The University Of Sheffield.

Exploring Literacy Playshops in a Saudi Arabian Kindergarten

By:

May Alkhunain

A thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy

The University of Sheffield
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Dedication

To my lovely family, I dedicate this work.

Acknowledgements

First, I thank Allah Almighty for His blessing given to me in completing this thesis.

I would like to express my immense gratitude to my supervisors, Dr. Fiona Scott, and Dr. Heather Ellis, for their great support, kindness, invaluable guidance, and insightful feedback throughout the journey of my thesis. I would also like to extend my deepest thanks to my previous supervisor, Prof. Jackie Marsh, for her unlimited support, wise guidance, and inspiration since the outset of my thesis.

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Abstract

Although children are surrounded by technologies and media in their home setting, kindergartens are still limited in how they incorporate practices related to digital technologies and popular culture. This qualitative case study seeks to explore a new curriculum called Literacy Playshop (LP) and to understand the influence of LPs on children's literacy engagement, motivation and practices in one Saudi kindergarten. This study adapted Karen Wohlwend's 'Literacy Playshop' curriculum design (Wohlwend, 2013). The curriculum developed connections between play and literacy in an approach that provided opportunities for young children to use digital technologies, popular culture and a variety of tools to produce videos by themselves.

To achieve this aim, a LP was implemented for children aged 5-6 years old in a kindergarten in Riyadh. The sample consisted of eight child participants and their teachers and mothers. Structured observations were undertaken using the Leuven Involvement Scale during literacy and the LP for eight children. Semi-structured interviews with the teachers were undertaken prior to the LP. Throughout the LP, child observations were made using field notes, videos, and artifacts. Semi-structured interviews with teachers, the principal and the mothers of the children were also undertaken. Inductive and deductive thematic analysis were used to analyse the data.

The thesis' findings revealed that children's literacy practices and engagement was enhanced through implementing the LP, both at kindergarten and at home. The LP seemingly motivated the children by providing the opportunity to experience and potentially satisfy needs for autonomy, competence, and relatedness. Teachers taking part in the study also felt that including the LP impacted on child engagement, and supported language and creativity, although applying the LP was challenging due to the existing curriculum and lack of equipment. These research findings have implications for early childhood curricula in Saudi Arabia, for policy makers, teachers and researchers. Recommendations are made for future research.

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List of Abbreviations

SA Saudi Arabia

SDT Self-Determination Theory

LIS Leuven involvement scale

LP Literacy Playshop

Declaration

I, the author, confirm that the Thesis is my own work. I am aware of the University's Guidance on the Use of Unfair Means (www.sheffield.ac.uk/ssid/unfair-means). This work has not been previously been presented for an award at this, or any other, university.

Chapter One: Introduction

1.1 Introduction

This chapter presents the overall approach of this thesis. Section 1.2 begins with the background of the study. Section 1.3 explains the context of this study, which provides an overall view of the geographical location, population, educational system and curriculum applied in Saudi kindergartens. The aims and questions of the study are presented in Section 1.4, while Section 1.5 outlines key terms used. Finally, the structure of the thesis is outlined in Section 1.6.

1.2 Background of the Study

In recent decades, the concept of literacy has expanded to include practices mediated by a variety of digital technologies, such as videos, video games, smartphones and blogging (Burnett, 2010; Knobel & Lankshear, 2014). However, in educational settings in Saudi Arabia (SA) and many other countries (Al-Othman et al., 2015; Dyson, 2020; Moje, 2002; Wohlwend, 2008), the curricula still emphasise a conventional view of literacy (i.e., reading and writing skills), including reduced playtime for children (Haroun, 2018; Miller & Almon, 2009; Parry, 2021; Wohlwend, 2013, 2017b). Indeed, children are increasingly using a wide range of digital technologies in their everyday lives (Burnet, 2016; Marsh et al., 2020; Palaiologou, 2016a). For example, in SA, the context of this study, a study conducted in Riyadh with 220 parents of children aged 1–3 years showed that 90% of the children had watched TV and used media devices before the age of 2 years; 87% had their own tablets; and 8% used smartphones (Alroqi et al., 2021). According to the General Authority for Statistics in Saudi Arabia (2021), 62.5% of Saudi households have computer devices and 97.5% have a mobile phone. The percentage

of households with access to the internet has reached 96.3%, enabling the use of a variety of devices. According to the Office of Communications (Ofcom) report (2020), in the United Kingdom (UK), eight in ten children aged three to four years were using devices to access the internet. The most popular device among them was the tablet (67%), with 48% using their own. Additionally, 35% were using a mobile phone and 30% a laptop. These numbers reflect an increase from a 2019 Ofcom report, which showed that six in ten children aged three to four years used devices to access the internet: 49% used a tablet, 24% used their own tablet, 20% used a mobile phone and 15% used a laptop. Additionally, in the USA, the Commonsense Census of Media Use by Children (from 0–8 years) (Rideout, 2017) report showed that 95% of children lived with a family that used smartphones, up from 63% in 2013; 78% of children lived with a family that used tablets, up from 40% in 2013; and 42% of children had their own tablets, up from 7% in 2013.

This wide range of technology access in everyday life has changed ways of communicating (Knobel & Lankshear, 2007). It is no longer enough for people to read and write printed words; instead they share blogs, podcasts, texts, recorded videos and edited photos on a daily basis (Wohlwend, 2015b). Thus, the concept of literacy has broadened and cannot be considered only from a psychological–cognitive view, which involves reading and writing skills; it also considers the sociocultural perspective, which emphasises the social and cultural contexts in which literacy practice takes place (Street, 2003). Therefore, a growing body of research has been conducted drawing on the concept of literacy as a sociocultural practice (Razfar & Gutiérrez, 2013), which has influenced research on early childhood literacy (Burnett, 2016). Informed by the sociocultural perspective, several theories have emerged in related to the emergence of technologies, such as new literacy studies (Street, 1984), new literacies (Knobel & Lankshear, 2007), multimodality (Kress, 1997) and multiliteracies (Cope & Kalantzis, 2009). These theories have been used in early literacy studies and are discussed

further in Section 2.3. Indeed, few Middle Eastern researchers have studied early literacy practices from a sociocultural perspective, despite the fact that several have investigated early literacy development in the region (Al-Othman et al., 2015).

The notion of literacy is no longer limited to text-based print alone; use of technology, popular culture and multimodal texts are also incorporated (Heron-Hruby et al., 2008). However, there are limited opportunities for children to access digital technologies and popular culture forms in educational settings. In the UK, children's literacy learning, for example, it has been argued that although teachers are required to use on-screen multimodal texts, print-based alphabetic literacy remains the core assessment criterion (Burnett, 2010). This is supported by Flewitt et al. (2015), who have noted that in England, the emphasis on print-based alphabetic has been further limited by an increased focus on synthetic phonics, the latter of which is often presented in national curricula as critical to the development of early literacy. It has been argued that, in the United States of America (USA) curricula continue to be structured and assessment continues to be based (Dyson, 2020) on standardised tests (Wohlwend, 2015b), with Dyson (2020) claimed that this fact undermines children's agency in the classroom. Furthermore, integrating digital technologies for children's use has not been included in the Saudi national kindergarten curriculum (Alasimi, 2018). Additionally, opportunities for children to interact with popular culture mediated by digital technologies are also limited in early childhood settings. Playing and learning centred around popular culture themes, such as superheroes, has not received unanimous support among classroom educators (Dyson, 2018; Wohlwend, 2013; Yoon, 2018). In SA, to the best of my knowledge, there is no research exploring the use of popular culture forms related to popular characters in early childhood settings, although previous international research has indicated that popular culture motivated children in literacy practices (Marsh, 1999; Simmons, 2014; Weld, 2011; Yoon, 2018).

There is a need to incorporate different modes of learning, including the use of digital technologies, in school settings in line with the 21st century as children often use such technologies in their homes. As discussed previously, there is a wide range of digital technologies and media which children worldwide are immersed in outside of schools. Palaiologou's (2016a) study stated that children in the 21st century are 'literate on new technologies' (p. 18). In addition, she described children as 'digitally fluent from a very young age' (Palaiologou, 2016a, p. 5). Burnett and Merchant (2018) argued that instead of denying practices around digital technologies in schools, these practices should be encouraged because they are a fundamental part of children's lives outside school. Opportunities to work with digital media that employ a variety of technologies in school settings is in line with 21st-century literacy practices (Burnett & Merchant, 2018). Children could be more engaged if they were allowed to communicate using multiple modes, both digital and nondigital (Wessel-Powell et al., 2016).

Therefore, scholars have advocated modifying the literacy curriculum to acknowledge the extensive digital technologies and media that children already use (Burnett, 2016; Munawar et al., 2021; Palaiologou, 2016a). This would address the need to broaden literacy in educational settings and adapt to learners' interests (Alfarhan, 2016). It has been suggested that children's interests need to be considered when establishing a curriculum (Chesworth, 2016) based on the 'funds of knowledge' approach (Moll et al., 1992). This was supported by Dyson (2020), who argued that as part of the formal curriculum, children's interests should be incorporated. Thus, Wohlwend (2015b) claimed that instead of making curriculum fit standardised testing, there is a need for new early-literacy pedagogies that encourage children to play and are related to new literacies. Thus, she applied a playful curriculum design called 'Literacy Playshop' (LP), which is aimed at children aged three to eight years in the USA. She justified that 'Playshops bridge literacy practices, play, and children's multimedia knowledge

in classrooms where teachers support children's video explorations and collaborative film projects to engage digital literacies through play and media production' (Wohlwend, 2015b, p. 160). In this curriculum, children could play, read, write and incorporate their own cultural references to create personalised productions using various materials involving digital technologies (Wohlwend, 2013). Further explanations and justifications of this innovative curriculum is provided in Chapter Two, Section 2.5: Literacy Playshop (LP). This curriculum design has not been explored in SA, and to the best of my knowledge, there is no research investigating engagement with digital technologies in an innovative way, particularly with young kindergarten children's settings in SA. Thus, this study aims to address this gap in knowledge by adapting the LP curriculum design into one Saudi kindergarten.

1.3 Context of the Study: Saudi Arabia

Because the current study seeks to explore a new curriculum i.e., a LP in a Saudi kindergarten setting, it is useful for readers to understand the Saudi context. The geographical location, population, economical aspects, educational system, and existing curricula applied in Saudi kindergartens are all presented. SA is the largest Arab country in Western Asia and in the Middle East. It belongs to the Arabian Gulf countries (i.e., Bahrain, Oman, Kuwait, Qatar and the United Arab Emirates). The population in 2021 was about 34,110,821, of which 5,676,135 were under nine years old and 30% were under 14 years (General Authority for Statistics in Saudi Arabia, 2021). The capital city is Riyadh, where the present study is conducted. SA's official language is Arabic, and its main religion is Islam. Saudi education is centred on Islam, which is integral to its culture (Aljabreen & Lash, 2016). In SA, oil was discovered in 1938, and since that time, the country has become one of the world's leading economic powers and the second-largest member of the Organization of the Petroleum Exporting Countries [OPEC] (2022), which significantly impacted education and many other aspects. For example, 11% of governorates in SA are identified as the 'affluent class', which

includes Riyadh, Jeddah and Dammam. Additionally, 44, 91% are considered ‘upper middle class’, 33.05% are considered ‘lower middle class’ and 11.01% are considered ‘deprived’ (Alomar et al., 2018). Although oil is the foundation of the Saudi economy, SA’s Vision 2030 launched in 2016 aims to reduce the country’s dependency on oil (Vision 2030, 2016).

Before discussing the Saudi Vision 2030 and its relation to early childhood education, it is worth briefly explaining the history of the Saudi education system because it is useful for understanding the context of the current study and because the Saudi education system differs from other countries, such as the UK, where I have studied. Saudi schools are separated by gender, with the exception of kindergartens, which are taught only by females (Aljabreen & Lash, 2016). Thus, the present study included both male and female children, but only female teachers. Additionally, only the mothers of the children were included because they regularly communicated with the teachers.

SA’s education system is divided into three official stages: primary (ages 6–12 years), intermediate (ages 12–15 years) and secondary (ages 15–18 years). Children in SA between three and five years old who have not yet been admitted in year one of school can attend kindergarten in SA. Kindergarten is thus divided into three sections: Kindergarten stage one (KG1) for children aged three, Kindergarten (KG2) for children aged four and Kindergarten (KG3) for children aged five. However, kindergarten in SA is non-compulsory; children can start year one without kindergarten (United Nations Educational, Cultural and Scientific Organisation (UNESCO), 2010). The main official objectives of kindergartens set by the SA Ministry of Education are:

- Encouraging a child’s moral, mental, and physical development in a setting similar to that of their family home and in line with Islamic injunctions

- Preparing children for school life by familiarising them with the school atmosphere and helping them gradually transition away from a focus on the self and towards engaging in a collective social life with their peers.
- Providing children with fundamental knowledge and rich experiences corresponding to their age and related to the surrounding environment or context in which they live.
- Teaching children how to live according to healthy principles by providing them with physical exercise, instructing them regarding hygiene, and guiding them regarding living a generally healthy lifestyle.
- Fostering children's imaginative thinking, refining their critical perceptions, and providing them with opportunities to thrive under the guidance of their teachers.
- Supporting children's needs by simultaneously educating them and offering them opportunities for enjoyment in learning without overwhelming them or not challenging them enough.
- Ensuring the safety of children, including addressing the early signs of inappropriate or problematic behaviours, and effectively dealing with childhood problems/issues. (Samadi & Marwa, 2006; UNESCO, 2010)

Formal education in SA started in 1926 with the establishment of the Directorate of Knowledge. In 1953, the Ministry of Knowledge was established to supervise public education for boys. Education in SA was only available to boys until 1959, when the General Presidency for Girls' Education (GPGE) was established and opened 15 primary schools for girls and 1 intermediate teachers' institute. In 2003, the GPGE merged with the Ministry of Knowledge. The following year, the Ministry of Knowledge was renamed the Ministry of Education (Ministry of Education, 2021).

Formal recognition of the importance of early childhood in SA began in 1961. By 1965, 13 kindergartens had been established due to efforts of the private sector. In 1966, the Ministry of Knowledge (now the Ministry of Education) opened the first government kindergarten (Ministry of Education, 2022), followed by two more in Dammam and Alahsa (Aljabreen & Lash, 2016). In 1975, a kindergarten opened in Makkah (Ministry of Education, 2022). In the following years, the number of kindergartens increased all over the country. By 2009–10, there were 1,521 (UNESCO, 2010), and that number increased to 4,868 by 2020 (Ministry of Education, 2021). The number of children enrolled in kindergartens was 100,032 in 2004, 141,422 in 2011 (Ministry of Education, 2011), 317,861 in 2018, 344,312 in 2019 and 393,732 in 2020 (Personal communication, 2022). Although the number of children enrolled in kindergarten has increased substantially, the ratio is still low compared to other countries. For example, enrolment in pre-primary education in SA was around 14.3% in 2012, around 21.5% in 2019 and around 21.8% in 2020 (UNESCO, 2022a). By contrast, the average Gross Enrolment Ration (GER) in the UK in pre-primary education was 84% in 2012, 105.9% in 2019 and 105.8% in 2020 (UNESCO, 2022b). Although Arab countries have increased enrolment between 1999 and 2007 from 15% to 19%, this is considered only a slight improvement and remain far below the world average at 33% in 1999 and 41% in 2007 (UNESCO, 2011). However, the Saudi Ministry of Education (2021) aims to increase kindergarten enrolment to 90% by 2030.

There are many reasons for the increased enrolment and expansion of kindergartens in SA. Social and economic changes in Saudi society have made women an integral part of the development of the economy and the workforce. This led families to seek care and educational placements for their children in childcare centres and kindergartens. Additionally, the disappearance of extended family members who used to play an important role in childcare has

led parents to explore alternative quality placements for their children before they enter school (Gahwaji, 2013).

Furthermore, kindergarten expansion in SA is consistent with the Saudi Vision 2030. It was previously mentioned that the Saudi Vision 2030 was launched in 2016 as a comprehensive national development plan that aims to reduce the country's dependency on oil by diversifying the economy and developing a variety of sectors including health, business, education (KG to adult education) and promoting jobs opportunities, training and skills developments. Of relevance here, special consideration was given to early childhood education as one of the Vision's aims, which includes increased enrolment and development plans for early childhood (Alotaibi, 2021). Vision 2030 (2016) states:

> We will continue investing in education and training so that our young men and women are equipped for the jobs of the future. We want Saudi children, wherever they live, to enjoy a higher quality, multi-faceted education. We will invest particularly in developing early childhood education, refining our national curriculum and training our teachers and educational leaders (p. 36).

Remarkable success was achieved within five years of establishing the Saudi Vision 2030 including education amongst many other aspects. One of the achievements of this vision, is the launching of a number of science programs for adults and older children. Some of the programs established the following: the Saudi Digital Academy; 14 digital innovation labs; and the Digital Filmmaker Programme in collaboration with the British Film Institute, the University of Southern California and the Institute for Creative Media Skills at Pinewood Studios in the UK. Furthermore, the Saudi Vision 2030 also helped to establish 104 Science, Technology, Engineering, and Mathematics (STEM) centres for older children to increase STEM skills in schools emphasising technology and innovation (Vision 2030, 2016). Thus, it

might be possible in the future to integrate digital technologies into educational settings for young children studying the Saudi educational curriculum. The following sections clarifies the existing curriculum applied in this context.

1.3.1 Self-learning Curriculum

It is useful to discuss the nature of the curriculum in SA kindergartens to clarify the context of the study, as the current study explores a new curriculum – LP – within a kindergarten setting. In SA, pre-primary education was not governed by any official curriculum until 1986 (Ministry of Education, 2016). Before that, kindergartens depended on individual practices and focused on the traditional approach of teaching reading, writing and mathematics (Alomar, 2013). Therefore, teachers were free to structure their own curricula without supervision (Aljabreen & Lash, 2016). In 1985, an early childhood education project was developed in cooperation with agreements conducted between GPGE, the UNESCO and the Arab Gulf Programme to support United Nations Organisations Development. The project resulted in the comprehensive development of kindergartens in SA and provided a curriculum called the self-learning approach. The project also prepared qualified female teachers and established training centres to apply this curriculum. The curriculum's main aims were to enhance the efficiency and performance of Saudi teachers, ensure that all those who work in the field of early childhood education have access to a common reference and information source and ensure that all preschool children in SA receive integrated and comprehensive education (Alomar, 2013). This curriculum depends on self-learning, which focuses on the self-activity of children; therefore, each child interacts in an educational environment that helps them discover and develop their abilities in proportion to their own growth patterns (Ministry of Education, 2016).

The curriculum is divided into two main parts across seven books. The first part presented in the first book lays out an intellectual framework and educational requirements for the profession, as well as connecting them to SA's learning policies. This book is used as a guide for teachers on how to organise kindergarten classrooms and includes educational principles, daily schedules and information on dealing with challenging behaviours. The second part is practical and divided into ten units, which are outlined in the remaining six books. The first five books are separated into five detailed units: water, sand, food, house and hands. The sixth book contains five short units: friends, health, clothes, family and 'My book'. Each book presents the unit's aims, required materials, range of themes, lessons and activities for teachers to use in their lesson framework, as well as explaining the teacher's role. Therefore, teachers can base their lesson plans and classroom activities on the unit itself (Ministry of Education, 2016). The cover images for all seven books are provided in Appendix A.

