me with this dissertation.
- Finally, I thank God for His guidance and strength to finish this dissertation.

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Preface

During my primary school years, I remember how excited we used to be whenever our Year 3 teacher announced that we would be having our lesson in the school's outdoor areas. We would be eager to learn what activities we will be doing outside and hence, it increased our interest and engagement in the lessons our teacher delivered. However, not all my primary teachers used the outdoor spaces as a teaching resource during my primary years. Therefore, this led me to realize that teachers showed different attitudes towards this practice. Consequently, through this study, I wanted to learn more about local Year 3 teachers' perspectives on this practice and whether this practice's implementation has increased in the local primary schools. Additionally, I aimed to study what teachers believe are the effects of outdoor education and the challenges they meet when delivering an outdoor lesson.

This study enabled me to merge my positive attitudes towards outdoor learning and teaching. I firmly believe that teachers have the ability to influence the students' learning and development significantly. Therefore, it is the teachers' responsibility to deliver educational and engaging learning experiences which allow the students to grow holistically.

1 Introduction

1.1 The author

Since childhood, this author has always had an interest in outdoor areas and believes that they can be very beneficial for those who spend time in them. The church school that the writer attended during her primary years offered a number of outdoor areas that were available for the educators and students to use. These areas included a garden and two large yards which the author loved to spend time in. Additionally, they were equipped with resources such as benches, trees, and plants that made them more appealing to the students.

Moreover, education is another interest of this author. In fact, an experience from the researcher's early years at school stands out as the inspiration behind the interest in outdoor education. When the author was in Year 3, the class teacher planned a science lesson in the school's garden in which the students had to document the different types of plants present in this area. This specific lesson, along with other outdoor lessons that the class teacher used to plan, enhanced the author's love and curiosity towards nature and outdoor learning.

Through the author's degree in Early Childhood Education and Care, various opportunities where young learners were able to explore their school's outdoor areas were witnessed. It was observed that these outdoor experiences were both exciting and educational for the children. This observation led the author to study whether primary teachers view this practice as essential in primary years as well. Hence, while reading for the Masters degree in Early Childhood and Primary Education, this author was able to combine this area with the primary years and therefore, had the opportunity to study the Year 3 teachers' perspectives towards the practice of outdoor learning. Moreover, through this study, this author attempted to study how the schools' outdoor areas are being incorporated into lessons on various subjects addressed to primary students, more specifically to local Year 3 primary students.

Through this study, the researcher had the opportunity to appreciate the value of outdoor education and hence, was given more insight into how to plan and deliver more fulfilling educational opportunities through the schools' outdoor areas. Through this research, the author aspires to contribute to broader studies about the promotion of outdoor education in the primary years by offering insightful information about the benefits and challenges of

including outdoor learning in the curriculum. The goal is to enhance both academic performance and the holistic well-being of the learners.

1.2 Outdoor education

Green and Rayner (2022) state that the term ‘outdoor education’ refers to the outdoor experiences presented to the learners that take place outside of a traditional classroom. These places could include school grounds, in nature, for example in the school’s gardens, or at other locations situated in the school’s outdoor spaces. This practice provides an opportunity for experiential education, where it gives the opportunity to students to learn by doing and hence, link their learning with real-world experiences. Moreover, this practice involves hands-on learning activities which allow students to increase their engagement with the topics being discussed (Dewey, 1916/1944 as cited by James & Williams, 2017).

Studies on outdoor education have shown that various advantages can emerge from this practice and can affect the pupils' holistic education. Green and Rayner (2022, p.238), state that “the pedagogical benefits of using school ground environments for outdoor teaching and learning purposes are far-reaching, and include improved academic, social, health and ecological outcomes in formal early childhood, primary and secondary education” (as cited in Beames, Higgins, and Nicol, 2012; Dymont, Bell, and Green, 2017; Dymont and Green, 2018; Mannion and Lynch, 2016). This author believes that when students get to experience these areas in a guided practice linked with the curriculum, the learners receive more meaningful learning and hence, their learning and development increase. Moreover, outdoor learning provides an excellent opportunity for learners to develop sustainable practices (Hill, 2013).

Even though teachers are aware that this practice is beneficial for learners, studies have shown that many teachers still opt to teach indoors or use these areas on an irregular basis and hence, limit the amount of outdoor learning for their students (Beames, Higgins, and Nicol, 2012; Comber, 2016, as cited in Green and Rayner, 2022). Studies found that this is also present in Maltese primary schools, where as Spiteri (2016) mentioned, outdoor education in Malta is not commonly used by educators. This is due to various reasons and challenges that educators might face when the students’ learning environment is changed. Through their study, Rickinson et al. (2004, as cited in Dymont, 2005) identified five limitations that were

limiting educators in making use of outdoor education. These include concern regarding the health and safety of students; the learning expertise and confidence of teachers when teaching in the outdoors; school curriculum, time, resources, and assistance constraints; and development and changes within education and routine.

1.3 Purpose of this study

“The best learning environment for the child is one where they are provided with the opportunity to develop holistically, and that equal attention to the physical/motor skill, social and cognitive development of the child is an imperative” (Malone & Tranter, 2003, p.298). Educators have to keep in mind that in order to keep their pupils engaged and excited during lessons, they should be creative and provide various activities that cater for every student’s needs and interests. In addition, the students’ learning environment plays an important role in the level of students’ engagement. It can become very monotonous for students when practising the same classroom routine every day. This author believes that when students change their learning environment and experience a difference during lessons, an increase in their enthusiasm for learning would be present.

Currently, little is researched about the topic of outdoor education in the local context. The purpose of this study is to investigate how the local primary educators teaching the Year 3 classes view the benefits and challenges of this practice. Also, this study aims to identify to what extent these primary educators value such practice. This leads the researcher to analyse the teachers’ perspectives, knowledge, and behaviour towards outdoor learning. Moreover, results between the three school sectors: state, church, and independent, will be compared.

Hence, throughout this study, this researcher aims to investigate the following research questions:

1. What do local Year 3 primary teachers value in outdoor learning?
2. What are the effects of this type of learning on the children?
3. What are the challenges that Year 3 teachers encounter when implementing outdoor education?

Moreover, this study intends to shed light on the following:

- This data will provide more insights into the effectiveness of outdoor education across the different local educational systems. Hence, this data would be useful to inform local school policies and influence school curricula.
- By comparing the information among different school sectors, one would be able to identify differences in each sector and hence, identify the effectiveness of different policies, distinct resources, and opportunities that best support outdoor education in primary schools.
- Moreover, through analysing the different perspectives of teachers from different school sectors, one would be able to identify the best practices and strategies that teachers can use when linking the curriculum with outdoor education and hence, teachers can learn from each other's experiences regarding this practice.
- As a result, this study would promote this method of teaching with the aim of improving the students' learning and well-being.

1.4 The structure of the study

As mentioned in Table 1, this research will be divided into the following sections.

Section	Outline
Preface	A brief introduction providing insight into this study.
Introduction	Background information about this research. Identifying the purpose of the research study.
Literature Review	An analysis of studies present to date in both local and global contexts regarding outdoor education. A critical analysis of the techniques and standing research on outdoor education in the primary years. A timeline of important events linked with outdoor education. Identification of the research gaps in the literature related to outdoor education that needs to be further studied.
Methodology	Discussing the researcher's approach to this study.

	<p>Justifying the reason why the mixed method approach was chosen to complete this study.</p> <p>A description of how the researcher made use of the quantitative and qualitative tools.</p> <p>The limitations and ethical considerations were also discussed in the third chapter.</p>
Findings and Data Analysis	Analysis of the findings obtained from the questionnaires and the interviews conducted with Year 3 teachers.
Discussion	<p>Interpretation of the obtained data and results in relation to the research questions and existing literature.</p> <p>Discussion of the key findings that emerged from this research study.</p>
Conclusion	<p>A summary of the findings of this research study.</p> <p>A list of other limitations that were identified in this study.</p> <p>A list of recommendations that may help educators to enhance their outdoor learning practices in the Year 3 primary classes.</p>
References	A list of sources that were cited throughout this research study.

Table 1: The structure of the study

1.5 Conclusion

Through this chapter, the author shared personal experiences that inspired a passion for exploring outdoor learning in the primary years, specifically with Year 3 students. The goal of this study is to examine teachers' perspectives on outdoor education, its impact on learners, as well as the challenges associated with its implementation. The author has also provided a clear outline of the study's structure. The subsequent chapter will be a literature review that explores outdoor learning from both a local and global standpoint, providing an opportunity for comparing and contrasting local and international practices.

2 Literature review

2.1 Introduction

Through this chapter, outdoor learning will be defined and discussed from a local and global perspective which will allow a comparison between what is being done locally and beyond. Literature on education for sustainable development (ESD) will be reviewed followed by an analysis of the sustainable development goals. The benefits and challenges experienced by educators working in primary Year 3 classes will be discussed. An overview of the history of where outdoor learning originated will also be analysed. Furthermore, teachers' perspectives, knowledge, and behaviour towards outdoor learning will be discussed. Subsequently, previous research similar to this study will be reviewed with a focus on analysing the educators' perspectives and knowledge of outdoor learning with primary students.

Since local outdoor learning is lacking research, this study examines how primary school teachers feel about using this practice as part of their lessons. Thus, local primary Year 3 teachers' knowledge, behaviour, and pedagogical strategies will be examined.

2.2 Defining outdoor learning

2.2.1 Education for sustainable development (ESD) and outdoor learning

Sustainability is the goal of Education for Sustainable Development (ESD), which denotes a balance between social, ecological, and economic sustainability (Vásquez, García-Alonso, Seckel & Alsina, 2021). The first document to ever mention sustainable development (SD) was the Brundtland Report back in 1987. It defined SD as a "development which meets the needs of the present, without compromising the ability of future generations to meet their own needs" (UN, 1987, p. 16). From the author's point of view, this concept is essential to be taught in class as the knowledge and skills taught will carve our future societies. Furthermore, it will result in our future generation having the adequate knowledge to make the best, mindful choices for themselves, for the others around them, and for the next generations. Hence, teachers can act as change agents to effect change and to put education for sustainable development into practice (Bürgener & Barth, 2018). It is also stated that in order for everyone to obtain lifelong learning opportunities, high-quality education should be ensured and promoted for all students (UNESCO, 2015). Additionally, Mifsud & Chisholm

(2018) state that outdoor education is a crucial component of the larger framework of ESD, which plays a central role in tackling present circumstances towards achieving a sustainable future.

As Vásquez, García-Alonso, Seckel & Alsina (2021) state, in order to develop citizens that follow this approach, one has to start motivating and educating individuals “from an early age” (Vásquez, García-Alonso, Seckel & Alsina, 2021, p.2). This practice will allow more people to make sustainable decisions. Spiteri (2020) also states that since education has the potential to provide immediate economic, social, and environmental advantages, it is regarded to make a significant contribution to sustainability. In this context, UNESCO (2017) argues that ESD is a complete and transformative approach to education that considers the learning environment, the learning outcomes and the pedagogy. Furthermore, it allows for learning to be dynamic and student-centred. Additionally, the participation and collaboration with the students would increase the promotion of sustainable development (UNESCO, 2017).

This type of pedagogy would be more beneficial when linked with outdoor education as it would increase participation in sustainable strategies (Hill, 2013). Studies show that when students experience outdoor education and are exposed to nature, children develop environmental ethical awareness and responsibility (Mårtensson et al., 2011; Palmberg & Kuru, 2000 as cited in Manni, Ottander, Sporre, & Parchmann, 2013). Moreover, student participation in this subject would increase due to the fact that outdoor lessons are more student-centred and require more active participation (Mifsud & Chisholm, 2018). Furthermore, when students are experiencing lessons in the outdoors, they would feel more stimulated to ask questions and explore the topics being discussed.

As Kolb (1981) argues, one learns through both environmental and personal experiences. Hence, through this experiential learning in the outdoors, the pupils would have the opportunity to learn through observing and interacting with the environment and thus, increase their education regarding sustainability. Therefore, ESD and outdoor learning can raise students’ awareness of sustainability issues, cultivate a sense of responsibility for the environment, and promote active participation in sustainability practices both inside and outside of the classroom.

2.2.2 What is outdoor education?

According to Waite (2011), learning is an ongoing process which does not happen solely in a classroom. As Nicol and Waite (2020) state, “significant cross-curricular learning opportunities exist just outside the classroom” (Nicol & Waite, 2020, p.3). When learning is taken outside of the classroom and into the outdoors, the students are presented with an opportunity for a cross-curricular and integrated approach that will eventually increase the pupils’ learning (Marchant et al., 2019). The outdoors differences the learning experience for the students as learning departs from the familiar and traditional forms that the students are normally used to and leads to a less structured learning experience (Rea, 2008). Furthermore, Becker, Lauterbach, Spengler, Dettweiler, and Mess (2017) define outdoor education, which is a term used interchangeably with the term outdoor learning (Nicol & Waite, 2020), as teaching or learning in an outdoor environment. Hence, through this experience, the content taught and learned is delivered differently from the learning delivered in the classrooms. When students are allowed to experience learning outdoors, it gives them the chance to change their classroom environment and increase learning opportunities in the schools’ outdoor areas. This can be sustained in several places, such as the school’s yards, gardens, and other outdoor areas available within the school. As a result, this practice provides experiential learning to students where they can experience hands-on and in-context education (Dewey (1916/1944) as cited by James & Williams, 2017). Therefore, it can be argued that outdoor learning ought to be an essential aspect of education since it provides students with a different learning environment, a variety of resources, and distinctive educational experiences that increase and complement traditional classroom-based education.

Unfortunately, today’s children are spending less time outdoors than children from previous generations (Torquati, Gabriel, Jones-Branch, & Leeper-Miller, 2010) mostly due to crime, traffic, and safety concerns (Marchant et al., 2019) and thus, children are losing their psychological and physical connection to nature (Restall & Conrad, 2015). In our modern age, fewer green spaces are available for families to visit, and children are preferring to choose to spend their free time on modern technology than engage with the outdoors (Mifsud & Chisholm, 2018; Marchant et al., 2019). In addition to this, outdoor learning is receiving less importance in schools. Studies conducted in different countries, such as England

(Humberstone & Stan, 2011), resulted in low percentages of teachers that make use of this practice. Consequently, children miss out on experiencing nature and the active participation that is offered during lessons held outside (Mifsud & Chisholm, 2018). Thus, it is the school's responsibility to provide the students with access to natural areas through the school's outdoor spaces and educational activities (Marchant et al., 2019). This research aims to investigate the local schools' outdoor spaces that are available for the students and educators to use and hence, investigate how they are being used. This will provide an insight into which type of outdoor education is being applied in the local context with a specific interest in the Year 3 classes.

Educators working in schools that have outdoor spaces accessible to the children have the opportunity to provide nature-based activities that the pupils would not otherwise encounter (Miller, Kumar, Pearce, & Baldock, 2021). For instance, when children get to experience nature and connect with it, essential lessons, such as the importance of protecting biodiversity, can easily emerge (Restall & Conrad, 2015). Outdoor learning is ideal to support the curriculum that the educators follow and thus, is suggested to be integrated with the students' learning (Fägerstam, 2014; Macquarrie, 2018 as cited by Prince, 2019). James and Williams (2017) argue that through outdoor learning, the children's classroom-based learning gets extended since different opportunities are provided outdoors. They state that this practice helps lessons become more "meaningful and comprehensive" (James & Williams, 2017, p.58) for pupils' learning and therefore, more effective for them. Hence, significant learning linked with the curriculum can be made accessible to all students where they can easily engage with the lessons, increase their interest in the lessons and learn through hands-on practice in outdoor spaces (Quay et al., 2020).

2.2.3 Effects on students' learning

It is vital for educators to understand that students have different methods that help them increase their learning. Gardner's theory of Multiple Intelligences supports this argument as he states that all learners have different abilities that aid them in understanding given information. With this learner-based philosophy, individual differences can be better acknowledged and dealt with (Sener & Çokçaliskan, 2018). Thus, outdoor learning may be one

of the methods that educators can use to help students enhance the quantity and quality of their learning.

Various essential outcomes can be achieved through the use of outdoor learning (Ardoin, Bowers, Roth, & Holthuis, 2018). In fact, school outdoor spaces have shown that they can positively impact students in their learning, understanding of the curriculum, academic attainment, behaviour, effective experiential learning, and social and emotional development (Blair, 2009; Marchant et al., 2019; Williams & Dixon, 2013) as well as their socio-cultural identity (Aasen et al. 2009). Outdoor education is essential because as research suggests, children's mental health and well-being are unfortunately declining. Thus, regular exercise and time spent in the outdoors may benefit the children's health, happiness and educational outcomes (Becker et al., 2017; Bølling et al., 2018).

Dring, Lee, and Rideout's study (2020) confirmed that when students experience outdoor learning, various benefits emerge. Results from their study showed that all the educators that participated in their study agreed that it is essential for students to be exposed to the outdoors. These educators stated that when lessons were delivered outdoors, children increased their enthusiasm and engagement (Dring, Lee & Rideout, 2020). Additionally, studies have shown that when students spend time outside, it results in a positive effect on their mood and an increase in the children's brain functions. Contact with nature has also been shown to provide cognitive advantages, including enhanced cognition, awareness, reasoning, creativity, and imagination (Marchant et al., 2019). Therefore, educators should appreciate the potential that the outdoors has to offer when it comes to engaging pupils in learning.

Dring, Lee, and Rideout's study (2020) also stated that this practice supported a range of learning preferences such as place-based learning, kinaesthetic learning, and visual learning. It was also evident that lessons outside have a calming effect on students with special needs and decreased behavioural issues (Dring, Lee, & Rideout, 2020). James & Williams (2017) state that outdoor education is valuable for children that find it difficult to follow traditional schoolwork and activities and also for children that decreased interest in learning and academic subjects. This is possible since outdoor learning activities engage students with the lesson and increase their interest and participation in what is being done and taught.

Moreover, the outdoor environment offers various other useful skills essential for children's development. This practice encourages an increase in problem-solving skills and risk-taking behaviour (Green & Rayner, 2022). In conclusion, outdoor learning has the potential to enhance various aspects of the students such as their health, well-being, and enjoyment of school. Additionally, it can foster student engagement, improve learning outcomes, and promote the development of valuable skills (Quibell, Charlton & Law, 2017).

2.2.4 Teachers' challenges to such practice

Even though educators are aware that outdoor education offers a lot of benefits to students, various challenges may arise. Over time, access to the outdoors during school hours has decreased due to the rigorous curriculum that educators must cover (Humberstone & Stan, 2011; Marchant et al., 2019). Additionally, teachers are experiencing constant stress to improve their students' achievement marks (Basford & Bath, 2014), thus resulting in a shortage of time to explore outdoor learning with the students. Consequently, this leads the practitioners to give more importance to the structure and restrictions in the classroom rather than focusing on making engaging lessons and activities outside in the schools' outdoor areas (Davies & Hamilton, 2018).

The grade level and the subject being taught also make a difference when taught in an outdoor classroom. Some practitioners think that science is one of the main subjects that can be taught outside as it has obvious curriculum links to the outdoors. Yet, outside learning during any subject is always beneficial. Hence, the absence of evident curricular connections is one of the main obstacles that educators experience during this practice (Dyment, 2005). In her study, Dyment (2005) failed to examine the different perspectives of teachers that teach specific grades. This would have given a clearer idea of how the teachers' perspectives change according to the situation that different grades bring with them. Additionally, institutional support is also essential for educators to be able to conduct outdoor activities (Dring, Lee & Rideout, 2020).

Another issue that resulted in Maynard and Waters' (2007) study was the weather conditions. It resulted that educators were being worried about the complaints they may receive from parents if a student is sent home wet or dirty. Also, health and safety concerns and litigation

in case a child is hurt outdoors, are some of the challenges that educators encounter when practising outdoor learning. This is because during outdoor activities, opportunities for physically risky activities increase (Maynard & Waters, 2007; Little, Wyver & Gibson, 2011).

These challenges may arise also according to the educators' attitudes towards this practice. The teachers' beliefs have an essential impact on the teaching that the students receive and thus, they affect the type of environment and learning that the pupils receive (Little, Wyver & Gibson, 2011). This may also be a result of the educators' confidence, where they fear losing control in the outdoor classroom (Dyment, 2005), and self-efficacy in using the outdoor areas as part of his/her teaching (Marchant et al., 2019). Therefore, this author believes that all educators need to receive training on effective outdoor learning to increase their level of expertise in this practice and thus, improve their delivery of outdoor lessons.

2.3 Teacher's perceptions, knowledge, and behaviour towards outdoor learning

2.3.1 In-service teachers' perceptions and behaviour

It is known that outdoor learning areas are essential resources that can serve as a means for students to understand and tackle important issues related to social development, health, and environmental challenges (Dring, Lee & Rideout, 2020). Although most teachers are aware of the benefits that this practice has to offer, different perceptions of outdoor learning still emerge. Several teachers undervalue the outdoor environment and find this practice to be challenging due to various barriers (Dyment, 2005). Literature suggests that teachers still struggle to adopt innovative strategies for teaching since their performance is still a crucial component of the schools' assessment (Waite, 2011). Consequently, learners miss out on this essential resource and its benefits.

Countries such as Scandinavian nations have long recognized the value of outdoor education in schools as crucial to children's intellectual, emotional, and physical growth (Humberstone & Stan, 2011). Additionally, it is effectively incorporated into the educational system, which recognizes that children need to engage in "risky" play (Sandseter, 2009, p.439). Moreover, a lot of research on primary children's well-being praises the benefits of the outdoors as a place for play and learning while also being a place where students could enhance their creative skills and where lifelong learning is promoted (Waite, Davis, and Brown, 2006 as cited by

Humberstone & Stan, 2011). Unfortunately, local behaviour toward outdoor learning is still lacking (Spiteri, 2016) but some local schools are starting to appreciate the benefits that the outdoors has to offer. Thus, they are working towards increasing outdoor learning and outdoor spaces in their schools. For instance, St. Nicholas College, Mġarr primary school, recognised the benefits that the outdoors has to offer and thus opened their own outdoor classroom on the school's grounds for all the students to experience (St. Nicholas College Malta, 2021).

2.3.2 Teachers' knowledge towards outdoor learning

According to Dymont's (2005) study, one of the barriers that teachers deal with is their lack of expertise and confidence in this area. Therefore, it leads to an ineffective learning experience. Davies and Hamilton (2018) state that training is an effective method to help educators recognise their role as educators and base their learning according to their students' interests in the natural spaces. As a result, the students' engagement and an increase in the learners' outcomes will be achieved (Davies & Hamilton, 2018).

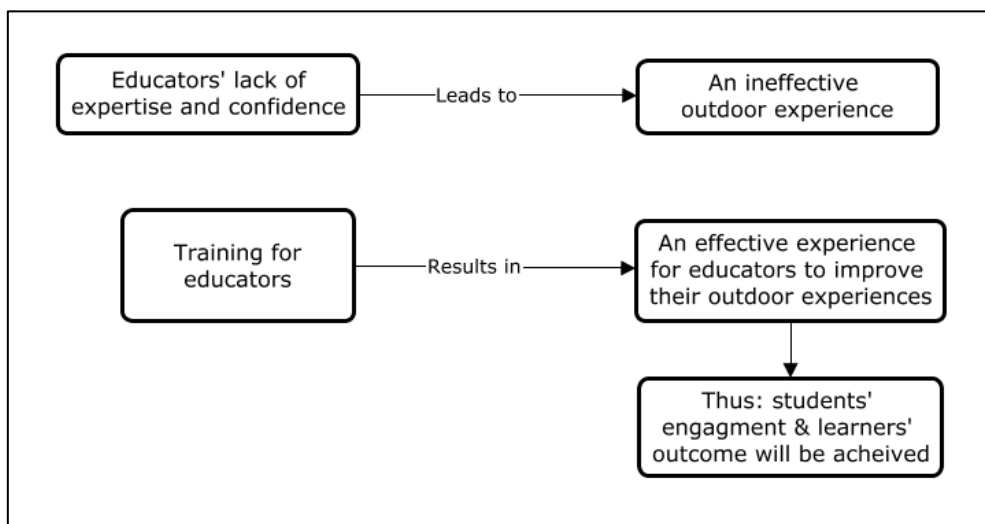


Figure 1: Educators' expertise in outdoor education according to Dymont (2005) and Davies and Hamilton (2018)

In order to decrease this barrier, it is clear that pre-service teachers should receive training on how to conduct outdoor lessons (Dymont, 2005). This would increase their confidence in this specific area which will thus encourage them to increase their outdoor lessons with their students. Training is also ideal for in-service teachers through courses for professional growth

in outdoor learning. This will result in an enhancement in the practitioners' teaching skills (Dyment, 2005). Furthermore, according to Groves and McNish (2011), educators who receive proper training and increase their exposure to outdoor education often experience a positive shift in their attitudes, resulting in improved interactions with students and greater understanding of their learners.

On the other hand, other educators value this practice and believe that it can help develop their students' learning (Davies & Hamilton, 2018). Hence, they include outdoor pedagogy, which Waite (2011) describes as a teaching strategy informed by the educator's context and principles, while also focusing on the pupils' learning in outdoor school areas.

Nowadays, educators are giving more importance to outdoor learning than in the past. Historically, teachers used to take children to play in the outdoors as a reward for indoor learning or to burn off energy. Presently, teachers use the outdoors on purpose to improve their pedagogy and curricula (Waite, 2011). As various theorists, mainly Dewey (1971) and Kolb (1984, as cited by Harris & Bilton, 2019) have identified, experiential learning is very beneficial when included in the teachers' pedagogy. It is beneficial for practitioners to make use of outdoor education as this practice gives them the opportunity to turn abstract knowledge into concrete and more easily understandable information for their students (Harris & Bilton, 2019). Thus, when learning is present in the outdoors, experiential learning can easily be incorporated into the teaching carried out. This is because as Dewey (1971) states, children have the opportunity to experience 'trial and error' instances while Kolb (1984, as cited by Harris & Bilton, 2019) points out to the opportunity where children get to experience concrete learning, reflect on what they have learned, and apply the knowledge in various contexts through an experimental process (Harris & Bilton, 2019). Hence, when outdoor learning is included in the educators' pedagogy, the students get to experience opportunities where they make use of their thinking skills, test concepts physically, and get to experience failure along with success.

2.3.3 Enhancing outdoor learning in primary schools

According to Rickinson et al. (2004), in order to promote the use of outdoor learning in schools and to foster better academic outcomes through this practice, educators must create clear

objectives, coherence between objectives and the curriculum, rigorous pedagogical approaches that support learning, and repeated outdoor experiences which are carefully designed along with post-activity work. Rickinson et al. (2004) state that when these recommendations are followed, educators could ensure a broader learning experience incorporated into the students' outdoor experience. Hence, when positive results are visible, outdoor learning will be automatically used more frequently.

Waite (2010) also states that according to the analyses of the English primary curriculum, importance should be given to applying cross-curricular lessons that utilize learning situations outside of the classroom. Alexander and Flutter (2009, as cited by Waite, 2010) argue that even though the curriculum gets tweaked, one needs to give attention to the assessment processes. They suggest that the possibility of promoting education outside the classroom during primary school years appears to be less optimistic with the ongoing use of testing measures. Hence, if the testing processes are reduced or eliminated, educators will get more freedom on how to deliver the National Curriculum and schools get more independence in deciding how their students learn (Waite, 2010). In turn, schools will get more freedom to encourage the use of outdoor learning. This author agrees with having assessments and examinations decreased as this will allow the primary teachers to give more importance to the process of the children's learning. As a result, it would allow educators to plan more engaging lessons for their students without having the fear of not doing enough traditional schoolwork.