Using the self-learning curriculum, kindergarten classrooms are organised into seven areas: the Library Centre, the Block Centre, the Dramatic Play Centre, the Cognitive Centre, the Art Centre, the Discovery Centre and the Reading and Writing Centre. The tools integrated into these centres are provided to teachers along with a book provided by the Ministry of Education. For example, the Library Centre provides books, a puppet show, a book stand, a sofa and an audio recorder. The Block Centre provides blocks in different sizes, toy cars, animal toys, traffic toys and tree toys. The Dramatic Play Centre is divided into two parts: the one used at the beginning of the year contains home items, such as a sofa, kitchen furniture and kitchen tools, a bed, shoes, hats and traditional clothes for boys and girls. The second part includes tools related to the unit being applied in the kindergarten. For example, if the unit is about water, the centre provides water-themed toys or pictures related to water. The Cognitive Centre contains educational toys for exploring, books on science and about plants, pets and stones and worksheets. The Art Centre contains paper, glue, scissors, markers, play dough,

paint, tape and colouring tools. The Reading and Writing Centre contains worksheets for writing letters and numbers, cards with numbers and letters, papers, small boards for writing letters, pens, pencils, pencil sharpeners and erasers. It includes sand for practicing writing letters and an audio recorder (Ministry of Education, 2016). Each kindergarten in SA follows the principles set by the Ministry of Education to assess the adaptation of the curriculum in a classroom environment.

Within the self-learning curriculum, literacy is one of the many skills that needs to be trained. Some of the skills highlighted in the curriculum are as follows: listening, auditory discrimination, accuracy of observation, visual discrimination, eye–hand coordination, growth of small fingers, ability to focus and expression through oral and written language. All of these skills, which overlap and harmonise, constitute readiness for reading and writing (Ministry of Education, 2016). The curriculum recommends that teachers support these skills and increase each child's connection with language by writing words they are interested in and reading them at a slow pace. The children are given the words to keep, and the words are repeated in sentences and expressions. Teachers need to provide suitable writing tools to help children copy words. The main principles for early literacy in accordance with the self-learning curriculum are as follows (Ministry of Education, 2016, p. 9):

- A child in this developmental stage needs to express their thoughts and feelings verbally.
- A child needs to be exposed to a variety of activities on an individual and group basis to enhance language communication skills as well as normal social behaviour.
- A child needs to be given the opportunity to hear their voice and express themselves, which further raises their language awareness.

- A child needs to see the words written on a piece of paper so that they may repeat them as often as they please.
- A child needs to link the concept of the word they see with the concept of writing. To do so, written words by children can be hung on a board by teachers so that the child and the other children can see it.

Children are expected to be taught eight letters of the alphabet in KG2 and 20 letters in KG3, as well as words that start with these letters (Ministry of Education, 2016). More attention is given to literacy by providing a specific area of interest for reading and writing in kindergarten classrooms in which children are exposed to a variety of literacy activities and worksheets during their learning (Khomais, 2007). The tools previously mentioned for the Reading and Writing Centre were provided by the Ministry of Education.

Khomais (2007) argued that the self-learning curriculum built on Piaget's view gives more consideration to children's development and the learning environment, whereas the sociocultural context of children's development has been overlooked in this curriculum. Hence, it can be said that literacy is viewed in this curriculum from a cognitive perspective rather than a sociocultural perspective, which views literacy beyond a set of cognitive skills, as the LP in the current study does.

1.4 Research Aims and Questions

This case study aims to explore and test the curriculum design of LPs for the first time in a Saudi kindergarten. It attempts to understand the impact of LPs on children's literacy engagement, motivation in literacy and literacy practices in one Saudi kindergarten. It also attempts to understand teachers' feelings regarding this new LP curriculum by applying it for the first time in a Saudi context.

To achieve the research aims, the three main research questions are as follows:

RQ1. What is the impact of implementing a LP on children's literacy practices and engagement in literacy in one Saudi kindergarten?

RQ2. What is the impact of a LP on children's motivation, as understood through self-determination theory (SDT)?

RQ3. What are the teachers' feelings about the advantages and disadvantages of the LP approach?

1.5 Terminology

It is crucial to explain the terms used in this study. The term 'literacy' has been widely used in studies from the cognitive view and mainly focuses on reading and writing (Street et al., 2014). However, the concept of literacy is complex and has been reconceptualised from a sociocultural perspective (Razfar & Gutierrez, 2013) which this study adopts. Thus, I refer to the theories that redefined literacy and discuss them further in the literature review Chapter Two (Section 2.3).

Furthermore, I have used the term 'traditional literacy' in this thesis while acknowledging that there is a porousness of the boundaries between what comprises 'traditional' versus other literacies, including 'new' or 'digital' literacies (Scott & Marsh, 2018). New literacies are discussed in the literature review. Traditional literacy has been defined as the 'ability to read or write and understand the text' or 'the ability to use written language actively and passively' (Van Deursen & Van Dijk, 2014, p. 14). Studies of early childhood literacy have traditionally focused on language-based texts, examining the processes and practices involved in understanding and creating these texts (e.g., reading and writing) (Scott & Marsh, 2018). In the context of the thesis, when I refer to traditional literacy, I often

refer to the sorts of activities I observed in the classroom that I felt were represented in Van Deursen and Van Dijk's (2014) definition of traditional literacy such as writing letters on worksheets or boards and practicing letters in songs or competitions. However, most of these activities in Saudi kindergartens are guided by the curriculum provided by Ministry of Education. In Section 1.3.1 above, I discuss the Self-learning Curriculum in which KG2 teachers are expected to teach eight letters and KG3 teachers are expected to teach 20 letters, along with words that begin with these letters. It is essential for teachers to provide children with writing tools that will help them copy letters or words (Ministry of Education, 2016). Kindergartens in Saudi Arabia conduct these literacy practices as part of the overall daily schedule as well as provide specific literacy instruction. The daily schedule of the kindergarten in which I conducted this study is presented and discussed in the Methodology chapter.

A LP refers to a curriculum design that has been implemented and tested in the USA with children aged 3–8 years and was developed by Karen Wohlwend (2013). The curriculum is clarified further in the literature review Chapter Two (Section 2.5).

The term 'kindergarten' refers to a programme for children in SA before they start year one in school. Kindergarten is for children aged three to six years old.

SDT is a theory of human motivation developed by Deci and Ryan (1985). It clarifies that individuals have three essential psychological needs: relatedness, autonomy and competence, which are attributed to the development of motivation. This theory is used as a theoretical framework to understand children's motivation to participate in LPs by discussing how the three psychological needs are satisfied. Further explanation of this theory is presented in Chapter Three.

1.6 Structure of the thesis

This thesis comprises six chapters, including the current chapter:

Chapter One: Introduction

This chapter introduces the research study and presents the aims and research questions. Chapter one also sets out and describes the background context of this study along with relevant terminology.

Chapter Two: Literature Review

This chapter presents the literature review, which outlines the theories that affected my approach to reconceptualising the concept of literacy. It also includes an explanation of the LP curriculum and reviews relevant literature on play, literacy and popular culture and literature relevant to teachers' attitudes towards using digital technologies**.**

Chapter Three: Self- Determination Theory (SDT)

This chapter discusses SDT which this study has drawn on to understand children's motivation, including clarification of the three basic psychological needs; need for autonomy, relatedness and competence and present relevant studies that have applied SDT.

Chapter Four: Methodology

This chapter presents my philosophical positions in this research and my positionality. It also outlines the methodology and study design, including implementing a LP, site selection and sample selection (eight children, their mothers, three teachers and the principal), data collection methods, ethical considerations, the process to ensure trustworthiness and the data analysis processes.

Chapter Five: Findings and Discussions

This chapter presents the findings and discussion, which include the background information on the eight children who participated in the study, the findings of the research in relation to the three research questions, and an interpretation and discussion of the findings in relation to the existing literature.

Chapter Six: Conclusion

The conclusion summarises the findings of this research, presents its contribution to knowledge, outlines limitations and implications for policymakers, teachers, parents, and researchers, and offers recommendations for future research.

The last section includes a full bibliography and appendices.

1.7. Chapter Summary

This chapter presented an overview of the thesis. It began by clarifying the background of the study, followed by an explanation of the context and the curriculum applied in the Saudi education system, specifically kindergartens. By aiming to explore the curriculum LP in one Saudi kindergarten, this research seeks to understand the impact of this curriculum on children's literacy engagement, motivation in literacy and literacy practices and understand teachers feeling regarding this curriculum. For this purpose, three questions were presented in this chapter. Relevant terminology and the outline of the study were also presented.

The following chapter presents the literature review, including the theoretical framework that impacted my approach, a description of the LP curriculum, and discusses relevant literature and identifies research gaps.

Chapter Two: Literature Review

2.1 Introduction

This thesis draws from several theoretical frameworks, including socioculturalism, New Literacy Studies (NLS), multimodality, and Self-Determination Theory (SDT). The overview of these frameworks is divided into two chapters. Chapter Two presents socioculturalism, NLS, multimodality, as well as relevant literature. Chapter Three presents SDT and relevant literature. This chapter briefly discusses the theoretical traditions and the works within them to provide a grounding context for the study, followed by a review and presentation of the studies related to my research. The chapter comprises six sections: Section 2.2 introduces the sociocultural perspectives; Section 2.3 reviews an expanding concept of literacy by explaining NLS and multimodality; Section 2.4 discusses the relationship between play and literacy; Section 2.5 describes the Literacy Playshop (LP) and its purpose; Section 2.6 presents research on the relationship between play, literacy and popular culture; and Section 2.7 reviews teachers' attitudes towards using digital technologies**.**

2.2 Sociocultural Perspectives

Sociocultural theories were first developed by the Russian psychologist Lev Vygotsky and his colleagues in the 1920s and 1930s (John-Steiner & Mahn, 1996). Vygotsky (1896-1934) first asserted that knowledge and learning are constructed through social interaction and cultural context to develop human cognition (social constructivism) (Vygotsky, 1978), as opposed to cognitive constructivism, which emphases that the learner constructs knowledge individually.

Vygotsky outlines several important concepts regarding children's learning in his sociocultural theory. First is the concept of the zone of proximal development (ZPD), defined

by Vygotsky as 'the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers' (Vygotsky, 1978, p. 86). The ZPD represents the developmental space between what children are able to learn on their own and what they are able to learn with assistance. Roosevelt (2008) asserts that providing students with interesting and culturally meaningful learning and problem-solving activities encourages regular and continual learning in their own ZPDs, which Roosevelt considers to be the main goal of education. However, these activities should be more challenging than what the students would usually do independently; thus, it is essential that team or pair-work is encouraged to complete these tasks. Therefore, engagement in these the activities, according to Vygotsky, is mediated by utilising more capable peers, teachers and cultural tools such as language, signs, works of art, symbols, technologies (John-Steiner & Mahn, 1996), and literacies, as Vygotsky indicated that 'children use literacies as cultural tools to access, understand, and make meaning as they learn to mediate the world' (Wohlwend, 2013, p. 43). Literacies are further discussed in the present study in Section 2.3.

Another significant contribution from Vygotsky theory is mediation, which is the process of how social, cultural and historical factors are influenced by and act on an individual (Wertsch, 1985). In fact, ZPD is an important aspect of the concept of mediation as it stresses that the child's individual mental development is socially mediated (Razfar & Gutiérrez, 2013). In addition, Vygotsky indicated that play is the source of development that allows for mediation and creates the ZPD earlier than does other activities (Bodrova & Leong, 2015). In this case, children further their learning development simultaneously through play when mediated by more knowledgeable peers or teachers and cultural tools. In this theory, the help provided from more capable individuals is called scaffolding.

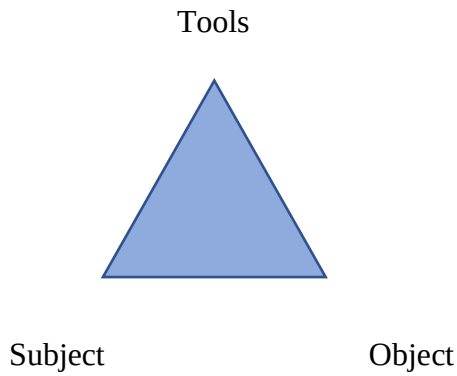
Vygotsky introduced the notion of tool mediation, in which he considers the primary aspect of an individual's consciousness is its association with using tools (Wertsch, 2007). Tool mediation indicates the relationship between the subject (learner) and the object (aim of learning) in which learning is mediated by using tools (Figure 1) (Vygotsky, 1997). Mediation can be either implicit or explicit. Implicit mediation is less observable and thus harder to detect. It can include signs, such as language, for communication. In most situations, implicit mediation does not need to be deliberately inserted into ongoing activities because it is part of communication. By contrast, explicit mediation is the purposeful introduction of new tools as a 'stimulus means into existing activities via an external agent, such as a teacher (Wertsch, 2007). Edwards et al. (2020) have clarified that implicit mediation in early childhood education classrooms is connected to both teaching and education, with play-based learning being the main aim of activities. However, in implicit mediation, long-held cultural practices are cemented the justification for this being the difficulties experienced by teachers when responding to the use of digital technology and media in children's play (Edwards et al., 2020). Thus, the use of explicit mediation, such as the intentional integration of new tools into children's play in the classroom, as applied in the present study, is required in order to challenge long-standing practices by addressing alternative objectives of learning activities. However, such integration of new tools might present challenges for teachers. The current study seeks to explore children's literacy engagement and practices during the application of the LP curriculum and attempts to understand teachers' feelings about this curriculum.

The mediation tools being applied in the present study, such as digital cameras, puppets, toys, storyboards, and popular media characters, are informed by the LP curriculum (Wohlwend, 2013). Today, tools related to technologies are more often found in children's play compared to previous generations (Razfar & Gutiérrez, 2013). While Vygotsky (1978)

indicated that in play, a child may use a stick to represent a horse, in the current generation, Wohlwend (2009b) revealed in her study that a child may use a carrot to represent a phone. Sociocultural research in the past has emphasised the use of print media and literacy events such as bedtime stories. However, over the last decade, numerous studies have been conducted to explore how digital technology can be incorporated into literacy and thus understand the value that literacy practices associated with digital technologies have in children's lives (Razfar & Gutiérrez, 2013).

Thus, mediational tools and socially supported activities in the ZPD by more knowledgeable teachers are discussed in this section as essential concepts in the sociocultural perspective of learning. Sociocultural perspectives have enabled us to understand the essence of learning as a socially mediated procedure. This has also improved our understanding of extending the meaning of literacy, moving beyond simply reading and writing skills to embedding literacy in social practice (Street, 1984). This is explored further in the following section.

Figure 1 Vygotsky's mediational tringle (1997, p.80)



2.3 Expanding the Meaning of Literacy

In the current study, it is crucial to briefly explain the theories that re-defined literacy in the late twentieth and early twenty-first centuries; 'literacy as social practice', 'new literacies', 'multimodality'. Drawing from a sociocultural perspective, the meaning of literacy no longer means the ability to 'read' and 'write', and proponents of NLS argue that literacy is a social practice that occurs from everyday life (Street, 1984). NLS states that the 'ideological' model of literacy is a set of practices that are culturally sensitive, as these practices differ depending on the context and culture as opposed to the traditional vision that establishes literacy as an 'autonomous' set of skills mainly learnt at school and thus separated from the learners' everyday life, and social and cultural background (Street, 1984). From this perspective, studies drawn from literacy as a social practice are focused on what people do with literacy rather than concerned with merely learning literacy in an educational environment.

2.3.1 New Literacy Studies (NLS)

NLS identified literacy as a social practice; this practice relies on two main concepts, which are literacy events and literacy practices (Pahl & Rowsell, 2012). Barton and Hamilton (2000) distinguished between literacy events and literacy practices in which they note 'in the simplest sense literacy practices are what people do with literacy' (p.7). However, one cannot observe these practices as they are shaped by different attitudes, values, feelings and social relationships, whilst written practices in school are dominant and supported by those in power. On the other hand, literacy events are observable and 'are activities where literacy has a role' (Barton &Hamilton, 2000, p. 8). Furthermore, Heath (1983) stated that literacy events represent 'any action sequence, involving one or more persons, in which the production and/or comprehension of print plays a role' (p. 386). From this perspective, the focus of literacy event is on print texts.

With the overwhelming impact of new technologies on everyday life, communication methods have changed as children use computers, videos, and blogs on a daily basis (Knobel & Lankshear, 2007); thus, broadening the definition of literacy. In this perspective, new literacies emerge under the paradigm of the NLS; thus, several definitions of literacies exist, and studies have argued what make the practices 'new'. Knobel and Lankshear (2007) concluded:

> the more a literacy practice privileges participation over publishing, distributed expertise over centralised expertise, collective intelligence over individual possessive intelligence, collaboration over individuated authorship, dispersion over scarcity, sharing over ownership, experimentation over 'normalisation,' innovation and evolution over stability and fixity, creative-innovative rule-breaking over generic purity and policing, relationship over information broadcast, and so on, the more we should regard it as a 'new' literacy (p. 21).

These practices are supported and improved by new technologies so that new literacies as previous mentioned are more 'participatory' and 'collaborative', and less 'published' and 'individuated' than traditional literacy. Thus, it is clear that the meaning of literacy moves beyond reading and writing skills.

Green (1988) identified three dimensions of literacy: operational (language), cultural (understandings of texts relating to context) and critical (critical texts/ power). This model looks at literacy in a holistic way such that all three dimensions are intertwined, and they are all given an equal position (Green, 2002). It has been found unhelpful to start with matters of language (operational) while ignoring social practices (culture) and reflecting on these and texts (critical). To clarify these three dimensions, the operational dimension focuses on language, comprising alphabets, handwriting, etc. This

model can be seen in early-year teaching, such as in learning to print letters. In the cultural dimension, literacy is a social practice. Thus, children can make meaning to create text, and that text is related to their prior experience using variety of interactions with others. The critical dimension focuses on critiquing, redesigning and applying the text to different settings. It is about identifying the opinion and perspective of the text (Scull et al., 2013). This 3D model of literacy has been applied in different studies. For example, it was applied to understand digital literacy and changing literacies in a European Co-operation in Science and Technology (COST), where the three dimensions were defined (Sefton-Green et al., 2016) COST refers to programme aims to advance research into digital literacy and multimodal practices among young children (Sefton-Green et al., 2016). The 3D model of literacy was also used as a lens to understand the practices of three preschool teachers in Australia who participated in a project for young children. Analysis of videos, surveys and interviews revealed that the 3D model existed in different practices (Scull et al., 2013).

Sefton-Green et al., (2016) defined digital literacy ‘as a social practice that involves reading, writing and multimodal meaning-making through the use of a range of digital technologies’ (p.15) in which reading, and writing refer to broader meaning-making practices. They indicated that digital literacy or new literacies describe literacy events and practices using both digital technologies and non-digital practices. Knobel and Lankshear (2014) indicated that there are occasions when new literacies are recognised that do not incorporate the use of digital technologies such as ‘paper-based and face-to-face creation, distribution, and sharing of, say, fan fiction’ (p. 97). In fact, children communicate in both traditional and new ways across various digital media (Scott & Marsh, 2018). Engaging children in meaningful activities like dramatic play, drawing, storytelling will develop both ‘languages’ and ‘literacies’ (Razfar and Gutiérrez, 2013) in which literacy practices can be discovered in school and home settings. If

these practices go beyond the traditional print text, which mean multiple modes, multimodality is an appropriate theory to draw on to better explore these practices.