Waite (2010) also points out to the numerous advantages that outdoor learning has to offer. Thus, policy-makers and educators should be motivated to engage in this practice and guarantee that students continue to have opportunities to learn outside of the classroom during their primary years. Most importantly, suitable outdoor learning spaces should be made available to all students (Davies & Hamilton, 2018). This researcher aims that through this local study, implications for outdoor learning policy in schools would be affected. Thus, the data collected would be useful to inform local school policies and influence national school curricula.

2.4 History of outdoor learning in primary schools

2.4.1 Global perspective

Throughout centuries, scholars have been arguing about the benefits of learning when spending time outdoors. The philosophers Aristotle and Plato were the first theorists that proposed that young children should engage in outdoor play and education (Spiteri, 2020). Further emphasis on the concept of children learning outdoors continued to flourish by other important scholars since clear evidence showed that nature promotes healthy child development (Blair, 2009; Marchant et al., 2019; Williams & Dixon, 2013).

Back in 1816, Robert Owen, one of the first pioneers of education, established a nursery school in the southern Scottish town of New Lanark for the children of his manufacturing workers. His goal was to better the world by separating children from their parents as young as possible and educating them in settings which followed a curriculum centred on outdoor activities through physical activity and music. The children were encouraged to learn from the natural objects that were found outdoors (Joyce, 2012). This change was effective in the children's learning and development although, at that time, his ideas were too extreme and thus, the government was not in favour of them (Harrison, 1969 as cited by Joyce, 2012). Ultimately, given his emphasis on educational reform for the underprivileged, Owen may be considered one of the first contemporary "educators" (Joyce, 2012).

Johann Heinrich Pestalozzi and Jean-Jacques Rousseau's ideas of outdoor education are closely tied to those of Robert Owen's work (Joyce, 2012). During the mid-18th century, Pestalozzi and Rousseau emphasised the importance of outdoor learning for children. They mention that it is essential for practitioners and students to perceive nature as a teacher. Furthermore, the use of sensory skills, such as the touch and movement skills that enables the children to interact with nature, were stated as significant in the children's outdoor experience. They argued that this type of learning is a vital learning tool for students' education (Guaran, 2016). Similarly, John Locke believed that children are driven to learn by their natural curiosity. Hence, through nature, students can satisfy their curiosities by exploring the world around them and learning from it. In Locke's opinion, a happy child is a child that is encouraged and assisted to explore the world (Gianoutsos, 2006).

The scholar Friedrich Fröbel was the first to have established kindergartens. Fröbel held a high regard for young children and treated them as respected members of the community and as unique individuals (Hoskins & Smedley, 2016). The term 'kindergarten' can mean both "a garden of children" and "a garden for children" (Hoskins & Smedley, 2016, p. 208). Fröbel's intentions for these gardens were for children to learn to observe and experience nature. He believed that through outdoor play and walks in nature, the children achieve strong knowledge, such as in geographical terms, and learn to enhance and develop their responsible and active citizenship behaviour (Guran, 2016). Thus, children would learn by doing, active participation, and experiential learning in nature.

John Dewey's ideas also serve as part of the foundation for what we now refer to as outdoor education. He points out that traditional educational spaces, such as the classroom setting, are sufficient for learning, but when the children are given freedom of movement and encouraged to participate in hands-on and experiential learning, where they can observe how different concepts can be used in actual circumstances, learning turns into an invaluable and important experience (Dewey, 1938). Another scholar that had a similar belief to Dewey's is Margaret McMillan. She is generally known for her "open-air nursery" (Liebovich, 2019, p. 2) which was dedicated to less fortunate children. McMillan argued that the children's physical freedom was as important as air and food. In fact, the nursery was open to give these children another start in life that may alter the course of their future through access to clean clothing, nutritious food, and most importantly, a place to learn outside (Liebovich, 2019). Hence, it is essential for practitioners to explore and offer freedom of movement to their students since it allows the students to view learning as an essential experience.

According to Nicol (2002), the term outdoor education was recognised and discussed to be added during school hours through the period of the 1970s on the foundation of the National Association for Outdoor Education (NAOE). Since then, the term 'outdoor education' started being recognised and appearing in school curricula (Svobodová, Durna, Mísařová, & Hofmann, 2020). Nicol (2002) points out that the first definition of outdoor learning was proposed during a debate at the Darington Conference in 1975. Outdoor learning was defined as an educational objective through a directed, hands-on experience in the outdoors, where the environment's resources are used as the lesson's resources (Svobodová, Durna, Mísařová, & Hofmann, 2020).

Currently, many academics and researchers remain intrigued by the potential advantages of using outdoor areas for educational purposes, such as incorporating lessons within school yards or gardens. Consequently, this research study may therefore aid practitioners in better comprehending the significance of utilising the schools’ outdoor spaces for educational purposes and to further explore the benefits that this practice has to offer.

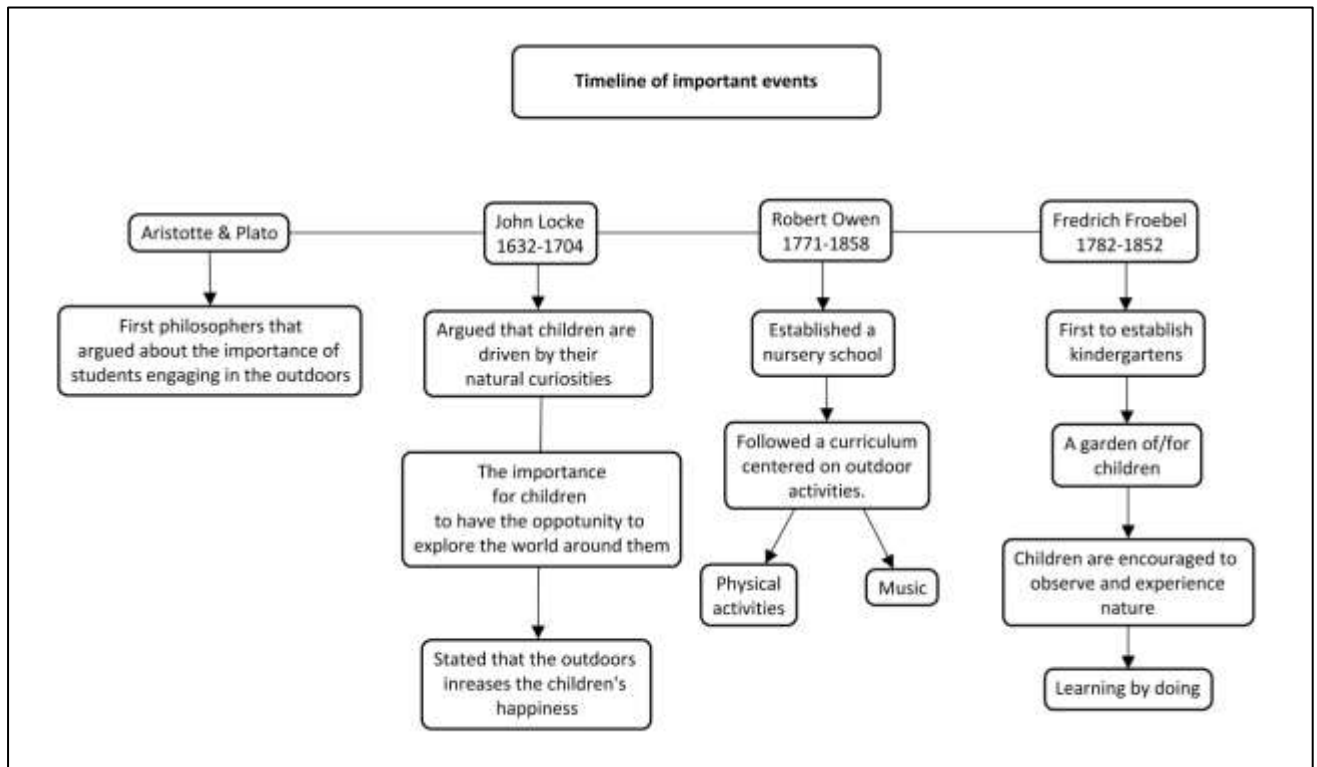


Figure 2: Timeline of important events till the 18th century

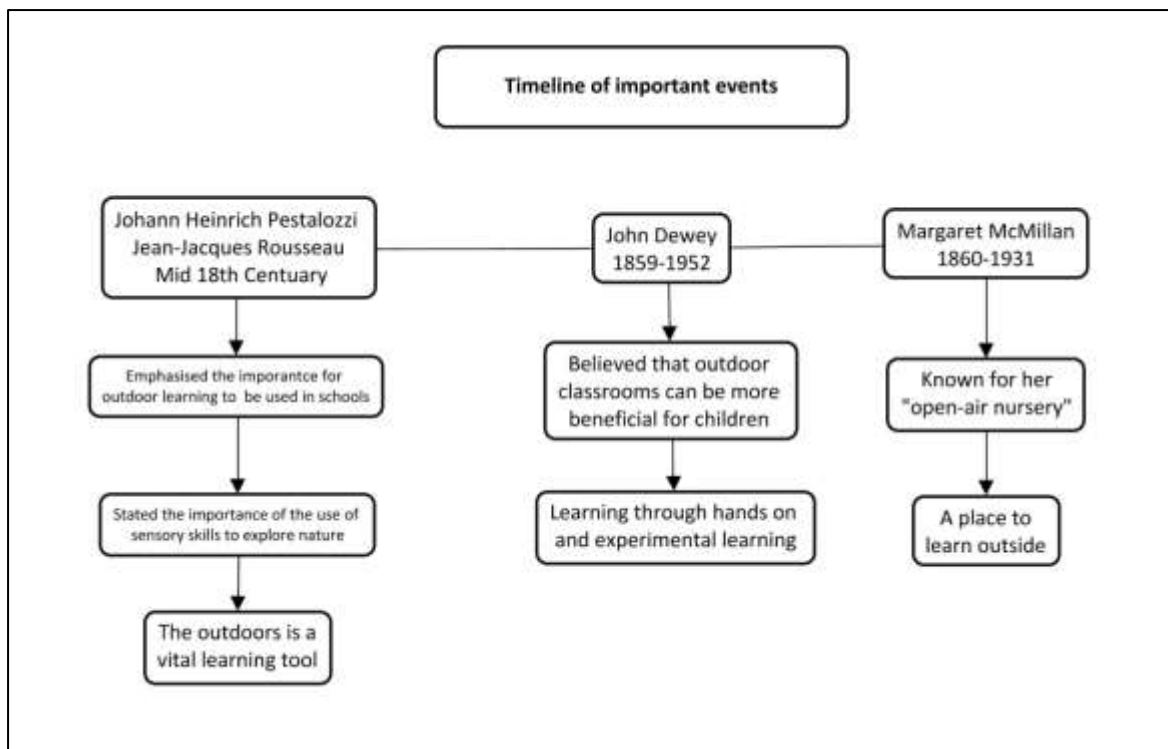


Figure 3: Timeline of important events from the 18th century onwards

2.4.2 Maltese point of view

Despite existing research in related fields, there have been no local studies on the Maltese Year 3 primary school teachers' perceptions regarding outdoor education. Therefore, due to the research gap in the subject under study, this will be looked at by the author.

Unfortunately, outdoor education in Malta is not widely used by practitioners (Spiteri, 2016). According to Mifsud (2012), most schools in Malta, in particular the state schools, use an exam-focused pedagogy where the main importance is given to exams. Furthermore, educators are viewed as individuals that give out information for the students to study and remember, which will thus then be replicated during the pupils' exam papers (Mifsud, 2012). Hence, this system does not encourage students to enjoy learning and increase learning at their pace, but rather to satisfy the educator's expectations and to compete with classmates. As a result, experiential and hands-on pedagogy and outdoor learning are seen as a waste of time by the teachers and the students' parents (Mifsud, 2012). On the contrary, educators should be able to make their students feel secure and independent in the school's environment where they would feel comfortable taking risks in outdoor areas and connecting

with nature through various experiences and resources (Maynard and Waters, 2007; Little, Wyver & Gibson, 2011; & Green & Rayner, 2022). Therefore, this author believes that outdoor learning is essential to be practised more frequently in our local schools for children to increase their engagement in learning while enjoying the knowledge being delivered by the educator.

A challenge that does not encourage the children to spend a lot of time outdoors is that Maltese natural places are restricted due to years of land speculation. In order to increase students' outdoor experiences, as investigated by Spiteri (2020), local educators should thus make more use of the outdoor areas provided by the school as it will give an essential experience to the students. Spiteri (2020) states that when local educators take their students outside and use nature as a resource, different ways of teaching and learning could be explored and an increase in the students' engagement and interest could be achieved. Unfortunately, Spiteri does not examine the educators' perspectives regarding this practice in her research.

Moreover, back in 2012, the National Curriculum Framework (NCF) recognized the importance of ESD in the Maltese educational system by including it as one of its objectives. Following that, the adoption of ESD by Maltese educators was no longer a choice based on personal interest but was required to be incorporated into their pedagogy (MEE, 2012). School programmes run by NGOs were also introduced, such as EkoSkola and Dinja Waħda. These programmes aim to give opportunities to local students to learn more about ESD and increase their learning about the environment around them. The objectives set out for ESD by the NCF encourage the improvement of students' knowledge, abilities, and attitudes required to become active participants. Moreover, children get to improve their decision-making skills both in a local and global context. Thus, this leads to improving both the present and future generations' lives. Additionally, children acquire a holistic understanding of their environment, learn to respect and appreciate diversity, and improve their critical and creative thinking abilities (MEE, 2012, p.38). Hence, it is believed that ESD helps students to experience active citizenship in their schools where they learn to live sustainably. It also promotes students' empowerment to become change agents.

Local outdoor learning still lags behind (Spiteri, 2020) and thus, this author believes that more awareness should be made to enhance this practice on our Maltese islands. It is important for

practitioners to note that this practice can be of benefit to their students since learning is made more interesting and engaging to them through the different environments and resources used. In fact, Gatt, Tunnicliffe, Borg, and Lautier (2007) argue that it is important for Maltese students to experience more time in the outdoors so that they will be able to increase their learning about what nature has to offer us. They also argue that children should not be silent observers but experience outdoor activities where they engage in experiential and hands-on learning. This author agrees with their statement as it is believed that the more that the children get to experience hands-on learning, the more they can increase their learning and development.

2.5 Previous research conducted internationally

A number of researchers carried out studies to identify the benefits for the students and the challenges that may arise when practising outdoor education in schools. Davies and Hamilton (2018) carried out a study which focused on nine English school settings that were located in Northeast Wales. The study was focused on the early years, focusing on students aged from two to eleven years. They aimed to discover the educators' various challenges that may arise when practising outdoor learning. Throughout their study, they aimed to identify the educators' experiences of teaching students in the outdoors and to identify issues which affect this practice. Similarly, the current study aims to determine the challenges faced by the local primary educators through their experiences in the schools' outdoor areas. Throughout the researchers' mixed-approach study, the educators got to explain their experiences and the challenges encountered during their outdoor learning experiences with their students. This author will adopt these researchers' strategies and use both quantitative and qualitative research methodologies for their investigation.

Results showed that educators believe that although assessment in the outdoors is similar to that on the inside, when in open spaces, the children answer more naturally as they are sometimes unaware that they are being assessed. The researchers concluded that outdoor classrooms are not always utilized to their fullest capacity to aid in the education of children (Davies & Hamilton, 2018). It would be beneficial to study how Maltese educators view assessment in the outdoors and to which extent the outdoor spaces are being used.

Also, adverse weather, lack of suitable resources, staff experience levels, curricular policy changes, and an inadequate child-staff ratio, were some of the challenges mentioned by the participants. The need of protecting children's safety was also emphasized, but several educators felt that there should be some element of risk in the outdoors as it can be very beneficial. Educators were also concerned with the policy drivers as they are influencing the amount of time allotted for outdoor learning and influencing assessment. Hence, due to the pressure that they experience to test children academically, the outdoors is regularly seen as a “secondary resource” (Davies and Hamilton, 2018, p.10). The researchers also analysed that some educators perceived stereotypical views towards this practice, such as that it is more beneficial to students with learning difficulties.

Furthermore, Cini and Farrugia (2015) analysed the outdoors from a local perspective by evaluating the state, church, and private Maltese school sectors. Through their qualitative research, they have explored and identified the benefits of outdoor play and learning and their effects on the overall development of Maltese primary children. This study resulted that although local educators are aware of the benefits of the outdoors, they still tend to prefer to teach indoors and thus, students are spending most of their time indoors (Cini & Farrugia, 2015). Hence, this author aims to investigate whether educators teaching Year 3 classes still prefer to teach indoors even if they are aware of the benefits that these spaces have to offer. Additionally, an investigation of the challenges faced by local educators in schools will be carried out. Thus, this will determine whether outdoor education is also seen as something ‘extra’ to the local teachers’ perceptions. Therefore, through the educators’ questionnaire and interview responses, this author will get a better understanding of their perspectives on this practice.

Furthermore, Mifsud and Chisholm’s (2018) study confirms that Maltese students are getting more detached from the outdoors. They state that one of the reasons causing children to spend less time outdoors is the use of digital media. Moreover, the researchers argue that outdoor education is essential for students to learn about sustainable development, where they would have the opportunity to obtain a sense of ownership over the land and its resources. It resulted that this sense of ownership in children is diminished due to the detachment from nature, which consequently decreases motivation to protect it (Mifsud & Chisholm, 2018). Thus, through this local study, outdoor education was viewed as essential

to increase education for sustainable development among children. Hence, this research study will also investigate whether local teachers view education for sustainable development as one of the main components that emerge from the outdoor teaching practice.

2.6 Synopsis of the findings of the literature review

The literature review has given this researcher insight into several topics connected to the primary educators' perceptions of outdoor education on various levels. The synopsis of the main findings from this literature review is listed below:

- It was noted that ESD is essential to be taught to primary children as they would carve our future generations and thus, through the interaction with the outdoor environment, the children will learn to protect it and its resources.
- Definitions of outdoor education and how it is perceived by local and foreign educators were addressed.
- Research indicates that outdoor education makes learning more engaging. The change in the students' classroom environment enables them to experience nature-based activities and extend their learning through different opportunities.
- Many authors stated that most educators have a positive perspective toward outdoor learning but tend to put this practice aside to focus more on indoor learning.
- Different challenges to such practice were identified. Some teachers undervalue outdoor education due to its barriers. Mostly, the rigorous curriculum that teachers need to deliver and assess was mentioned. Hence, this leads to the challenge of lack of time in the class's timetable.
- Various authors stated that training is important for educators to receive as it will help them to increase their confidence during outdoor activities and enhance their professional development.

2.7 Conclusion

Since research on local teachers' perspectives regarding outdoor education is lacking, the current study will strive in filling the present gap on this topic by studying local Year 3 teachers' perspectives on this practice. The researcher will analyse and compare the findings

of the literature review with the results obtained from the qualitative and quantitative components of the study, aiming to identify any similarities and differences between them. Through this study, the researcher will strive to analyse the research questions by taking into account other researchers' methodologies.

Additionally, while taking into consideration the features of the studies reviewed, a holistic approach to examining local outdoor education practice will be taken by including crucial elements that some writers have overlooked. These characteristics consist of:

- studying whether there are any differences between the participants' results due to the school sectors that they teach in;
- evaluating whether the sector in which teachers teach affects the amount of outdoor learning being practised;
- reviewing whether local teachers are aware of the benefits that this practice can offer to their students and what they value from it;
- examining the challenges that local primary educators encounter;
- identifying the local primary teachers' perspectives, knowledge, and behaviour towards outdoor learning.

In the next chapter, the methodology and data collection of this study will be discussed. A thorough explanation of the methods used for both the quantitative and qualitative aspects of this study will be discussed.

3 Methodology

3.1 Introduction

This chapter will outline the research methodology adopted in this study, including an explanation of how participants were recruited and informed about this project. Research tools used for this study along with the distribution and collection of data will be discussed. The analysis of the data obtained will also be explored. Furthermore, this chapter will demonstrate the author's adherence to ethical principles throughout this research project.

3.2 Research questions

The purpose of this research study is to investigate the extent to which outdoor learning is being implemented with Year 3 students in the local context. Additionally, it aims to identify the benefits and challenges that teachers experience when using this approach in the Maltese setting. Therefore, the research questions will explore these topics in relation to outdoor education.

In order to conduct this study and to be able to investigate the research questions, the researcher opted for a mixed-method approach. Through this method, both qualitative and quantitative data were able to be sought. This approach was chosen as it allowed the researcher to identify a more thorough and comprehensive understanding of the research questions than if only one single mode of inquiry was to be chosen (Cohen, Manion & Morrison, 2018). This is because the mixed method approach allowed the researcher to study the perspectives of several educators through the quantitative part of the study while also delve deeper and develop the key issues through the qualitative data obtained. Hence, the research questions were answered more meaningfully as generality and particularity were combined. Therefore, by using this method, the opportunity to find unexpected and more credible results was increased (Cohen, Manion & Morrison, 2018).

3.3 Epistemology

Due to the combination of qualitative and quantitative approaches, mixed methods research is also centred on the researcher's commitment to the epistemological framework (Hands,

2022). Maynard (1994) explains that epistemology is the process used to identify and clarify the necessary types of knowledge. Mirhosseini (2018) points out that epistemology refers to the comprehension of knowledge which is learned through the process of inquiry. Moreover, it is said that the epistemological position forms the basis for the methodological and procedural levels of the investigation (Mirhosseini, 2018).

For this research study, a constructivist perspective was adopted. This epistemological paradigm focuses on creating theories through the process of meaning-making (Denzin & Lincoln, 2007; Hesse-Biber, 2010 as cited by Mirhosseini, 2018), such as the study of documents and other content, and from data collected from participants.

Furthermore, this philosophy contends that every individual creates his/her own knowledge. There is also the conviction that knowledge is a shared experience among all those participating and not just that of an individual participant (Prawat & Floden, 1994). The researcher adopted this type of epistemology as it is the most salient in order to answer the study's research questions. Moreover, this philosophy will allow one to better explore the realities of outdoor education present in the local Year 3 primary classes.

3.4 Mixed method research

According to Feilzer (2010), mixed-method approaches discuss the positive and negative attributes of quantitative against qualitative research. A researcher that adopts a mixed-method approach investigates both aspects of reality, the macro (quantitative) and the micro (qualitative). This enables one to thoroughly investigate the area of study.

Additionally, according to Johnson and Onwuegbuzie (2004), mixed methodologies research is not an argument between quantitative versus qualitative research, but it is the third research paradigm in educational research. This is because both methodologies are useful and important in a research study. In fact, the mixed methods approach's goal is "not to replace either of these approaches but rather to draw from the strengths and minimize the weaknesses of both" (Johnson and Onwuegbuzie, 2004, pp. 14-15). Hence, when one uses both procedures, better research will emerge than if only one approach is used. This is because the research would be viewed from different aspects and all available tools and information will be used to comprehend the situation (Cohen, Manion & Morrison, 2018).

Moreover, Creswell and Plano Clark (2011 as cited by Cohen, Manion & Morrison, 2018) state that this type of methodology increases the value and credibility of the data obtained since it yields perceptions of the processes and explanations of specific areas. As a result, the opportunity for a researcher to discover unexpected data increases. Hence, through this method, a more complete image will be created.

A sequential explanatory strategy is used in the analysis of the present study. Ivankova, Creswell and Stick (2006), state that mixed-methods sequential explanatory design is “highly popular among researchers and implies collecting and analysing first quantitative and then qualitative data in two consecutive phases within one study.” (Ivankova, Creswell & Stick, 2006, p.4). Through this strategy, the quantitative data gets contextualized through the qualitative data. Also, the qualitative findings enrich and strengthen the findings obtained from the quantitative data as well as contribute to creating new knowledge (Bowen, Rose & Pilkington, 2017). The research questions were promptly followed by the establishment of this strategy. This is because the goal of this study was to examine this area from “more than one standpoint” (Cohen, Manion & Morrison, 2018, p.265).

The sequential explanatory strategy was applied in this research study by obtaining information about whether outdoor education is being applied in the local Year 3 primary classes through quantitative data. Furthermore, through the qualitative data, a deeper study about how outdoor education is being applied and an insight into the educators’ perspectives regarding the benefits and challenges that they encounter during such practices were explored.

Through the use of a mixed approach, this author aimed to remove any potential research gaps that might develop following the collection and analysis of quantitative data. By combining both methods together, the researcher aimed in providing a greater understanding of the teachers’ perspectives on outdoor education. This would not have been possible had the researcher used only one method (Creswell & Plano Clark, 2011). Therefore, the mixed method approach increases the reliability of the data obtained since it supplies the research study with more evidence than if only a particular approach was to be used (Caruth, 2013).

3.5 Research tools

Both the research methods used in this study, the qualitative and quantitative methods, investigated the perspectives of primary educators teaching Year 3 classes. The teachers' gender, age, school sector within the primary educational system and the number of years of teaching experience with Year 3 students varied. These differences were important since the author sought to determine whether there was a connection between these characteristics and the educators' views of perspectives, knowledge, and behaviour towards outdoor education. Also, the researcher tried to compare results between different groups of teachers from different school sectors: state, church, and independent, whilst also identifying the factors that affect the benefits and challenges of outdoor learning.

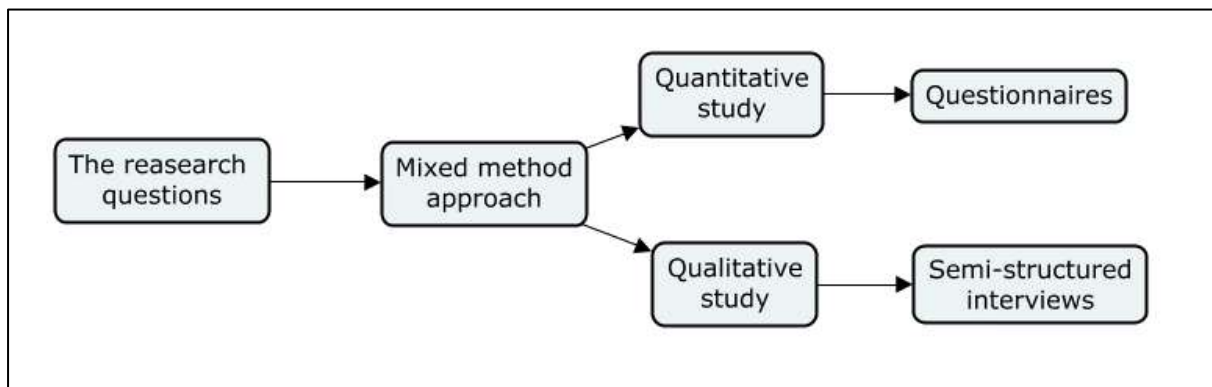


Figure 4: Research tools used for this study

3.5.1 Quantitative data collection tools

3.5.1.1 Designing questionnaire questions

In order to acquire the quantitative data, this researcher opted for questionnaires which were addressed to Year 3 educators (Appendix A). This approach was adopted to reach as many participants as possible and thus, explore and analyse a wider picture from the local teachers' perspectives working in the three school sectors. Hence, responses about the topic were obtained from a large sample of the population (Cohen, Manion & Morrison, 2018).

According to Cohen, Manion and Morrison (2018), it is crucial to include a brief covering letter that introduces the researcher and describes the research study in detail. Thus, this research study and the author were introduced through an information letter addressed to the

participants (Appendix B). By contextualizing the study, underlining the aims of the research, and emphasizing its significance, the author was able to engage the intended audience. The anonymity and non-traceability of the responses were also ensured.

The anonymous questionnaire attempted to examine the perceptions and opinions of Year 3 teachers regarding the practice of outdoor learning and whether it is being incorporated into their teaching pedagogy. Through this questionnaire, a glimpse of what the educators view as challenging and the benefits that emerge from such practice were also attempted to be studied.