2.3.2 Multimodality

A number of studies have drawn on multimodality, a movement which Kress led in the 2000s (Bezmer & Blommaert, 2012). The concept of 'multimodality' originated from social semiotics (Kress, 2010) and is further explained in the current study. In social semiotics, signs are fundamental and made from social interaction and shaped through culture. In the use of signs, meanings and forms merge together; the form of the (signifier) is a representation of the meaning (signified). Kress illustrates an example of a boy who is three years old, who drew a circle (signifier) to mean a 'wheel' (signified). By drawing a number of circles as wheels (signifiers), the boy represented a car (signified) (2010). From this perspective, social semiotic theory indicates that the relation between meaning, and form is aptness and is not arbitrary. Kress determines that signs exist in all modes the child uses, so all the modes are considerable and have meaning. He confirmed that the making of signs made by a sign- maker is based on his or her choices and shaped by his or her interests. A sign maker or 'young' maker, as Kress indicated, uses the semiotic resources (artefacts, material, etc.) available to her or him to produce the meaning in a social setting. Kress gave an example of a child that, with her friend, made a car on the floor; they used a box as the car, pillow as a seat, two wire-mesh drawers as car doors and used some bobs to represent passengers. After playing, they changed everything and made a new thing. He concluded that these representations are 'temporary only and are subject to constant transformation' (Kress, 1997, p.29). In this respect, children focused on what was important about the car at that moment and produced it accompanied by 'the signs of speech, of gesture, of facial expression' (Kress,1997, p. 30) and emphasised that these representations are not arbitrary.

The semiotic theory of multimodality, according to Kress, is a theory of communication which focuses on meaning-making processes through modes that are not only focused on written language but also include multiple modes such as image, writing, drawing, 3D objects, moving image, speech, gesture, etc. and each mode expresses meaning. Van Leeuwen (2005) indicated that multimodality is 'the combination of different semiotic modes, for example, language and music in a communicative artefact or event' (p. 28). Modes are the name of 'socially shaped and culturally given semiotic resource for making meaning' (Kress, 2010, p. 79). However, Kress (2000) argued that print literacy is highly regarded in Western countries; indeed, it is a mode that is privileged above others. Kress (2000) critiqued the Western world's perception of printed texts by stating that:

> literate Western societies have for too long insisted on the priority of a particular form of engagement, through a combination of hearing and sight: with the sense of hearing specialised to the sounds of speech, and the sense of sight specialised to the graphic representation of sounds by 'letters', on flat surfaces (p. 184).

Wohlwend (2017a) supported this argument by indicating that educational discourses have traditionally not provided diverse modes and materials for children in the classroom, instead focusing only on traditional reading and writing and not multimodal play. Therefore, informed by this idea, it is essential that early childhood classrooms provide students with a variety of modes and resources so that they can play and create new literacies and become involved in the process of meaning-making by using artefacts, drawing, speech, and images, among other media.

The multiplicity of modes can be viewed through children's play and what they use or make during the play, as well as their body (Kress, 1997). Naturally, children's play is multimodal as play includes movements, facial expressions, play props, artefacts, reading and

writing in dramatic play, to name a few. Any multimodal text might combine elements of performance (gesture, movement, posture, facial expression), images (moving and still; photographic, drawn, painted, computer-generated, etc.), sound (spoken words, sound effects, music and silence), writing (including font, graphics and layout) and duration (shot length, sequence, rhythm and transitions) (Bearne and Bazalgette, 2010. p. 7). It may also include using two different modes together, such as movement, dance, drawing, song, conversation (Kim & Kim, 2017). From this perspective, children produce signs by using a multiplicity of modes during their play; this is not due to them compensating for their emergent language, but because they wish to communicate the most robust meaning they can via their designs (Kress, 1997, Wohlwend, 2017a).

2.3.3 Multiliteracies

The notion of design, which is defined later, was introduced by the New London Group (NLG) and applied a new approach to literacy pedagogics called multiliteracies in 1996 (Cope & Kalantzis, 2009). NLG became interested in the importance of 'two 'multi' dimensions of 'literacies' in the plural—the multilingual and the multimodal' (Cope & Kalantzis, 2009, p. 166). Multiliteracies focus on different types of communication that are needed in diverse cultural and social contexts for traditional and electronic texts (Walsh, 2017). Design presents meaning to 'something you do in the process of representing meanings, to oneself in sense-making processes, such as reading, listening or viewing, or to the world in communicative processes, such as writing, speaking or making pictures' (Cope & Kalantzis, 2009, p. 175). This refers to how children use the tools that are available in a particular communication environment at a given moment to realise their interests as sign makers (Jewitt, 2008). Three forms of designs have been identified by the NLG in their (1996) multiliteracy framework: available designs (resources for design), designing (the work to transform of available design to produce new representations) and the redesigned (the outcome of designing process/product

designing). Thus, informed by multimodality and multiliteracies, classrooms should develop a curriculum that encourages children to be producers of knowledge using multimodal resources, as opposed to children being passive recipients of a narrow curricula, as within the traditional view of literacy.

2.4 Play and Literacy

A growing number of scholars have explored the positive relationship between play and literacy (Dyson, 1997, 2003; Roskos & Christie, 2007, 2011, 2013; Roskos et al., 2010; Wohlwend, 2011, 2013, 2015b). Roskos and Christie (2011) described this relationship as the play-literacy nexus, which is defined as the space 'where play, language and early literacy converge and interact' (p. 204). This relationship has become a prominent field of research in early literacy instruction. The studies conducted by the authors have focused on various types of play, such as free play, sociodramatic play, pretend play, role-play, directed play and thematic play (Roskos & Christie, 2013). According to Christie and Roskos (2009), literacy in connection with play that involves pretending through role assignments and make-believe (i.e., dramatic play) implies the use of superior thinking processes such as 'imagining, categorising and problem solving' (p.1). Elkind (2007) argued in his book, *The Power of Play*, that play is essential for academic learning, cognitive, social and emotional development. Consistently, studies have shown that play can be an effective strategy for literacy development (Grant & Mistry, 2010).

Researchers have thus argued that it is possible to develop children's early literacy skills by creating a literacy-rich environment that allows them to play and interact with each other. In this respect, Mielonen and Paterson (2009) investigated how dramatic play promoted children's literacy and supported language development in home settings. Their study, based on video-taped observations and interviews of two five-year-old girls engaged in

role-playing at home, demonstrated that the social interactions involved in role-playing in a rich literacy environment allowed the girls to develop language skills such as reading and writing. Similarly, in Jordan, Ihmeideh (2015) compared two groups of kindergarten children in a dramatic play area: an experimental group of 25 children with access to writing tools and activities in a dramatic play area and a control group of 21 children with no choice to integrate writing devices into their play. He showed that writing development was more prominent within the experimental group and highlighted the positive attitude of the learners towards the writing practices. This is supported by Roskos and Christie's (2011) affirmation that a literacy-based play environment plays a central role in developing children's literacy practices. Almomni (2017) found that providing a rich classroom environment for children to play in positively influenced the development of language in children aged 5–6 years old in Jordan.

In a 2000 study, Hall investigated how literacy skills could be developed by children through play in a sociodramatic play area of the classroom. The study was conducted in England and involved 35 children aged 4–5 years. The theme selected by the teacher to support the learning activities was 'a garage'. In this study, children visited an actual garage and were then asked to create a copy of a garage by using the literacy tools made available in the classroom, such as paper, coloured pencils, and pens. The teachers provided the children with events and situations and asked the children to incorporate these indications into their play. For example, to obtain permission for the build, the teacher encouraged the children to write authorisation letters addressed to the local town hall. The children were then encouraged to apply for work at the garage that they built. Hall concluded that literacy skills were developed effectively in the children engaged in the play experience facilitated through enjoyment of the dramatic play settings. This reveals the importance of educators providing a

classroom environment conductive to early childhood development by giving children the freedom to play.

Incorporating play in learning has proved effective in developing language not only with children who are native speakers but also with children who speak more than one language. In this respect, Grant and Mistry (2010) investigated the effects of sociodramatic play on the learning of English as Additional Language (EAL) with Year-4 children, using observation and questionnaires submitted to children and teachers. The results of their study revealed that engaging in sociodramatic activities in a flexible learning context enables children to use a wide range of vocabulary, words and phrases and encourages them to interact with their peers. The researchers therefore recommended using sociodramatic play as a pedagogical tool to assist EAL children.

With regard to teachers' readiness to integrate literacy in play-based learning, Pyle et al. (2018) interviewed 12 kindergarten teachers who had different perspectives on the role of play in literacy learning. Based on their data analysis, two categories of teachers emerged that were then separated into two groups: a play and development group and a play and learning group. The play and development group comprised five teachers who separated play from learning, while the play and learning group comprised seven teachers who combined play with learning. The teachers who incorporated playing and learning believed that playing was essential for children's literacy, whereas the teachers in the play and development group considered that play was not an appropriate pedagogical method for the development of children's literacy. Although there were differences in how the two groups integrated play and literacy, all the teachers recognised how challenging the implementation of a play-based curriculum is.

In recent years, research investigating the relationship between literacy and play has been further developed. The previous studies presented mainly focused on the importance of play environments in developing print literacy and language. However, new insight into play-literacy studies has emphasised play itself as a literacy practice that features reading and writing as well as being multimodal.

From this perspective, Wohlwend (2018) considered play as 'a child friendly tool for meaning making' (p. 3). She identified play as a way of enacting, representing, and participating in cultural practices through children's bodies, toys, props, and drawings (Wohlwend, 2015a). Wohlwend built her view of play as a literacy of children from the Vygotskian view of play in which play is defined as a symbol-making method (Vygotsky, 1978). Wohlwend (2011) suggested that children's play is a form of text; as such, Wohlwend developed the concept of 'action text' as a form of embodied literacy, which refers to the expression of meaning through body movement in imaginary play or by animating toys and available resources during pretend play. She explained that children use different modes to deliver the meanings of their action texts from materials made available in their environment (Wohlwend, 2011). This draws on multimodality, as explained earlier, in which children make meaning not only with one mode (language) but by multiple modes. Thus, during play, children produce 'action texts' with movement, sound, and gaze as multiple modes in which they are culturally shaped. Wohlwend suggested that children write action texts with their bodies. She would also acknowledge that children write stories with print text, too.

In her study, Thiel (2015) supported embodiment literacy in which she analysed children's practices in an early years setting and suggested that their movements could be read as a form of embodied literacy practice. She described the playground in her study as a notebook in which children create embodied literacies. She conducted the study within a

group of children at an American clubhouse used as an after-school space for summer activities. She focused on Zack, an African American child in year four of around ten years of age, who, on one occasion at lunch time approached her wearing a Wolverine superhero costume, immediately triggering the curiosity and attention of his peers. This event served as the starting point of Thiel's research (2015) on literacy. In her study, Thiel (2015) developed the concept of muchness, which she defined as 'embodied, intellectual fullness that manifests through an internal compulsion to be engaged in an activity that one has a particular affinity for or curiosity about, unstopped by challenges or frustrations' (p. 41). She based her theoretical approach on Deleuze and Guattari's concepts of assemblage and lines of flight. She argued that muchness occurs when a child engages in play by following her or his imagination (thus creating a 'line of flight') and collaborates with others to compose a story, demonstrating a potential to provide structure and meaning. Thiel (2015) recommended that to provide muchness in a learning setting, the classroom environment should allow for flexibility and improvisational play so that children can 'follow lines of flight' (p. 38). Furthermore, children should be allowed to retell texts with movements, and not only verbally.

Recently, scholars have discussed the multiple modes of meaning-making present in school settings and home contexts. In one study, Kim and Kim (2017) analysed a child's play. The focus was on the play of a 4-year-old child (one of the authors' sons) as he explored his interest in dinosaurs by developing—through drawing, oral language and body movement—a story centred around the theme of the extinction of dinosaurs. This study highlighted the interaction between this child and his older brother, who assisted him in his literacy process of meaning-making, as well as the role played by his parents in this context, especially his mother. The authors of this study lived in the United States and the aim of their ethnographic case study was to demonstrate how a child can use multimodal play-literacy

practices at home to express an understanding of the world by applying their own meaning-making. The study further confirmed the importance of play in early childhood education through the use of multimodality and emphasised the collaborative dimension of literacy events. Similarly, a study within a school context of children ages 5–7 years showed that children use multiple modes of communication to present storytelling, such as images, props, film making, puppets and printed words (Wessel-Powell et al., 2016). Thus, the study developed a multimodal assessment tool for schools and stressed that allowing children to communicate using multiple modes could enhance engagement and produce more exciting stories. Additionally, in a qualitative case study exploring the effects of children's digital composition on learning in school, Lim and Toh (2020) found that children's digital multimodal compositions or performances illustrated both the children's creativity and as well their critical thinking capabilities. Furthermore, in a study within the school and home contexts, Parry and Taylor (2021) found that children created new texts by using digital technologies provided both at home and at school. Describing these practices as 'digital authoring', the study includes various vignettes from different research contexts. All these studies emphasise the importance of integrating multimodalities and playfulness in homes as well as educational settings, which are considered part of the principles introduced later in the current study.

Apart from these other modes, visual representations are also used by children to make meaning. These visuals are mainly related to art. However, in the middle of the 20th century, visual representation incorporated the everyday images that surround people (Jewitt, 2008). It comprises still or moving images, crafts, and scenes (Cope & Kalantzis, 2009). Friedman (2018) recently studied Israeli kindergarteners aged 3–4 years, aiming to encourage children to use multimodal literacies with a focus on verbal and visual modes. The results showed that the use of visuals improved children's decision-making in designing photographs

and talking about their pictures. Through observation and analysis of children's abilities to 'read' a photograph and produce images, the study revealed how important it is to implement certain changes in early childhood literacies. Jewitt (2008) argued that visuals are crucial to notions of 'creativity and education' in which people's interest in creativity is not limited to language or writing but also to visual and other modes. Further, she stressed that there is a lack of attention to visuals and other non-lingual resources in educational settings (Jewitt, 2008), especially with young children. In the current study, Saudi kindergarten children, for the first time, used digital cameras and other tools to make their own production of visuals (videos), alongside other modes during their play.

Despite the body of research indicating the positive relation between play and literacy and how play is a tool for making meaning in literacy and for enhancing literacy skills, the time for play is reduced in educational settings, with the focus being placed on academic learning in many countries. In the United States, playtime is decreasing in early childhood classrooms (Wohlwend, 2013, 2017b). Playtime in kindergarten is being replaced by academic ways of increasing literacy skills through practice, such as workbooks and worksheets (Wohlwend, 2008). In the same contexts in the United States, Miller and Almon (2009) argued that on a typical day in American kindergartens, children spent more time being taught literacy and mathematics skills rather than playing. They indicated that children spent two or three hours on literacy and maths compared to 30 minutes for free play. In the United Kingdom (UK), Bennett et al.'s (In Wood, 2009) study indicated that play in reception classes (aged 4–5 years) was restricted in duration, regularity and quality. In SA, the context of the current study, Haroun (2018) indicated that Saudi mothers focus on the academic learning of the child from an early age in exchange for a reduced time allocated to play. Using a questionnaire, this study investigated the beliefs regarding play of 138 Saudi mothers whose children were enrolled in kindergartens and found that the mothers believed

that play was important for children. However, the mothers agreed that play might have a negative effect on academic learning; thus, according to the mothers, play has to be restricted in the academic year.

Based on the official curriculum and guidelines provided by the Ministry of Education in SA, teachers are expected to prepare a reading and writing corner, which is a part of the classroom where children can use available written cards about numbers and letters, papers, board, pencils, erasers, sharpers, sands to write letters, and a recorder (Ministry of Education, 2016). This was explained further in Chapter One. Kindergarteners are expected to be taught 20 letters during their last year in kindergarten before starting year one. All worksheets provided in the guideline can be copied by the teacher and placed in the corner. Therefore, only print paper literacy is provided in the guidelines for teachers' application in the classroom. There is no mention of adding new technologies or materials relating to popular culture for children's engagement and play in the new literacies, which is unlike 21st century literacies.

Burnett and Merchant (2018, pp. 3–4) identified nine principles as a charter for 21st-century literacies:

1. Acknowledge the changing nature of meaning making.
2. Recognise and build on children's linguistic, social and cultural repertoires.
3. Acknowledge diverse modes and media.
4. Recognise the affective, embodied and material dimensions of meaning making.
5. Encourage improvisation and experimentation.
6. Use playful pedagogies.
7. Create opportunities to work with the positionality of digital media.
8. Provide context that facilitates criticality.
9. Promote collaboration around and through texts in negotiating meaning.

They argue that these principles could be applied in classroom practice, where children's experiences with literacy are related to the world around them.

These principles have been applied in several studies. For example, in a Europe-wide project called Makerspaces in the Early Years (MakEY, 2017–2019), children explored and enhanced their digital literacies in spaces provided in schools and in various other (different) settings (Blum-Ross et al., 2020). The project explored using practical experimentation via a range of traditional and digital tools to enhance creativity, storytelling and play. The results of this project, which were applied in various countries in Europe and America, are presented in the book *Enhancing digital literacy and creativity*. A study conducted in English primary schools in 2017 focused on Moomins, a central character in many books, films and programmes in Sweden and Finland. Moomin puppet shows and stories were provided for the children. After learning about Finnish culture from conversations with a parent, the children started the Moomins related activity. They drew characters and cut them using a laser, and a shoebox was repurposed as a theatre to present them. They also used clay to make the Moomin characters and used an iPad to import the clay Moomin models to the Qlone App so that they could be viewed. Families were invited to watch the children's productions, which were displayed at an exhibition, which provided the children with a sense of pride at seeing their work displayed (MakEY, 2020). Indeed, as shown by the work of Wood & Chesworth (2017), children engaged in multimodal modes of learning and playfully interact while using both digital and traditional resources, which helps them become digital experts as they move between modes. From this perspective, many curricula in early childhood encourage playful learning by integrating digital technologies, such as the LP curriculum, which is explained in the next section.

2.5 The Literacy Playshop (LP)

The 'LP' curricula developed by Karen Wohlwend has been applied in the United States of America (USA) where it established new connections between play and literacy aimed at

children aged 3 to 8 (Wohlwend, 2013). In this curriculum, Wohlwend emphasised the notion of play as literacy and incorporated playing, reading, writing as well as other multimodal aspects, indicating the possibility for children to integrate their own cultural references into their play in order to engage in the creation of multimedia artefacts. Children develop new literacies and they film their play using popular media, which is explained in detail below. Wohlwend (2013) argued that through their involvement in play activities, children could shift from being passive learning consumers to being active learning producers. In the LP curriculum, children represent meaning through multiple modes such as movement, props, action and speech. Based on theories of multimodality, Wohlwend stresses that print literacy conveys one mode (textual information) whereas video requires design and organisation of multiple modes such as speech, image, movement, sound effect, physical space, camera angles, etc. (Kress, 1997, 2003; Wohlwend, 2013). The LP curriculum thus encourages teachers to think outside the limits of print text to help children engage in 21 century skills.