The questionnaire was designed to be as approachable as possible and different question styles were included. These varied from rating scales, listing, multiple choice questions, closed-ended, and open-ended questions. The author attempted in designing the questionnaire's questions to be fit for their purpose and hence, concrete and relevant data would be measured (Rowley, 2014). Different questions were included in order to gain more insight into certain topics, particularly in light of the respondents' individual viewpoints. Moreover, instructions were given, and the layout of the questionnaire was simple for one to understand.

The initial section of the questionnaire examined the participants' general information such as gender, age, school sector, and the number of years of experience in teaching Year 3 classes. Following this section, questions about the outdoor practice were asked. The questions focused on how the educators perceived outdoor education, the benefits and challenges encountered in such practice, and whether they are willing to use it as a teaching strategy. The final section of the questionnaire invited the educators to participate in a follow-up 30-minute interview. In order to create the questions found in the questionnaire, references to similar previous studies and the author's general knowledge of this area of study were used.

3.5.1.2 Sample for the quantitative research

This study's quantitative component included distributing structured questionnaires to Year 3 educators in Malta. The researcher proposed the response sample size by taking into account the number of local Year 3 teachers' population, which was 258 teachers (Table 2) as

provided by the Ministry of Education and Employment. Hence, the sample size of the quantitative data was calculated and amounted to approximately 155 questionnaires, ensuring a 95% confidence level and a confidence interval of 5%.

School Sector	Number of Primary Year 3 Teachers
State Schools in 2021/22	167
Non-State schools in 2021/22	91
Total number of Year 3 teachers	258

Table 2: Number of Primary Year 3 Teachers in Malta

This author initially planned to invite every local Year 3 educator to participate in the study but unfortunately, this was not possible. This is because some schools forbade the researcher from approaching their staff. Even when permission was granted, there were instances where teachers refused to respond to the questionnaire.

3.5.1.3 Pilot study for the quantitative part

Thabane et al. (2010) recommend that data collection tools must be piloted as it gives the researcher an insight into whether the questions are clear enough and allows one to test the amount of time that will be taken to complete the questionnaire. Hence, this researcher tested the questionnaires through a pilot study with six primary Year 3 educators. The pilot study (Appendix C) included an extra question that requested participants to remark on any further concerns they may have had with the questionnaire's design as well as to indicate whether any of the questions had been difficult to comprehend or unclear. The pre-test instrument was an excellent way to assess the questionnaire's implementation and increased the “reliability, validity and practicability of the questionnaire” (Cohen, Manion & Morrison, quoting various authors, 2018, p.496).

Following the pilot study, the questionnaire was revised, and a few minor adjustments were made. Consequently, some of the questions were eliminated as they were repetitive. Wording to a set of instructions and some questions were altered and rephrased to make them clearer to the participants. Moreover, an additional open-ended question was included

to decrease questions asking for a 'yes' or 'no' answer only. Having said this, no major alterations in the questionnaire were made.

3.5.1.4 Distribution of the online questionnaires

Numerous actions were taken by this author to facilitate questionnaire dissemination in all school sectors. Permission was sought from all private schools, from the Archdiocese of Malta to invite educators working in church schools, and from the Ministry for Education, Sport, Youth, Research and Innovation for permission to disseminate the questionnaire to educators working in state schools.

A list of primary church schools, obtained from the Archdiocese of Malta, and a list of primary private schools, obtained from The Office of the Commissioner for Revenue, was drawn up (Appendix D). Regarding educators working in state schools, this author was given permission to contact specific state schools only and thus, only the schools that the Ministry for Education, Sport, Youth, Research and Innovation gave permission for were contacted.

When permissions were obtained by the three representatives for each sector, the researcher contacted the heads of schools individually. They were provided with information regarding the research study and asked for their consent to conduct research in the schools under their supervision (Appendix E). Cohen, Manion and Morrison (2018) point out to the importance of researchers obtaining acceptance at an early stage of the research as it presents the best chance to show their credentials as serious researchers. It also determines their own ethical position with regard to their proposed research.

The emails sent were sectioned into two parts; the first part was addressed to the Heads of schools while the second part was addressed to the Year 3 teachers. The researcher shared the questionnaire link within the emails sent and attached an information letter about the study (Appendix B). Moreover, the author made sure to assure non-traceability and anonymity.

Reminders were sent when schools failed to reply to the emails. Moreover, when reminders got disregarded as well, the author contacted the schools through phone calls. Hence, the

researcher made sure that the opportunity to participate in the study was provided to the entire target population.

Furthermore, the questionnaire link was also posted on social media platforms so that it would reach more Year 3 educators. Therefore, educators that work in schools where the Head of School did not agree to share the questionnaire with his/her staff, would still have the opportunity to participate in the study. These questionnaires were shared through Facebook pages for Maltese educators, including 'Primary teachers in Malta', 'Teacher Talk Malta', and 'Malta teachers'. It was also shared on local academic Facebook pages such as 'Primary Science Malta' and 'Social Studies Primary Malta'.

The distribution of the questionnaires was done over two months, starting from the beginning of November 2022 till the end of December 2022. Subsequently, the response rate was 81.94% since 127 questionnaires out of the 155 questionnaires that the researcher aimed for were collected.

3.5.1.5 Data collected and the analysis of quantitative data

Answering the research questions was the goal of the quantitative data analysis. These were to analyse teachers' values towards outdoor education, to identify this practice's effects on learners, and the challenges that emerge from this practice. The raw data from the questionnaires was analysed using the SPSS program.

Additionally, the differences between teachers working in the three school sectors: state, church, and independent, were examined using SPSS Spearman correlations. The Kruskal Wallis test was used to compare the primary school teachers' mean knowledge, viewpoints, and behaviour scores across the three different sectors.

3.5.2 Qualitative data collection tools

3.5.2.1 Designing the interview questions

For the qualitative study, interviews were designed (Appendix F). The participants were already made aware of the study's purpose through the information letter sent with the

questionnaires. This tool was selected because the interviews can delve into more depth and put “flesh on the bones of questionnaire responses.” (Bell, 2010, p.161).

Through semi-structured interviews, the researcher was provided with more flexibility as there was no defining order of the questions to be asked (Dearnley, 2005). The researcher was flexible and asked questions according to what the participants answered to avoid repeated questions. Moreover, the interviews allowed new ideas to emerge.

The interview questions were classified into four categories. The first category consisted of some introductory questions that assisted the researcher in learning about the educator’s experience in the Year 3 classes and about her/his school environment. The other three categories were related to each research question respectively. Hence, the second category focused on the educators’ perspectives on outdoor learning, the third category dealt with what the educators observe as beneficial from such practice, and the final category sought to study the challenges that educators might encounter in the schools where they work.

3.5.2.2 Sample for the quantitative research

Given that this study used a mixed methodology and that the interviews were not the only form of inquiry, a substantially smaller sample of Year 3 teachers was selected. Six educators from the quantitative research sample were selected for this study's qualitative component. Since the participants had put their email addresses in the questionnaire’s invitation, it allowed the author to identify possible participants for the qualitative research portion while yet allowing the participants to stay anonymous. This was ensured because an email address is not always necessary to determine a person's identity.

There were several educators that accepted the questionnaire’s invitation to participate in the interview. Thus, this researcher chose the first two participants from each school sector that accepted to participate. Therefore, the researcher interviewed two educators from the state, church, and private school sectors respectively.

3.5.2.3 Pilot study for the qualitative part

To provide high-quality findings, a pilot test of the interview questions was also carried out (Appendix G). The researcher tested the questions through a pilot study with two Year 3 teachers. Through this pilot study, the researcher got to review the questions and make some changes to make the questions clearer for the participants to understand and thus, the value and dependability of the results would be enhanced.

As a result of this study, the researcher realised the importance of adding some introductory questions before asking questions related to the educators' perspectives on this practice. This change was important so that the participants get to feel more comfortable, and the conversation gets more flowy between the researcher and the interviewees. Moreover, it was observed that certain interview questions were repeating the questionnaires' questions. Hence, the likelihood of acquiring sufficient in-depth information for the researcher to analyse would have been limited.

3.5.2.4 Conducting online interviews

After the questionnaire responses had been analysed, the interviews were held. Participants were informed about the anonymity of this study prior to the interviews being conducted. Also, the researcher sought their consent for the interview to be recorded. Through the interviews held, an in-depth analysis of what the teachers perceive of this practice and how they use the outdoor school areas was studied. Furthermore, the recordings of the interviews were transcribed.

3.5.2.5 The analysis of qualitative data

Transcripts were carefully read and analysed. Through this process, frequent themes present in the transcripts were highlighted. These themes were then explored through a thematic coding system which summarised the key topics of the interviews while also identified points of similarity among different transcripts. According to Flick (2014), coding allows "researchers [to] scrutinize and interact with the data as well as ask analytical questions of the data" (Flick, 2014, p. 156). Additionally, to ensure participant confidentiality, the participants' names were replaced with codes.

3.6 Validation of study

Sapsford and Jupp (1996) define 'validity' as choosing the right design for a study which will provide reliable findings for its conclusion. Hence, the data collection would be able to support the researcher's interpretation. Therefore, this author aimed to plan a reliable research design.

Validity was assured through the triangulation of data which involved comparing and analysing the findings from both modes of inquiry. Cohen, Manion and Morrison (2018) state that triangulation involves studying a topic from several perspectives and thus, making use of both qualitative and quantitative data. Hence, triangulation will provide a "powerful way of demonstrating concurrent validity" (Cohen, Manion & Morrison, 2018, p. 263).

Moreover, through adopting a mixed method approach, the research gaps were reduced since the qualitative study allowed the researcher to cover any gaps that were not answered through the quantitative data. Also, the semi-structured interviews allowed the researcher to ask questions to clarify any unclear information. Thus, this provided more information and made the data collected more valid.

Furthermore, the author strived to reduce bias in the qualitative study through the use of a thematic coding system. Instead of searching for specific information to record that might be triggered by the author's own mindset, this framework allowed the author to find essential components shared by all the participants' responses.

3.7 Limitations

3.7.1 Limitations of this study

Through this study, several challenges were faced by this researcher. The distribution phase of the questionnaires was where the majority of issues surfaced. It was challenging and very time-consuming to obtain permission to distribute the questionnaires to Year 3 educators. This is because a number of head of schools refused to share the questionnaires with educators working within their schools. Also, several head of schools did not reply to the emails sent, thus, reminders and phone calls were made to ensure that the emails were forwarded to Year 3 educators.

It was mostly challenging to distribute questionnaires in the private sector. Since the private sector is the smallest school sector in Malta, every private school was very valuable for this study. Several of the private institutions turned down the request, thus this researcher obtained few responses from this population.

Moreover, this author found a difficulty in obtaining the number of responses that were planned to be collected. It was planned on collecting 155 questionnaires. The sample size was calculated in this manner in an effort to generalize the findings so that they would be relevant to the entire population at the completion of the research. However, the author only managed to obtain 127 questionnaire responses. As a consequence of not reaching the required sample size, the results of this study may only be regarded as representative of the people who participated.

3.7.2 Limitations of this research design

The mixed method approach that this researcher opted for offered various limitations throughout this study. The questionnaire used to gather data for the quantitative data included the following limitations:

- The participants may not have accurately reflected their actual knowledge and perspectives when answering the questionnaire questions.
- Although this author included a detailed paragraph about what is meant by outdoor education in this research study, some educators still misunderstood this and referred to outings and other activities done outside of the school's premises.

Furthermore, the interviews conducted for the qualitative data also presented some limitations:

- The data collected through the interviews could be different from what is currently being done in the Year 3 classes.
- Even though the researcher sought for the participants' consent to record the interview, some participants might have felt self-conscious since they knew it was being recorded and hence, might not have shared their experience to the maximum.

This researcher believes that since a mixed method approach was adopted, limitations for both the quantitative and qualitative data will be reduced (Caruth, 2013).

3.8 Ethical considerations

The researcher sought permission from each concerned authority prior to conducting the research. This involved seeking permission from private schools, the Archdiocese of Malta to invite teachers working in church schools, and the Ministry for Education, Sport, Youth, Research and Innovation to disseminate the questionnaire to educators working in state schools. Furthermore, anonymity and strict confidentiality were guaranteed for all educators participating in the study. Through emails (Appendix E) and information letters sent (Appendix B), the participants were informed about the aims of this study. Moreover, the recordings of the interviews were only accessed by the researcher and were stored in an anonymous form. No names were recorded in either mode of inquiry. Furthermore, responses were digitally stored on a secure, password-protected computer.

3.9 Conclusion

Through this chapter, the author aimed to highlight the steps taken to obtain data for this research study. Thus, one would understand how data was collected and hence, understand how the findings were formed. As a result of this study, an amount of data emerged which consequently, allowed for an analysis of the perspectives of Year 3 educators on the topic of outdoor education. The next chapter, Findings and data analysis, will analyse the findings for both modes of inquiry.

4 Findings and data analysis

4.1 Introduction

The objective of this chapter is to investigate the extent to which Year 3 teachers value outdoor education and to identify their opinions on the benefits and challenges that arise from this practice. This chapter aims to analyse the outcomes obtained by using a mixed method approach to delve into the perspectives of local Year 3 primary teachers. This chapter will be divided into two sections. In the first section, the findings obtained through the quantitative study, thus, the questionnaires, will be addressed. Moreover, the second section will discuss the thematic analysis of the interviews conducted for the qualitative study.

4.2 Quantitative findings and analysis

The quantitative data obtained was analysed through the IBM SPSS (Statistical Package for Social Science) version 28.

4.2.1 Sample from the quantitative study

The researcher aimed to collect 155 completed questionnaires to ensure a 95% confidence level and a confidence interval of 5%, however, only 127 questionnaires were collected. Through the analysis of this sample size, it was observed that as seen in Figure 5, the majority of the participants that took part in this questionnaire were females (81.1%) while the remaining 17.3% were males and 1.6% identified themselves as other.

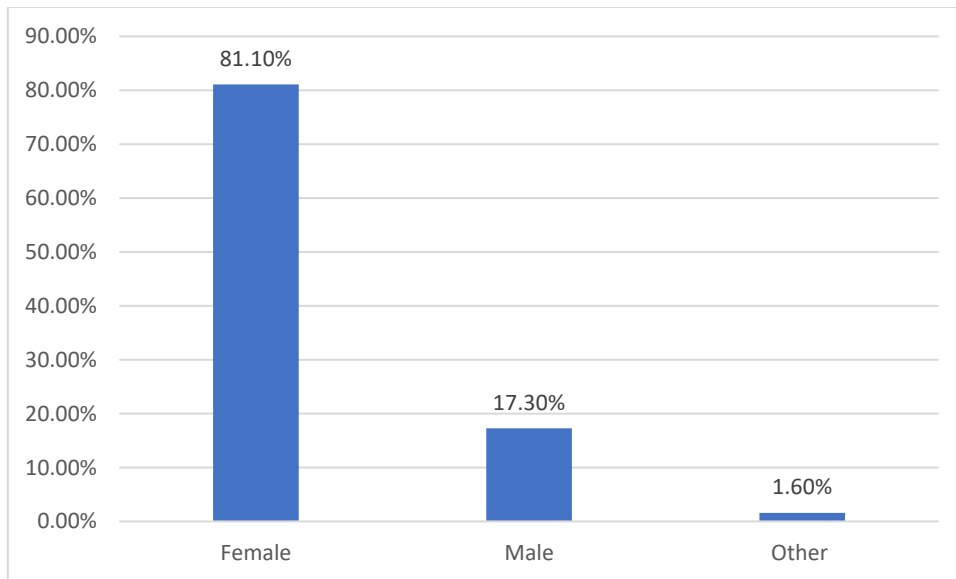


Figure 5: The percentages of the participants' genders

The participants' age varied. As observed in Figure 6, the age range that was most frequently represented in this sample was 31-40 years (37.8%). Subsequently, the sample was composed of participants between the ages of 41-50 (28.3%), 20-30 (27.6%), and 51-60 (6.3%).

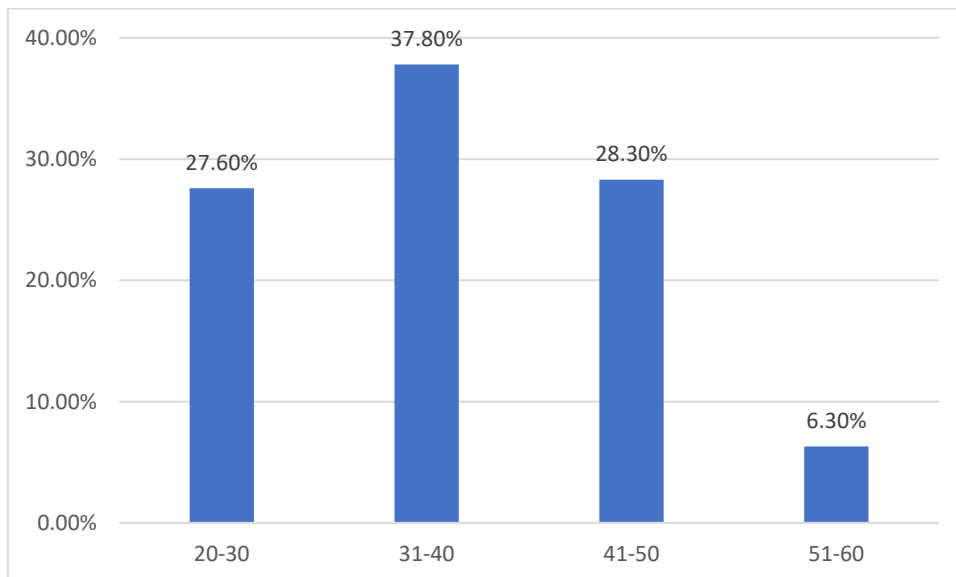


Figure 6: The percentages of the participants' age range

In order to obtain a representative sample from the three local school sectors, the author aimed to invite all the primary schools to take part in the study. Figure 7 shows that the majority of the primary educators that participated in this study worked in the state sector (70.9%). Following this was the church sector (19.7%) and the private sector (9.4%).

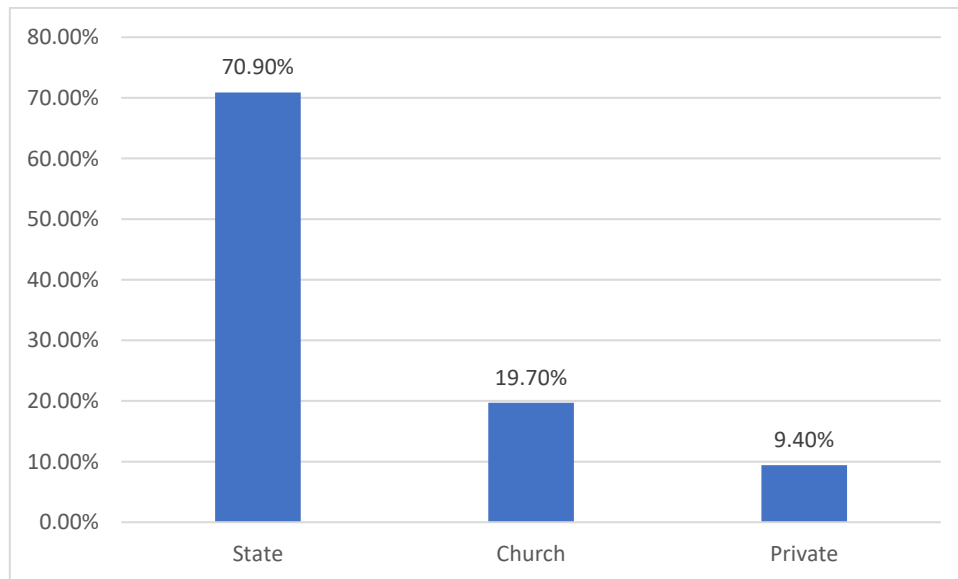


Figure 7: The percentages of teachers working in various school sectors

Table 3 shows the analysis of the years of the sample's experience with teaching the Year 3 classes. The majority of participants in this sample fell within the range of up to 5 years (45.7%). Following were 6-10 years (32.3%), 10-15 years (15%), 21 years and over (3.9%) and 16-20 years (3.1%) respectively.

Years of experience	Frequency	Percentages
Up to 5 years	58	45.7%
6-10 years	41	32.3%
10-15 years	19	15%
16-20 years	4	3.1%
21+ years	5	3.9%

Table 3: Years of teaching experience with Year 3 students

4.2.2 Data analysis on Year 3 teachers' values upon outdoor learning

4.2.2.1 Perceptions of Year 3 teachers on the importance of outdoor education

Question 7 analysed whether Year 3 teachers view this practice as important to their teaching practice. This question was presented in a form of a rating scale where teachers were encouraged to rate the importance of this practice from 1 (being the lowest) to 5 (being the highest). As Figure 8 shows, most of the teachers view this practice as very important (45.7%). It is interesting to point out that none of the teachers rated this question as 'least important' (0%) while only one teacher rated this practice as 'less important' (0.8%).

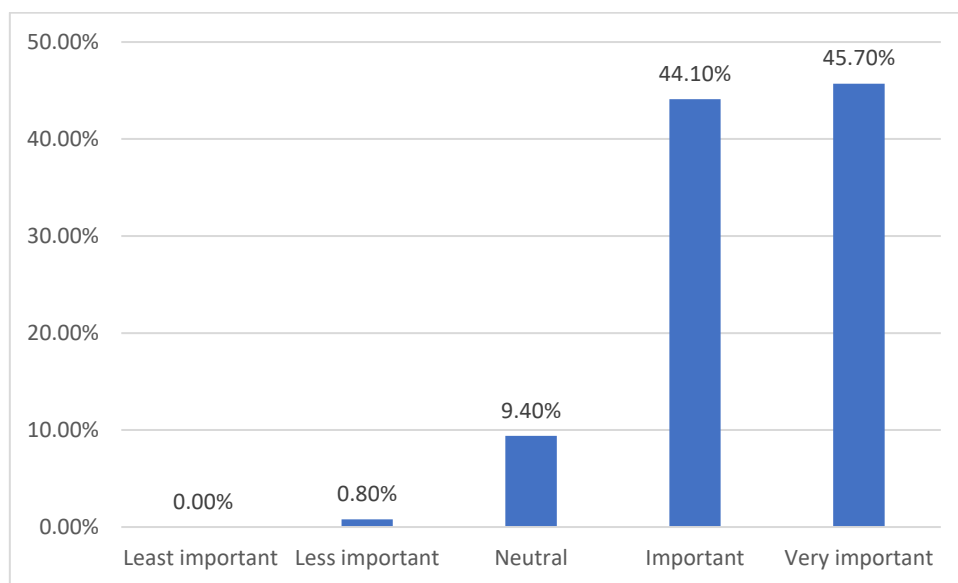


Figure 8: Views on the importance of this practice

4.2.2.2 Teachers' preferred subjects to conduct in the schools' outdoor areas

Table 4 shows the primary subjects that Year 3 teachers prefer to conduct in the schools' outdoor areas. The teachers were not constrained to choosing one subject only but were encouraged to choose all the subjects that they prefer to deliver outside. Science was the most popular subject to be voted by the teachers (84.3%). The remaining subjects were chosen as follows.

Subjects	Frequency	Percentages
Science	107	84.3%
Mathematics	84	66.1%
English	61	48%

Social Studies	46	36.2%
Art	45	35.4%
Maltese	42	33.1%
Drama	40	31.5%
Religion	25	19.7%
All my lessons	7	5.5%

Table 4: Subjects that Year 3 teachers prefer to conduct outside

Moreover, participants had the opportunity to add other subjects that they enjoy delivering in the schools' outdoor areas. An educator included reading sessions, three educators included Physical education, one educator included Music, and another one included extracurricular activities such as cooking and farming.

Table 5 shows the teachers' perspectives as to why they choose to teach their chosen subjects, from the previous question, outdoors. Through this table, one can observe that teachers mostly believe that this practice allows for more engagement with the lessons being delivered (78.7%) and that the children become more motivated to participate (77.2%). The least popular reason was that teachers choose this practice as it decreases the students' misbehaviour (21.3%). Hence, this shows that most of the teachers do not believe that this practice decreases misbehaviour during these lessons.

	Frequency	Percent
The students increase their engagement with my lessons	100	78.7%
Pupils are more motivated to participate	98	77.2%
Increases opportunity to teach through experiential learning	90	70.9%
Enhances the level of the pupils' learning of the curriculum	70	55.1%
Improves students' behaviour	27	21.3%

Table 5: Teachers' reasons for choosing to deliver lessons outdoors

Furthermore, the participants had the opportunity to add other reasons why they choose to deliver lessons outdoors. Experiential learning and hands-on learning were mentioned. Additionally, a teacher stated that s/he observes no difference when teaching indoors or outdoors. The reasons expressed by the teachers are as follows:

- When teaching science, I can show the students plants and insects outside (0.8%).
- Exposing the children to the outdoors (0.8%).
- Provides students with the opportunity to see and experience what they are learning (0.8%).
- They can relate what is being taught to the world around them (0.8%).
- Something different (0.8%).
- I do not feel that outdoor learning has different benefits than traditional classroom learning (0.8%).

4.2.3 Data analysis on Year 3 teachers' perspectives on the effects of outdoor learning on students

Question 10 analysed the participants' perceptions towards certain benefits that emerge from outdoor education using the Likert Scale. The questions presented were ranked from 1-5, 1 being the least important and 5 being very important to the educators.

56.7% of the participants strongly agree and 33.1% agree with the statement that outdoor education helps in making lessons more meaningful and effective for the students. 7.1% found this statement to be 'neutral', while 1.6% considered it to be 'less important' and another 1.6% as 'least important'.

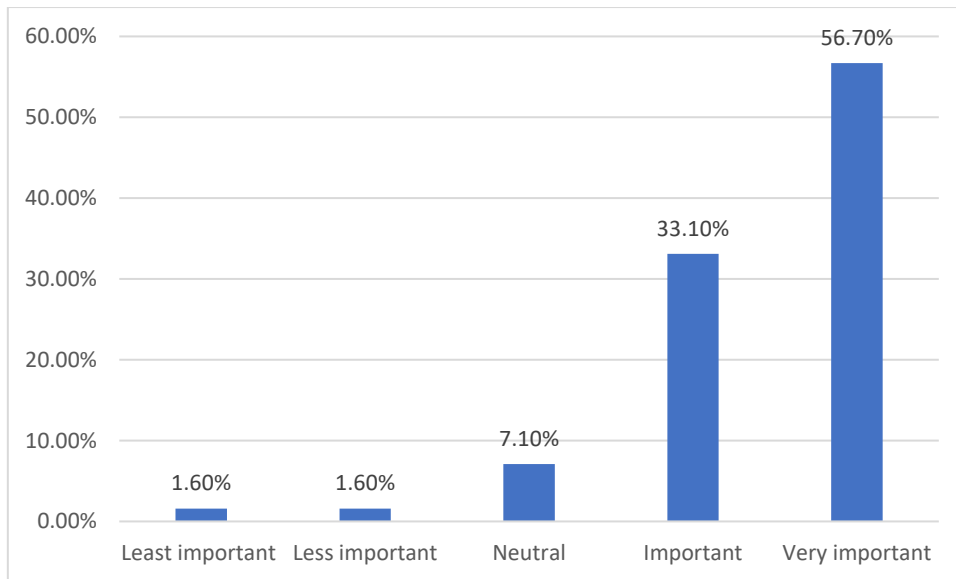


Figure 9: Outdoor education helps in making lessons more meaningful and effective

More than half (54.3%) of the respondents considered it 'very important' for students to improve their enthusiasm for learning and concentration while studying in outdoor areas, while 31.5% regarded it as 'important.' Only a small percentage of respondents (0.8% and 1.6%) considered it 'less important' or 'least important,' respectively, while 11.8% took a neutral position towards it.

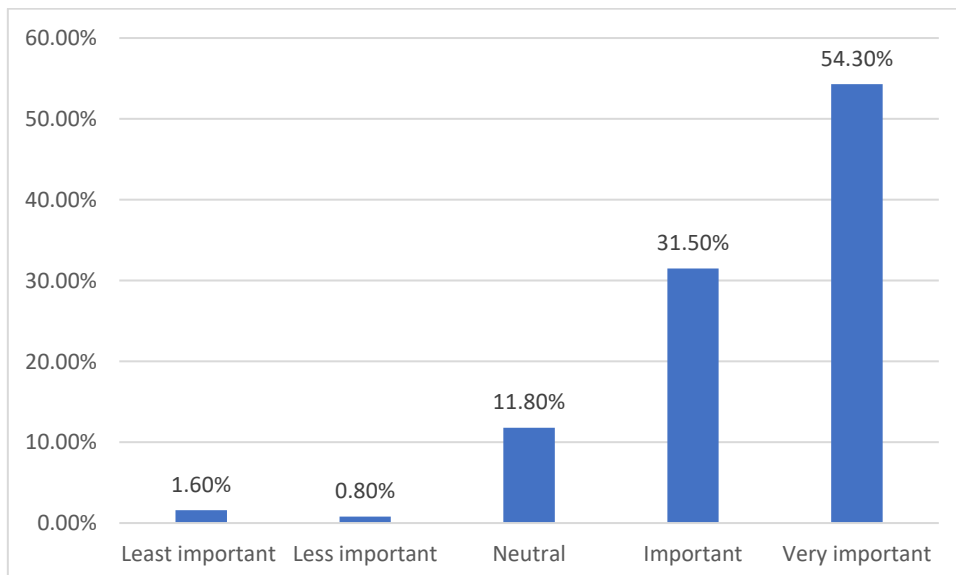


Figure 10: Learners increase their enthusiasm for learning and improve their concentration

46.5% of participants rated outdoor learning as 'very important' and 41.7% as 'important' in increasing the students' active participation. Only 7.9% were neutral, while 3.9% viewed it as 'less important' and none as 'least important'.

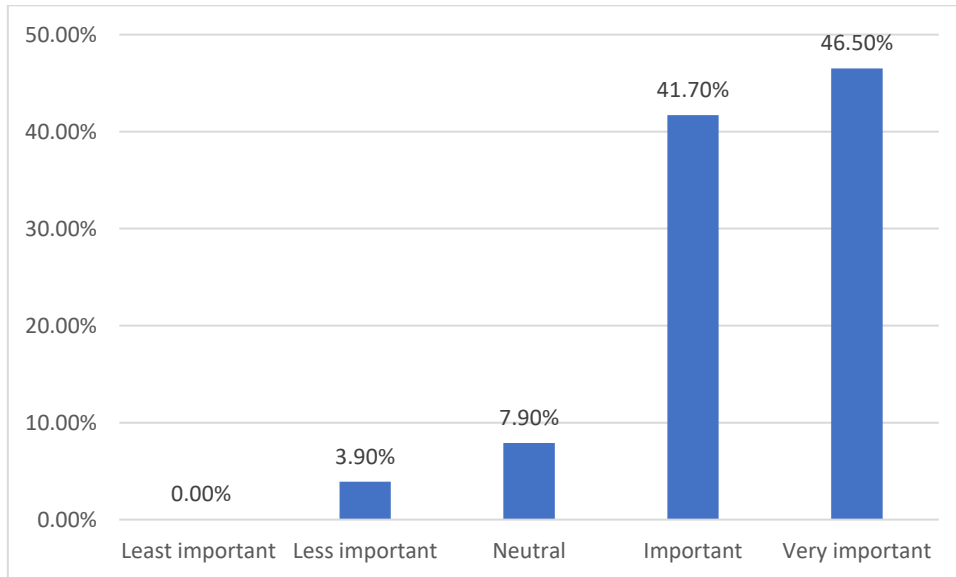


Figure 11: Increases active participation of the students

37% and 37.8% considered either 'very important' or 'important' respectively for outdoor education to provide opportunities for learners to develop their social and emotional skills. 22% remained neutral, while 2.4% and 0.8% regarded this statement as 'less important' and 'least important' respectively.

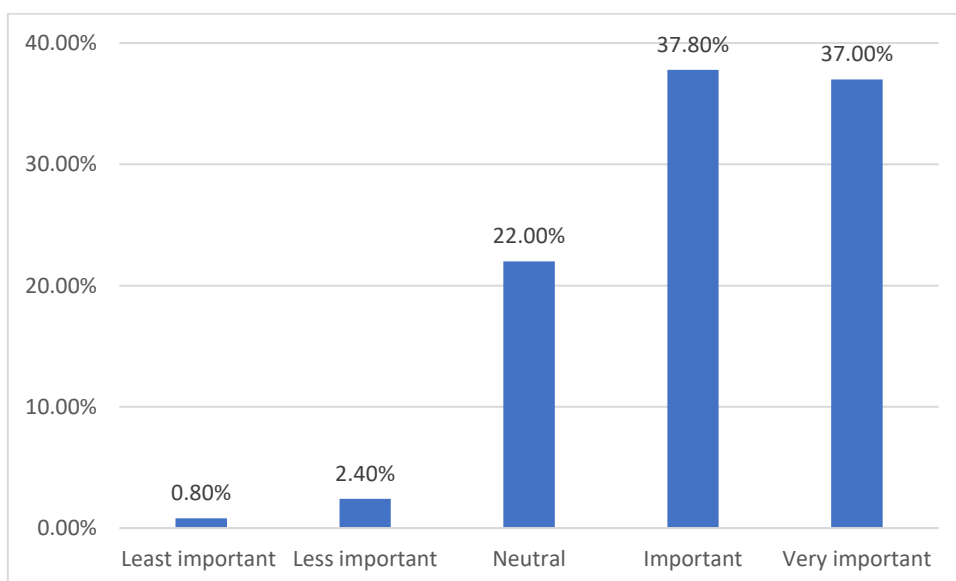


Figure 12: It gives more opportunities for students to develop their social and emotional skills

40.9% believe that outdoor education is important to help students think critically and creatively while a slightly lower percentage (38.6%) considered it very important. On the other hand, 15.7% were neutral while only a small percentage, that of 2.4% respectively, deemed it less important or least important.

A significant difference between the three local school sectors: state, church, and private was recorded ($p = 0.031$). As Table 6 shows, teachers working in the church sector obtained the highest mean rank (77.32), followed by teachers working in the state sector (62.6) and teachers working in the private sector (46.75).

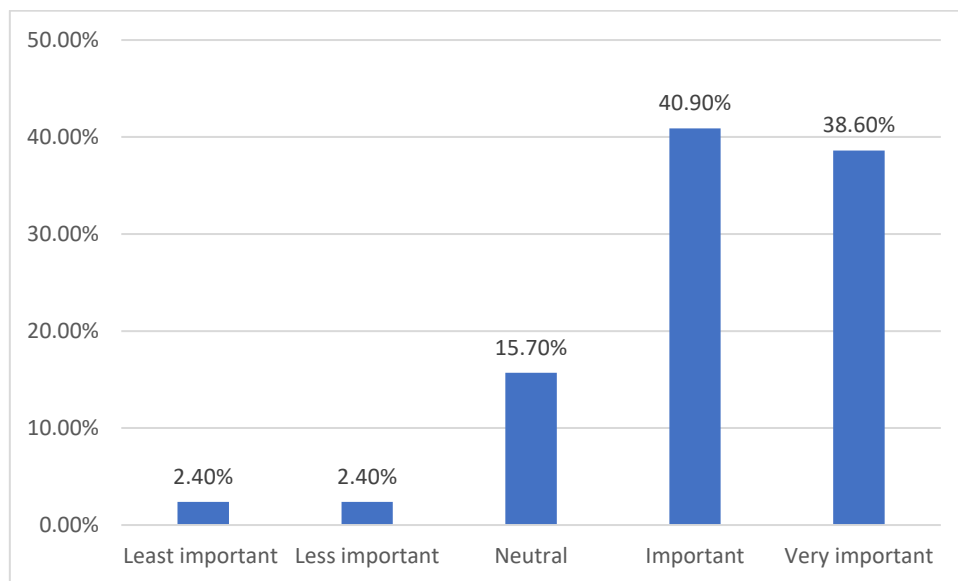


Figure 13: Students increase their ability to think creatively and critically

School Sector	Frequency	Mean	P-value
State	90	62.6	0.031
Church	25	77.32	
Private	12	46.75	

Table 6: Kruskal Wallis test: Comparison of mean scores of teachers' attitudes towards the benefits of outdoor learning in different school sectors

49.6% of the participants stated that outdoor education is 'very important' to increase the students' physical and intellectual development. 37% stated that it is 'important'. 9.4% were

neutral while only a small percentage, 2.4% and 1.6%, considered it to be 'less important' and 'least important' respectively.

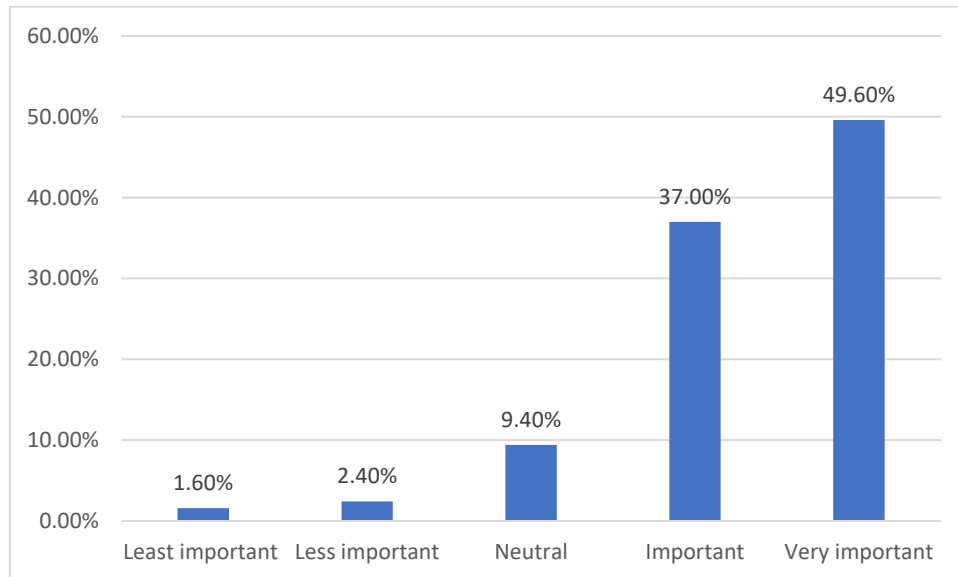


Figure 14: Important for the physical and intellectual development of the students

39.4% considered it as 'very important' while 34.6% considered it as 'important' for outdoor education to improve the students' problem-solving and risk-taking skills. 21.3% remained neutral while 3.9% considered it as 'less important' and 0.8% as 'least important'.

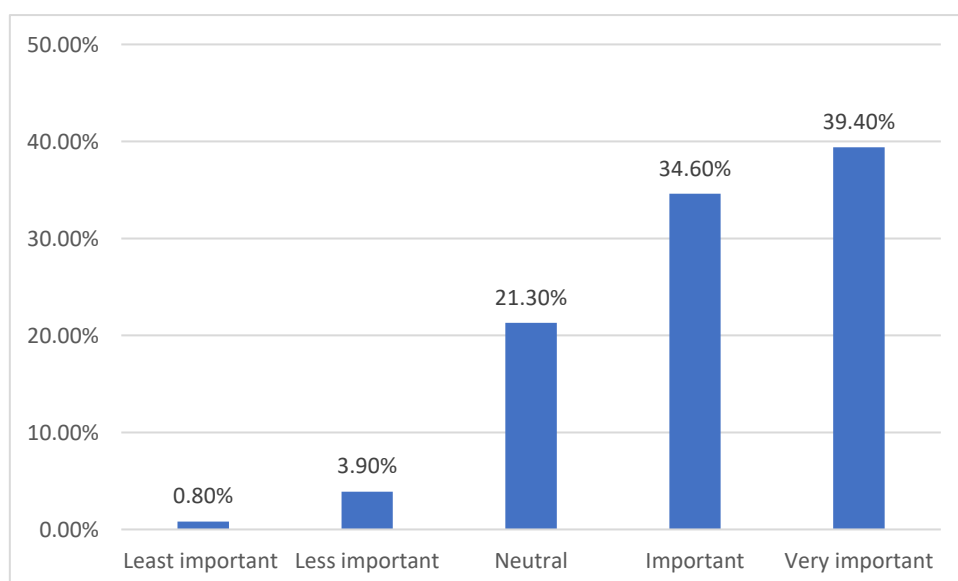


Figure 15: Improve their problem-solving skills and risk-taking skills

The majority of participants, 59.1%, considered outdoor education to be 'very important' for students to learn to respect nature and increase their awareness of sustainability, while 28.3%, considered it 'important'. Only a small percentage (0.8% and 1.6%) viewed it as 'less important' or 'least important,' respectively, and 10.2% maintained a neutral position towards it.

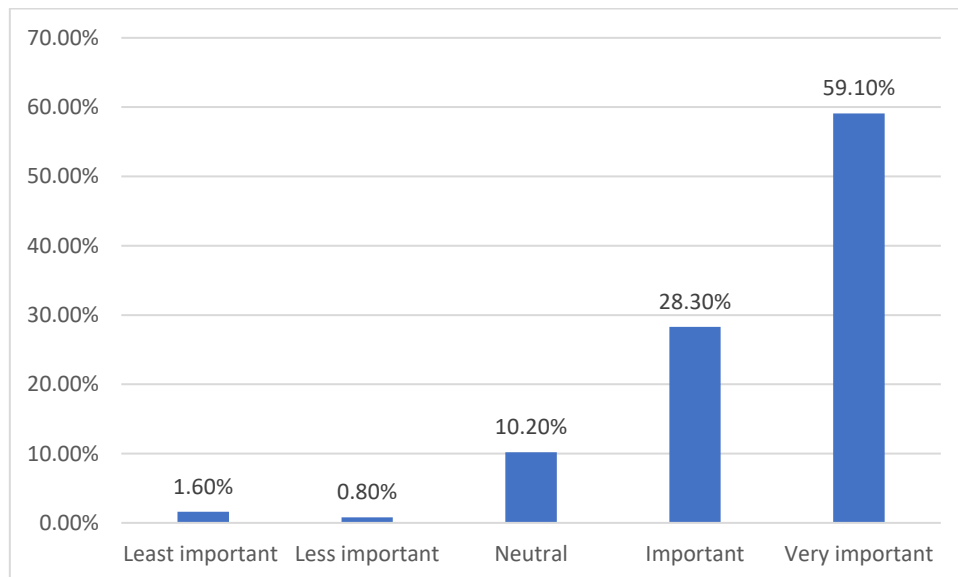


Figure 16: Learning to respect nature and increase awareness towards sustainability

37% of participants considered this practice as important for behaviour and academic attainment while only 18.9% considered it to be 'very important'. 33.9% kept a neutral position while 7.9% and 2.4% considered it to be 'less important' and 'least important' respectively.

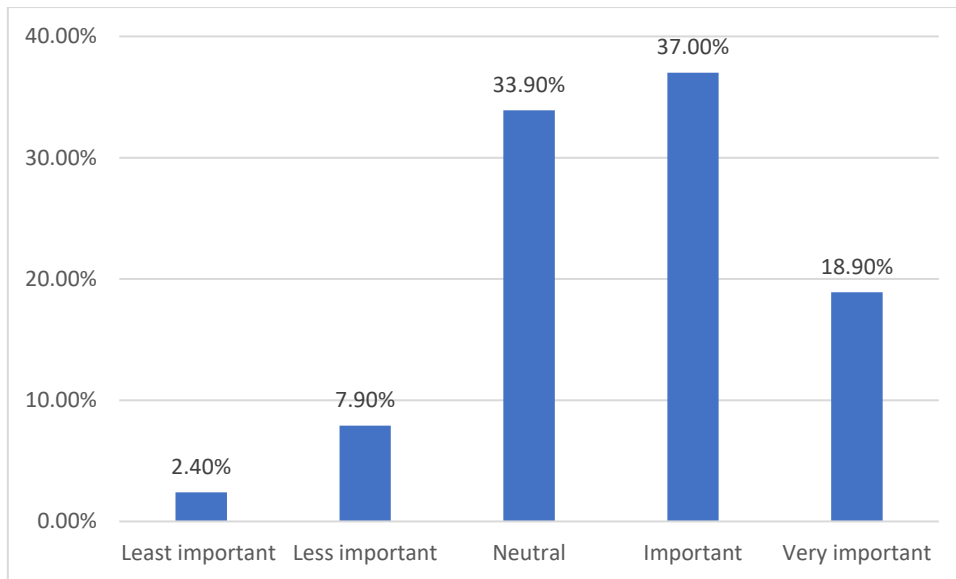


Figure 17: Improves behaviour and academic attainment

40.9% and 44.9% deemed outdoor education to be 'very important' and 'important' respectively. 9.4% stayed neutral while 3.1% and 1.6% thought it was 'less important' and 'least important' respectively.

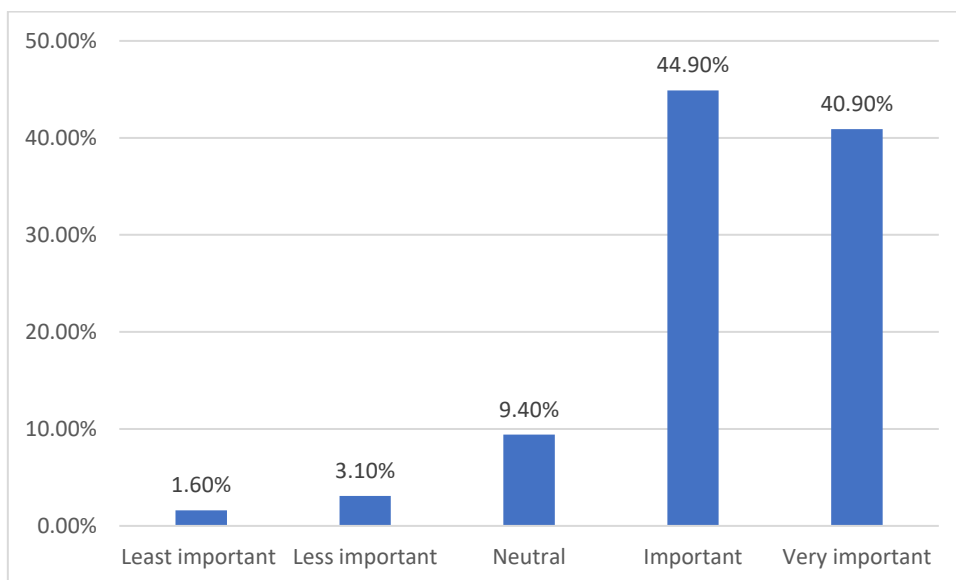


Figure 18: Improves the children's health and welfare

The next question, question 11, required a short answer and analysed the additional benefits of outdoor education. It was answered by 54.3% of the participants.

Some educators reflected that through this practice, an opportunity to improve social skills is presented.

Participant A (State): *It gives more opportunities to children to socialise in a meaningful way.*

Participant B (State): *Increases their communication and thinking skills.*

Participant C (State): *It gives me an opportunity to get to know my students more.*

Participants also commented on the importance of the change in the environment.

Participant D (Church): *Getting outside of the four walls of the class is very beneficial, especially for young students. They enjoy spending time in the school garden even if it is just for a reading lesson.*

Participant E (State): *Children enjoy the chance to get out of the classroom. The fact that they are enjoying themselves renders helps to build a positive attitude towards school and learning.*

Participant F (Private): *Less stressful environment than the classroom.*

Moreover, participants stated that apart from changing the classroom environment, the learners get the chance to disconnect from the electronics in the classroom and develop an appreciation for nature.

Participant G (Church): *Help them take a break from electronics and appreciate the outdoors more.*

In addition, hands-on learning and experiential learning were also stated as benefitting from this practice.

Participant H (Private): *They put what they have learnt in class into practice e.g. measuring outside with a metre ruler.*

Participant I (State): *Children will be learning by seeing real-life phenomena.*

Participant J (State): *Students can have a mental break from the classroom and the lessons, as well as have the opportunity to have a hands-on experience with problem-solving, experiments and learning through different situations.*

Participants also commented that this practice might be very beneficial for collaboration and students with different needs.

Participant K (Church): *Encourages teamwork and helps students with ASD and Dyslexia.*

4.2.4 Data analysis on Year 3 teachers' views regarding the challenges encountered through outdoor education

Using a Likert scale, question 12 examined the obstacles that the participants experience when implementing outdoor education in the schools they teach. Participants were encouraged to assign a weighing score (from 1-5) to each statement based on whether they believed it accurately described the challenges that they encounter.

A significant portion of participants, 62.2%, considered the school curriculum to be a 'highly important' obstacle that keeps them from practising outdoor education more frequently. An additional 29.1% viewed this challenge as 'important', while 6.3% remained neutral. None considered curriculum as 'less important', while only 2.4% view it as 'least important'.

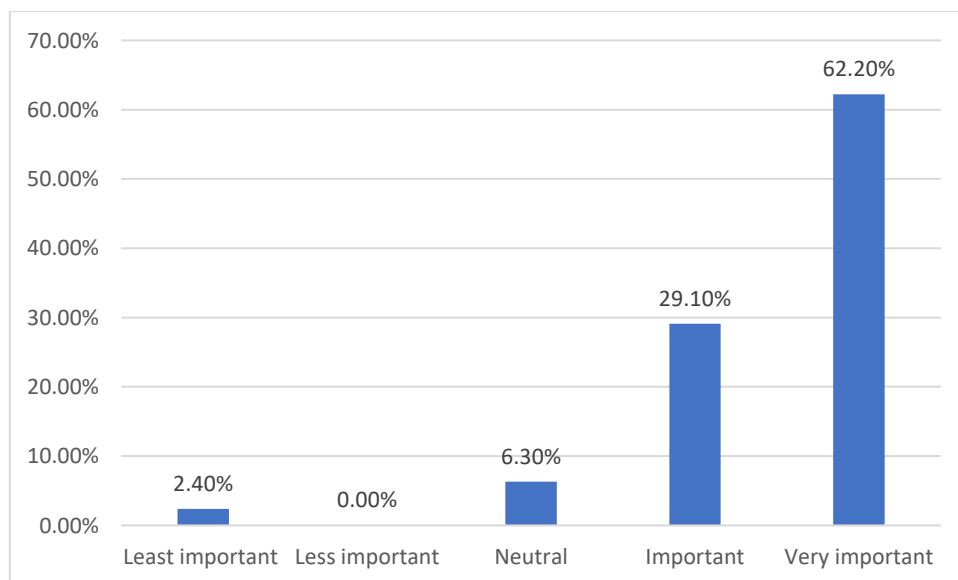


Figure 19: Busy school curriculum

32.3% of the participants deemed the challenge of having stress to improve the students' marks to be 'important' while 22% considered it to be 'very important'. 26.8% were neutral while 13.4% and 5.5% deemed it as 'less important' and 'least important' respectively.

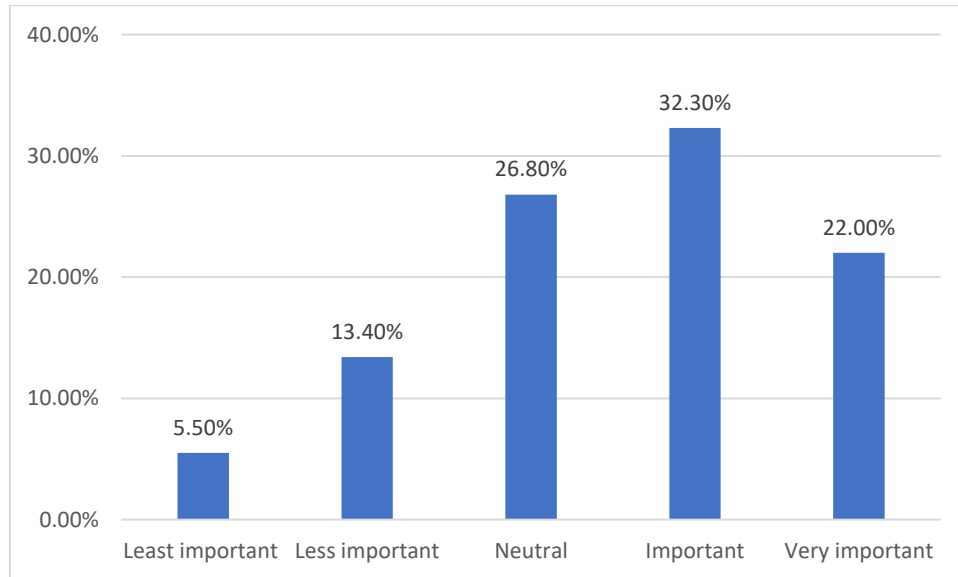


Figure 20: Experiencing constant stress to improve the students' marks, thus looking at outdoor learning as something 'extra'

More than half of the participants (53.5%) consider the challenge of time as 'very important'. 29.9% consider it as 'important', 11.8% kept a neutral position, 3.9% found it to be 'less important', and 0.8% as 'least important'.

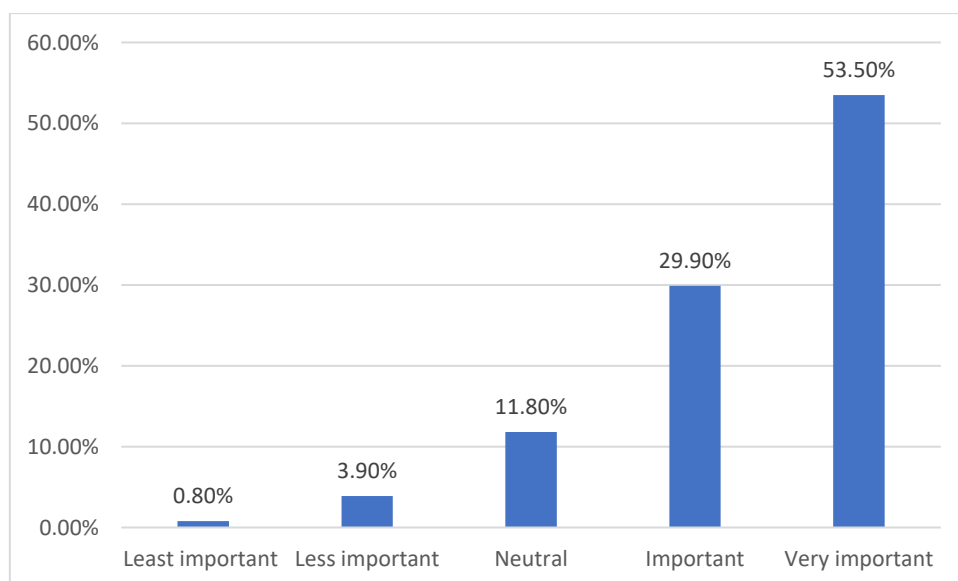


Figure 21: Lack of time

Most of the participants, 26%, do not consider the fear of losing control in the outdoor area as a challenge (less important). 18.9% considered it as 'least important' while 24.4% were neutral. Moreover, 18.9% considered it as 'important' while only 11.8% considered it to be 'very important'.