Drawing from the sociocultural approach including mediation previously discussed, Wohlwend tested the LP approach, where literacies are tools that mediate literacy learning and made it more relevant to children's everyday practices. Literacies, such as video cameras, colours and toys, help children make meaning with their peers' and teachers' guidance. In her approach, Wohlwend demonstrated three levels of mediation—'child exploration, shared meaning mediators and teacher guide engagement' (Wohlwend, 2013, p. 43)—and discussed the relationship between them, which she drew from Vygotsky's approach. These are further explained in the current study. In the LP, children's explorations are mediated by tools provided by teachers, these include digital cameras, iPads, costumes and puppets. Medina and Wohlwend (2014) outlined that 'mediation straddles the space between teacher-guided engagements and child explorations' (p. 45).

Wohlwend (2013, 2017b) conducted her study with a group of six teachers in early childhood classrooms who each implemented a LP during a single school year. The teachers used observation – kidwatching (Owocki & Goodman, 2002) – to learn more about the children's abilities while they were engaged in play. During implementing the LP, Wohlwend (2013) indicated four processes involved in children's meaning-making (i.e., play, storying, collaboration, and production), which is the framework of a LP. These processes are not isolated from each other, as it is essential to negotiate between teachers and children to move between the emergent processes in a LP (Wohlwend, 2013). The processes of play, storying, production and collaboration are explained in detail below.

Play: in a playful approach to literacies in Wohlwend's approach, children drew based on their favourite characters. They used white paper, coloured pencils, felt pens and scissors provided by teachers. Some children preferred to cut their character and started to play with it (Buchholz & Coggin, 2013). Thus, Buchholz & Coggin (2013) indicated that cutting out the character moved the activity from 'a school-based writing/drawing activity' to 'a play-based activity' (p.12). Some children created sceneries and props, which they connected to their stories. The children enthusiastically discussed characters with each other, and conversations filled the classroom. One of the teachers described the activity as being 'one of the best parts of the week'. All characters created by children are saved in storytelling folders (Buchholz & Coggin, 2013).

Storying: storyboards were used by the teachers to explain to the children how to experiment with telling/ presenting stories. The children watched 2 minutes of selected films such as the popular Toy Story, reflecting the teachers' decision to bring "safe" mainstream media into school which would obtain little resistance from student's households (Buchholz & Coggin, 2013). The debate regarding the integration of popular media into educational settings

is developed further in the Popular Culture section. After watching the film, the teachers asked children to use six-block storyboards to retell the stories from the video. After they showed children how to produce them, each child was asked to work individually on their storyboards. After this first storyboarding experience, on the second day, the clips were played a second time so that the children could continue reflecting on their storyboards, adding ideas and changing things if necessary. After a few days, the children were asked to create storyboards from their head, based on popular media and their culture, following the workshop structure that teachers developed earlier. The children were asked not to write on the lines below the drawing boxes (Buchholz & Coggin, 2013). Thus, through storyboarding, the children explored and developed authorship, and this led them to gradually shift from independent authoring to 'interactive and collaborative' authoring as noted by Wohlwend in Buchholz & Coggin (2013, p.17). Children's work was saved in the storytelling folder and the work completed on another day. Some teachers in this study felt that children seemed to struggle for ideas for the storyboard; however, many tools used in this curriculum, such as puppet, props, play, costumes and storyboards, were available for the children to use if they wanted them (Buchholz & Coggin, 2013).

Production: in the early stage of this process, digital cameras were introduced as a new storytelling tool, which added another dimension to children's storytelling in the classroom and highlighted the need to provide instructions to the children on how to use it (Buchholz & Coggin, 2013). Children gathered with their teacher every day on the carpet and watched and discussed children's filmmaking. For example, the teachers showed on the screen what two children had produced and asked the class what they noticed. One of the children said that she could only see one of the children, not the other one. Thus, teachers discussed solutions to this problem with the class, such as, 'How do you know what is in the camera frame?' (Buchholz & Coggin, 2013, p.19) Children explored multiple ways to use the cameras. Some children

used puppet shows, and others created a background for their film, others used storyboards from storytelling folders to support their play. The characters used in the stories were based on popular texts or the children's own stories. Lastly, the children used film editing software to create their films (Buchholz & Coggin, 2013; Wohlwend, 2013).

Collaboration. Wohlwend (2013) indicated that children in the playshops transformed the meanings together. These meanings and roles could be seen in their dramas and films and were continually subject to improvisation and renegotiation. Buchholz and Coggin (2013) illustrated an example of some children working together for several days to compose and act out a story. Children were not limited to the use of storyboards, as they were invited to further explore storytelling through a collective approach. To that effect, they engaged in group activities such as improvising and performing and were invited to film and record their productions with the digital cameras or tablets (Buchholz & Coggin, 2013; Wohlwend, 2013).

According to Wohlwend (2013), these four processes are supported by three instructional elements, these being: guided engagements (activities designed and led by teachers), mediators (cameras, puppets, storyboards, iPads, pencils and so on, teachers also mediate), and children's explorations (allowing children to create stories, draw, play, using cameras or iPads). The curriculum as set out by Wohlwend (2013) outlines the basis for employing a LP curriculum, including observations that playtime is decreasing in early childhood classrooms even though play bears strong curricular value as an essential feature of 21st century literacy. Moreover, children often start to develop digital literacies through play and media experiences. Wohlwend (2013) thus believes that children in the curriculum involving a LP can use play and perform stories that they are familiar with by exploiting and transforming a variety of media texts to create their own original material, using play and filmmaking as means of creation and production. To achieve this result, Wohlwend suggested

re-defining ‘playful pedagogies’ in a way that would enable children to mediate information and means of creation to become active participants, fully involved in the process of meaning-making. Wohlwend thus hopes to encourage teachers to design their own LPs to motivate children to engage in the process of storytelling through the implementation of media and technology in the classroom to produce digital videos through play using popular media themes and toys.

Inspired and informed by the LP curricular model (Wohlwend, 2013), the current study explores this kind of innovative curriculum for the first time in a Saudi kindergarten. The rationale for choosing the LP approach is based on the knowledge that the literacy curriculum in the context of the current study mainly focuses on reading and writing skills as one mode, with very little integration of literacy practices based on play and a limited use of digital technologies by children, particularly in the innovative way that Wohlwend (2013) applied this in her study. A LP would enable the use of other modes including visual and movement. I believe that, based on literature discussed in the current study, and my experience presented in Positionality section, the autonomous model of literacy (Street, 1984) still has a place of privilege in educational settings in SA; thus, in the context of the current study, there is a lack of pre-existing research that explores children’s new literacy engagement and practices, especially young kindergarteners. The present study therefore addresses this gap.

2.6 Play, Literacy, and Popular Culture

As previously mentioned, the meaning of literacy has expanded beyond the ability to read and write. Today, text-based print is not the only source of literacy, as the notion of literacy now incorporates the use of technology, popular culture, and multimodal texts (Heron-Hruby et al., 2008). Marsh (2010) defined popular culture as ‘the range of texts,

artefacts and practices that are popular with large numbers of children and are either produced commercially or produced and circulated amongst children themselves' (p.13).

A number of popular culture forms can be seen in children's literacy practices at home, such as watching television and films, playing games and cards, and reading books. These activities are similar to adult popular culture, but the difference, as indicated by Marsh and Millard (2000), is that children, for example, often incorporate artefacts, such as stickers, clothing, hair and sport accessories into their cultural practices. In addition, popular culture for adults is produced by adults, and most popular culture forms for children are made by adults too, an overriding circumstance that leads the television, film, and toy companies to decide what constitutes and reflects children's interests. These popular culture interests are fundamental to the everyday practices of children's literacy outside schools (Lankshear & Knobel, 2006; Marsh & Millard, 2000). Children are immersed in practices connected to popular culture, media, and new technologies in their home from birth to six years of age (Marsh et a1., 2005).

Much of popular culture is mediated by new technologies, which are on the increase outside of schools. In the UK, a survey by Marsh et al., (2019) was undertaken of 3,154 families with children aged 0-16. The report of this study outlined that 79% of children had access to televisions, 74% to smart TVs, 91% to tablets, 86% to smartphones, 75% to PC or laptops and 80% to games consoles. 83% of children in this study use YouTube, which was the most popular social media used. Most of children mentioned that they watched Peppa Pig cartoons, movies, youtubers, animal videos and Disney (films). In SA, the context of the present study, a survey in Riyadh comprising 220 parents of children aged one to three was undertaken. The study found that 90% of the children had watched TV and used media devices before the age of two; 87% had their own tablet, and 8% used smartphones (Alroqi et

al., 2021). The LEGO foundation reported on a study (Marsh et a1., 2020) that looked at 2,400 parents of children aged between three and 11 across the UK, and found that 82% of the children used TV, 94% used tablets, 72% used laptops, and 84% used smartphones. A survey conducted in China (Dong et al., 2022) with 1,953 parents found that all the children in the study accessed digital technologies, such as watching TV and using smart phones. Furthermore, the study clarified that multimodal practices are influenced by children's age, family income, and home digital resources. A mixed-methods study conducted in the UK and South Africa (Scott et al., 2023), focusing on children aged 3–8 years, found that playing with digital technologies is widespread among children, even in countries that have limited access to technologies such as South Africa (SA). Moreover, the study clarified that children in SA were more likely to produce digital content unassisted than children in the UK despite relying mostly on smartphones.

However, a review of the literature shows that literacy practices related to popular culture and use of new technologies are generally excluded from the early years school curriculum. Flewitt et al. (2015) claimed that research continues to show that the incorporation of new technology into early literacy education has produced ambivalent results. Dyson (2018) argued that the notion of children playing and learning around themes drawn from popular culture, such as superheroes, has failed to win unanimous support among classroom educators. This is supported by Yoon (2018), who claimed that during her work in many traditional schools and outside of schools, superhero play, for example, was barred from all curriculum activities despite the many opportunities for literacy experiences it, and specifically, popular culture in general, offer. Similarly, Marsh et al. (2005) have underlined the fact that these opportunities are often limited in early years classrooms due to the potentially negative overtones the dominant discourses of popular culture texts may convey

with regard to violence, racism, gender roles, etc. (Arthur, 2005; Dyson, 2018; Marsh, 2006). In this respect, in a study of 6-year-olds, Marsh and Millard (2000) found that children were able to differentiate between violence in actual life and in popular culture texts when they asked the children about the effects of violence based on their own experience compared to seeing violence on television and in games. They thus argued that children are capable of either accepting or rejecting the products presented to them. In this sense, they are not merely passive receivers, but are able to actively develop their own cultures based on their experiences at home. Thus, children are able to develop the characters and plots they see in popular culture in new and innovative ways, rather than merely copying them (Marsh, 2014). Similarly, Wohlwend (2009a) advocated that children are not only consumers of popular media but are also able to create their own stories and characters based on the features found in their own families. However, the debate around the issue of incorporating popular media culture into the classroom continues.

A growing body of research has revealed the important role of incorporating popular culture into children's literacy practices (Dyson, 1997, 2003, 2018; Marsh, 1999, 2006; Wohlwend, 2011, 2013; Yoon, 2018). Children instinctively reflect their knowledge of popular culture when they engage in classroom play (Dyson, 2013). Similarly, Dunn (2015) has argued that children naturally make a connection between what exists outside and inside the classroom. Thus, according to Yoon (2018), play that incorporates popular culture should be fully integrated into the curriculum rather than just marginally referred to. Using ethnographic methods to conduct her study on the possibility of popular culture as an 'entry point for early literacy' (p. 171), she focused on the literacy practices of two early learners, Lucas and Trevor, engaged in play in a kindergarten located in New York. During their play, the children made use of materials based on prominent features of popular culture, such as Star Wars. Yoon paid close attention to the literacy the children produced from their

drawings, talking, and writing, and particularly examined the elements of interaction and creativity. She methodically recorded and transcribed the contents of the children's play and then collected the artefacts resulting from their interactions. Yoon noted that engagement in social interactions was observed in Trevor and Lucas at the intersection of play, popular culture, and literacy. The children's play involved movement, oral storytelling, layered meanings, and drawings that represented plot. She demonstrated that if practitioners make an in-depth analysis of children's play that includes elements of popular culture, then literacy can be seen both *in play* and *at play*. Indeed, valuable opportunities for literacy practice emerge when children interact around popular culture. This is in line with Marsh (1999), who conducted a case study with two classes of six and seven-year-old children in an English primary school, in which she investigated the effects of integrating the theme of superheroes (in this case, Batman and Batwoman) into literacy activities. Through observations and interviews of the participants, she showed that the inclusion of popular culture in school settings makes children more engaged in literacy practices such as reading and writing.

Similarly, studies focusing on the use of virtual worlds as representative of popular culture such as Club Penguin (Marsh, 2014) and Minecraft (Bailey, 2017), have found the use of these helpful in motivating children's engagement in a range of enjoyable literacy practices (Marsh, 2014), with various aspects of play associated with enjoyment and fun, which can be considered part of affective learning (Bailey, 2017). The two studies noted above were conducted in the UK. In the study carried out by Marsh (2014), interviews with 26 children aged between five and eleven years were undertaken, and three eleven-year-old children were filmed, and their parents interviewed, while the study by Bailey (2017) was conducted with twelve children aged ten and eleven years in an after-school Minecraft club using participatory and visual methods including fieldnotes, videos, photos, discussion, artifacts.

Furthermore, Weld (2011) aimed to understand the positive impact of popular culture on the teaching of literacy strategies. She observed students after they had read a chapter of the book entitled *Dramarama*, which was the source for a popular British children's TV series of the same name. From the one-on-one time spent with the students, both interviewing them and thoroughly analysing their work, she concluded that popular culture integrated as literacy material in classroom settings was beneficial for students' learning and confirmed that the incorporation of popular culture in literacy activities was effective with children aged eight to nine years (Weld, 2011). In a study conducted in Australia with students of a similar age group, Simmons (2014) employed ethnographic methods to explore the possibility of engaging children with popular culture through sociodramatic play. She focused on 25 Australian students aged around 10 years old, including 10 boys and 15 girls from different cultural backgrounds. Her research showed that, despite their differences, children could use information drawn from 'a shared knowledge of popular culture' (p. 270) in sociodramatic play to collaborate and engage in the creation of cultures with their peers.

Dyson (2018) stressed that the 21st century offers children a multiplicity of opportunities for engaging with popular culture. For example, in a qualitative study, she demonstrated the relationship between children's participation in popular culture and acts of composition in the school environment. She focused on three first and second-year American children from low-income families aged around seven-year-old— Jameel, Tina, and Ta'Von. She found that the children were active agents and creators in appropriating appealing words, sounds, and genre features from popular culture and recontextualising these as they anticipated others' responses. For example, 'a singing fish on a city street, superheroes weeping at a funeral, old blues figures finding new life in a 7-year-old aficionado's texts—all were productions by child consumers' (p 44). From her observation during both phases (i.e., participation and composing), she argued that the lack of support for teachers to apply a

constructive and appropriate response to children's participation in popular culture (i.e., professional agency) is detrimental to 'collective and critical exploration' (45), and, consequently, affects both learners and practitioners. Dyson imagined how Jameel would feel if he was able to record his singing, how Tina and her peers would feel if they could videotape X-People stories; and how delighted Ta'Von would feel if he could play his blues music on the school podcast. Vasquez (2003) had similar results to Dyson (2018) in a case study of a six-year-old playing with Pokémon cards, finding that the child developed a new form of literacy by engaging with the popular culture text to create his own Pokémon cards.

Previous related studies have investigated the potential role of incorporating popular culture texts into children's learning, literacy, and play among students of different age groups. These studies were conducted in various countries, including the US (Dyson, 2018; Vasquez, 2003; Yoon, 2018), the UK (Marsh, 1999, 2014), and Australia (Weld, 2011). However, to the best of my knowledge, no similar studies have been done in SA regarding incorporating aspects of popular culture into the educational setting with young children, which is the context of the present study.

Much of children's play that is based on popular culture is obviously related to the nature of the particular media used. Children like to dress up and use toys in ways that reflect what they see on television, in films, and books, and recreate narratives with their favourite media characters (Marsh, 2005 et al). Their play also involves digital media, such as computer games, mobile phones, and production. Burnett and Merchant (2018) argued that school is a place for children to use new media technologies to engage in creative activities rather than denying these practices, which are an integral part of their lives outside of school. Marsh and Millard (2000) argued that educators can support the playful approach to literacy

by integrating popular culture into classrooms. This is in line with Burnett and Merchant (2018), who asserted that there is a need for children to engage in a playful approach to literacy in which they can collaborate and explore using digital technology in creative ways. A study by Rowe and Miller (2017) explored children's play in their composing of an e-book using digital cameras and tablets. Children used these devices to take photos in their school and homes. They then brought all these photos to make e-books in school, using the Book Creator app. The study was conducted in the United States with two groups of bilingual children; one group of 4-year-olds and the other 7-year-olds. The children shared their productions with their friends using a projector in the classroom. This study concluded that children can use multiple modes and languages to not only conduct print activities but also to use new technologies, drawing on their culture and experience.

Burnett and Merchant (2018) have identified principles as a charter for 21st century literacies as discussed in Section 2.4: Play and Literacy in which children are encouraged to be creative, improvising and collaborating in a playful environment using communicative resources to make meaning. In their book, they described a project organised by Jeannie Bulman that was conducted in four primary schools in Lincolnshire, in which children were encouraged to collaborate and improvise using digital and nondigital media. The project involved the children making different plans according to the different roles they assumed. For example, one class took on the role of NASA, another the astronauts, another the Earth, and another Mercury. The astronaut characters interviewed each other, while NASA sent tasks to the astronauts. The Earth's plan was to go into space and generate media, while Mercury created unfamiliar characters appropriate to that distant planet. The children filmed the space flight and used email for the announcement and the Morfo app to send their

pictures to Mercury. NASA and the Earth received these images, and the astronauts used a drawing app to share their opinions about Mercury. Burnett and Merchant viewed this project as in line with the principles of 21st-century literacies. These principles were previously mentioned in Section 2.4: Play and Literacy.

Studies have advocated that the curriculum for children in the early years should draw on children's interests (Bertram & Pascal, 2002). The previously mentioned studies applied popular culture resources and technologies in the classrooms in interesting ways that promote children's engagement. As mentioned, children are immersed in popular culture and technologies in their homes. Dyson (2013) has emphasised how children inevitably bring into the classroom an engagement with popular culture artefacts and media space even though most teachers place theses at the margins of the official curriculum. Thus, it is more likely that children naturally bring different 'funds of knowledge' (Molle et al., 1992) into their school settings. Moll, Amanti, Neff, and Gonzalez (1992) defined funds of knowledge as 'the historically accumulated and culturally developed bodies of knowledge and skills essential for household or individual help, individual functioning and well-being' (p. 133). González et al. (2005) argued that teachers need to bridge the gap between the school curriculum and out of school and family sources of knowledge. According to Hedges, Cullen and Jordan (2011), 'a funds-of-knowledge approach provides a framework for understanding children's lives and the potential of their families, communities, and cultures to influence their interests, inquiries, and knowledge-building'(p. 201). Chesworth (2016) has suggested some practices that could be applied to support curriculum and pedagogical decisions informed by children's interests and choices in play to enable a 'funds of knowledge' approach. That is to say, teachers need to engage with children and families to understand more about the knowledge and interests of the child and develop the curricula in accordance with these. However, Burnett and Merchant (2018) claimed that most of the curricula's emphasis is on particular areas of

learning activity regardless of children's interests. She considered that a central feature of effective education in classrooms is that it draws on children's interests and helps them to make meaning using a variety of recourses and media.