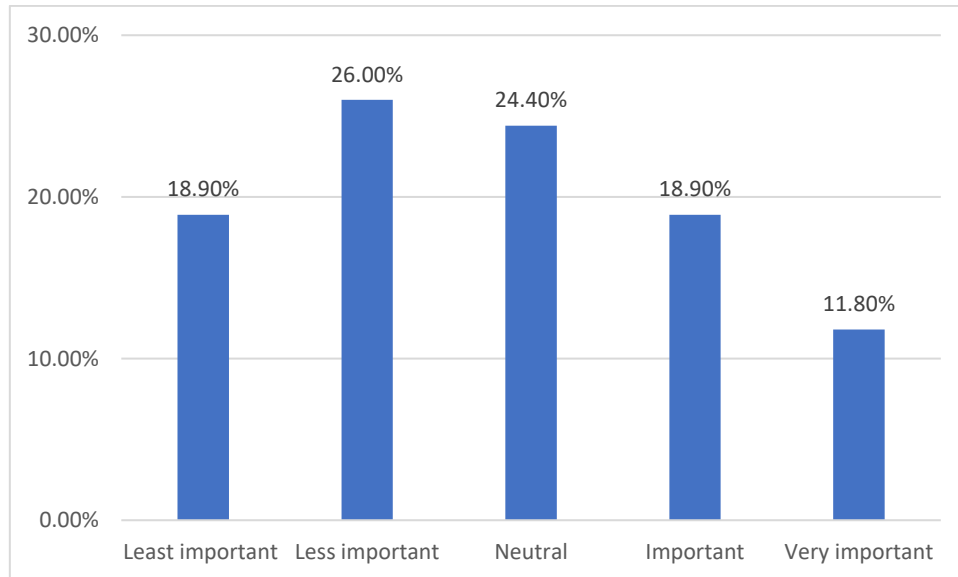


Figure 22: Fear of losing control in the outdoor classroom

A neutral stance was taken by the majority of participants (40.9%) towards the lack of clear curricular connections to certain subjects taught in the outdoors, with 18.9% and 7.9% considering it 'important' and 'very important', respectively. Additionally, 22% and 10.2% found it to be 'less important' or 'least important', respectively.

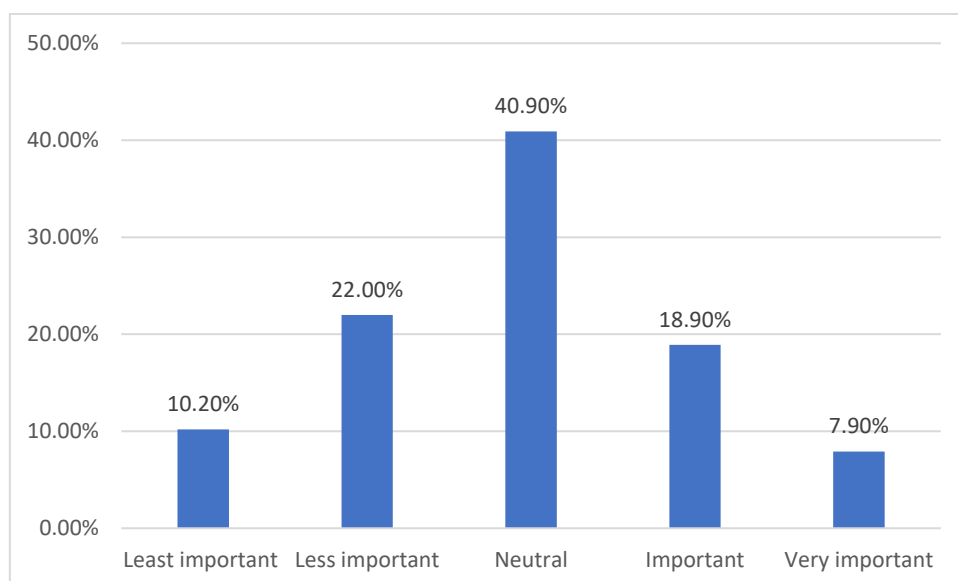


Figure 23: Lack of evident curricular connections to certain subjects taught in the outdoors

33.1% of the participants took a neutral position towards the importance of having support and resources when delivering an outdoor lesson, while 27.6% found it to be 'important'. 17.3% deemed it to be 'very important', 12.6% considered it to be 'less important' and 9.4% viewed it as 'least important'.

A Kruskal Wallis test indicated that there was no significant difference between the teachers' perceptions working in the three school sectors for the challenge of lack and support ($p = 0.076$). A mean rank order test presented that teachers working in state schools were ranked the highest (67.67), followed by teachers working in church schools (60.62), and teachers working in private schools (43.54).

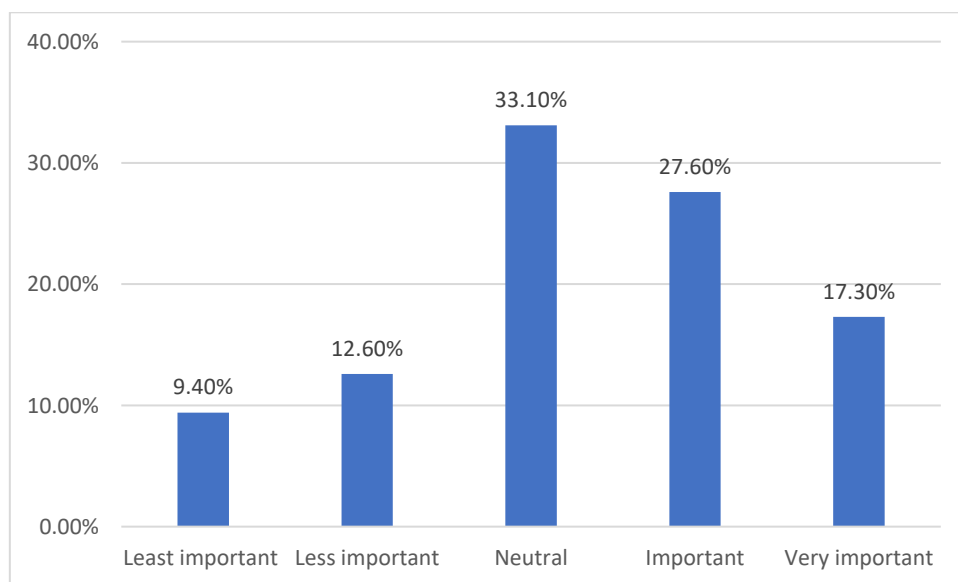


Figure 24: Lack of support and resources

33.9% of the sample found weather conditions to be an important challenge to affect their outdoor learning practice while 10.2% deemed it to be 'very important'. 29.9% were neutral while 15.7% and 10.2% considered it to be 'less important' and 'least important', respectively.

A significant difference between participants working in different school sectors was recorded ($p = 0.016$). Table 7 demonstrates that teachers employed by private schools obtained the highest mean rank (72.67), followed by teachers employed by public schools (67.87) and teachers employed by church schools (45.92).

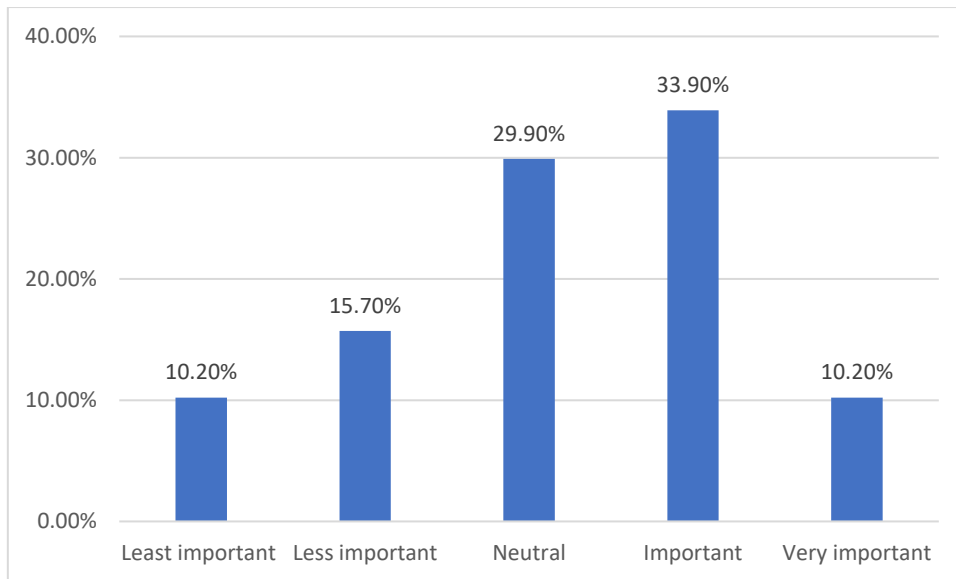


Figure 25: Weather conditions

School Sector	Frequency	Mean	P-value
State	90	67.87	0.016
Church	25	45.92	
Private	12	72.67	

Table 7: Kruskal Wallis test: Comparison of the mean scores of teachers' attitudes towards challenges of outdoor learning in different school sectors

25.2% considered the learners' safety as an important challenge while only 11% considered it to be very important. 35.4% kept a neutral position while 15% considered it to be 'less important' and 13.4% deemed it to be 'least important'.

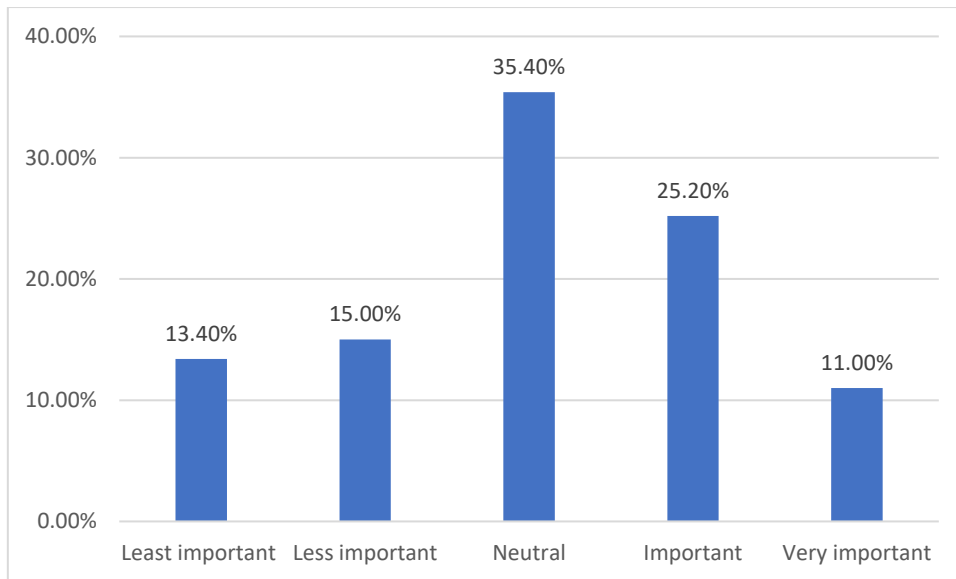


Figure 26: Concern about the pupils' safety

33.9% of the population considered lack of training as a 'very important' challenge and 30.7% considered it to be 'important'. 18.9% kept a neutral position while 7.9% deemed it as 'less important' and 8.7% as 'least important'.

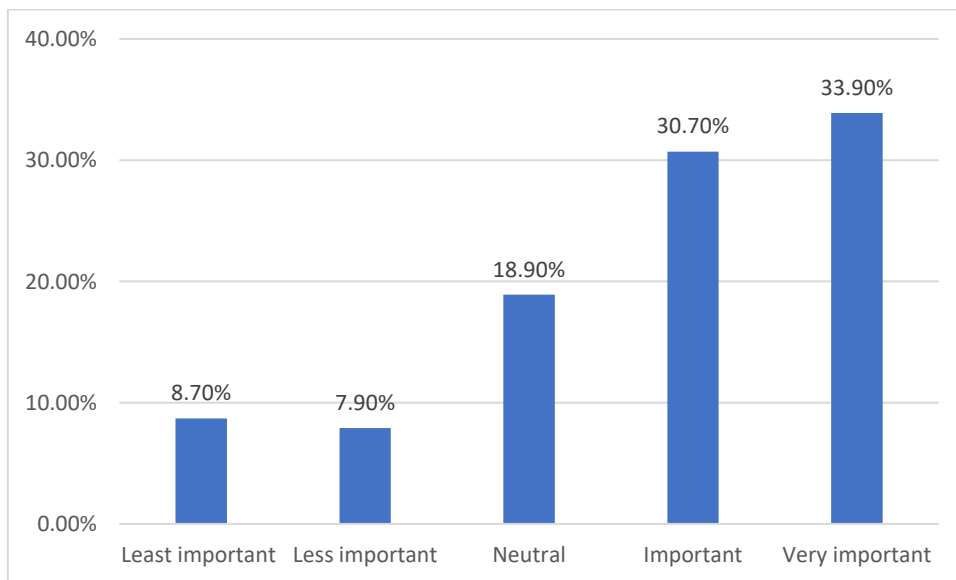


Figure 27: Lack of training in outdoor teaching

Following this question, 71 participants (55.9%) answered question 13, a short answer question which explored additional challenges related to outdoor education that were not mentioned previously and which participants face when practising it in their schools.

Several teachers agreed that students may get distracted when conducting outdoor lessons. This is due to the noise created by other students using the same outdoor space.

Participant L (State): *Other classes will be conducting other lessons, such as physical education, and thus disturb my lesson due to excessive noise.*

Moreover, others remarked that the students experiencing outdoor education get distracted more easily than if they were receiving lessons indoors which, hence, increases behaviour challenges.

Participant M (Church): *Students very often become easily distracted when compared to learning in the classroom.*

Participant N (State): *People passing by and cars hooting. This makes teaching more difficult.*

Participant O (State): *Children who do not want to follow misbehave and end up running all over the place so it's more tiring to control them.*

This may also be due to the fact that teachers do not practice outdoor education frequently and hence, as one of the participants stated:

Participant P (State): *Not all students are focused. Sometimes the outdoor area is associated with fun and play therefore if something is not done frequently children might think that a lesson held outdoors is not as important as one held inside.*

Other participants remarked that students with different abilities, unlike what was noted by some of the teachers when commenting about this practice's benefits, make this practice more challenging for them to conduct.

Participant Q (State): *Students with challenging behaviours or certain diagnoses like autism may make the whole experience more difficult as they are out of their usual surroundings.*

Participant R (Private): *Children with different abilities*

Participant S (Church): Differentiated learning is made more difficult.

Furthermore, other challenges related to nature were also mentioned:

Participant T (Church): Wasps! Not the first time that I had to go back inside because of them.

Participant U (State): Someone who has allergies to the sun for example ...

4.2.5 Comparison of Year 3 teachers working in the three sectors

4.2.5.1 Encouragement in schools and teachers' values towards outdoor education

Question 6 analysed whether the school that the participants work in encourages outdoor education. The researcher opted for a five-point Likert scale to identify how much schools encourage outdoor education and whether the school's encouragement affects the teachers' practices. Figure 28 shows a bar graph that presents the participants' results.

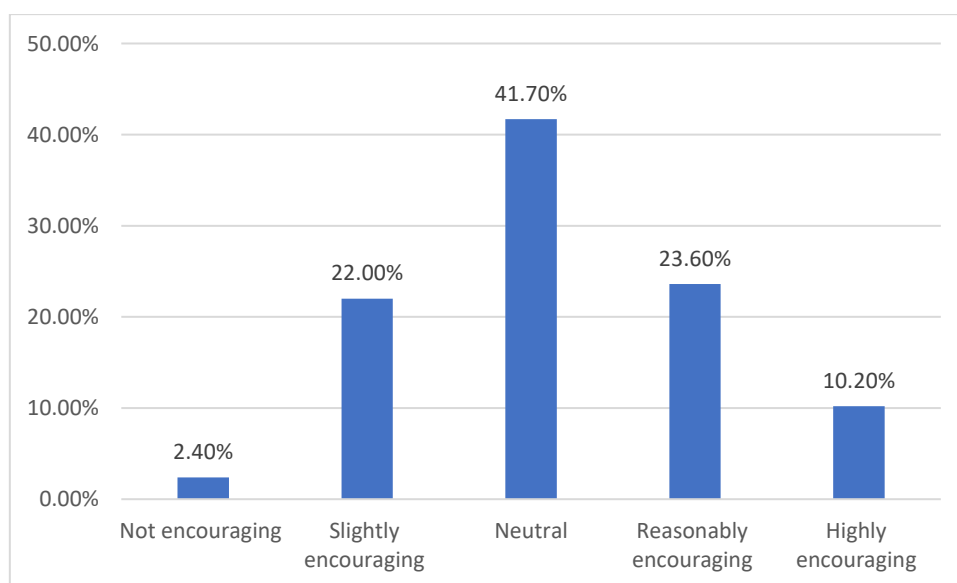


Figure 28: Outdoor education encouragement in schools

The majority of the participants (41.7%) considered their schools to be neutral in encouraging them to practice outdoor education. 23.6% considered their schools to be reasonably encouraging while only 10.2% considered the schools they teach in to be highly encouraging.

22% deemed their schools to be slightly encouraging while only 2.4% stated that their schools were not encouraging at all.

A Kruskal Wallis test indicated that there was no significant difference between how much outdoor education was encouraged in schools from various sectors ($p = 0.856$). A mean rank order test presented the rank for the state schools was 63.06, for church schools 65.1, and for private schools 68.75. Hence, through this test, private schools were determined to be the sector that most encourage outdoor education, followed by church schools and state schools accordingly.

As shown previously in Figure 8, most of the participants, 45.7%, deemed this practice to be very important while 44.1% deemed it to be important. A Kruskal Wallis test showed that there was no significant difference among teachers working in different sectors ($p = 0.316$). A mean rank order test showed that teachers working in the private sector were the most participants that view this practice as important (71.38), followed by teachers working in the state sector (65.33) and teachers working in church schools (55.66).

4.2.5.2 *The teachers' perceptions of increasing the amount of outdoor education to their timetables*

In question 14, as seen in Figure 29, 76 participants (59.8%) stated that they believe that outdoor lessons can be increased to their timetable while 51 participants (40.2%) stated otherwise.

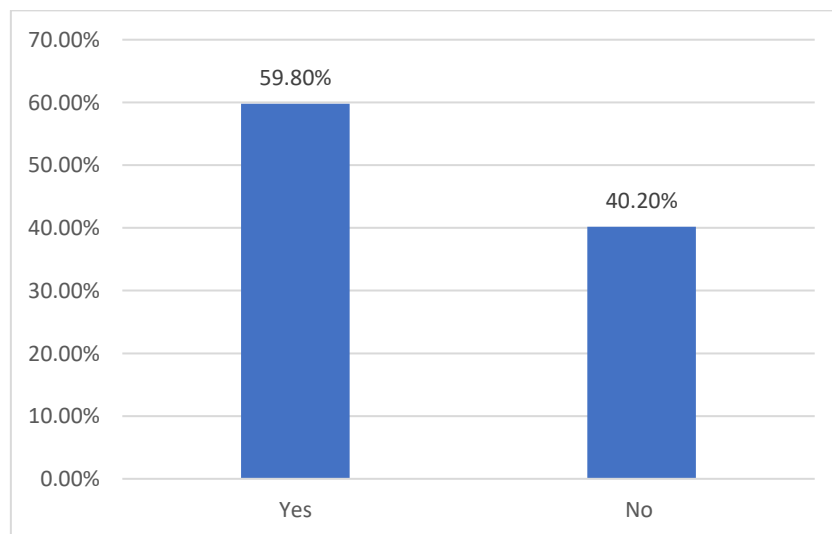


Figure 29: Teachers' perspectives on increasing outdoor learning

A Kruskal Wallis test identified that no significant difference was recorded among the responses of the teachers' perspectives working in the three sectors ($p = 0.523$). However, the mean rank order test presented teachers working in state schools with the highest rank (65.31), followed by teachers working in church schools (63.9) and teachers working in private school (54.38). Hence this shows that even though no significant difference was recorded, educators working in state schools are more likely to increase outdoor education to their timetable when compared with the other school sectors.

81 participants provided their opinions regarding the inclusion of outdoor education in their class timetable. Figure 30 displays the frequencies of various reasons that the participants provided for why they would increase outdoor education. On the other hand, Figure 31 shows the frequencies of reasons provided by the participants for not increasing outdoor education, presented in a graphical format.

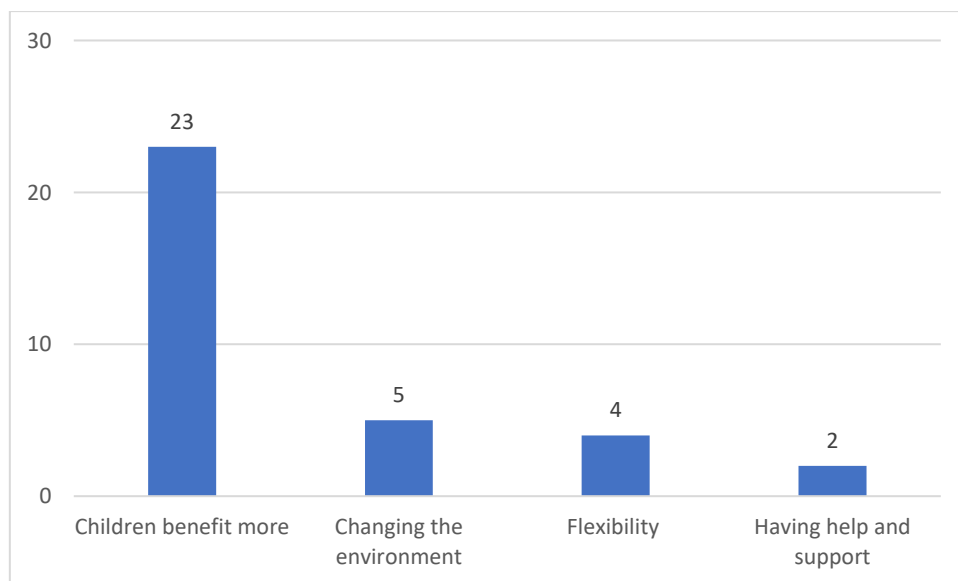


Figure 30: Reasons for increasing outdoor education to timetable

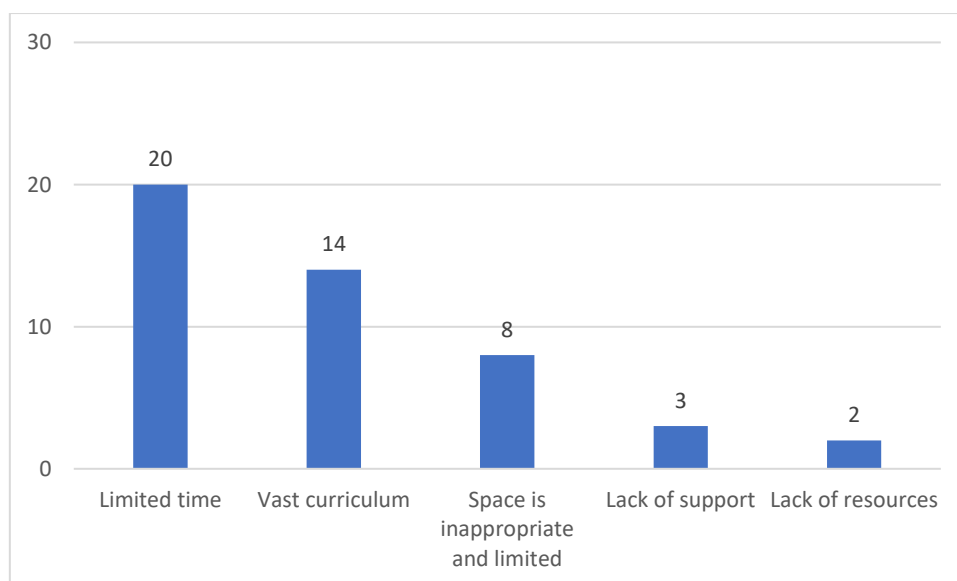


Figure 31: Reasons for not increasing outdoor education to timetable

4.2.5.3 Teachers' suggestions for increasing outdoor education in their pedagogy

Educators working in the three sectors were asked to list suggestions of what they wish can be changed for them to be able to increase their outdoor education practices. The results are presented in Table 8.

Suggestions given by local Year 3 educators	Frequency	Percent
More flexible curriculum	33	36.26%
Adequate outdoor school areas – specific for outdoor learning	15	16.48%
More outdoor resources	10	10.99%
Training for educators	8	8.79%
More encouragement from SMT	8	8.79%
Longer hours at school	5	5.49%
Training for parents about this practice's benefits	3	3.30%
More human support	3	3.30%
Outdoor education to be specified in the curriculum	2	2.20%

Slots in the school's timetable dedicated only to outdoor education	2	2.20%
Less emphasis on solely academic achievement	2	2.20%

Table 8: Teachers' suggestions for increasing outdoor education practice

4.2.6 Conclusion

The findings of the quantitative study were provided in this section. The main findings include:

- Most of the Year 3 teachers believe that outdoor learning is important for their students' learning and development.
- It is identified that primary schools do not place a high level of value on outdoor education.
- Educators tend to feel more comfortable practising Science and Mathematics through outdoor learning.
- The majority's reason for choosing to deliver lessons outside was that it increases student engagement, motivation, and learning through experiential learning.
- Various benefits were mentioned to emerge from this practice.
- Although educators are aware of the benefits, they still have mixed attitudes towards this practice as they are aware of the challenges brought by it.
- There are a number of obstacles that can hinder the implementation of outdoor education such as lack of training.
- Lack of evident curricular connections was identified as a barrier, especially for teachers in state schools.
- Weather challenges were the most significant barrier for teachers working in private schools.
- The participants highlighted the necessity for more adequate outdoor spaces, resources, and a flexible curriculum.
- Significant differences were present between teachers working in the three school sectors.
- Private schools are more encouraging of outdoor education and teachers working in these schools value it the most.

- The majority of participants, particularly those working in the state sector, want to increase outdoor education to their timetable.
- Making the curriculum more flexible was the most popular suggestion in order to facilitate outdoor education.

After analysing the questionnaire results, the interview questions were constructed to provide further insights into the local Year 3 teachers’ perspectives on outdoor education. The qualitative part of this research study will be covered in the next section.

4.3 Qualitative findings and analysis

Participants working in different school sectors were interviewed individually in six semi-structured interviews:

- Two interviews with Year 3 teachers teaching in a private school
- Two interviews with Year 3 teachers teaching in a state school
- Two interviews with Year 3 teachers teaching in a church school

The attributes of the participants chosen are described in Table 9.

	Gender	Age	School sector	Teaching experience with Year 3 students
Participant 1	Female	31-40 years	Private	Up to 5 years
Participant 2	Female	31-40 years	Private	10-15 years
Participant 3	Female	31-40 years	State	Up to 5 years
Participant 4	Female	41-50 years	State	6-10 years
Participant 5	Female	41-50 years	Church	Up to 5 years
Participant 6	Female	20-30 years	Church	6-10 years

Table 9: Interviewees’ attributes

The interviewees' comments were analysed through a thematic approach, which according to Braun and Clarke (2006), this approach provides a simple and flexible theoretical framework for qualitative data analysis. The following key themes emerged:

- Teachers' attitudes towards outdoor education
- The benefits of this practice
- Challenges that emerge from outdoor education practice
- Year 3 curriculum
- Resources used in the schools' outdoor areas
- Support received by educators
- Planning for outdoor lessons

Subsequently, the following seven themes are analysed in detail.

4.3.1 Teachers' attitudes towards outdoor education

This author wanted to learn more about how the local Year 3 educators perceive their experiences when implementing outdoor education. When asked to describe their experiences, participants stated that they find outdoor education to be a positive experience for their students. In fact, Participant 2 (Private) stated that *since I've been teaching outdoors, my lessons have improved quite a lot.*

Participant 6 (Church): *Honestly, I love preparing these kinds of lessons where I take the students outside. I believe that it is beneficial for the students, even for the fact that they are moving a bit around you know, they are not all the time seated down. I believe that it is beneficial for the kids, and even for me, because I change the environment as well.*

When participants were asked if they believe that this practice was considered to be part of their pedagogy, in question 7, half of them agreed that it is while the other half stated that it is not and that they do not use the outdoor areas regularly.