In the present study, popular culture materials such as costumes, toys related to media characters and digital technologies are applied in the LP curriculum design as tools intended to motivate children, in which it is assumed that children are interested in content that they may be familiar with at home. Parents in the current study were asked about the offering of these tools and practices, and children expressed their favourite media characters and technologies before developing the new curriculum. This kind of study, to the best of my knowledge, has not been explored in Saudi Arabia (SA).

2.7 Teachers' attitudes towards using digital technologies

As the present study explores the LP curriculum in a Saudi kindergarten, it seeks to understand teachers' attitudes towards integrating this curriculum, in which digital technologies are crucial tools. I have therefore reviewed studies to understand teachers' perceptions of and attitudes towards integrating digital technologies into classroom settings with young children.

Previous studies have discussed the limited used of technologies with children in educational settings as indicated by teachers in different contexts such as in SA (Qurban, 2011, 2012), Kuwait (Aldhafeeri et al., 2016), the UK (Macdonald, 2017), England, Luxemburg, Malta, Greece (Palaiologou, 2016b), and Australia (Lynch & Redpath, 2014). This is supported by Flewitt et al. (2015), who argued that research still indicates that teachers remain hesitant to incorporate new technology into early education.

A review of the relevant existing literature showed that teachers' attitudes towards and perspective of incorporating digital technologies in early years education vary. Although a majority of teachers are competent in using technologies in their everyday lives (Palaiologou, 2016b), in terms of practices in their classrooms, some scholars have indicated that teachers have not embraced the integration of technology (Palaiologou, 2016b; Aldhafeeri et al., 2016). However, other scholars have indicated a positive attitude by teachers regarding the integration of digital technologies into children's classrooms (Formby, 2014; Lynch & Redpath, 2014). Further studies have shown both positive and negative attitudes of teachers regarding incorporating digital technology (Alghamdi et al., 2021; Aseri, 2018; Flewitt et al., 2015; Huffstetter et al., 2010; Macdonald, 2017). Macdonald (2017) identified an additional emergent kind of view she calls 'it depends on...,' (p.101) which involves teachers having neither directly positive nor negative views on the matter, indicating that their views depend on many characteristics; this was shown by Macdonald via a study conducted with early childhood teachers in the UK. In this study, 22 teachers were interviewed using focus groups, with ten teachers participating in in-depth interviews. The teachers' support of the use of technology depended on children's ages, with the majority believing that very young children are not suitable candidates to use technology. The teacher's focussed on the use of technology one year before starting school, when starting formal schooling, or at age seven as appropriate. Another view of teachers depended on how long children use technology at any given time. They believed that the use of technology for short periods of time at school in addition to a wide variety of other activities to be positive. Furthermore, most teachers supported the use of active technology such as digital cameras and digital toys but not screen-based technology such as TVs and computers. Their view was also dependent on children using technology socially or individually, stating that social use is more appropriate.

Scholars have highlighted many benefits of incorporating digital technologies in early childhood settings from the perspective of teachers. Some teachers have noted that integrating technology enhances oral language. For example, Huffstetter et al. (2010), in a Florida based study, integrated a computer programme with children aged four and five years and measured reading skills and language. In open-ended interviews, the teachers affirmed that the use of technology could encourage children's reading skills and oral language; therefore, the teachers would adapt to using the programme in their classrooms. However, the teachers indicated barriers to integrating the new programme, including limited time and lack of staff. Despite the limited time, they indicated that integrating this technology was valuable. These findings are supported by Kaye (2017), who found that technology affords various opportunities for children to communicate and develop their language, vocabulary and stories; furthermore, when technology is used as part of children's imaginative play, it helps these areas develop even further. Kaye (2017) stressed that technology encourages children who may be reluctant to speak in play. She explained how James and Cane (2009) described a child for whom English was not their first language being embarrassed by their accent and reluctant to speak, but who became confident after a positive experience using a voice changer. This is aligned with a study carried out by Macdonald (2017) which indicated that teachers described the use of voice assistants included with digital devices, such as Apple's SiRi, as a motivation for children with autism to interact. Other teachers in the study found that digital technology potentially motivated children and help them engaged in various activities, with learning and educational benefits such as language learning. These teachers expressed a belief in the importance of technology in preparing children for the future.

In addition to developing language, many practitioners have found that technologies are useful for engagement and motivation (Flewitt et al., 2015; Kaye, 2017; Ntuli & Kyei-

Blankson, 2012). Flewitt, Messer and Kucirkova (2015) studied children in three different age groups (three to four years, four to five years, and seven to thirteen years) in three different settings (a nursery, a primary school, and a private school) using an iPad, which the researchers lent to them. The researchers interviewed the teachers before and after integrating the iPad and observed its implementation in the teachers' practices. Their study revealed that during literacy activities, the iPad enhanced children's motivation to learn, as well as their concentration, collaboration, communication and oral language. Children who had been reluctant to speak began talking, in line with the findings of the previous study (Kaye, 2017; James & Cane, 2009). Self-esteem, engagement in activities and creativity when using a story picture app were confirmed by practitioners. Thus, Flewitt et al. (2015) confirmed that teachers appreciated the opportunity to use an iPad to deliver curriculum in different ways to help children engage with the material. Although some teachers indicated negative views of technology regarding harm such as sitting for a long time whilst using the device, technical difficulties, the time needed to search for appropriate apps, cost and a lack of language use before implementing the iPad in the classroom; however, after a few weeks of use, their fears decreased. Notably, an online survey by the National Literacy Trust conducted with 362 practitioners who worked with children aged three to five years indicated that children enjoyed using tablets. In another study, three-quarters of practitioners agreed with the statement '[for] children to get on at school, it is important [that] they learn to use technology from an early age' (Formby, 2014, p. 20). Teachers felt that incorporating digital technology in the early years enabled teachers to scaffold digital literacy for children and support their autonomy, with children able to select music, take pictures, as well as record and share their own memories (Chordia et al., 2019).

Furthermore, a study conducted by Aseri (2018) in SA aimed to explore how technology (particularly iPads) influences the learning of children aged five to six years in

kindergarten and helps them develop metacognitive and language competences. A mixed-methods approach was undertaken in this study, including interviews with teachers before and after the intervention, children's observations, and language tests before and after the intervention. The study aimed to understand whether technologies influence the development of metacognitive competencies (communication, self-development, creativity, problem solving, and autonomy). The teachers in the study by Aseri (2018) indicated that that language, creativity, autonomy and 'self-development which led to developing concentration' were improved. Supporting autonomy was also cited as a benefit in previously mentioned study (Chordia et al., 2019). However, Aseri (2018) found that communication decreased, and the ability for problem solving either stagnated or decreased. Aseri's (2018) study aligns with previous studies stressing that motivation improves among children using technology (Flewitt et al., 2015; Kaye, 2017), with teachers observing that children seemed motivated and interested when completing tasks on tablets, which differed from traditional methods. Improvement in creativity was also found to be related to the use of an iPad, as mentioned in the findings of Flewitt et al. (2015) and Lynch and Redpath (2014), who stated that iPads provide valuable opportunities for creativity via multiple modes and media as well as varied communication methods, such as pictures. Flewitt et al. (2015) concluded that a tablet's features effectively could support children, even those for whom English was a second language or those who had motor difficulties, in collaborating and communicating with others during classroom activities. This is in line with the previously mentioned study by James and Cane (2009) regarding the positive impacts on second-language learners.

Recently, a study investigated students teachers' readiness to incorporate digital technology in an urban kindergarten in SA (Alghamdi et al., 2021). 74 students' teachers completed the survey, with 11 participating in semi-structured interviews. The study revealed student teachers' positive attitudes towards the integration of technology into children's

classrooms. They believed that technology supports children's collaboration as well as different learning styles and facilitating overall learning. Some of the challenges they faced when integrating technologies were administration barriers, large numbers of children in classrooms, and insufficient school infrastructure, which did not provide digital devices in their school, as well as parents' lack of support for the technology's use in school. Student teachers' ability to transition their skills about technology into practice in class can be challenging.

Despite studies showing the positive influences of integrating new technologies from the teacher's perspective, integrating new technologies into classroom practices in early education settings is not supported by many practitioners and in many countries. Edwards (2016) has argued that practically, teachers cannot easily achieve the provision of play-based learning experience with the incorporation of technologies and digital media in early childhood. This is because of the many negative views and challenges presented in previous studies. Palaiologou (2016b) explored teachers' perspectives regarding integrating digital technologies into children's play in the classroom via a mixed-methods study in England, Luxemburg, Malta, Greece, and Kuwait. This study applied a survey, followed by interviews, to explore early childhood teachers' personal use of technologies and their practices in the classroom. Palaiologou (2016b) found that while the teachers were competent at using digital devices in their everyday lives, they were hesitant to integrate these devices into classroom practices due to their beliefs about play-based pedagogy, which they believe enables children to enjoy the physical environment using hands on experience. Attitudes towards digital devices were negative in all countries in Palaiologou's (2016b) study, except Luxemburg, where teachers had a more positive view towards such devices. The teachers perceived that children's creativity and motivation are controlled by digital devices, which is not in line with the previously mentioned studies (Aseri, 2018; Lynch & Redpath, 2014). Similar to teachers'

perspectives in Palaiologou's study (2016b), Macdonald (2017) indicated, via conducting a study in the UK, that teachers believed that children's use of technology lowers their hands-on experiences—for example, reading a physical book and turning pages versus reading on a digital device. Different negative views regarding incorporating technology into children's learning have been reported by teachers. These include concerns about the excess use of technology at home, and the belief that schools should be a place to introduce children to different media. Moral concerns have also been expressed regarding safety, for example fears that children might face 'violence' when using technologies. Some teachers felt that the nature of technology causes isolation, with children working individually rather than together in groups. Concerns about safety and limiting socialisation with children using digital technologies were also reflected by teachers in Palaiologou's (2016b) study. Macdonald (2017) outlined some factors influencing teachers' attitudes towards technology, such as the cost of technology, with schools providing a limited number of devices; teachers not having enough time to engage with technology; and teachers needing training due to lacking the necessary relevant skills. These concerns were also all expressed by teachers in Flewitt et al.'s study (2015). In terms of literacy and technologies, Lynch and Redpath (2014) added that the policies and curricula of the early years may conflict with teachers' intentions to transform learning through the use of technology, especially in the context of tensions between print-based traditions and digital literacy. This is supported by Burnett and Merchant (2018), who argued that, in many countries, teachers are pressured to reach high standards, which does not allow time for children to explore. They also argued that guidelines for integrating digital media and technologies into a national curriculum are either not provided for or focus only on functional as opposed to creative uses. This is also true of the official Saudi curriculum, in which there is no mention of integrating digital technologies for children's use, as previously mentioned in Chapter One (Alasimi, 2018).

Furthermore, in Kuwait, Aldhafeeri et al. (2016) conducted a quantitative study using a questionnaire to explore the perspectives of 195 early childhood teachers on integrating digital technologies in classroom practices. The study revealed that the teachers were reluctant to implement digital technologies into their classrooms, even though the classroom environment was rich in terms of providing digital technologies (Aldhafeeri et al., 2016), finding that 44% of the teachers did not agree that using digital technologies supports the learning process; 46% affirmed that the early childhood curriculum should not integrate digital devices; and 57% affirmed that children's playtime in the classroom should not include digital devices. Another study in SA (Qurban, 2012) aimed to understand the importance and uses of digital devices from the viewpoint of Saudi kindergarten teachers in the city of Makkah. The study applied a descriptive approach, using questionnaires with 352 teachers in private and public kindergartens, and revealed that the use of digital devices was rare in both public and private schools, even though awareness of the importance of using technology was high. Qurban (2011) conducted another study to explore the use of multimedia in kindergarten from teachers' perspectives, which included distributing a questionnaire to 75 teachers from private and public kindergartens in Makkah. The study revealed that multimedia use in kindergarten is limited, with PowerPoint being used most often; however, the teachers asserted that using multimedia increased the student's level of engagement in activities (Qurban, 2011).

Thus, the previous studies outlined above reveal that teachers have a variety of attitudes and perspectives regarding the integration of new technologies into early childhood education settings. Some studies acknowledged that integrating digital technologies is crucial to developing language and communication; supporting autonomy, digital literacy, creativity, and engagement; and facilitating learning. On the other hand, some studies have shown that teachers believe that technologies are not appropriate to use with young children in

educational settings for various reasons, such as safety concerns, limited socialisation, loss of hands-on experiences, controlled creativity, in which teachers felt that cost, lack of training, and limited time were challenges they faced when integrating technology into the curriculum. The current study seeks to investigate teachers' attitudes following implementing the LP curriculum, which includes the integration of digital technology into children's play in the new curriculum.

2.8 Chapter Summary

This chapter discussed the theories that impacted my approach: sociocultural theory, NLS and multimodality. Drawing from a sociocultural perspective, I explained that the concept of literacy no longer only means the ability to 'read' and 'write', but rather that this concept has been expanded. The main concepts from a sociocultural perspective were outlined. Based on this perspective, learning is constructed through social interaction and the cultural context and not from an individual. I then presented the LP curriculum, which draws from the sociocultural approach, and discussed relevant studies. After that, Play, Literacy, and Popular Culture were discussed in relation to the relevant literatures.
Finally, teachers' attitudes towards using digital technologies in the classroom were reviewed. This chapter identified a gap in the literature regarding the integration of playful curriculum in literacy, which helps children use different modes and produce their own productions during play via a variety of cultural tools, in kindergarten within the Saudi Arabian context. This thesis aims to address this gap in knowledge.

The next chapter presents the theory being used as an analytical framework—SDT—which is a cognitive theory of motivation. The purpose of this study is to explore the impact of the LP curriculum on children's motivation, engagement and self-determination. I found

the theory of motivation relevant to my study, and SDT helped understand what motivates children to participate in playshops. In the next chapter, SDT is discussed further.

Chapter Three: Self- Determination Theory (SDT)

3.1 Introduction

The prior chapter discussed theories that affected my approach to reconceptualising the concept of literacy and identified the gap in the literature that this thesis addresses. The present study seeks to explore whether Literacy Playshop (LP) increase young children's motivation and help them engage in literacy practices, therefore it is important to clarify the meaning of motivation and highlight the research and theory around it. Although many motivational theories have been hypothesised in various studies, I believe that Self-Determination Theory (SDT) (Deci & Ryan, 1985) is a relevant and will be a productive theory in the present study for several reasons. First, upon reviewing the literature, I found that this theory applies widely in educational settings and has often been adopted to gain a clearer understanding of motivation in the classroom context (Davis & Bowles, 2018; De Naeghel, 2016; Ng et al., 2006; Salikhova et al., 2020; Smedt et al., 2020; Tegmark et al., 2022; Wang et al., 2019). SDT has helped researchers better understand learners' motivation, especially in older children, as well as the reasoning behind their motivation. Thus, SDT has significant educational implications (Ryan & Deci, 2020). In this present study, I believe that the data collected about each child study participant enables the generation of sufficient detail about their literacy practices and engagement. By applying SDT, I seek to better understand whether the LP motivates and engages children in literacy practices, as well as investigating why this is by interpreting the data in relation to the support of three psychological needs — autonomy, competence, and relatedness which comprise a crucial dimension of SDT (these three needs are further explained later in this study in Section 3.3 Self-Determination Theory).

The second reason for choosing this theory was that the reading of previous works that applied this particular theory of human motivation and literacy studies gave me the

confidence that employing this concept would be suitable to my own study which incorporated a broader meaning of literacy. The previous studies are discussed further in this chapter. Drawing on the use of SDT that most applicable to my study, it was found in other studies that learners, particularly children, require agency in literacy through the provision of many choices, such as the use of digital technologies and other non-print materials. Providing choices in the current study might give children a sense of agency in literacy practices, helping them to be more engaged and motivated. Reviewing relevant studies is discussed further in this chapter. Third, the three basic psychological needs discussed in SDT are universal and can be satisfied in all cultures (Brophy, 2004). The SDT theory has been examined with traditional literacy motivation including learning language with older children in different contexts in the US, Europe, and Saudi Arabia (Alhinty, 2015; Davis & Bowles, 2018; De Naeghel et al., 2016; Smedt et al., 2020; Ng et al., 2006; Tegmark et al., 2022) but has not been applied with the LP curriculum design aimed at young children. The present study seeks to address this gap. Fourth, in my previous experience of employing this theory in my master's work in the USA, I found it to be particularly useful in a course with young children in order to understand the characteristics of the early childhood classroom environment and whether it motivates children; this work led me to think about the possibility of using this theory to inform my current work. Fifth, SDT is suitable for use with Vygotsky's (1978) sociocultural theory because both theories emphasise the importance of social context. This is supported by Sun and Chen (2010), who argued that a sense of relatedness is both a learning resource from Vygotsky's perspective and a need to be fulfilled from the standpoint of SDT. Additionally, the study by Tuner (1995) focused on the work of Vygotsky, using it as a lens to inform her analysis of literacy learning in which learning involves social interaction and the use of intrinsic motivation. Thus, for all of the reasons outlined above, I feel SDT is the most relevant theory to use for my thesis.

This chapter explains the meaning of SDT and reviews the literature applying this theory in the particular context of literacy learning as well as other related studies relevant to my work. Due to limited studies informed by this theory on the broad meaning of literacy, particularly with young children in an international context, including that of Saudi Arabia, I refer to studies discussing traditional literacy with older children and older learners. I also look to studies that are very close to my own but make limited mention of the Saudi context, as to the best of my knowledge, there are few studies in this context relevant to my work; this is thus an identified gap in the present study.

This chapter is divided into three sections as follows: Section 3.2 provides a discussion of the meaning of motivation; Section 3.3 provides an explanation of SDT, followed by the two main types of motivation; intrinsic and extrinsic motivation then, clarification of the three basic psychological needs; autonomy, competence and relatedness and their relevance to the present study are discussed. Finally, Section 3.4 offers a presentation of relevant studies that have applied SDT.

3.2 Motivation

The term 'motivation' refers to 'any force that energises and directs behaviour' (Reeve, 2012, p. 150) and 'hypothetical constructs used to explain why people are doing what they are doing' (Brophy, 2004, p. 3). As a concept, it represents the factors that cause people to behave in certain ways (Ryan & Deci, 2000). Motivation is an inner drive to fulfil one's desires (Ugah, 2008). In order to achieve a goal, satisfy a need, or meet an expectation, people require motivation (Gopalan et al., 2017). However, as Gardner (2006) indicated, no simple universal definition of motivation can be provided. Various definitions of motivation are used in different views of the concept itself.

In terms of literacy, Cambria and Guthrie (2010) have identified motivation as 'the values, beliefs and behaviours surrounding reading for an individual' (p. 16). Another similar

definition according to Guthrie and Wigfield (2000) is that motivation to read is determined by 'learners' goals, values and beliefs with regard to topics, processes and outcomes of reading' (p. 405). In other words, children will take part in literacy for different reasons, depending on their interests, aims, etc. The current study views literacy more broadly than simply as reading, as in the previous definition. Indeed, motivation is crucial to learning in general and literacy in particular, especially for children, as many studies have confirmed (Sweet & Guthrie, 1996; Turner, 1995; Mata, 2011; Smedt et al., 2020). It assists learners in engaging in literacy, and without motivation, engagement may be lost (Ng & Graham, 2018). According to Cambria and Guthriem (2010), when we talk about children's reading motivation, we are referring to children's enjoyment of reading, what they want to read, and how they behave in relation to reading. If motivation is ignored by teachers and parents, the most important part of literacy is thus ignored. Learners can stay engaged longer and improve academic performance if they are highly motivated (Wang et al., 2019). Motivation also helps learners achieve their goals because motivated learners are thus enthused to complete a given task. Unmotivated learners have difficulty achieving their goals, proving that motivation plays a primary role in learning (Tegmark et al., 2022; Serin, 2018). Again, the current study views literacy more broadly than simply as reading and writing, as mentioned in the previous discussion.

Many studies on children's motivation in literacy have been conducted (Alhinty 2015; Davis & Bowles, 2018; De Naeghel et al., 2016; Guthrie & Cox; 2001; Houghton, 2015; Mata, 2011; Ng et al., 2006; Smedt et al., 2020; Sweet & Guthrie, 1996; Tegmark et al., 2022; Turner, 1995; Wigfield & Guthurie, 1997). Most of these studies employed principles from SDT theory (Alhinty, 2015; Davis & Bowles, 2018; De Naeghel, 2016; Ng et al., 2006; Smedt et al., 2020; Tegmark et al., 2022). Some scholars have employed Skinner's and/or Bandura's theories (Guthrie & Cox, 2001; Houghton, 2015; Mata, 2011; Wigfield &

Guthurie, 1997), while other scholars have employed concepts of intrinsic and extrinsic motivation (Guthrie & Cox, 2001; Mata, 2011; Ng et al., 2006; Sweet & Guthrie, 1996; Turner, 1995; Wigfield & Guthurie, 1997). Most of this literature, however, concerns children older than six years (Alhinty, 2015; Davis & Bowles, 2018; De Naeghel et al., 2016; Guthrie & Cox, 2001; Houghton, 2015; Ng et al., 2006; Smedt et al., 2020; Sweet & Guthrie, 1996; Tegmark et al., 2022; Turner, 1995; Wigfield & Guthurie, 1997). Nevertheless, limited studies considering literacy motivation in young children (Mata, 2011) were conducted in Libson, Portugal. In the Saudi context, Alhinty (2015) conducted an SDT-informed study with older children aged 9–10 years, and Khoja (2018) performed a study with Saudi graduate students to understand literacy motivation informed by SDT.

3.3 Self-Determination Theory (SDT)

SDT is a theory of human motivation developed by Deci and Ryan (1985). It focuses on the development of motivations and shows that all individuals have three essential psychological needs—relatedness, autonomy, and competence. Reeve et al. (2018) indicated that 'It is a theory of motivation that seeks to explain how sociocultural conditions facilitate or undermine human engagement and flourishing' (p. 16). There is a significant body of empirical research supporting SDT, which has been used to analyse and understand motivational processes and behaviours throughout diverse fields of study (Barrable & Arvanitis, 2019). SDT assumes individuals are naturally inclined towards psychological development and integration through which learning, success, and interpersonal connection can be achieved. Nevertheless, strong and enabling environments must exist, as these proactive human tendencies are believed not to come naturally to people (Ryan & Deci, 2020). It has been clarified that according to SDT, a lack of motivation can be attributed to the thwarting of any of three basic needs (autonomy, competence, and relatedness). These three needs are discussed further in Section 3.3 SDT.

Regarding the educational context, which is the focus of the current study, SDT states that 'when students' basic psychological needs for autonomy, competence, and relatedness are supported in the classroom, they are more likely to internalize their motivation to learn and to be more autonomously engaged in their studies' (Niemiec & Ryan, 2009, p.139). This has been confirmed via empirical studies clarifying that the satisfaction of the three psychological needs fosters motivation among learners in an educational environment (Ryan & Deci, 2020); based on such studies, applications of SDT are primarily focused on facilitating the satisfaction of learners' basic psychological needs (Ryan & Deci, 2020). SDT supposes that all learners, regardless of age, gender, race, or culture, have innate tendencies, such as psychological needs, curiosity, and intrinsic motivation, which offer a motivational basis for classroom engagement and a high level of performance in school (Deci & Ryan, 2000; Reeve, 2012). The SDT position is supported by a large amount of research through varied cultural contexts and school settings has confirmed that support for basic psychological needs facilitates learner's intrinsic motivation (Ryan & Deci, 2020).

SDT was developed based on the ideas of intrinsic and extrinsic motivations (Ryan & Deci, 2000). According to Ryan and Deci (2000), intrinsic motivation refers to 'the doing of an activity for its inherent satisfactions rather than for some separable consequence' (p. 56)—in other words, participating in an activity for the pleasure of the activity itself, meaning that these activities are interesting and enjoyable to the person doing them (Cambria & Guthrie, 2010) regardless of external factors and influences. The term intrinsic motivation is used by some researchers to describe interest (Cambria & Guthrie, 2010), such as when a child does something for their own sake. For example, a child is intrinsically motivated to play or engage in an activity for enjoyment, for the challenge presented, and due to curiosity rather than because of external aspects (Niemiec & Ryan, 2009; Ryan & Deci, 2000). In keeping with this, educational researchers have indicated the importance of intrinsic motivation for

learners' potential to succeed (Ryan & Deci, 2000). Intrinsic motivation is important for educators to understand because it is a natural source of learning and accomplishment that can either be stimulated, which improves learning, or impeded, which decreases learning, by both practitioners' and parents' approaches (Ryan & Stiller, 1991). Fostering motivation leads to high-quality learning, persistence, and creativity, which lead to enhanced performance (Deci & Flaste, 1996; Niemiec & Ryan, 2009; Ryan & Deci, 2000; Tegmark et al., 2022).

In contrast, extrinsic motivation reflects the actions that a person engages in to achieve aims determined by external factors (obtain a reward, win a competition, etc.) (Ryan & Deci, 2000). SDT propositions different types of extrinsic motivation that differ depending on the degree of autonomy. For example, when a student does homework because they either fear their teacher or want to earn a reward, they are extrinsically motivated; the goal is to either avoid punishment or receive a reward. The previous classic case of extrinsic motivation is common in education. However, the other type of extrinsic motivation, which is the most autonomous, is if a student participates in work that is valuable for their career. They are extrinsically motivated because participation is not tied to interest but to instrumental worth. Both examples include influence, but the first is obeying an external control, whereas the second comes with the student's endorsement and is done by choice. Thus, they represent different degrees of autonomy (Ryan & Deci, 2000).

Previous literature has illustrated the outcomes of intrinsic and extrinsic motivation in educational settings in learning in general as well as in literacy. Deci and Flaste (1996) countered the staid idea of rewards, considering the use of rewards as extrinsic motivation to be a less effective approach, asserting that providing rewards actually work against a child's performance. It was found that intrinsic motivation can be undermined by extrinsic motivation, such as rewards (Ryan & Deci, 2000). This aligns with the work of Cameron and

Pierce (1994), who reviewed more than 96 studies and found that if a reward was expected after completing a task, there was decreased intrinsic motivation. With similar findings, a study with young Japanese students conducted by Kage and Namiki (1990) asserted that using tests to motivate children in the school context resulted in lower intrinsic motivation and, as a result, lower performance. Barrable and Arvanitis (2019) argued that teachers often use grades and prizes as positive reinforcement to motivate children, as well as using external pressure and punishment in an educational context. They claimed that rather than advocating for external controlled via 'rewards or punishments,' SDT emphasises intrinsic motivation and how it supports learners. According to the theory, intrinsic motivation is supported by the satisfaction of relatedness, autonomy, and competence (Niemiec & Ryan, 2009), and learners can experience intrinsic motivation and self-determination in the classroom if these needs are met. When these needs are not satisfied, learners may feel controlled, and their motivation is likely to be extrinsic rather than intrinsic (Brophy, 2004).

In terms of literacy, when learners are intrinsically motivated to read, they will be far more engaged in the process (Wigfield & Guthrie, 1997). Moreover, when children are motivated to read because of intrinsic satisfaction, they are also more likely to be motivated to write. In the same way, when children are forced to read by external influence, they are more likely to write as a result of similar pressure (Smedt et al., 2020). It is argued that intrinsic motivation is likely to affect literacy in the long term, whereas extrinsic motivation is more likely to yield results in the short term (Ng et al., 2006; Sweet & Guthrie, 1996). Therefore, if a child reads a book because they are interested or involved in it (i.e., intrinsic motivation), they will probably read frequently in the future. Conversely, if a child reads for external motives (e.g., to please teachers, for rewards or for competitive reasons), they will likely stop reading once the goal has been obtained. Studies conducted in the US (Grolnick & Ryan, 1987) and Sweden (Tegmark et al., 2022) have investigated the consequence of the

two kinds of motivations in literacy motivation. The study by Grolnick and Ryan (1987) conducted with children aged ten, involved two groups of children being asked to read a passage from a book. Group 1 was told that they would be tested and graded on the passage, while Group 2 was not told they would be tested. The results found that the children who were not told about the test (Group 2) had a greater understanding of what they read compared with group 1. While Group 1 demonstrated more memorisation, after one week, they had forgotten more of what they had read than Group 2. In another study, Tegmark et al. (2022) explored what motivates older children aged 12 and 15 years to read at schools in Sweden in light of SDT and found that the majority of motivation is controlled motivation, such as, 'The teacher said so' (p. 110). The results of their study confirmed the importance of satisfying the three psychological needs outlined above (and discussed further below) in enhancing motivations. In both these studies (Grolnick & Ryan, 1987; Tegmark et al., 2022), the impact of motivation on children's literacy learning was clear. However, both of these studies were conducted with old children.

Overall, both intrinsic and extrinsic motivation influence children's engagement in activities in various ways. If children are curious and enjoying the activities, then they are intrinsically motivated; if they are not eager about learning, they need external motivation, such as rewards (Serin, 2018). In a review of the extant literature, Poulsen et al. (2006) found that when an activity is interesting and provides enjoyment for a child, there is no need to use external motivation. In literacy, Guthri (1996) clarified that children come to school and bring their own needs for curiosity, challenge, involvement and social interaction, and if their school supports these needs, they will be self-determined and engaged in activities. However, the opposite will happen if schools do not support these needs. It has been argued that the best way to motivate children at school or at home is to support their sense of autonomy (Deci & Flaste, 1996). According to SDT, although autonomy is the key to more internalised

regulation and stronger feelings of self-determination, competence and relatedness are also necessary (Comanaru & Noels, 2009).

According to Ryan and Deci (2000), SDT involves the idea of intrinsic motivation, and they originally put forth SDT as a critique of the two dominant behavioural theories in empirical psychology in the 1940s and 1960s—operant conditioning (Skinner, 1965) and Hull's learning theory (1943). One aspect of the definition emphasises that intrinsically motivated behaviours do not depend on reinforcement, as operationally separable consequences are not required given that engaging in interesting activities is intrinsically rewarding in itself. This was proposed in response to Skinner's (1965) operant conditioning theory asserting that all behaviour is motivated by reward and separable consequences such as treats or money. The other aspect of the definition highlights the idea that intrinsically motivated behaviour is a function of basic psychological needs; this aspect was put forth in response to Hull's (1943) learning theory, which asserted that all acquired behaviour is the result of underlying physiological requirements being met. Contrary to behaviouristic techniques, which aim to externally mould and regulate motivation, SDT emphasises people's inherited motivational tendencies for learning and development with the aim of supporting them, representing a significant change in this area of study (Ryan & Deci, 2020).

Two behavioural measures are generally used to determine intrinsic motivation in educational settings—the free choice measure (i.e., providing learners with moments and spaces in which they can freely decide what to do and how to do it) and the self-report measure (i.e., providing opportunities for students to assess their own involvement and enjoyment and subsequently make their own interpretations) (Guthrie & Cox; 2001; Guthrie & Wigfield, 2017; Ryan & Deci, 2000; Turner, 1995). Large sample sizes can be studied using self-report tools (Smedt et al., 2020). An example of a free choice measurement is when learners are exposed to an activity in two different contexts. In one context, the learners

are told that they will receive a reward if they complete the activity assigned to them (i.e., extrinsic motivation). In the other context, they are asked to perform the activity without any promise of reward (i.e., intrinsic motivation). In both contexts, the learners involved in the activity are at one point given 'free choice' to either do something else or go back to the previously assigned activity and complete it. In this case, if students choose to complete the activity within the no-reward context, it shows that their inner drive to perform the activity (intrinsic motivation) is strong (Ryan & Deci, 2000).

Ryan and Deci (2020) have argued that although the use of self-reporting in quantitative studies has led to the identification of reliable results, in education, in order to gain a deeper understanding of experiences, practices, and motives in schools, there is a need for qualitative research throughout SDT. The current study applied a qualitative case study aimed at understanding children's motivation through the lens of SDT. Indeed, it has been argued that self-reporting is not suitable to use with young children for developmental reasons. For example, Turner (1995) claimed that young children are typically optimistic and are assumed to respond positively to all survey measures. Additionally, it is challenging for a child to understand the differences between behaviours versus intentions; for example, if a child wants to try their best at reading, then the child believes they are doing so. However, she asserted that observation is another essential method for measuring children's motivation because reliability can be addressed. She emphasised that observers could document what children do rather than only what they say. Children's behaviours around literacy tasks, body language, and enjoyment could be observed indicators of children's motivation in literacy (Cambria & Guthrie, 2010; Turner, 1995). This is supported by Baroody and Diamond (2013), who clarified that the observation of young children helps researchers to observe the enjoyment of literacy activities and the frequency of participation that indicate motivation and engagement. Observation has been used as a method in previous studies to understand children's motivation in literacy

(Alhinty, 2015; Guthrie & Cox, 2001; Poulsen et al., 2006; Turner, 1995). For example, Guthrie and Wigfield (2017) clarified that it is quite possible to observe how learners are motivated and engage in literacy. They provided some examples as indicators in literacy, such as enjoying reading a book, reading on a preferred topic, and being easily distracted while reading. Baroody and Diamond (2013) affirmed that it is challenging to accurately measure young children's motivation, suggest approaching it by using multiple perspectives. In the current study, the observations of children while applying the LP, including their enjoyment, conversations, and behaviour during play, were considered. Additionally, conversations with children as well as interviews with their parents and teachers can also support the generation of data about children's motivation and engagement in literacy. Furthermore, interpreting the data in relation to supporting the three psychological needs in SDT, to be discussed further, will help to understand whether children are motivated in literacy as previous studies have suggested (De Naeghel, 2016; Ng et al., 2006; Tegmark et al., 2022).

Other studies have used different methods to investigate children's literacy motivations (Mata, 2011; Sweet & Guthrie, 1996). Mata (2011) focused on kindergarten literacy motivations and gender differences. The study included 32 kindergartens in Lisbon with 451 children. To measure literacy motivation, Mata created a method of motivation measurement based on the Motivation for Reading Scale and used interview-based reports of the learners' perception, evaluation and enjoyment of the various reading and writing activities to measure their motivation level. The interviews took 15 minutes per child, and the responses were recorded on the conducted scale. The results of this study indicated that children have high motivation for both reading and writing, yet motivation was higher in reading than in writing. Furthermore, they showed that the degree of motivation was not informed by the gender of the learners. Similarly, in a study aimed at understanding literacy motivation in children, Sweet and Guthrie (1996) asked children aged between eight and thirteen years about their reasons

for reading. Focus groups, interviews and questionnaires were used, and the results showed that the children's reasons for reading included fun, a favourite book or topic, social interaction, sharing, being a member of a collaborative writing project, the challenge of a complex story and because teachers promised them points for reading. Interviews have been used (Mata, 2011; Sweet & Guthrie, 1996) to understand children's literacy motivation with young children (Mata, 2011) as well as with older children (Sweet & Guthrie, 1996). Interviews were also used in the current study with young children to understand motivation within a broad meaning of literacy. According to SDT:

> three psychological needs—for autonomy, competence and relatedness—as universal, fundamental and broad ranging in their influences on goal-oriented pursuits. If those needs are fulfilled, people's motivation will be autonomous, and their pursuits will be well aligned with their sense of self and will reflect what they view as interesting or important. If not, their motivation will be more controlled, and their pursuits will be less self-determined. Satisfaction of the three basic needs provides the necessary conditions that allow people the freedom to engage in self-determined activity (Brophy, 2004, p. 186).

In other words, it has been found that satisfying a learner's need for autonomy, competence, and relatedness enhances intrinsic motivation and self-determination in given activities (Niemiec & Ryan, 2009). The three needs are explained in the following sections, and their relevance to the present study is discussed, alongside existing literacy studies that have focused on these needs.

Reviewing studies that closely resemble my own, it was found that some used SDT within the field of digital technology but not with the intent of understanding how popular culture might support literacy in the classroom. There are to two strands of research that

follow from this—how people who are interested in digital technology have used SDT and how I believe digital technology and popular culture relates to the three psychological needs.

3.3.1 Need for Autonomy

Autonomy explains a learner's need to practise their own choices without external influence or force (Comanaru & Noels, 2009). It is 'a sense of initiative and ownership in one's actions' (Ryan & Deci, 2020, p. 4). De Naeghel et al. (2016) identified the need for autonomy as 'the experience of a sense of volition and psychological freedom when engaging in an activity and being the initiator of one's own behaviour' (p. 233). Similarly, Barrable and Arvanitis (2019) clarified that autonomy means 'regulation by the self' and refers to acting with full volition and self-endorsement' (p. 43). According to SDT, autonomy can be supported by offering choices that enhance it and increase intrinsic motivation (Brophy, 2004; Reeve et al., 2003; Ryan & Deci, 2020). Many researchers have suggested that providing learners with choices is a popular practice that should be implemented in the classroom to help build learner autonomy and thus enhance motivation (O'Brien & Dillon, 2008). On the other hand, autonomy is possibly undermined by being externally controlled (Ryan & Deci, 2020)

Previous studies have stressed the role of teachers in supporting autonomy in educational settings (De Naeghel et al., 2016; Deci et al., 1991; Niemiec & Ryan, 2009; Smedt et al., 2020; Valas & Sovik, 1994). For example, Niemiec and Ryan (2009) found that giving learners a voice and choices in activities is an effective way for teachers to support learners' autonomy rather than pressuring them via assessments. This aligns with Valas and Sovik (1994), who indicated that motivation is enhanced among learners when teachers support autonomy instead of controlling students. For example, providing choices, reducing the pressure of grades, inviting learners to ask questions, listening to their opinions, and supporting them in solving problems in their own way are examples of autonomy-supporting

teacher behaviours (Guthrie et al., 1995; Valas & Sovik, 1994). Deci et al. (1991) suggested that learners' autonomy, interactions, and ability to evaluate their competences have a direct impact on intrinsic motivation, which educators need to support. Furthermore, for teachers to integrate choice to support learner autonomy in the classroom, some studies (Brophy, 2004; Davis & Bowles, 2018) have suggested that at the beginning of the school year, teachers could ask students what they are interested in and incorporate themes into the curriculum based on these interests. It is possible that the experience of interest supports autonomy (Ryan & Deci, 2020). Brophy (2004) argued that if the curriculum does not support learners' choices and interests, intrinsic motivation will not be developed. Thus, supporting autonomy in teaching is crucial. The importance of considering children's interests in the curriculum aligns with Chesworth (2016), who suggested the importance of considering children interests in the curriculum based on the 'funds of knowledge' approach (Moll et al., 1992), as mentioned in the previous chapter. In this thesis, children's interests and choices are also considered.