Participant 1 (Private): *I think it is part of my pedagogy because I believe in it. So when you believe in something you do your utmost, or in your head when you're planning, you try to plan with that in mind.*

Participant 2 (Private): *I think that it is part of my pedagogy, and over the years I found that even parents, are aware of my teaching, and they would like me to continue with*

this style of teaching. I use outdoor spaces once or twice a week, or even more, with different lessons.

Participant 6 (Church): *Yes, I do try to include it in my pedagogy because as I said before, it's also fun for me to see them enjoying it, seeing them get excited and seeing them thinking and being motivated. It's a great experience to have.*

On the other hand, participant 3 (State) stated that *at the moment I don't use it due to the lack of resources*. Also, participant 4 (State) declared that she does not consider it as part of her pedagogy as she does *not do that much. Maybe once a month or twice*. Moreover, Participant 5 (Church) states that *[she does] not consider it as part of [her] pedagogy however in the future [she] wishes to make use of outdoor learning more often and implement it frequently in [her] methods of teaching*.

4.3.2 The benefits of this practice

All the educators interviewed were aware of the benefits that can emerge from this practice. The author wanted to explore more why they think that the school's outdoor areas are essential for the learners' education and development. Participant 4 (State) stated that *whenever I do outdoor teaching, the children seem to enjoy it. I can observe that they are more motivated because it's something not that common for them*.

Participant 2 (Private): *Students learn more values than what we usually teach indoors. I feel that they are more open towards nature, and even their attitudes towards it are improved. They are more inclusive of each other since it's a less formal environment and it gives them more opportunity to get to know each other better. Also, children learn to be more accepting of each other and appreciate different abilities.*

Another participant stated the benefits from a parent's point of view as well:

Participant 1 (Private): *Moreover, even from a mother's perspective, I think outdoor learning is very beneficial because the children are not confined in a particular space, and they have a lower chance of getting sick than when they are confined in a classroom inside.*

The researcher wanted to discover whether there are specific students that benefit more from this practice. Not all educators agreed that different students can benefit more from it. However, it was recorded that *students that lack attention* (Participant 3, State), *students that can't sit still or are easily bored by whole class tasks* (participant 4, State), *visual learners and also students that are a bit hyper* (participant 6, Church) were observed to benefit more from this practice.

Another interesting benefit was stated by Participant 2 (Private)

Students with special needs. We have a student who uses a wheelchair. The student feels that sometimes the other students have to adapt to him. However when we are in outdoor spaces, all students have to adapt to this environment and not just to his needs, so he feels that he's part of the class, and everything is going as it should be.

4.3.3 Challenges that emerge from outdoor education practice

The researcher wanted to investigate the barriers that limit educators to practice outdoor education with their students. Although all the participants were aware of different beneficial aspects of this practice, a number of participants stated that they still prefer to use the indoor classroom to deliver their lessons. A participant stated that *this year I have only done my lessons inside the classroom. I would like to deliver outdoor lessons, to be honest, but the environment is not inviting at all.* (Participant 3, State). Similarly, Participant 4 (State) remarked that the outdoor areas available are very small and also, outdoor resources are very limited.

Participant 4 (State): *For example, the garden is very small. I can't let them roam around in the garden; you know. They have to stay in line because the passage is very small, so lack of outside resources. And also limited space in the garden.*

The weather was a barrier mentioned by most of the educators. Participant 1 (Private) stated that *when it rains, the mud kitchen gets very, very muddy so it makes it impossible to take the students there.* Additionally, Participant 2 (Private) referred to the wind, where she stated that *when it's very windy, the children cannot work properly on their books.*

The noise was also mentioned as being a challenge for educators.

Participant 4 (State): *The courtyard is surrounded by classes, so it gets very noisy for the other classes as well. For example, once, we did a creative writing lesson outside. First, there was a storytelling session about a rocket, and then we did paper rockets where the children flew their rockets in the yard. Then they wrote about an adventure on the rocket. They really had fun and were motivated to write about it, but I don't think that the other teachers were very pleased with me.*

Participant 5 (Church) mentioned *the tight curriculum that [the educators] have to follow*. She stated that *it is not always easy to find some time to conduct outdoor activities as these take up more time than the normal lessons*. Additionally, Participant 6 (Church) mentioned that along with the Learning Outcomes that educators need to follow, they also need to assess children. She states that *there is no real freedom of what teachers are going to teach and how they are going to teach it because they still need to assess everything, which is too much*. Hence, this also leads to the challenge of time. In fact, Participant 6 (Church) continues to state that *through this curriculum, we have a syllabus that we need to finish in a certain time frame*.

4.3.4 Year 3 curriculum

The author wanted to explore how educators link the curriculum with outdoor education. All the educators agreed that outdoor education helps the students *link the curriculum learned with real-life material* (Participant 6, Church) and hence, the students get to experience hands-on and experiential learning.

Participant 5 (Church): *If for example, I teach something in the classroom, it is very helpful for the students to practice the topic first-hand in real life. For example, if I am teaching them length in Maths, it is helpful to demonstrate such a topic in a different environment than that which they are used to.*

Participant 1 (Private): *The children are more independent, and they can grab onto new information and learn better than if they are in the classroom. This is because, in the classroom, there are a limited number of manipulatives or things which the children can look at.*

Participants also noted that outdoor education is also ideal for revision. Participant 6 (Church) stated that these activities are beneficial *even for revision, and also for certain students that are visually orientated, I think they grasp the curriculum a bit better whenever we are outside.*

Moreover, it was stated that this practice enhances peer teaching.

Participant 2 (Private): *I think that outdoor learning gives more opportunities for interaction, and since the students interact more, they get to learn from each other more. So they expand their knowledge. Apart from that, they also teach each other and help each other progress in their learning.*

Moreover, question 14 aimed to investigate whether outdoor education is included in the school policies of the participants' respective school sectors. The results showed that both participants from the private school sector mentioned outdoor education in their policies, but there was no dedicated policy solely focused on this practice. On the other hand, both participants from the state school sector stated that outdoor education was not mentioned in their policies. In the church school sector, one participant mentioned that outdoor education was not included in their policy, while the other participant stated that it was included but not in a specific manner.

Through question 15, participants were asked how they would feel if outdoor learning was to be embedded in the school curriculum and policies. All of the participants had positive comments and stated that it would be very beneficial for the students as it would ease their learning. In fact, Participant 5 (Church) stated *I would view it as a positive change as I am aware of the benefits. Therefore if it were to be embedded into the curriculum, I would fully support it.* Participant 6 (Church) also stated that she would agree as *whenever we do something which is part of the curriculum but in different ways, where it's fun and it's different, students really enjoy it.*

Hence, it was agreed that outdoor education would be very beneficial if it were to be included in the school curriculum and policies. Participant 6 (Church) continued to say that it would be very beneficial since *in Malta our system is too class-based, strict and old school and so I think that outdoor learning needs to be included more.*

Although all the participants agreed with including outdoor education in the curriculum and school policies, some of them said that they would need more training on this practice to be able to implement outdoor education in the best possible way. Participant 1 (Private) remarked that she would *be happy, but [she] would like to have more training so it would give [her] more ideas as [she] feels that [she] sometimes lacks ideas for outdoor activities.* Additionally, another participant commented that more resources would help her to deliver outdoor lessons.

Participant 4 (State): *I think that if I am encouraged and I am given more training on how to do it, and if I am provided with more resources, because if it's included in the school action plan, then there will be more resources for outside learning.*

4.3.5 Resources used in the schools' outdoor areas

In question 2, the author sought to explore the outdoor spaces available in the schools that the participants teach in. Both participants working in a private school (Participant 1 and 2) stated that they *have various different outdoor areas with resources such as yards with flowers and trees, and a football pitch* (Participant 2, Private). Participant 1 (Private) stated their various outdoor areas which include *a valley where we can go for walks, and maybe do a picnic there. [They] have the Mud Kitchen with soil, benches with tables, trees, and resources such as large pots and watering cans.*

On the other hand, participants 3 and 4, which work in state schools, said that outdoor spaces and resources are *very limited* (Participant 4, State) at their schools.

Participant 3 (State): *As far as I know, the only other outdoor spaces available are the yards. Unfortunately, they are very bleak, they are surrounded by the school building. There are no trees or plants. I don't know the material of the ground, but I can describe it as being very scratchy, because every time a student falls, they get hurt very badly. Also, no outdoor resources are available for me to use.*

Moreover, participants working in a church school did not say similar things regarding the outdoor spaces and resources. Participant 6, that works in a church school stated that they have *various outdoor areas* (Participant 6, Church).

Participant 6 (Church): *We have a front garden equipped with a swing and slide. We have the back garden on the backside of the school, here we have larger trees, but the soil is covered with syntactic turf, the kids can sit on it and there are some large cushions. There are some benches as well, a lot of teachers do use this space. We do various activities there, from reading to outdoor tasks.*

Additionally, Participant 6 (Church) mentioned that they have a large yard, a track, a football pitch, a smaller yard with a trampoline and a small inflatable pool, and a greenhouse.

Participant 5 (Church) stated that they only have *two outdoor spaces: the internal yard and the external yard just outside the school premises. Both yards are mainly used for recreational purposes.*

4.3.6 Support received by educators

The amount of support given by the SMT was explored through question 13 of the interview. Both participants working in a private school stated that *outdoor learning is definitely encouraged* (Participant 1, Private). Participant 2 added that the SMT takes an interest in this practice, and *they do come by and ask students what they're doing.*

Participant 6 (Church) also stated that the school encourages this practice and also likes to enjoy seeing the outdoor activities. Participant 6 considers herself *quite lucky honestly. All the fun ideas that we come up with, they do encourage.* Participant 5 (Church) also agrees that the school encourages this practice however, *they leave it up to the teacher to decide if and when to make use of outdoor areas for teaching.*

The participants working in state schools have different experiences with their SMT. Participant 3 stated that she receives no encouragement at all while Participant 4 stated *that they don't discourage us but no, I can't say that they really encourage us.*

Learning support educators were also mentioned to be of support in this experience. Participant 6 (Church) stated that she has 3 LSEs in her classroom, and they help her to plan fun activities for the students. They also offer their help in managing groups of children while in the outdoor areas.

Participant 6 (Church): *One time one of my LSEs had an idea to make an outdoor lesson with stations. We are 4 adults in the class as I have 3 LSES in my class. We grouped the children into four different groups and each group had an educator with them. We came up with different goals for the lesson and used these stations as a rotation.*

Participants 1 and 2 (Private) also stated that the LSEs make outdoor education easier for them. *They help me prepare the stations so that students can go around the different stations when we are doing the lesson* (Participant 2, Private).

Participant 3 (State) argued that *the LSE that I have in my classroom is one-to-one, so I have to do most of the things on my own* and hence, she does not have any support that helps her to implement outdoor lessons.

Moreover, question 14 analysed whether outdoor learning is included in the school's policies. Teachers working in private schools stated that this practice is mentioned in their school policies, teachers in state schools said that it is not, and teachers working in the church schools stated that it is included, but that it is not very specific.

4.3.7 Planning for outdoor lessons

Question 5 investigated how the interviewees plan their outdoor lessons. Two educators stated that planning is done the same as if they were to deliver the lesson inside. Participant 1 (Private) stated that *these lessons come impromptu. If I don't have the time, or if it doesn't come naturally, or if I observe that the mood of the children isn't in the right place, I don't go, but usually, it works.*

On the other hand, four educators stated that they plan them differently from the inside lessons. *I feel that the lessons which are outdoor planned include more resources than the ones for indoor learning and include more opportunities for group work* (Participant 2, Private). Participant 5 (Church) also said that *outdoor lessons require more thought and preparation than indoor lessons since the activities typically involve more creativity and planning.*

Most of the participants agreed that these lessons' goals are *linked to the learning outcome that [they] would be teaching during the lesson* (Participant 1, Private). *Experiential learning* was also mentioned as a goal by Participant 3 (State).

Moreover, Participant 5 (Church) said that her goal is to *make learning more fun for the students*. She stated that through this practice, *children absorb the lesson and at the end of the day have a more positive outlook on learning, something which might not be achieved when conducting the lesson indoors in the classroom*.

Furthermore, in question 11, the researcher analysed the educators' views on the types of assessments that they plan for outdoor learning.

Participant 5 (Church): *Conducting an assessment is not usually one of my main objectives. I do not view assessment as a top priority when conducting outdoor learning. However, it is important to ensure that the students have taken something useful from the lesson and not just view it as a fun activity.*

Other participants stated that they assess *whether they learned the concept or not* (Participant 2, Private). This is done *through questions and activities done in these outdoor areas such as, observing symmetry found in nature* (Participant 1, Private), *writing* (Participant 4, State), and *assessing their reading skills* (Participant 6, Church). Collaboration with peers was also mentioned *through games and group work* (Participant 3, State).

Participant 6 (Church): *When we do go outside and we experience different activities, it's easier for me to assess without them knowing because they act how they are really like. For example, when they know that it's a test or a dictation, they tense up. So I tend to plan discussions, reading sessions, and presentations like 'show and tell' outside so they will act more naturally.*

4.3.8 Conclusion

Through this section, the author has presented the findings from the qualitative study. An overview of the key conclusions of the participants' perspectives on outdoor learning is provided below:

- The participants showed positive attitudes towards outdoor learning although not everyone stated that it is part of their pedagogy.
- The educators were aware of the various benefits that this practice offers to their students.
- Even though participants were knowledgeable about what outdoor education has to offer, due to certain barriers, they do not make use of it frequently.
- The introduction of the Learning Outcomes in Year 3 did not make outdoor education easier as educators have to assess students more regularly and hence, are tight with time.
- Positive comments were stated towards the statement of having outdoor education embedded in the curriculum and policies.
- The educators requested more training and resources.
- The level of support available by the SMT and LSEs affects the extent of outdoor education that can be provided.
- More than half of the participants agree that planning for outdoor lessons is more creative and resourceful than planning for indoor lessons.
- Educators mainly assess children through questioning, writing, and reading when in outdoor spaces.

Although educators have a positive attitude toward outdoor learning, the challenges that they encounter do not make it easy to practice outdoor education frequently. The Discussion, in the next chapter, will analyse the study's results and identify crucial aspects that emerged from it.

5 Discussion

5.1 Introduction

This research study aims to investigate the perspectives and practices of local Year 3 teachers towards outdoor education and to explore to what extent the schools' outdoor areas are being used by the local Year 3 teachers. Throughout this chapter, the author will analyse the findings and themes that emerged from both the quantitative and qualitative studies. These themes include:

- Year 3 Teachers' knowledge and implementation of outdoor education
- Teachers' attitudes towards outdoor learning
- Teachers' perspectives on the effects of outdoor education
- Factors influencing the implementation of outdoor education
- Comparing differences among educators working in the three local school sectors

Moreover, previous research and studies related to outdoor education will be referred to and discussed. This will enable the author to tackle the research gaps identified in the previous chapter, the Literature Review.

5.2 Year 3 Teachers' knowledge and implementation of outdoor education

5.2.1 Teachers' knowledge on outdoor education

The participants who took part in both the qualitative and quantitative studies had prior knowledge and understanding of outdoor education as well as the benefits that arise from this practice. As stated by Rea (2008) and confirmed by participants, educators are aware that outdoor education provides students with the opportunity to change their environment. In fact, a participant from the quantitative study referred to the schools' outdoor areas as a *less stressful environment than the classroom* (Participant F, Private).

To improve teachers' knowledge in outdoor teaching, participants expressed the need for more training. This was evident by the high number of participants who rated the 'lack of training in outdoor teaching' as a 'very important' barrier in the questionnaire. Additionally, one of the suggestions made by participants was to receive more training on the subject. During the interviews, training was also mentioned by several participants. Participant 1

(Private) stated that training would be very beneficial for her as she would be able to get more ideas on how to implement outdoor education. In 2018, Davies and Hamilton stated that without the right training on outdoor learning, educators might not be able to support the students' learning and assessment opportunities to their full potential. Hence, findings reveal that more teacher training about outdoor education is required for Maltese educators teaching the Year 3 classes.

5.2.2 Implementation of outdoor education in local primary schools

During the interviews, when asked to describe the outdoor areas, half of the participants were unable to say that their schools offered suitable and sufficient outdoor spaces. For example, Participant 3 (State) claimed that the outdoor *environment is not inviting at all* and hence, made it challenging for educators like herself to implement outdoor education with their students. These results indicate that these schools are not providing these beneficial assets, thus, hindering educators from making use of these areas. As Marchant et al. (2019) commented, schools should be responsible for providing natural and outdoor areas for students to enhance their learning and development. On the other hand, the other three participants mentioned various outdoor areas available in the schools they teach in such as gardens, yards, football pitches, mud kitchens, valleys, tracks, and greenhouses. Hence, as stated by Miller, Kumar, Pearce, and Baldock (2021), these educators have a better opportunity to offer their students nature-based activities that students would not otherwise experience. Consequently, through these results, one notes that although certain Maltese schools are equipped with appropriate outdoor spaces, others are not and hence, more of these spaces are needed to ensure outdoor education in primary schools.

Dyment (2005) claimed that outdoor learning varies according to the level and subject being taught. Thus, this researcher studied the subjects favoured by Year 3 educators for outdoor education and investigated how they implement them into the schools' outdoor spaces. In line with findings from Dyment's study (2005), Science was the most popular subject amongst the participants that took part in this questionnaire. In addition, this researcher's study found that Mathematics was the following preferred subject among educators. This contrasts with Dyment's findings (2005), which indicated that Physical Education was the next teachers' preferred subject to teach outdoors.

The questionnaires revealed the reasons why participants chose specific subjects as their favourite to teach outdoors. One of the participant's reasons for choosing Science as her preferred subject was that through outdoor education, she is able to show the plants and insects to the children while linking them to the lesson being taught. Moreover, during the interviews, Participant 6 (Church) claimed that this practice allows her to *link the curriculum learned with real-life material* while Participant 5 (Church) gave an example of how she implements Mathematics in the outdoor spaces, *if I am teaching them length in Maths, it is helpful to demonstrate such a topic in a different environment than that which they are used to*. This links with the domain of experiential learning and concrete experiences (Dewey (1971); Kolb (1984, as cited by Harris & Bilton, 2019). Additionally, as Waite (2010) stated, most of the sample of Year 3 teachers studied gave importance to linking learning situations with opportunities that the outdoors has to offer. Hence, the learners experience hands-on and experiential learning in the outdoors.

In addition, the questionnaire examined the perceived importance of the barrier created by a lack of clear connections to the curriculum. The majority of participants did not consider this barrier to be significant since most of them rated this challenge as 'neutral'. Such a result does not support Dymont's statement (2005) which states that one of the biggest challenges for educators in this approach is the absence of clear curricular links. Furthermore, when examining teachers' preferred subjects for outdoor implementation and their responses regarding the perceived barrier of lack of clear curricular connections, it becomes evident that educators may not possess adequate knowledge of the various cross-curricular learning opportunities that exist outside the classroom, as highlighted by Nicol and Waite (2020).

Additionally, another suggestion mentioned in the questionnaire results was for parents to be provided with training on outdoor education as well. This is because, as Palavan, Cicek, and Atabay (2016) state, to successfully implement outdoor education, it is crucial to have the support of the parents. As a result of having the parents updated with this practice, Participant 2 (Private) stated that her students' parents are aware of her teaching practices and are pleased with her teaching style. Additionally, they have encouraged her to continue using this approach.

5.3 Teachers' attitudes towards outdoor learning

The fact that the majority of participants expressed a desire for further training on this practice indicates their interest and willingness to learn how to implement it into their teaching methods and pedagogies. As a result of receiving training and spending more time in the outdoors, Groves and McNish (2011) state that the educators' attitudes towards this practice will be positively affected.

In the questionnaires, most of the participants stated that outdoor education is 'very important' or 'important' in their teaching practices. This aligns with the findings of Davies and Hamilton's (2016) study, where all teachers that participated in their study expressed a positive attitude towards this practice. This point was further explored and developed in the qualitative study. Participant 2 (Private) remarked that once she started implementing outdoor education in her teaching strategies, her lessons *have improved quite a lot*. Moreover, Participant 6 (Church) demonstrated a positive attitude when expressing her enjoyment in creating activities related to this practice and noted that it is beneficial for both herself and the students as they all enjoy the change of environment. These findings are in line with Maynard and Waters' study (2007) where they found that educators feel more relaxed when implementing an outdoor lesson.

Moreover, when asked if they incorporate outdoor education as part of their pedagogy, only half of the participants that participated in the interviews confirmed that they do. This differs from Waite's (2011) research, in which teachers expressed eagerness towards outdoor education and included this practice to their pedagogies.

In this research study, both participants working in private schools and a participant working in a church school stated that they believe in this practice and hence, use the outdoor spaces regularly. Participant 2 (Private) mentioned that she makes use of these spaces *once or twice a week, or even more, with different lessons*. Moreover, the other half of the interviewees (two participants working in state schools and one in a church school) stated that although they are aware of this practice's benefits, they still use the indoors due to various challenges that they face. Participant 5 (Church) expressed that although at the moment outdoor education is not part of her pedagogy, *in the future [she] wishes to make use of outdoor learning more often and implement it frequently in [her] methods of teaching*.

This result shows that despite local teachers' strong support for outdoor education, challenges such as *lack of resources* (Participant 3, State) hinders the implementation of a value-based pedagogy that incorporates outdoor education. This contrasts with Waite's study (2011), which suggested that educators' belief in and commitment to this practice enable them to overcome obstacles, ensuring that children receive outdoor education.

The researcher further analysed the planning and goals that Year 3 educators plan for their outdoor lessons. The majority of participants stated that outdoor lessons are planned differently from indoor ones. Hence this shows that most of the teachers are not replicating indoor lessons in the outdoor areas as Maynard and Waters (2007) found in their study. This is because, as stated by participants, outdoor lessons require more creativity and preparation and also allow for more opportunities to plan group work activities.

Moreover, different goals were mentioned for these types of lessons. Most of the interviewees claimed that their ultimate goal is for children to understand and acquire the lessons' learning outcomes. Participant 5 (Church) mentioned that the goal is for outdoor lessons to be *fun*. She continued to state that through these fun activities, children *absorb* the lesson and obtain positive attitudes towards learning. Additionally, she mentioned that this might not be possible when lessons are conducted indoors. In line with what Priest (1999b, as cited in Karppinen, 2012) states, these fun and experiential outdoor lessons are not only fun and games but are an important asset for the students' learning.

As per the questionnaire, most of the participants believed that they could enhance their practice of outdoor education. Reasons presented that educators are aware of the advantages that are provided to students when they experience outdoor education. However, the primary reason for not enhancing outdoor education was the limited availability of time. Further insight into the teachers' perspectives on outdoor education was obtained through interviews. During the qualitative study, participants were asked about their reactions to outdoor education being incorporated into the curriculum and school policies. All participants displayed a positive attitude towards this proposal. Participant 6 (Church) mentioned that this change would make Maltese schools less rigid and more engaging for students. In fact, Spiteri (2016) mentioned that outdoor education in Malta is not typically seen and is not often implemented by educators. Hence, this change would be very beneficial for the local schools. Moreover, Participant 4 (State) remarked that if outdoor education is

added to the curriculum and policies, this would consequently result in more outdoor resources and training for educators to make use of.

5.4 Teachers' perspectives on the effects of outdoor education

Overall, the effects discussed by participants were all beneficial effects for the students' learning and development. Through both questionnaires and interviews, the vast majority of respondents expressed a strong preference for incorporating outdoor education as an effective teaching strategy, citing its numerous advantages for students. Educators highlighted that the fact that the traditional approach to delivering lessons to students should be improved. Rather, the student ought to be at the centre of the learning process, aligning with Dewey's (1938) constructivist theory where he proposed that through hands-on and experiential learning, students become actively engaged with their lessons, resulting in a more meaningful and effective learning experience. The study participants expressed that children's engagement with lessons is improved through the incorporation of outdoor education. This result is consistent with Waite's findings (2011).

Moreover, motivation was an important benefit among participants. Participants stated that this practice motivates learners to focus on their learning. In fact, Participant 4 (State) commented that when she once delivered a creative writing lesson outdoors and included outdoor activities related to the writing task, the children's motivation to write about it increased as they were able to link the fun activities to their writing. The finding of this study aligns with the results discovered by Dettweiler et al. (2015) and Bølling et al. (2018), as both studies concluded that teaching the traditional curriculum outside of the classroom setting had a beneficial impact on motivation in comparison to indoor classroom teaching.

Based on the results of the questionnaire, the participants viewed the promotion of appreciation and awareness towards nature and sustainability as a crucial advantage of outdoor education. Mifsud and Chisholm's (2018) research also found that children tend to enjoy being in closer contact with nature and learn more effectively through hands-on experiences, especially if they come from urban environments with limited interaction with nature. Participant G (Church) emphasized that such engagement facilitated a break from electronic devices and encouraged a deeper appreciation of the outdoors. This advantage was

also mentioned in the interviews, where Participant 2 (Private) noted that when children are exposed to the outdoors, they tend to demonstrate more openness towards nature and an improved attitude towards environmental considerations. These findings align with the research conducted by Mårtensson et al. (2011) and Palmberg & Kuru (2000 as cited in Manni, Ottander, Sporre, & Parchmann, 2013). Additionally, this study's results suggest that the experiences and settings in which students receive their education, as demonstrated in Hill's research (2013), play a significant role in equipping learners to actively contribute towards a sustainable future.

The majority of participants in the questionnaire expressed that children's health and welfare are important benefits of outdoor education. This is in line with Quibell, Charlton, and Law's (2017) findings that outdoor activities can improve children's well-being. Participants also noted that outdoor activities are fun for children and can enhance their enjoyment of school, as suggested by Quibell, Charlton, and Law (2017). Additionally, the physical and intellectual development of children through outdoor education was viewed as 'very important' by most participants, which is consistent with McMillan's ideas about the physical freedom provided by the outdoors (Liebovich, 2019) and Marchant et al.'s (2019) research on the cognitive benefits of outdoor exposure.

Another crucial benefit noted by the majority of participants is the improvement of children's social and emotional skills through outdoor education. Participant A (State) stated that outdoor activities provide more opportunities for children to socialize in a meaningful way, while Participant 2 (Private) highlighted the chance for students to interact, learn from each other, and develop their emotional skills in the school's outdoor areas. Overall, these findings demonstrate that, like Scandinavian countries, Maltese educators recognize the value of outdoor education in promoting the intellectual, emotional, and physical growth of children (Humberstone & Stan, 2011). Other benefits that were ranked as important and were stated to emerge from outdoor education include an enhancement in the learners' active participation, problem-solving skills, and critical thinking skills.

Moreover, the researcher examined whether students with learning difficulties benefit more from outdoor education compared to other children. Some educators disagreed with this statement, arguing that everyone can benefit from the practice if appropriately planned. In a study by Davies and Hamilton (2018), educators who recognized these rich opportunities and

strived in planning appropriately were able to offer benefits to all children. However, one of the participants in the questionnaire observed that specific students benefit more, such as those diagnosed with Autism Spectrum Disorder (ASD) and dyslexia. Interviews revealed that from some of the participants' perspectives, students who lack attention span, struggle with sitting still or get easily bored with whole class tasks, visual learners, hyperactive students as well as children that make use of a wheelchair benefit the most from outdoor education. These findings are in line with Davies and Hamilton's study (2018), which also emphasized the potential benefits for children with extra learning needs in an outdoor classroom setting.

The quantitative study revealed that most participants did not believe that outdoor education improves students' behaviour during lessons. Additionally, when asked to rate whether they perceive outdoor education to improve academic attainment and behaviour, the majority responded with either 'neutral' or 'important'. Only a small fraction of the participants rated outdoor education as 'very important' to improve academic attainment and behaviour. This finding is in contrast to the studies by Marchant et al. (2019) and Williams & Dixon (2013), which found that outdoor education positively impacts both academic attainment and behaviour in students.