The issue of autonomy versus control as an impact of the environment on intrinsic motivation has been widely studied, with a common finding being that autonomy support enhances intrinsic motivation compared to control (Ryan & Deci, 2000, 2020; Turner, 1995). Grolnick and Ryan (1987) indicated that when learning is controlled, it will be less effective and less intrinsically motivated. Allowing learners to make decisions regarding their activities in terms of selecting books, as previously mentioned, selecting friends with which to share their interests and allowing their opinions to be expressed will enhance their interest, and engagement (Brophy, 2004; Ryan & Deci, 2000; Turner, 1995). Conversely, controlling undermines intrinsic motivation, and learners then tend to withdraw from decision making (Turner, 1995). Furthermore, children whose parents support their autonomy tend to explore and attain mastery more than their control-driven peers (Ryan & Deci, 2000)

In terms of literacy, a number of researchers have argued that literacy motivation could be enhanced by supporting autonomy in educational settings (Cambria & Guthrie, 2010; Davis & Bowles, 2018; De Naeghel et al., 2016; Guthrie & Cox, 2001; Guthrie et al., 1995; Smedt et al., 2020; Tegmark et al., 2022). For example, Cambria and Guthrie (2010) have considered that providing choices is a preferred motivator for literacy learners. For example, texts, books, characters, and authors can be chosen by learners for reading activities. In addition, allowing students to choose which questions they want to answer from a variety of questions and then answering in writing or via oral discussion is encouraged. Guthrie et al. (1995) added that when teachers listen to learners' opinions about what they read, encourage debate, and give them the freedom to write, their interest in reading will be greater than that of learners who are controlled. Cambria and Guthrie (2010) have argued that despite the influence that parents and the home environment have on students' learning, the role played by teachers is essential to reinforcing the development of literacy motivation. This is supported by De Naeghel et al. (2016) and Smedt et al. (2020), who have suggested that teachers play a crucial role in supporting the need for autonomy in literacy learning, as well as other psychological needs. Similarly, Davis and Bowles (2018) have argued that teachers need to incorporate choice and freedom in the classroom, thereby supporting autonomy in language learning and enhancing intrinsic motivation. They explained that if teachers support autonomy and incorporate children's interests after asking the learners about them, students will feel more intrinsic motivation because they will recognise that their teacher validates their decisions and learning stems from their own choices. This is in line with Tegmark et al. (2022), who found in their study that providing children with more interesting texts and the option to choose their own texts encourages them to read more. This finding agrees with those of Guthrie and Cox (2001), who affirmed that self-selecting interesting texts for reading supported autonomy for children. Indeed, most previous studies

have discussed older children aged between seven and eleven years, focusing on traditional meanings of literacy. However, limited studies have focused on young children, which is the focus of the present study.

Although researchers have explored supporting autonomy with older children in traditional literacy and academic contexts through the lens of SDT (Guthrie & Cox, 2001; Smedt et al., 2020; Tegmark et al., 2022), limited studies have investigated SDT in the context of a broader meaning of literacy, particularly with young children. For example, Peng et al.'s (2012) study of video games through the lens of SDT revealed that choices were provided in video games that supported autonomy satisfaction. This included choosing characters, how to increase the strength of avatars, and how to react to characters other than the player, as well as making conversation choices. This was shown to lead to increased motivation and enjoyment during video games. Despite the previous study being conducted with undergraduate students, a different age group than that of this present study, it linked SDT to understanding motivation by using video games, comprising a form of digital literacy practice (Steinkuehler, 2010), and exploring motivation through the SDT lens.

In terms of a broader meaning of literacy relevant to my current study, Bock (2016) used the word 'agency' to refer to the progress of sign-makers, claiming that by using multimodal pedagogies, children have the power to choose modes that will enhance their sense of agency. She emphasised that children's motivation might be increased if they are able to choose modes. A sign maker—a term coined by as Kress (2010) as indicated in the previous chapter—uses the resources (artefacts, material, etc.) available to them to produce meaning in a social setting. Multimodality is not just simply focused on written language, it includes, amongst others, multiple modes such as still images, writing, drawing, 3D objects, moving images, speech, and gestures. Providing a variety of modes in the early childhood setting has been recommended by researchers (Rowe & Miller, 2017; Wohlwend, 2017b).

That is to say, teachers need to provide a variety of resources and choices for children in the educational setting, as this might enhance learners' motivation for and engagement in literacy. For example, previous studies have discussed providing digital technologies, such as a digital camera and tablet, motivated children to engage in literacy (Chordia et al., 2019; Flewitt et al., 2015; Friedman, 2018; Rowe & Miller, 2017). Furthermore, providing popular culture as a reference for children in an educational setting has been shown to motivate students in literacy (Dyson, 2018; Marsh, 1999, 2014; Vasquez, 2003; Wohlwend, 2011). For example, Club Penguin as a popular culture reference has been shown to motivate children in literacy learning (Marsh, 2014) and the inclusion of the characters Batman and Batwoman were shown to make children more engaged in literacy practices (Marsh, 1999). This was further supported by Dyson (2018) in terms of the positive relationship between children's participation in popular culture and acts of composition. Similarly, Vasquez (2003) indicated that playing with Pokémon cards stimulated a six-year-old to develop a new form of literacy. Therefore, a variety of choices including those relevant to popular culture provided for children in the current study in a LP might help to satisfy the needs for autonomy. It has been argued that it is important for children to experience agency in their play and to be considered capable (LEGO Foundation, 2017) As a result of experiencing agency, children become active participants in the process of making choices about their play and feel a sense of efficacy related to their play activities (Marsh et al., 2020).

While intrinsic motivation could be enhanced by support for autonomy, it could also be undermined by controlling education (Niemiec & Ryan, 2009). Deci et al. (1999) clarified that several experimental studies have supported the assumption that both autonomy and competence together enhance intrinsic motivation. If a learner feels competent but not autonomous, intrinsic motivation will not occur. Indeed, the need for autonomy is essential in SDT, and it is also important to support competence and relatedness (Niemiec & Ryan,

2009). Autonomy and competence are intrinsically linked, and thus meeting both needs is critical to motivation (Barrable & Arvanitis, 2019). The need for competence is discussed in the following section.

3.3.2 Need for Competence

According to Ryan and Deci (2020), competence means 'the feeling of mastery, a sense that one can succeed and grow' (p. 3). A similar definition refers to 'feeling effective in one's ongoing interactions with the social environment and experiencing opportunities to exercise and express one's capacities' (Ryan & Deci, 2002, p. 7). The need for competence indicates the person's need to feel able to perform and complete an activity (Barrable & Arvanitis, 2019; Comanaru & Noels, 2009). According to SDT, it is one of the needs that must be met to enhance children's motivation and self-determination in an activity (Deci & Ryan, 2000; Poulsen et al., 2006). In order to achieve competence, it is necessary to work in a structured environment that provides challenges and positive feedback for learners (Ryan & Deci, 2020).

In educational settings (the focus of the current study), learners should be given clear expectations and be told by teachers what steps they need to take to achieve their goals (De Naeghel et al., 2016). Furthermore, educators can support children's need for competence by providing activities that are optimally challenging to motivate them (Niemiec & Ryan, 2009). This is supported by Poulsen et al. (2006), who asserted that the need for competence should be considered when teachers and parents prepare activities for children to enhance intrinsic motivation. Engagement in an activity can be achieved if the activity level is higher than the child's level but not too hard (Tuner, 1995). This aligns with Vygotsky's (1978) sociocultural theory, discussed previously, including the concept of the zone of proximal development (ZPD), in which activities should be more challenging than what students usually do independently to encourage collaboration.

Feedback and suitable tools are also important for helping learners feel efficacy (Niemiec & Ryan, 2009). Positive feedback improves intrinsic motivation, while negative feedback reduces it (Harackiewicz, 1979; Ryan & Deci, 2000, 2017). Ryan (1982) distinguished between two types of feedback—informational and controlling—with controlling feedback decreasing intrinsic motivation compared to informational feedback. Ryan (1982) defined controlling feedback as 'one that is interpreted by the recipient as pressure to attain a particular behaviour outcome' (p. 415) and stated that informational feedback 'provides people with behaviourally relevant information in the absence of pressure for a particular outcome' (p. 415). Thus, whether rewards are informational or controlling depends on the situation (Deci et al., 2001; Ryan, 1982). If a teacher uses verbal rewards to secure desired behaviour from pupils, it is considered controlling, such as if they say, 'Good, you are doing as you should' (Ryan, 1982, p. 452). Furthermore, tangible rewards, when expected, are also controlling, and they undermine intrinsic motivation (Deci et al., 2001). The informational aspect enhances self-determination and therefore develops intrinsic motivation, while the controlling aspect undermines intrinsic motivation (Barrable & Arvanitis, 2019; Deci et al., 2001). Understanding this is crucial for educators in primary schools (Deci et al., 2001) and assumes it is also significant with pre-primary school kindergarten children, the age group in the current study.

Through the lens of SDT, children should be provided with suitable instructions and feedback to enhance their competence (Barrable & Arvanitis, 2019). Furthermore, scaffolding in educational settings can be provided by teachers, peers, or digital devices. For example, Flewitt et al.'s (2015) study revealed that an iPad provided immediate feedback for children, which motivated them in literacy. It also provided an opportunity for children to interact with and support each other. This scaffolding provided by peers was also recognised by teachers in Flewitt et al.'s (2015) study, which indicated that children with more

knowledge about using the iPad supported other children who had less experience. The authors also added that communication between children had extended benefits for children for whom English was a second language and encouraged shy children to begin talking. Similarly, in Rowe and Miller's (2017) study, children who were four and seven years old worked together to produce e-books using tablets and digital cameras. Teachers provided explanations and scaffolding to help them in the progress of using an e-book app. Furthermore, it has been found that when teachers provide strategies informed by SDT and include step-by-step directions, positive feedback, encouragement, and support, children's intrinsic motivation for reading was enhanced (De Naeghel et al., 2016). Scaffolding during the use of different tools related to the LP, directions, and positive feedback by teachers could be provided in the current study during the LP process.

Regarding literacy motivation and competence, Wigfield and Guthurie (1997) argued that children are engaged and motivated in reading if their competence is satisfied. For example, the impact of competence in reading for children has been investigated in previous studies (De Naeghel et al., 2016; Miller et al., 1993). For example, Miller et al.'s study (1993) in North Carolina using interviews with children in primary school in year 3–5 and between eight and ten years old was conducted to understand the students' interest in multiple types of literacy tasks. The children were asked to complete two kinds of assignments—writing a paragraph and copying words. Then, the students were asked which of the assignments they liked best. Writing multiple sentences in a paragraph was seen as challenging, but the students found it fun to write about their families. For the simple assignment of copying words, the children indicated that the task was boring, but they liked it because it was easy to get a good grade and earn a reward. This finding was supported by Turner (1995), who asserted that a student's determination and engagement are enhanced if the student is provided with challenges and collaborative tasks. This was also supported by

De Naeghel et al. (2016) in Belgium. After the authors conducted a workshop for 12 teachers informed by SDT on how to support autonomy and competence in reading, they found that intrinsic reading motivation was enhanced in children. This study indicated how important supporting the two psychological needs (autonomy and competence) is in enhancing literacy motivation with children aged 9–12 years. Both the studies by Miller et al. (1993) and De Naeghel et al. (2016) focused only on traditional literacy reading and writing skills rather than a broad meaning of literacy, which is applied in the present study.

In terms of a broad meaning of literacy related to competence and motivation, limited studies have explored this idea through the lens of SDT. For example, Rogers (2017) and Peng et al. (2012) explored motivations for playing video games and manipulated the features of play using digital technologies through the lens of SDT. As previously mentioned, video games are considered a form of digital literacy (Steinkuehler, 2010). Peng et al. (2012) focused on autonomy and competence, revealing that learners in their study experienced choice and freedom that satisfied autonomy. Furthermore, they felt competent and gained a sense of self-efficacy using the games and able to see their achievements thereby satisfying their need of competence. Similarly, Rogers (2017) found that playing video games satisfied the need for autonomy, competence, and relatedness (relatedness is discussed further below). In their study, open/ flexible rules provided by video games which allowed a wide range of action options led to feelings of autonomy and indicated feedback impacts on competence, while the social features led to relatedness (Rogers, 2017). Both studies indicated that playing with digital technologies led to enjoyment. This is in line with Marsh et al. (2020), who indicated that challenging play with digital technology brings about enjoyment for children. However, the previous studies by Peng et al. (2012) and Rogers (2017) were conducted with adults, and to the best of my knowledge, there are no studies incorporating competence with a broad meaning of literacy, particularly with young children through the lens of SDT. The

motivation for playing using digital devices and the features of play that help to satisfy psychological needs such as choices and feeling capable might be found by applying the LP.

Previous studies have identified that providing children with digital technologies could help them to experience competence in their learning. For example, Flewitt et al.'s (2015) and Henderson and Yeow's (2012) studies indicated that using an iPad motivated children and enabled them to feel empowered and that they were collaborating. Flewitt et al.'s (2015) study conducted with children aged between 3 to 13 years in England revealed that providing iPads in the classroom enabled children to feel like experts, experiencing enjoyment and collaboration, which enhanced literacy learning. Similarly, Henderson and Yeow's (2012) study conducted with children aged 5–12 years in New Zealand revealed many features of using an iPad with children including teachers indicating that doing so assisted children in engaging, collaborating, and feeling pride in their work. Furthermore, the children also experienced a sense of pride after completing their products using an iPad complimented by a character from popular culture, in this example a Moomin. This study was explained further in the previous chapter (MakEY, 2020). Additionally, interviewing teachers of early-years children aged between three and five clarified the idea that incorporating digital technologies in early-year settings helps to scaffold digital literacy, whereby children can take pictures using their own cameras or phones in the classroom. This also supports their autonomy by providing children with music to select from and encouraging them to take pictures and videos of their own work and their peers' work and then share it in the classroom (Chordia et al., 2019). Teachers' supporting autonomy and scaffolding digital literacy gives children a sense of controlling the environment and having an active role in shaping their learning (Chordia et al., 2019). Similarly, it has been indicated that facilitating children's agency promotes their ability to make choices about their play and to feel self-efficacy (Marsh, 2020).

Furthermore, as previously mentioned, studies have indicated that providing popular culture references motivates children in literacy and learning (Dyson, 2018; Marsh, 2014, 1999; Vasquez, 2003; Wohlwend, 2011, 2013). Simmons (2014) clarified this further by integrating popular culture into children's play, whereby children become empowered and share their knowledge of popular culture during their play. She clarified that popular culture offers children a momentary sense of power within an otherwise powerless environment—the school curriculum. Similarly, Wohlwend (2013) has stated that as part of the LP approach, children are put in the role of expert by being given the opportunity to help each other during play and produce texts in the areas with which they are more familiar than adults. The current study incorporates different tools in children's play, including their favourite characters and digital cameras such that they might experience competence and a feeling of increased motivation, ability and engagement.

Therefore, competence is one of the three psychological needs that must be satisfied to enhance motivation and self-determination for children in terms of engaging in literacy and other learning activities. SDT posits that intrinsic motivation is enhanced not only by feelings of competence but also by feelings of autonomy and relatedness (Niemiec & Ryan, 2009; Ryan & Deci, 2020; Turner, 1995). The need for relatedness is discussed in the following section.

3.3.3 Need for Relatedness

The concept of relatedness refers to a 'sense of belonging and connection' (Ryan & Deci, 2020, p. 4). Similarly, the need for relatedness refers to 'the experience of feeling connected to and accepted by others' (De Naeghel et al., 2016, p. 233). In other words, it refers to the human need for 'a sense of warmth, security, and connection between the learner and other people in that social context' (Comanaru & Noels, 2009, p. 135).

In educational settings, learners need to feel that they belong in the classroom (Guthri, 1996). Informed by SDT, the need for relatedness could be supported by providing collaboration among learners in the classroom, which thus enhances intrinsic motivation (Brophy, 2004). Collaboration is a motivational way to make learning more enjoyable (Ng & Graham, 2018). Discussion, role-play, debate, and working together can be used in classrooms to build interaction among learners (Brophy, 2004). In the classroom, Wang et al. (2019) found that relatedness was one of the strongest predictors of motivation. Indeed, providing collaboration in the classroom supports the need for relatedness in SDT and aligns with the theory and concept of the ZPD (Vygotsky, 1978). When children work in a given activity in the ZPD, they can achieve the task with more capable teachers or peers through social interactions. Thus, relatedness is a need that must be met in SDT as well as a source of learning in Vygotsky's theory (Sun & Chen, 2010). By contrast, when learners feel disconnected from other learners or teachers, their intrinsic motivation will be low, and they will only respond to external control (Niemiec & Ryan, 2009).

In terms of literacy, Guthrie (1996) explained that when a sense of belonging is developed among learners, self-determination will increase, thereby enhancing literacy engagement and affect their long-term motivation for literacy (Cambria & Guthrie, 2010). By contrast, when learners feel disconnected from other learners or teachers, their intrinsic motivation will be low, and they will only respond to external control (Niemiec & Ryan, 2009). Cambria and Guthrie (2010) and Guthrie and Wigfield (2017) have suggested some practices relevant to collaboration for motivating children in literacy learning, such as providing opportunities for partner reading, creating a project that allows children to work together, and having students create posters together, in which each child contributes by reading and writing and share their work with others. The authors confirmed the idea that teachers who are supportive of children collaborating with one another are more apt to

motivate such students, thus increasing their conscientiousness as readers compared to those who are forced to read alone. However, the children mentioned in the above studies were older children who were in years three to five of school and who were around eight and ten years old. For similar age groups, studies have indicated that collaboration and relatedness are motivational in literacy (Guthrie & Cox, 2001; Guthrie & Wigfield, 2017; Tegmark et al., 2022). For example, Guthrie and Cox (2001) clarified that improvement in reading motivation occurred in their study after applying strategies that support collaboration and autonomy in the classroom. Furthermore, Tegmark et al. (2022) indicated that the majority of children in their study reported that more interesting texts would motivate them to read more at school. Tegmark et al. (2022) concluded that the need for relatedness could be satisfied by incorporating interesting texts to which children can relate. However, these studies all emphasise traditional literacy, mainly focusing on reading and writing skills.

In a 2006 study, Ng et al. examined children's intrinsic motivation in different learning contexts and found that it was likely to stimulate the learners' perception of autonomy, social interaction and coherence as well as develop their involvement and curiosity for the literacy tasks proposed. The researchers' method consisted of videotaping learners from years three and five aged around eight and ten years old during their literacy practices and then interviewing them to get a sense of their motivation. In each grade, pupils were divided into two groups of 4 to 6 pupils and given one topic to work on (birds in year 3, dinosaurs in year 5). The students in year 3 and 5 were asked to perform closed and open tasks related to their topic. After the tasks, the pupils were asked to reflect on their literacy practices, including their perception of and involvement in the various activities. The research revealed that year 3 provided an opportunity for social interaction that positively stimulated the learners' intrinsic motivation, whereas in year 5, it was the opportunity for autonomy that encouraged it.