Another advantage of outdoor education, as observed by some teachers, is its effectiveness in assessing children. Interviews with educators revealed that many teachers formatively assess their students using various methods during outdoor activities. This finding contradicts with Estyn's (2011, as cited in Davies and Hamilton, 2018) claim that outdoor assessment is rarely carried out by teachers. The participants noted that children tend to perform more naturally when assessed in the outdoor environment, resulting in improved performance. This aligns with the findings of Davies and Hamilton (2018), who noted that outdoor assessments are similar to indoor ones but may yield better results due to the students' more natural behaviour. Furthermore, participants agreed that outdoor education expands student knowledge. During the interviews, Participant 6 (Church) stated that revision is more effective as an outdoor activity because children grasp information better when learning outdoors. Additionally, visually oriented students tend to grasp curricular concepts better when they are outdoors.

5.5 Factors influencing the implementation of outdoor education

Although most of the participants in this study supported outdoor education, this study's findings revealed several obstacles that prevent educators from adopting this practice. While practitioners recognize the benefits of conducting assessments in outdoor areas, they also acknowledge the challenge of the high volume of assessments they must complete every year. According to questionnaires, which are in line with Basford and Bath's study (2014), the majority of educators feel stressed to improve students' marks, and as a result, outdoor education is considered an added burden. Furthermore, interview participant 5 (Church) stated that the implementation of the learning outcomes has increased the number of assessments teachers must conduct, making it more difficult to find time for outdoor lessons and assessments. Therefore, she believes that educators are not free to be creative with teaching as assessments consume a lot of time. This suggests that Maltese practitioners prioritize their students' academic performance and appear to focus more on grades and assessments, despite their strong beliefs in promoting outdoor learning. This differs from Keichtermans' research (2005), which suggests that personal values significantly influence educators' teaching practices and that conflicting values may hinder them from incorporating outdoor learning, even when aware of its benefits.

The questionnaire revealed that school curriculum was a very important factor that influenced the educators' practice of outdoor education. In fact, when asked what changes they would like to see in order to practice outdoor education more frequently, most participants felt that the Year 3 curriculum should be more flexible. Moreover, a small percentage of participants expressed a desire for outdoor education to be included in the curriculum, as already mentioned before. Furthermore, this challenge was also mentioned in the interviews, where Participant 5 (Church) referred to the curriculum as being *tight*. This echoes a challenge identified in previous studies by Humberstone & Stan (2011) and Marchant et al. (2019), which found that the demanding curriculum limits opportunities for utilizing the school's outdoor areas.

The factors mentioned above have led educators to consider lack of time as a significant barrier. In fact, the majority of participants rated this barrier as 'very important' in their practice. It was also evident that educators have to complete the curriculum within a *certain time frame* (Participant 5, Church), which leaves them with little time to plan and execute

engaging outdoor activities for their students. As a result, children miss out on the opportunity to experience nature and engage actively during lessons conducted outdoors, as highlighted in the study by Mifsud and Chisholm (2018). As previously discussed, the research findings suggest that planning plays a crucial role in enhancing outdoor education experiences as it allows for more resources, creativity, and group work opportunities to be incorporated into the planning process. Hence, in line with Oberle, Zeni, Munday, and Brussoni's research (2021), the barrier of time can be tackled through better planning as educators noted that pre-planning helped them to stay on schedule and be accountable for outdoor lessons. The study also revealed educators could overcome the curricular barrier to outdoor learning by purposefully incorporating some curricular material outside.

The questionnaire results showed that most participants were neutral about the importance of support and resources for outdoor lessons. Some thought it was important, and a few said they needed more resources and human support to increase outdoor learning. In the subsequent interviews, it was found that half of the participants (two working in private schools and one working in a church school) stated that their schools are equipped with adequate resources, while the other half (one from a church school and two from state schools) reported that resources are very limited. In fact, Participant 3 (State) claimed that she does not make much use of the outdoors *due to the lack of resources*. It became apparent that teachers who had better access to outdoor resources were able to conduct more engaging outdoor activities and achieve better outcomes than those who did not. This finding supports the conclusions of Zink and Boyes' (2006) research that stated that resources play a significant role in the implementation of outdoor education. In addition, in line with the findings of Zink and Boyes (2006), participants expressed that human resources are also necessary to support outdoor activities. Interviews revealed that when teachers have support from a learning support educator (LSE) or senior management team (SMT), they feel more encouraged and empowered to plan engaging outdoor activities for their students.

Furthermore, the participants revealed that outdoor distractions are enhanced when in the outdoors and hence, the students' learning gets negatively impacted. According to their responses to the questionnaire, educators feel that the noise from other students using the same outdoor areas interrupts the lesson being taught and leads to increased behavioural issues in their outdoor classroom. As a result, teaching becomes more challenging. This

finding is consistent with Sjöblom, Eklund, and Fagerlund's (2021) study, which found that outdoor education can offer more distractions for students than indoor classes. Therefore, students who require a quiet environment to concentrate will not benefit from outdoor lessons. Moreover, Participant 4 (State) also highlighted that when conducting an outdoor lesson, excessive noise is produced, hence disrupting other indoor classes situated close to the outdoor space being used. Thus, the lack of appropriate outdoor spaces also makes educators uncomfortable in these situations as they unintentionally disturb nearby classes.

Nature itself was another barrier that participants stated they face when implementing an outdoor lesson. The majority of teachers participating in the questionnaire viewed weather conditions as important in their implementation. This barrier was further discussed in the interviews. Participant 1 (Private) stated that when it rains, it gets very challenging for her to take students to outdoor areas such as the mud kitchen. The wind was also mentioned by Participant 2 (Private) who commented that when windy, it interferes with the students' work and consequently, children are unable to work properly on their books. These findings align with Maynard and Waters' study in 2007, where teachers stated that they stay indoors during bad weather. Furthermore, additional nature-related obstacles were discovered in the questionnaires' findings where participants mentioned wasps and allergies to nature, such as allergies to the sun.

Furthermore, participants in the questionnaire did not see outdoor safety as a significant obstacle, as most held a neutral position as analysed in the questionnaires' findings. This contrasts with Maynard and Waters (2007) and Little, Wyver and Gibson (2011) who argued that concerns grew due to the increase in the potential for physically risky activities.

Additionally, some participants noted that outdoor lessons can be stressful for educators when teaching students with different needs. This limitation was highlighted in the questionnaires, where participants expressed concerns about the change in the learning environment that can be discomforting for students with autism and other diagnoses. As a result, this experience can be particularly challenging for educators. A participant also mentioned that differentiated learning becomes more difficult in outdoor settings. However, these findings contradict the study by Dring, Lee, and Rideout (2020), which found that the outdoors has a calming effect on students with special needs and reduces disruptive behaviour.

5.6 Comparing differences among educators working in the three local school sectors

The author aimed to highlight any significant differences between the viewpoints of Year 3 teachers working in different school sectors through the quantitative aspect of this study. These findings were further analysed through the qualitative aspect of this study to examine the quantitative findings in more depth. The results of the study could inform local school policies and influence school curricula to enhance outdoor education practices in the local primary schools. As suggested by Spiteri (2020), studies such as this one could help policymakers and education authorities to comprehend the significance of this practice. In fact, the analysis of interviews revealed that outdoor education is not specifically mentioned in any of the school sectors' policies where the participants were employed. Participants from private schools stated that it was mentioned, but not given the necessary emphasis. However, participants from church schools provided mixed responses, where one stated that it was not mentioned while the other noted that it is included but not in a specific manner. In contrast, both participants from state schools declared that outdoor education was not mentioned in their school policies. Additionally, the study could help identify the effectiveness of various policies, resources, and opportunities that support outdoor education in primary schools. It is also intended for teachers to utilize these findings to enhance their knowledge and skills in incorporating outdoor education into the curriculum.

Correlations were explored through the quantitative study. It was revealed that teachers working in the church sector had the highest agreement level with the statement that students increase their creative thinking and critical thinking skills. This was followed by teachers working in the state and private sectors accordingly. This might imply that Year 3 teachers working in the church sector value outdoor education the most for its potential to promote cognitive development among students.

Furthermore, this study identified another significant difference in a particular challenge that educators face when implementing outdoor education. It was found that teachers working in the private sector placed greater importance on weather conditions, as indicated by their high level of importance to this statement. Interviews with teachers working in the private sector confirmed this. Participant 1 (Private) noted that when it rains, certain areas like the mud kitchen become too muddy for outdoor activities with children. Additionally, Participant 2 (Private) shared that the region where she teaches is particularly windy, which makes it

challenging for her students to work on their books. Hence, this natural element causes significant barriers for educators working in the private sector.

Although there was no significant difference among participants working in different school sectors, the mean rank order indicated that teachers in the state sector experienced a lack of support and resources more commonly than those in other sectors. This was followed by teachers working in the church and private sector. This was confirmed in interviews with teachers in the state sector, where they reported limited outdoor resources and little support from the senior management team (SMT). In contrast, teachers in the church and private sectors had varying opinions on the resources and support offered by their schools. Participant 6 (Church) mentioned various outdoor areas available in the school she teaches while stating that she has a lot of support from the LSEs working with her and from the SMT. On the other hand, Participant 5 (Church) said that resources are limited, and teachers are encouraged by the SMT, but *they leave it up to the teacher to decide if and when to make use of outdoor areas for teaching*. Teachers in the private sector generally reported having adequate resources and encouragement to practice outdoor education.

When comparing the teachers' attitudes working in the three sectors, it was observed that although all the teachers were aware of the benefits that this practice has to offer, it was noted that not all educators implemented it in their pedagogy. This finding is consistent with Mifsud's (2012) study, where experiential learning was often viewed as a waste of time. This varied by sector, with teachers in the state sector reporting the least inclusion of outdoor education in their teaching, followed by teachers in the church sector who had mixed attitudes, and teachers in the private sector who reported more frequent inclusion of outdoor education. This suggests that teachers who have access to resources and support are more motivated to incorporate outdoor education in their teaching.

This author sought to discover the correlation between the encouragement received by teachers in different sectors and their values towards outdoor education. The study found a negative correlation among the three sectors however the mean rank order test showed that teachers working in the private sector receive the most encouragement, followed by the church and state schools respectively. When comparing this result to the mean rank order test for teachers' perspectives on the significance of outdoor education, the results showed that teachers in private schools had the highest value for it, followed by state and church

schools respectively. This suggests that private schools may provide more encouragement to teachers in this area, leading to greater value placed on it. However, there were differences in the mean order ranks between schools' encouragement and teacher values in the church and state sectors. Therefore, no definitive statement can be made regarding these sectors.

Moreover, when comparing the educators' perceptions of increasing this practice to their timetable, no significant difference was recorded. However, the mean rank order test showed that educators working in state schools were more likely to want to increase outdoor education, while those in private schools were least likely. This may suggest that private school teachers are already implementing outdoor education enough, but teachers in state and church schools need to increase this practice more. The most popular reason given by teachers to increase outdoor education in their timetables was that children benefit more from this practice. This is consistent with Gatt, Tunnicliffe, Borg, and Lautier's (2007) study, which emphasized the significance of outdoor engagement for Maltese students in enhancing their learning and development.

5.7 Conclusion

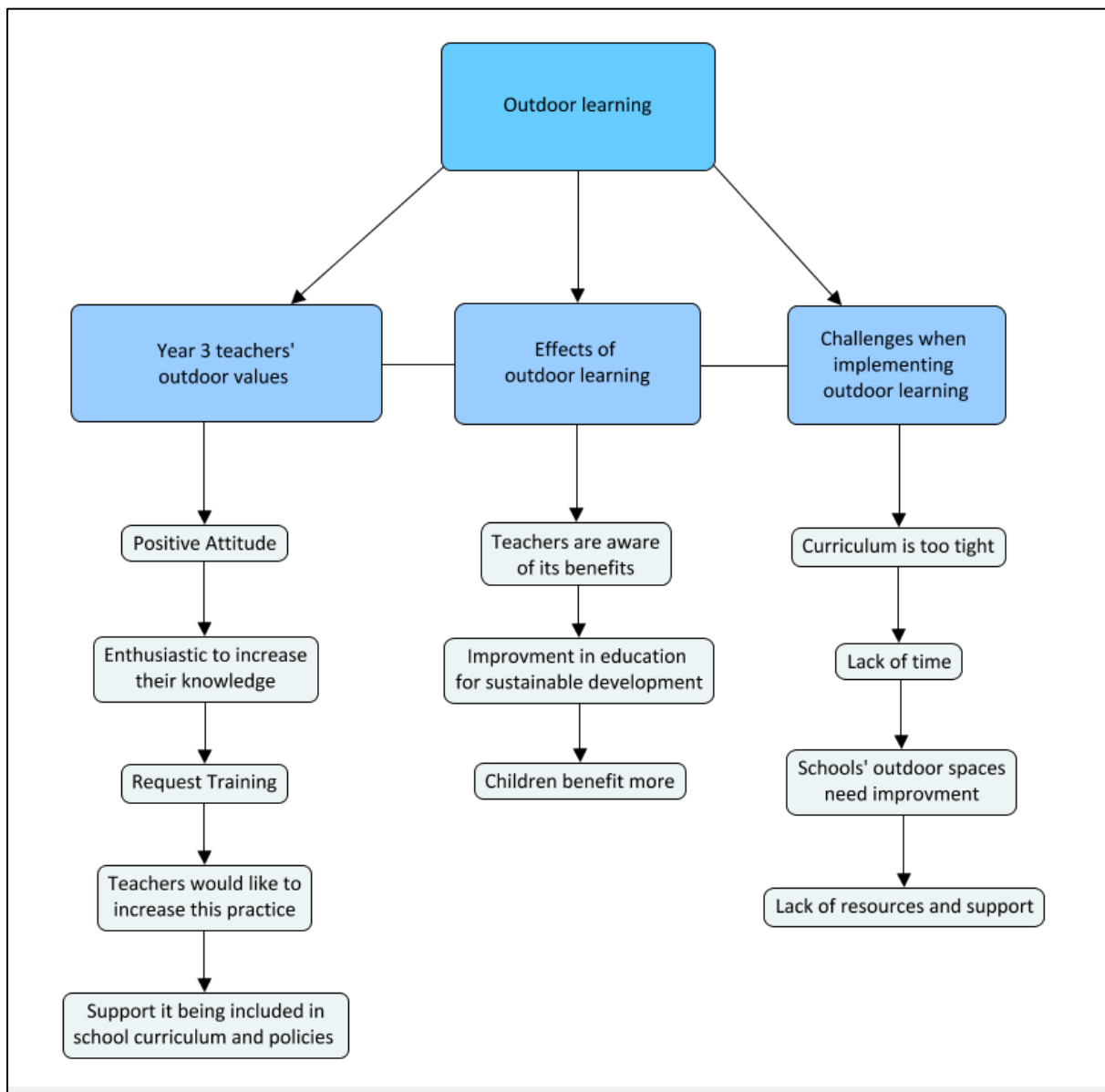


Figure 32: Essential findings of this study

The author used triangulation of results to present a more comprehensive study of local Year 3 teachers' perspectives towards outdoor education. The author aimed to compare the findings from both quantitative and qualitative studies, as well as relating findings with previous research. This approach allowed the author to establish that:

- Participants showed a positive attitude towards outdoor education.
- Educators may have insufficient knowledge of the implementation of cross-curricular learning in the schools' outdoor areas.

- It was observed that planning is necessary when implementing an outdoor lesson.
- Year 3 teachers are aware of the beneficial effects of outdoor education for their students.
- Education for sustainable development is considered a primary component of outdoor education by Year 3 teachers.
- Despite this, some educators prefer to teach in the indoor classroom due to various challenges that may arise.
- Participants working across all school sectors agreed that the curriculum is too tight and needs reducing to enable teachers to be more flexible in their teaching. Hence, educators experience a lack of time to implement outdoor activities.
- The local schools' outdoor spaces need to be improved, especially in the state sectors.
- Teachers require more resources and support to increase their motivation to include outdoor education in their pedagogy.
- Training is essential to raise awareness and knowledge of this beneficial practice and enable educators to learn and inspire themselves on how they can implement it with their students.
- The majority of the educators stated that they believe that outdoor education can be increased to their timetable with the main reason being that children benefit more.
- Educators favoured embedding outdoor education in school curricula and policies.

In this study, the author was able to draw important conclusions about local Year 3 teachers' views on outdoor education. The next chapter will outline the research objectives and main findings, followed by recommendations for improving outdoor education in local primary schools. The concluding chapter will also include an analysis of the limitations and strengths of this study and recommendations for future research. The author will also reflect on their learning process during the research.

6 Conclusion and recommendations

6.1 Introduction

This research study aimed to analyse local Year 3 teachers' perspectives towards outdoor learning. This author sought to analyse to what extent are the local schools' outdoor areas being utilized. Moreover, teachers' knowledge and attitudes were analysed. It was also identified whether and how educators integrated outdoor learning into their pedagogies and planning. The author also sought to learn how teachers perceive the effects of this practice on their students' learning while exploring the barriers they experience when practising outdoor education with their students. Moreover, a comparison among the three school sectors was made for the researcher to identify the effectiveness of different opportunities present in the local primary schools for both educators and learners. A mixed-method approach was adopted in this study, utilizing both questionnaires and semi-structured interviews addressed to Year 3 educators. This approach enabled the researcher to gather more reliable data for this study.

6.2 Main findings

The findings reveal that educators possess significant knowledge about outdoor education. The majority of local Year 3 teachers prefer teaching subjects like Science and Mathematics outdoors due to their clear curricular connections and opportunities for hands-on experiences. However, teachers would benefit from additional training to enhance their ability to teach other subjects effectively in an outdoor setting. While only half of the interviewees integrate outdoor education into their pedagogy, there is a positive attitude towards this practice and a willingness to enhance its use among teachers.

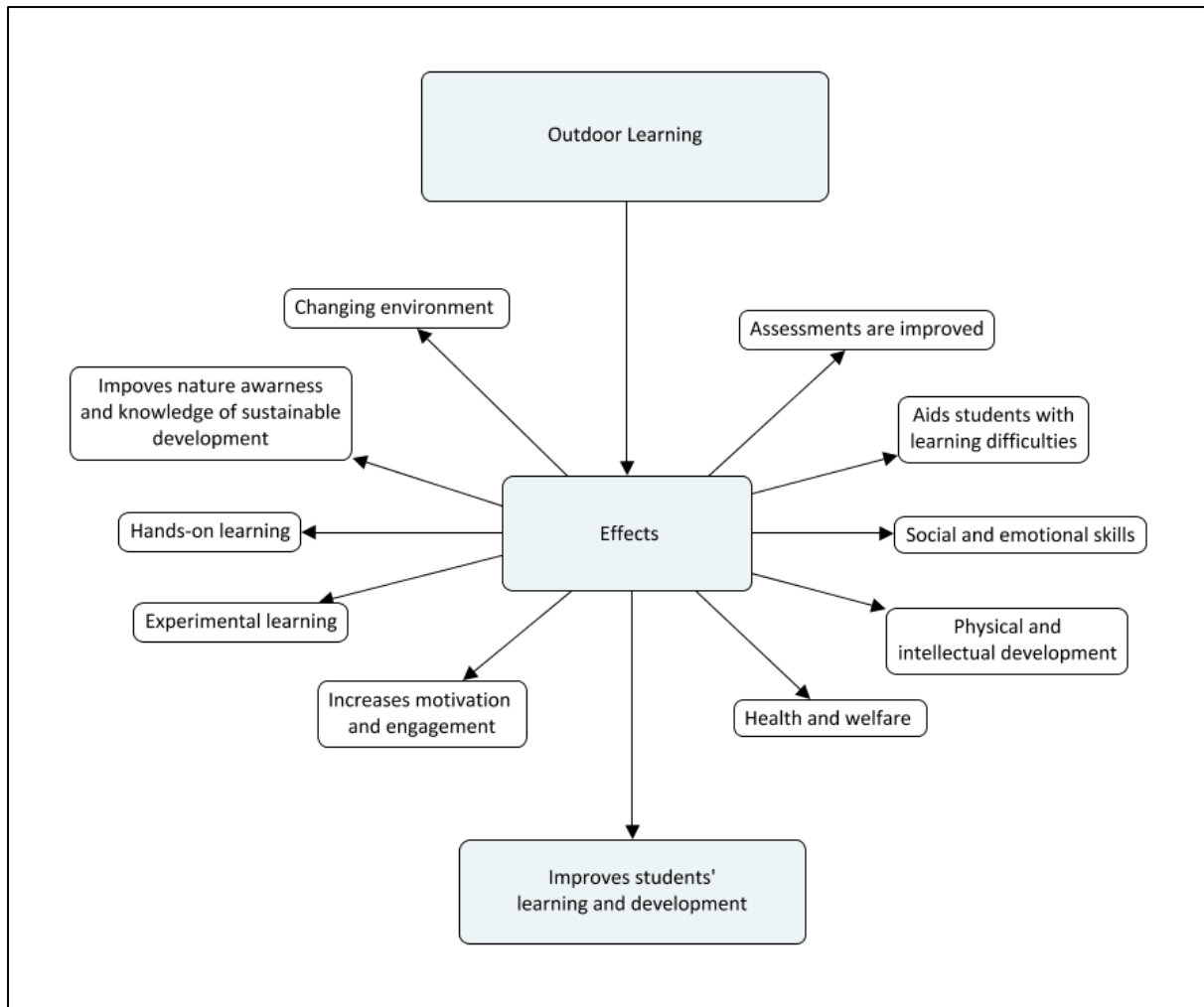


Figure 33: Beneficial effects of outdoor learning

The participants recognized the significant benefits of outdoor education on students' learning and development. These include:

- Changing the classroom environment
- An increase in nature awareness and knowledge of sustainable development
- More opportunities for hands-on and experiential learning
- Increasing student motivation and active engagement in lessons
- Improving the children's health and welfare
- Increasing the students' physical and intellectual development
- Enhancing students' social and emotional skills
- Potentially benefiting students with learning difficulties such as dyslexia
- Enabling more effective assessments

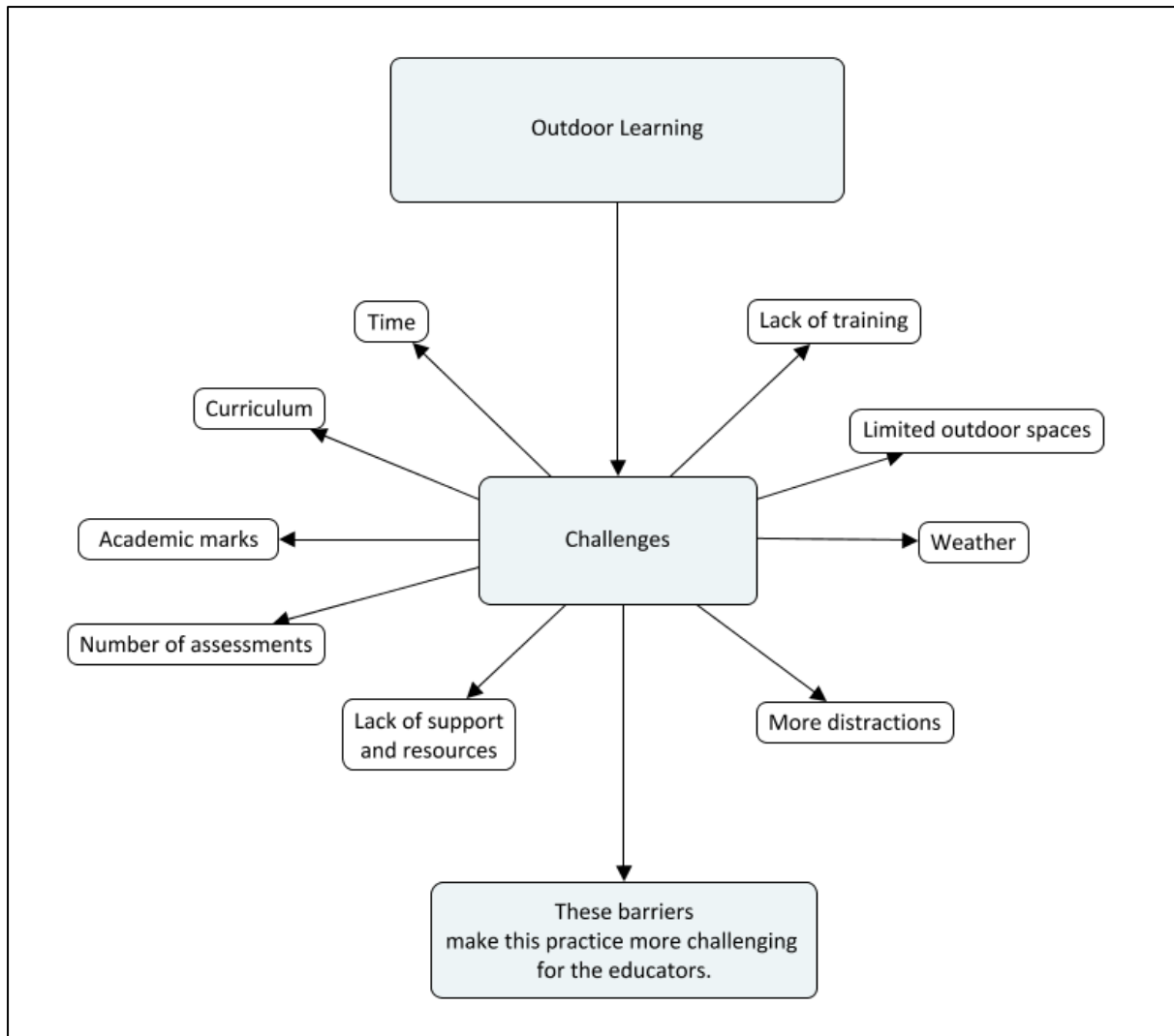


Figure 34: Outdoor learning’s challenges

The study identified several barriers that prevent teachers from using outdoor education frequently. The most commonly mentioned barriers include:

- Lack of time
- Tight school curriculum
- Prioritization of students' academic performance
- A high number of assessments that need to be done by teachers
- Lack of support
- Lack of appropriate outdoor spaces and resources
- Lack of training
- Distractions in outdoor areas

- Weather conditions

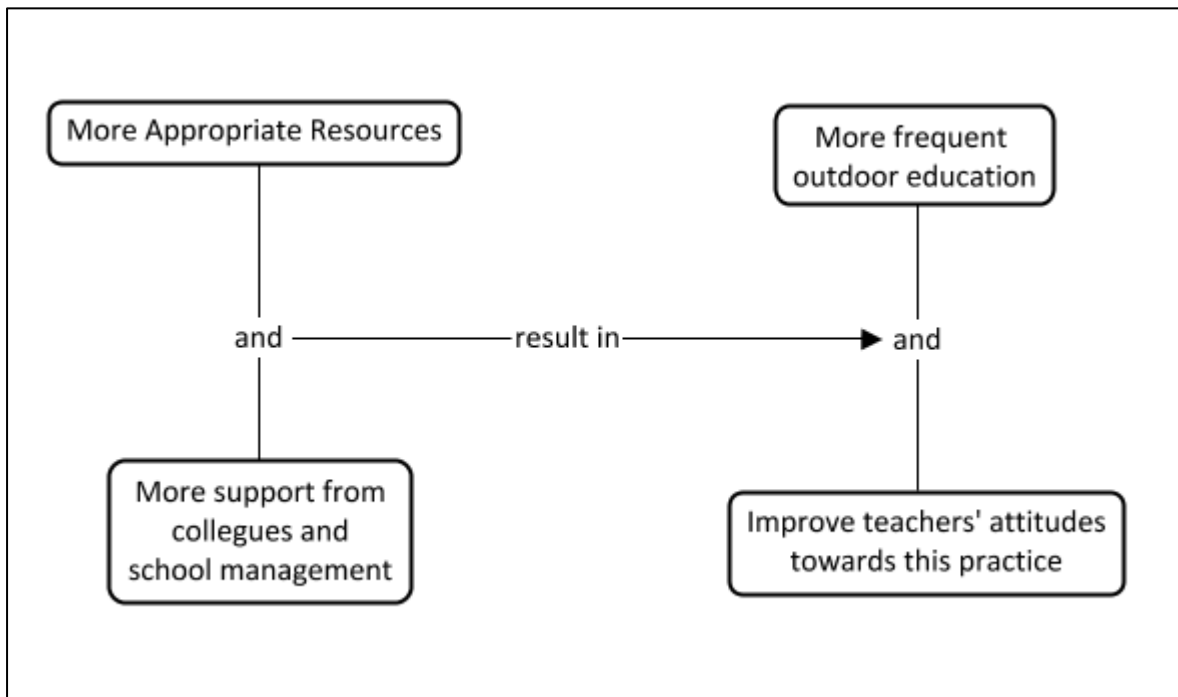


Figure 35: Findings from the comparison of Year 3 teachers working in different sectors

The comparison of teachers working in different school sectors suggests that when teachers are equipped with appropriate resources and receive support from their colleagues and school management, the implementation of outdoor education is more frequent. Encouragement from the senior management team is also crucial to teachers' attitudes towards this practice. The study's findings revealed that SMTs within private schools give the most encouragement for outdoor education when compared with other school sectors. Consequently, teachers in private schools were found to exhibit the most positive attitudes towards outdoor education when compared to other school sectors.

6.3 Recommendations to increase outdoor education practices in local primary schools

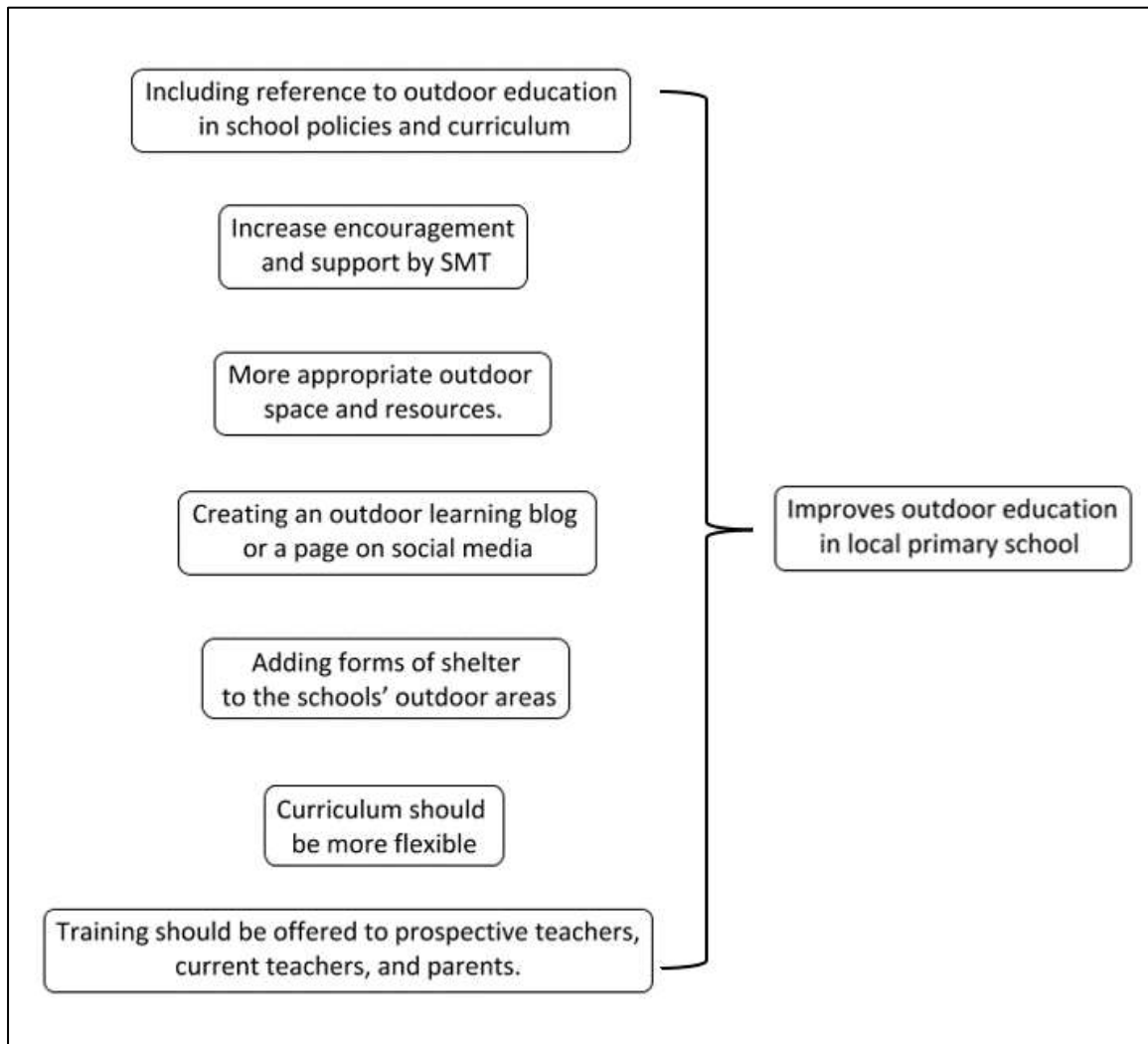


Figure 36: Recommendations

The following recommendations could improve outdoor education practices in Maltese primary schools and improve the benefits previously discussed:

- Embedding specific reference to outdoor education in the school policies and curriculum, as agreed and favoured by participants.
- The SMT should provide more encouragement and support to teachers to increase their practice in outdoor education.

- Appropriate school outdoor spaces and outdoor resources should be provided for educators to use. Hence, these can be used in making outdoor lessons more interesting and engaging for students.
- Outdoor resources can also be shared among primary teachers themselves. An outdoor learning blog or a page on social media could be created as a platform for collaboration between primary teachers to share ideas, content, and resources. This will eventually improve the educators' outdoor education implementation.
- To decrease the barriers that the weather brings with it, forms of shelter would be ideal to be included in the schools' outdoor areas. This would allow the educators and their students to experience outdoor learning even during rainy or windy weather conditions.
- The curriculum should be more flexible, allowing teachers to prioritize students' learning processes over academic marks.
- Prospective teachers should receive training. Appropriate preparation within the University of Malta or Institute for Education is needed to prepare teachers on how they can implement outdoor learning. It would be beneficial if practical tasks and information on how they can use the outdoor areas for teaching all subjects are included. Thus, outdoor learning across the curriculum would be promoted.
- Effective training for current teachers is also essential. Participants have stated that such training would help them generate more ideas on how to implement outdoor education in the school's outdoor areas. The Education Department can offer courses to teachers to help them improve their practice, with a focus on placing students at the centre of their learning.
- Training would be also essential if it was offered for parents as well. These courses will allow parents to understand the benefits and effects of outdoor education on their children's learning and development, which may decrease their focus on academic results and increase their awareness and positive attitude towards this practice.

6.4 Limitations of this study

The author is aware of the limitations of this study. While the methodology chapter previously included a summary of the methodological limitations, a list of some additional limitations is provided below:

- The sample quota for the quantitative study was not met because not all heads of schools accepted, hence the findings of this study cannot be generalized to the entire population.
- The limited time frame hindered the researcher in continuing to collect questionnaires from participants and hence gaining a larger sample size. Due to this restriction, the researcher had to stop asking heads of schools to distribute the questionnaires to Year 3 teachers.
- The participation of teachers was heavily dependent on the approval of their respective heads of schools, which limited the responses obtained, despite the researcher's efforts to promote the study via social media as well.
- Finally, regardless of the author's best efforts to avoid personal bias, it may have had an impact on the study due to the author's personal interest in the subject matter.

6.5 Strengths of this study

The author's findings were relevant in answering the research questions established at the beginning of the dissertation. The results provided insight into whether and how Maltese schools utilize their outdoor areas and shed light on Year 3 teachers' attitudes and beliefs about this approach. Furthermore, both quantitative and qualitative studies revealed several benefits associated with outdoor learning. The researcher also identified obstacles that teachers encounter when conducting outdoor lessons. As a result, the study provided a comprehensive response to the research questions. The results are reliable as they are backed by a thorough analysis of the data collected from questionnaires and interviews.

This study can highlight the importance of outdoor learning as an effective teaching method, particularly for Year 3 primary teachers to enable them to prioritize student-centred approaches. Suggestions for future studies that aim to increase outdoor education implementation in schools can also be led from this research study.

6.6 Suggestions for further studies

Literature on the topic of outdoor learning in Malta is still limited. Hence, more research must be done on this subject where outdoor education can be further analysed in various ways.

Recommendations to do so are the following:

- Analysing primary teachers' perspectives on outdoor learning with students with other year groups.
- Analysing secondary teachers' perspectives on outdoor learning.
- Analysing specific benefits that emerge from outdoor learning, such as the enhancement of the students' awareness towards nature and sustainability through this practice.
- Studying the relationship between the school's encouragement for outdoor learning and the teachers' values towards this practice.
- Conducting a project-based dissertation with ideas and resources about how teachers can implement this practice in their schools' outdoor areas.
- Exploring the benefits and challenges of outdoor education through the perspectives of the SMT.
- Studying parents' views on the implementation of outdoor education in schools.
- Analysing the perspectives of the Faculty of Education's Head of Department and Dean within the University of Malta regarding the enhancement of outdoor education training for primary teachers.

6.7 Conclusion

Through this research, the author gained more information on the importance of outdoor education in students' learning. The study identified several benefits of outdoor education for their students' holistic learning. As research suggests, benefits from this practice include its positive impact on students' understanding of the curriculum, academic attainment, behaviour, experiential learning, social and emotional development (Blair, 2009; Marchant et al., 2019; Williams & Dixon, 2013) and socio-cultural identity (Aasen et al. 2009). Additionally, outdoor education can help increase environmental awareness and promote sustainable decision-making skills to students "from an early age" (Vásquez, García-Alonso, Seckel &

Alsina, 2021, p.2). Moreover, the study revealed that outdoor education engages students in experiential and hands-on learning, which enhances their learning experience.

The author's personal and professional growth as a teacher was significantly influenced by this study, which reaffirmed their belief in the importance of outdoor education for students. It is hoped that this study will increase outdoor education in primary schools, reduce the barriers that teachers face when implementing outdoor education, and for an action plan to be developed by the Maltese Educational system accordingly. In addition, the University of Malta should also provide more training for teachers to support the successful implementation of outdoor education.

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8 Appendices

8.1 Appendix A: Questionnaire questions

Teachers' perspectives towards outdoor learning with local Year 3 students

Outdoor learning gives the opportunity for the students to change their classroom environment and experience learning in the school's outdoor areas (for example the school yard and school gardens). Through this study, I will be investigating to what extent outdoor learning is being applied in the local context with Year 3 students and what teachers consider to be the benefits and challenges when using this practice.

Your participation in this study would help contribute to a better understanding of the educators' perspectives toward outdoor learning. Any data collected from this research will be used solely for the purposes of this study.

Data collected will be treated confidentially and only myself, as the researcher, will have access to it. Anonymity is assured. Furthermore, participation in this study is entirely voluntary. All data collected will be stored in an anonymous form where only the researcher will have access to this data. Data collected will be deleted after the dissertation has been submitted.

Should you have any queries, feel free to contact me by email at kimberly.magro.17@um.edu.mt.

Thank you for your participation!

1. Participant's Consent:

- I am aware that my participation in this questionnaire is entirely voluntary and agree to participate in this study.

2. Gender:

- Male
- Female
- Other

3. Age:
- 20-30
 - 31-40
 - 41-50
 - 51-60
 - 61+
4. In which school sector do you teach?
- State
 - Church
 - Private
5. For how many years have you been teaching Year 3 students?
- Up to 5 years
 - 6-10 years
 - 10-15 years
 - 16-20 years
 - 21+ years

Section 2 – Practising Outdoor Education

6. On a scale of 1-5, 1 being the lowest and 5 being the highest, how much does the school you teach in encourage outdoor education?
7. On a scale of 1-5, 1 being the lowest and 5 being the highest, how important do you perceive outdoor education to be?
8. Which lessons do you prefer to conduct outdoors? (*You can choose more than one subject*)
- English
 - Maltese
 - Mathematics

- Science
- Social Studies
- Religion
- All my lessons
- Art
- Social Studies
- Drama
- Other: _____

9. Why do you prefer to teach your selected subjects in the school's outdoor areas?

(You can choose more than one reason)

- The students increase their engagement with my lesson
- Pupils are more motivated to participate
- Improves students' behaviour
- Enhances the level of the pupils' learning of the curriculum
- Increases opportunity to teach through experiential learning
- Other: _____

Section 3 – Benefits and Challenges to Outdoor Education

10. On a scale of 1-5, 1 being the least important and 5 being very important, rate how much you perceive the following benefits that emerge from outdoor education to be important:

- Help in making lessons more meaningful and effective for the students
- Learners increase their enthusiasm for learning and improve concentration
- Increases active participation of the students
- It gives more opportunities for students to develop their social and emotional skills
- Students increase their ability to think creatively and critically
- Important for the physical and intellectual development of the students
- Improve their problem-solving skills and risk-taking skills

- Allows learning to respect the nature and increase awareness towards sustainability
- Improves behaviour and academic attainment
- Improves the children's health and welfare

11. What other benefits do you think emerge from practising outdoor learning?

12. On a scale of 1-5, 1 being the least important and 5 being very important, rate the factors that make your outdoor teaching experience challenging:

- Busy school curriculum
- Experiencing constant stress to improve the students' marks, thus looking at outdoor learning as something 'extra'
- Lack of time
- Fear of losing control in the outdoor classroom
- Lack of evident curricular connections to certain subjects taught in the outdoors
- Lack of support and resources
- Weather conditions
- Concern about the pupils' safety
- Lack of training on outdoor teaching

13. What other challenges do you encounter when practising outdoor learning?

14. Do you think that you can increase the amount of outdoor learning in your class timetable?

- Yes
- No

15. Why do you think so?

16. What do you wish can be changed in order to increase this practice in your pedagogy?

Section 4 – Interview Invitation

Following this questionnaire, you can choose to take part in a 30-minute online interview where you will be asked to respond to a question battery developed following the analyses of the questionnaires. Your participation will be highly appreciated!

17. I would like to participate in the follow-up interview regarding teachers' perspectives towards outdoor learning with local Year 3 students:

- Yes
- No

Section 5 – Contact Details

18. Kindly provide your email address so as to schedule an interview at your convenience:

8.2 Appendix B: Information letter

Dear Sir/Madam,

My name is Kimberly Magro and I am a student at the University of Malta, presently reading for a Masters degree in Teaching and Learning in Early Childhood and Primary Education. I am presently conducting a research study for my dissertation titled 'Local Year 3 Primary school teachers' perspectives toward outdoor learning'; this is being supervised by Prof Mark C. Mifsud. This letter is an invitation to participate in this study. Below you will find information about the study and about what your involvement would entail, should you decide to take part.

The aim of my study is to investigate to what extent outdoor learning is being applied in the local Year 3 context. I also aim to identify what teachers consider to be the benefits and challenges when using this practice. Your participation in this study would help contribute to a better understanding of the educators' perspectives towards outdoor learning. Any data collected from this research will be used solely for the purposes of this study.

Should you choose to participate, you will be asked to participate in an online anonymous 5-minute questionnaire with your perspectives about outdoor learning. If you choose to complete the questionnaire, you will automatically be consenting to take part in the research.

Following this questionnaire, you can choose to take part in a 30-minute online interview where you will be asked to respond to a question battery developed following the analyses of the questionnaires.

Data collected will be treated confidentially and only myself, as the researcher, will have access to it. Anonymity is assured.

Participation in this study is entirely voluntary; in other words, you are free to accept or refuse to participate, without needing to give a reason. You are also free to withdraw from the study at any time, without needing to provide any explanation and without any negative repercussions for you. Should you choose to withdraw, any data collected from your interview will be erased as long as this is technically possible (for example, before it is anonymised or published), unless the erasure of data would render it impossible or seriously impair the

achievement of the research objectives, in which case it shall be retained in an anonymised form.

If you choose to participate, please note that you will be able to reflect upon your practice in outdoor learning. Also, through this study, implications for outdoor learning policy in schools may be affected. Thus, this information would be useful to inform local school policies and influence school curricula. Your participation does not entail any known or anticipated risks.

Please also note that, as a participant, you have the right under the General Data Protection Regulation (GDPR) and national legislation to access, rectify and where applicable ask for the data concerning you to be erased. All data collected will be stored in an anonymous form. Responses will be digitally stored on a secure, password-protected computer. Only the researcher will have access to this data. Data collected will be deleted after the dissertation has been submitted.

A copy of this information sheet is being provided for you to keep and for future reference.

Thank you for your time and consideration. Should you have any questions or concerns, please do not hesitate to contact me by e-mail at kimberly.magro.17@um.edu.mt; you can also contact my supervisor via email: mark.c.mifsud@um.edu.mt

Sincerely,

Kimberly Magro

kimberly.magro.17@um.edu.mt

Prof Mark C. Mifsud

mark.c.mifsud@um.edu.mt

Appendix C: Pilot study of the questionnaire

Teachers' perspectives towards outdoor learning with local Year 3 students

Outdoor learning gives the opportunity for the students to change their classroom environment and experience learning in the school's outdoor areas (for example the school yard and school gardens). Through this study, I will be investigating to what extent outdoor learning is being applied in the local context with Year 3 students and what teachers consider to be the benefits and challenges when using this practice.

Your participation in this study would help contribute to a better understanding of the educators' perspectives toward outdoor learning. Any data collected from this research will be used solely for the purposes of this study.

Data collected will be treated confidentially and only myself, as the researcher, will have access to it. Anonymity is assured. Furthermore, participation in this study is entirely voluntary. All data collected will be stored in an anonymous form where only the researcher will have access to this data. Data collected will be deleted after the dissertation has been submitted.

Should you have any queries, feel free to contact me by email at kimberly.magro.17@um.edu.mt.

Thank you for your participation!

1. Participant's Consent:

- I am aware that my participation in this questionnaire is entirely voluntary and agree to participate in this study.

2. Gender:

- Male
- Female
- Other

3. Age:
- 20-30
 - 31-40
 - 41-50
 - 51-60
 - 61+
4. In which school sector do you teach?
- State
 - Church
 - Private
5. For how many years have you been teaching Year 3 students?
- Up to 5 years
 - 6-10 years
 - 10-15 years
 - 16-20 years
 - 21+ years
6. How many hours do your students spend at school? (excluding breakfast and after school hours)
- Less than 6 hours
 - 6 hours
 - More than 6 hours

Section 2 – Practising Outdoor Education

7. Rate from 1-10, 1 being the lowest and 10 being the highest, how much does the school you teach in encourage outdoor education?
8. Rate from 1-10, 1 being the lowest and 10 being the highest, how important do you perceive outdoor education to be?

9. How often do you make use of outdoor learning?

- Never
- Rarely
- Once a month
- Once every two weeks
- Once a week
- Regularly

10. Which lessons do you prefer to conduct outdoors? (*You can choose more than one subject*)

- English
- Maltese
- Mathematics
- Science
- Social Studies
- Religion
- All my lessons
- Art
- Social Studies
- Drama
- Other: _____

11. Why do you prefer to teach your selected subjects in the school's outdoor areas?

Section 3 – Benefits and Challenges to Outdoor Education

12. Rate from 1-5, 1 being the least important and 5 being very important, how much you perceive the following benefits that emerge from outdoor education to be important:

- Help in making lessons more meaningful and effective for the students
- Learners increase their enthusiasm for learning and improve concentration
- Increases active participation of the students
- It gives more opportunities for students to develop their social and emotional skills
- Students increase their ability to think creatively and critically
- Important for the physical and intellectual development of the students
- Improve their problem-solving skills and risk-taking skills
- Allows learning to respect the nature and increase awareness towards sustainability
- Improves behaviour and academic attainment
- Improves the children's health and welfare

13. Are there any more benefits that you think emerge from practising outdoor learning?

14. Rate from 1-5, 1 being the least important and 5 being very important, the factors that make your outdoor teaching experience challenging:

- Busy school curriculum
- Experiencing constant stress to improve the students' marks, thus looking at outdoor learning as something 'extra'
- Lack of time
- Fear of losing control in the outdoor classroom
- Lack of evident curricular connections to certain subjects taught in the outdoors
- Lack of support and resources
- Weather conditions
- Concern about the pupils' safety
- Lack of training on outdoor teaching

15. Are there any more challenges that teachers encounter when practising outdoor learning?

16. Do you think that you can increase the amount of outdoor learning in your class timetable?

- Yes
- No

17. In your opinion, is there anything that can be changed in order to increase this practice in your pedagogy?

Section 4 – Interview Invitation

Following this questionnaire, you can choose to take part in a 30-minute online interview where you will be asked to respond to a question battery developed following the analyses of the questionnaires. Your participation will be highly appreciated!

18. I would like to participate in the follow-up interview regarding teachers' perspectives towards outdoor learning with local Year 3 students:

- Yes
- No

Section 5 – Contact Details

19. Kindly provide your email address so as to schedule an interview at your convenience:

Section 6 – Teachers’ suggestions regarding this questionnaire

20. What are your thoughts about the questionnaire’s design? Do you think it can be improved?

21. Where there any unclear or difficult questions? If yes, kindly state which ones please.

8.3 Appendix D: List of church and private schools in Malta

Primary church schools:

1. De La Salle College
2. Holy Family
3. Laura Vicuna
4. Our Lady Immaculate
5. Sacred Heart school
6. St Albert College
7. St Aloysius College
8. St Augustine College
9. St Benilds
10. St Dorothis
11. St Francis
12. St Joan Antide
13. St Joseph
14. St Monica
15. St Pauls Missionary College
16. St Theresa School Gozo
17. Stella Maris College
18. The Archbishop's Seminary – Minor
19. Theresa Nuzzo School

Primary private schools:

1. Chiswick House School
2. Mariam Al Batool School
3. QSI International School of Malta
4. San Andrea School
5. San Anton School
6. St Catherine's High School
7. St Edward's College
8. St Michael Junior School
9. Verdala International School

8.4 Appendix E: Email sent to heads of schools

Dear Head of School,

I trust this email finds you well.

I am Kimberly Magro, a University of Malta student following the Masters in Teaching and Learning in Early Childhood and Primary Education. I am presently conducting a research study for my dissertation titled 'Teachers' perspectives towards outdoor learning with local Year 3 students'. This project is being conducted under the supervision of Prof Mark C. Mifsud.

This study aims to investigate to what extent outdoor learning is being applied in the local context with Year 3 students and what teachers consider to be the benefits and challenges when using this practice. The study will compare results between different groups of teachers from different school sectors: State, Church, and Independent, whilst identifying the factors that affect the benefits and challenges of outdoor learning.

My data collection methods for my mixed-method approach study will involve an online anonymous 5-minute questionnaire with the teachers' opinions about outdoor learning. An invitation in the online questionnaires for teachers who would be willing to participate in the qualitative study will be included. For the qualitative study, educators will participate in a 30-minute online interview where they will be asked to respond to a question battery developed following the analyses of the questionnaires. The online interview with Year 3 teachers will be recorded. The educators will be informed and made aware that the data collected from the interviews will be kept confidential. They will also be informed about the possibility to stop participating in the interview at any time if they wish to do so.

I am hereby seeking your permission to administer online questionnaires to Year 3 teachers working at your school. The researcher will make sure that the participants are informed and made aware that the data collected from the interviews will be kept confidential. They will also be informed about the possibility to stop participating in the interview at any time if they wish to do so. Furthermore, this research project will abide by the General Data Protection Regulations at all times. Also, kindly note that this study has been approved by the MEYR Research Ethics Committee within the Directorate for Research, Lifelong learning and Employability, Ministry for Education.

Should you require further information, please do not hesitate to contact me or my supervisor; both our contact details are provided below.

Thank you for your kind consideration of this request.

Sincerely,
Kimberly Magro
kimberly.magro.17@um.edu.mt

Prof Mark C. Mifsud
mark.c.mifsud@um.edu.mt

Dear teacher,

I am a student at the University of Malta, currently following the Masters in Teaching and Learning in Early Childhood and Primary Education. I am presently conducting a research study for my dissertation titled 'Local Year 3 Primary school teachers' perspectives towards outdoor learning' under the mentorship of Prof Mark Mifsud.

I am inviting you to participate in a 5-minute online questionnaire: <https://forms.gle/zHioGCVrwx6RDIT2A> to help me understand Year 3 Primary school teachers' perspectives towards outdoor learning.

My study aims to investigate to what extent outdoor learning is being applied in the local Year 3 context. I also aim to identify what teachers consider to be the benefits and challenges when using this practice.

Following this questionnaire, an invitation to a 30-minute online interview is included where teachers will be asked to respond to a question battery developed following the analyses of the questionnaires.

Participation in this study is entirely voluntary. Moreover, data collected will be treated confidentially and only myself, as the researcher, will have access to it. Anonymity is assured. Attached please find an Information Letter with more information about this study.

Your participation will be highly appreciated! Whilst thanking you for your cooperation, should you have any questions or concerns, please do not hesitate to contact me by e-mail at kimberly.magro.17@um.edu.mt

Link to the questionnaire: <https://forms.gle/zHioGCVrwx6RDIT2A>

Thank you in advance,
Kimberly Magro

8.6 Appendix F: Interview questions

1. How long have you been working as a Year 3 educator and how can you describe your experience?
2. What are the outdoor spaces available in the school you teach? Can you describe them?
3. How do you perceive your experience of teaching in the outdoor spaces and what are your attitudes towards this practice?
4. Do you think that the outdoor areas are essential for your students' learning?
5. How do you plan your outdoor lessons? Are they planned differently from the indoor lessons? Why?
6. How does outdoor learning expand what the students already know?
7. How often do you make use of them, and do you think that it is part of your pedagogy?
8. What are your goals when planning outdoor lessons?
9. How do you perceive that students benefit from this practice?
10. Are there any particular students that you view as benefiting the most from such practice?
11. What type of assessment do you include in outdoor learning?
12. Do you experience any limitations when planning an outdoor lesson? Why?
13. Does your school's SMT encourage such practice?
14. Is 'outdoor learning' included in your school's policies?
15. How would you react if outdoor learning was to be embedded into the school curriculum and policies? Why?

8.7 Appendix G: Pilot study of the interview questions

1. What are the outdoor spaces available in the school you teach?
2. How often do you make use of them?
3. How do you perceive your experience of teaching in the outdoor spaces and what are your attitudes towards this practice?
4. Which subjects do you prefer teaching in the outdoors? Why?
5. Do you think that the outdoor areas are essential for your students' learning?
6. How do you plan your outdoor lessons? Are they planned differently from the indoor lessons? Why?
7. How does outdoor learning expand what the students already know?
8. How often do you make use of them, and do you think that it is part of your pedagogy?
9. What are your goals when planning outdoor lessons?
10. What are the benefits that you observed from such practice?
11. Are there any particular students that you view as benefiting the most from such practice?
12. What type of assessment do you include in outdoor learning?
13. What are the factors that discourage you from adopting outdoor learning/ limit the use of outdoor learning? Why?
14. Does your school's SMT encourage such practice?
15. Is 'outdoor learning' included in your school's policies?
16. How would you react if outdoor learning was to be embedded into the school curriculum and policies? Why?