Collaboration as one of the motivational features leading to relatedness in SDT, as previously discussed, is also one of the principles of 21st-century literacies, as outlined in Chapter 2; furthermore, collaboration is an essential feature in new literacy studies (Undheim & Hoel, 2019). Moreover, collaboration and communication comprise one of the five aspects of digital literacy identified by the EU Digital Competence Framework (Marsh et al., 2020). The experience of collaboration has been found in many recent literacy studies with children that have integrated digital technologies (Undheim & Hoel, 2019; Wohlwend, 2015b). For example, in a qualitative case study, the authors explored peer-to-peer collaboration and collaboration with teachers among groups of four-to-six-year-old children within the literacy context of developing multimodal digital stories (Undheim & Hoel, 2019). The study confirmed that the stories unfolded and developed collaboration among the children, as well as motivation, and the command of digital technology by both teachers and learners. Additionally, Wohlwend (2015b) indicated that digital puppetry offers a chance for children aged around five to six years to collaborate in digital literacy practices in which they compose a story together based on their interests. Furthermore, the experience of collaboration and interaction was provided in some studies in the MakEY project, thus providing children with the opportunity to use digital and non-digital tools in schools and other settings (Blum-Ross et al., 2020). Similarly, it has been found that children playing as a group or in twos while using digital technology via the use of tablets collaboratively produced content; this was observed in a study comprising a survey of 1,200 parents from South Africa and 2,400 from the UK of children aged between three and eleven, as well as interviews with 30 parents from each country and case studies including interviews and video footage of the parents and children (Marsh et al., 2020). Through the lens of SDT, Rogers (2017) found that playing video games enabled learners to interact and play with others, satisfying the need for relatedness and leading to enjoyment. Their study showed that the

feelings of competence, autonomy, and relatedness were positively correlated with the pleasure of playing video games.

Previous studies have discussed that incorporating a variety of tools, including digital technologies, with children could stimulate children to interact and work together. For example, Wohlwend's (2013) study implemented the LP with children in the US, in which the inclusion of digital cameras caused children to act out a given story together. Similarly, Flewitt et al. (2015) found that an iPad enabled children to communicate and develop collaboration in literacy. This experience of enjoyable learning in which enhanced literacy learning occurred was achieved by incorporating an iPad into the children's classroom (Flewitt et al., 2015). Likewise, in a study conducted in the Saudi context (Alhinty, 2015) via the lens of SDT, the author considered an iPad to be a motivational tool for satisfying the need for relatedness, finding that iPads motivated children in the study to learn additional languages, which in turn provided them with the opportunity to interact and collaborate. This study was conducted with children who were aged nine to ten years old. The feature of an iPad as motivational was also discussed in Henderson and Yeow's (2012) study, which affirmed that an iPad makes it easier for children aged five to twelve years to access information quickly and collaboratively. The size of the iPads enabled children to pass them around and share information. The children were seen helping each other to problem solve using the iPads. The features of using iPads in the previous studies could be also found in the use of digital cameras, which were applied in the present study with young children aged five to six years. In the current study, children used different tools, including digital cameras, which were more likely to motivate them to collaborate, thus enabling them to experience a sense of relatedness and enhanced motivation.

However, other studies have argued that digital technologies might reduce communication and interaction among children. For example, the solitary nature of

technology has been raised as a concern among many early childhood teachers in the UK according to Macdonald's (2017) study in which technologies, according to the teachers, limited social interactions among children. However, in the same study, some teachers felt that such technologies helped children to work together and help each other. In another study reviewing literature of the last 12 years, SDT was related to digital technologies in the educational setting and found that the need for autonomy and competence could be met by applying digital technologies in educational settings (Salikhova et al., 2020). However, satisfying the need for relatedness was challenging, as learners who studied individually found digital learning and working in a group to be difficult in the virtual learning setting (Salikhova et al., 2020). Indeed, it seems that because this review focused on adult learning in which virtual classes and mobile applications were discussed, individuality and non-collaboration may be present when learners use technology in learning interactions, challenging the feeling of a sense of belonging while undertaking group work. However, the role of digital technology in the current study is different which involves children playing and interacting with a variety of tools including digital cameras

In terms of popular culture, there are no studies directly incorporating popular culture and relatedness using the lens of SDT. However, the experience of collaboration has been mentioned in previous studies involving children and popular culture. For example, Thiel's (2015) study indicated that when a 10-year-old child wore a Wolverine superhero costume in a clubhouse in the US, he embodied literacy by following his imagination and collaborating with his peers. This study was discussed in the previous chapter. Similarly, in the study by Wessel-Powell et al. (2016) informed by a LP, children aged five to seven worked together in small groups to create story settings and produce texts. As previously discussed in the present study, Wohlwend (2013) justified that children are more familiar with popular culture than are adults. Thus, this enabled children to feel like experts and be able to negotiate and interact

with things they are more familiar with than those around them. In the current study, children were exposed to different tools, including popular culture forms such as costumes and toys, which were likely to encourage the students to interact and collaborate.

Therefore, supporting all three needs enhances motivation and engagement. It has been found that satisfying a learner's need for autonomy, competence, and relatedness enhances intrinsic motivation and self-determination in given activities (Niemiec & Ryan, 2009), while, when any of these three basic needs are not met, motivation and wellness are undermined (Ryan & Deci, 2020). Guthri (1996) suggested that classroom settings should be redesigned to increase students' engagement and self-determination. Teachers play a significant role in supporting the three psychological needs and as indicated by Deci et al. (1991) and Ryan and Deci (2020), when teachers supported the needs of SDT, students displayed more interest, curiosity, and motivation compared with students with controlling teachers. Several studies have investigated the role of teachers in supporting these needs. For example, Niemiec and Ryan (2009) indicated that if teachers support the three psychological needs (competence, autonomy, and relatedness), motivation for learning and academic engagement will increase. A positive relationship between a teacher's support of the three psychological needs in SDT and a learner's motivation and engagement were found by reviewing 71 studies (Stroet et al., 2013). Roth et al.'s (2007) study in Israel found that when teachers feel external pressure, they use a controlling teaching style rather than providing support for autonomy.

In terms of the important role of teachers in literacy with children, studies have investigated this role through the lens of SDT. For example, De Naeghel et al. (2016) explored the impact of teachers supporting SDT on the motivation of children aged 9–12 years in Belgium. A quasi-experimental method was applied in this study, which included 38 teachers and 664 children from 27 schools. The experimental group was comprised of

teachers who attended a workshop that applied an SDT (supporting autonomy, competence, and relatedness) teaching style, while the control group was comprised of teachers who used their current teaching style. After the post-test, autonomous reading motivation increased in children in the experimental group. Additionally, with children in similar age groups, Smedt et al. (2020) indicated that teachers can foster children's autonomy, competence, and relatedness needs in literacy in various ways. According to them, children should be offered a varied range of reading material from which to choose, along with writing assignments in which they can summarise what they have read and recommend a specific book to their peers (autonomy support). Teachers can guide children about how to apply reading and writing strategies when writing the end of a story (competence support). Additionally, it is possible for teachers to publish texts written by children so that peers can read them or allow children who have written texts to read their stories aloud in class (relatedness). Again, these studies (De Naeghel et al., 2016; Smedt et al., 2020) focused on reading and writing skills with older children through the lens of SDT, and the current study fills in existing research gaps by focusing on a broader meaning of literacy with young children through the lens of SDT.

3.4 Applying SDT in educational contexts

SDT has informed many empirical studies applied in educational settings to understand motivations for literacy, as previously discussed, as well as many other motivations for learning in different contexts. Most of the existing studies focusing on the lens of SDT deal with adults or older children. A number of studies conducted in educational contexts have continued to support the relationship between motivation and the satisfaction of psychological needs. For example, in Singapore, Wang et al. (2019)'s study included 1,549 students in high school with an average age of 14 years and determined the degree of satisfaction of the three needs via student reporting in the school context. This study found a link between the satisfaction of the three psychological needs and intrinsic motivation and

positive outcomes, which led to enjoyment. It has been indicated that controlled motivation is negatively correlated with the three psychological needs. Controlled motivation is negatively related to enjoyment and positively related to pressure. This study did not emphasise a particular school subject such as literacy or science. Instead, it explored learners' motivation throughout learning in general during school. Similarly, in a school context (Jang et al., 2009), when the SDT framework was applied to students in South Korea aged 15 years, it was found that their experience of autonomy, competence, and relatedness was associated with positive learning experiences, motivation, and achievement

Other studies have investigated the connection between digital technology and motivations through the lens of SDT in different educational contexts. For example, in a comparative study in Norway between undergraduate students using an art App and students using traditional textbooks that applied SDT (Jeno et al., 2017), the students who used the application had higher intrinsic motivation and competence compared with the students who used textbooks, which led to the conclusion that using mobile applications influences students' intrinsic motivation. Furthermore, another study has explored the impact of using mobile devices to motivate university students to read in English as a foreign language in the Saudi context (Khojah, 2018). Mixed methods were applied using questionnaires, focus groups, observation and pre- and post-tests. The university students were divided into three groups. The first group received traditional literacy lessons; the second group received task-based lessons; and the third group applied mobile tasks that adapted the three psychological needs informed by SDT. The results indicated that the third group was more motivated and attentive, and exhibited greater involvement and achievement than the other groups. Thus, the researcher recommended that classroom designs apply mobile tasks to motivate students in reading. It seems that digital technology plays a significant role in motivating learners in Jeno

et al.'s (2017) and Khojah's (2018) studies and might play a similar role in motivating young children in the current study.

Currently, Chiu (2021) is exploring the influence of the perception of the three psychological needs in SDT on student engagement in virtual learning during the pandemic (COVID-19) in Hong Kong. Pre- and post-self-report questionnaires have been used to measure satisfaction with the three psychological needs and engagement. The participants included 1,201 learners aged 13 and 14 years. A training workshop for teachers was applied in this study to help them use 'digital support' in their teaching within the SDT framework. Using this model, teachers can support autonomy by providing different digital resources, giving students the freedom to use those resources. Designing digital materials and providing feedback can support competence. Encouraging student interactions and working in groups of five students using emojis and images during communication can also support relatedness. The results of this study show that digital support helps satisfy students' needs, which improves engagement. This is supported by Ushioda (2013) who clarified that autonomy, freedom, and choices are intrinsic characteristics of teaching using digital devices. Teachers' use of these features could enhance intrinsic motivation for learning.

Hence, many scholars have applied SDT to understand learners' motivations, some of whom have focused on literacy motivations especially regarding traditional literacy. Other studies have investigated the role of providing digital technology in satisfying the three psychological needs to enhance motivations, such as studies in Norway (Jeno et al., 2017) and SA (Khojah, 2018) with adults, as well as with older children in China (Chiu, 2021) and in SA (Alhinty, 2015). However, in my literature review, I found that to the best of my knowledge, no studies have focused on new literacies and motivation through the lens of SDT particularly concerning very young children (ages 3–6 years) in any country, including in particular SA, the context of this thesis.

3.5 Chapter Summary

This chapter has presented SDT, a motivational theory, as it applies to understanding children's motivations in the current study. The chapter opened by justifying the reason for choosing this theory for the present work. Then, it clarified the meaning of motivation and provided an explanation of SDT. After that, the three psychological needs that are important dimensions of SDT were explained and discussed, including their relevance to the current study, alongside existing literacy studies that have focused on these needs. Finally, studies applying SDT in different educational context were presented.

In the following chapter, the methodology is presented. My philosophical position and positionality in this research are explained. Data collection methods, study design (site and sample selection), and the LP design are clarified. Ethical considerations are also discussed. Finally, data analysis and processes to ensure trustworthiness are explained.

Chapter Four: Methodology

4.1 Introduction

This chapter presents the current study's methodology for data collection and analysis. Section 4.2 presents my philosophical positions regarding this research; 4.3 describes my positionality; and 4.4 explains and justifies the use of a qualitative case study. Section 4.5 presents the study design, including the site and sample selection and the Literacy Playshop (LP) design, and 4.6 justifies the data collection methods. Section 4.7 discusses ethical considerations; 4.8 describes the processes that were implemented to ensure trustworthiness of the data collected and the interpretation of the data; and 4.9 outlines the data analysis procedures. This study aimed to explore the impact of LPs on children's motivation, engagement and literacy practices in one Saudi kindergarten by answering the following questions:

1. What was the impact of implementing the LP on children's literacy practices and engagement in literacy in one Saudi kindergarten?
2. What was the impact of the LP on children's motivation, as understood through Self-Determination Theory (SDT)?
3. What were the teachers' feelings about the advantages and disadvantages of the LP approach?

4.2 Philosophical Positions

Explaining the philosophical paradigms that underpin methodologies and data-collection approaches for research is crucial. In this respect, I define the concepts of epistemology and ontology. Ontology refers to 'the nature of existence and what constitutes reality' (Gray, 2014, p. 19); it is about 'the nature of reality' (Creswell & Poth, 2018, p. 19). Epistemology is 'the theory of knowledge and how we know things' (Matthew & Ross, 2010, p. 18)— 'how reality is known' (Creswell, 2013, p. 36).

This study implemented and explored LP implementation in a Saudi Arabian (SA) kindergarten to understand children's engagement, motivation and literacy practices in the classroom. The participants in the study made their own meaning depending on their culture, social background, community and references. My ontological assumption in this study recognises that reality is subjective and is considered multiple (Creswell, 2013) rather than singular. My study was concerned partially with generating accounts of experience through interviews with children, teachers and parents. I acknowledge that to explore this multiple reality, I need to understand participants' engagement and literacy practices not only from my view but those of other teachers and parents by using multiple methods (Robson & McCartan, 2016). There is a need to use multiple methods when a researcher is exploring a multi-reality (Gray, 2014). According to Cohen et al. (2018), 'social science is seen as a subjective rather than an objective undertaking and is a means of dealing with the direct experience of people in specific contexts, where social scientists understand, explain and demystify social reality through the eyes of different participants' (p. 17).

Based on my epistemological position, I adopted an interpretive and constructionist approach in which my own subjectivity, experiences and interpretations were considered part of the research process. I built relationships with participants to understand their

realities/knowledges, and I did not distance myself from the research procedure. To facilitate this, I was in the kindergarten every day during the twelve weeks of the study and engaged with participants as they built knowledge. This allowed me to use the participants' quotes as evidence (Creswell, 2013). According to Robson and McCartan (2016), 'Constructionist approaches are also sometimes referred to [as an] interpretive/interpretivist approach, indicating a focus on how the social world is interpreted by those involved in it' (p. 24). Focusing on a participant's meaning and interpretation using my subjective assumptions helped me explore and understand the phenomenon being studied (i.e., the impact of new curriculum) via the interpretive approach. The positivist approach, which generally focuses on testing hypotheses, assumes that knowledge is objective and aims to generate generalisable findings. This approach was not used because this study explores the impact of the new curriculum on children's engagement, motivation and literacy practices in just one particular kindergarten without aiming to generate findings to all Saudi kindergartens. The justification for focusing on a particular kindergarten is discussed in 4.5 study design. Based on the interpretive approach and my research questions, I chose the qualitative research methodology, which allows the collection of in-depth data using different methods to explore and understand the phenomenon being studied (Matthews & Ross, 2010). It is my belief that my background and subjectivity would affect the shape of my study and interpretation of the research as adoption of the qualitative approach (Creswell & Creswell, 2018).

4.3 Researcher Positionality

In qualitative research, researchers 'position themselves' in the study, which means they explain their background and its relation to the study (Creswell, 2013). In this respect, I will explain my academic background, career and personal experience.

After completing my bachelor's degree in early childhood education, I worked as a primary teacher in a kindergarten in Riyadh, SA. This was an experience that allowed me to work directly with children and better understand the curriculum applied in the kindergarten classroom environment. Subsequently, I worked for eight years in the Department of Education in Early Childhood at Princes Nourah Bint Abdul Rahman University in Riyadh, later becoming a lecturer (my current employment) within the department, teaching undergraduates on the Practical Training in Early Childhood course. As a lecturer, I supervise final year bachelor students, which comprises observing students while they are teaching kindergarten children and providing feedback. During these observations, I am always keen to observe how children engage in the various learning activities, in particular literacy and whether they seem interested in lesson content. Whilst providing teaching related feedback to the students, I listen carefully to any criticisms made of the curriculum and classroom environment. I observed that even though some kindergartens have implemented reading and writing 'corners' to enhance literacy in their early childhood classrooms, the vast majority still use traditional methods such as pencils and papers to teach this subject area. However, the integration of traditional literacy curriculum content differs from one type of kindergarten to another. For example, some kindergartens dedicated long time to literacy practices than other kindergartens. I think it is because the policy/or strategies that the kindergarten applied and might because satisfy Saudi parents as they tend to prefer the increased hours dedicated to literacy lessons offered by kindergartens. This experience of observing variety of kindergartens and listened to students has helped build my overall knowledge of early childhood curriculum teaching styles, reduced play time, and the lack of technology use in Saudi kindergartens.

Based on my work at the university in SA, I completed a Masters of Curriculum and Instruction in Early Childhood Education in Ohio, United States of America (USA). I had practical experience for three months at a Reggio Emilla kindergarten, where the curriculum

included lessons based on the children's interests. It was a valuable experience that led me to re-evaluate and question whether the integration of children's interests in learning could enhance their engagement. While in the USA, I had the opportunity to take a two-day tour organised for educators and parents with an interest in early childhood curriculums. This included visiting three different kindergartens in Ohio that applied three different curriculums in early childhood. This experience inspired me to think more about how different curriculums include children's interests, play and tools and how this could impact children's learning and engagement.

It is worth discussing some dimensions regarding my position in relation to my research as both an educator and parent. After the completion of my master's degree, I returned to SA and looked to have my then three-year-old child admitted to kindergarten stage one (KG 1). I enquired about the curriculum used at several kindergartens and the time they provided for play, and found several kindergartens still remained completely focused on traditional literacy teaching techniques in which they provided workbooks that children could work on at school and for homework. Furthermore, I saw how playtime was limited compared to teaching time and involved a lack of technology use such as iPads. Moreover, where technology was used, this was mostly for displaying content from the teacher's computer onto a whiteboard. Private schools are more likely than public schools to provide workbooks for children. Public schools generally provide children with worksheets to be used in the classrooms' 'Writing and Reading corner'. Furthermore, I observed some kindergartens teaching writing in the same classroom as all the other activities, whereas others were teaching it built for purpose literacy classrooms. Seating arrangements also differed from one school to another, from the traditional row arrangements of tables and chairs to the more up-to-date circle time gathering. Finally, based on my knowledge integrating of digital technologies for children to use such as iPads or popular culture had not yet been implemented in the majority of Saudi kindergartens.

In the UK, particularly in Sheffield, where I currently reside and study, I visited a primary school in 2019 where I observed a reception class for approximately 120 minutes. I observed the children during play as well as during normal literacy lessons to understand their engagement in various activities. I also volunteered for two days in Makerspaces in Early Years (MakEY) workshops in Sheffield, where I helped children to do activities relevant to makerspace in which I observed high levels of involvement from the primary school children. This experience gave me the confidence to undertake a study of my own (my PhD thesis) and include similar elements. I was also inspired to use technology and popular culture as a means to stimulate children's attention and motivation during literacy practices, which is an important feature of LPs. Furthermore, attending *Reconceptualising Early Childhood Literacies: An International Conference* in Manchester, gave me the chance to listen to a variety of researchers including Karen Wohlwend, who inspired me about the possibility of providing opportunities for children regarding technology use and popular culture in educational settings in my context.

I acknowledge that my positive view about the role of technologies shaped by my previous experience with young children could potentially impact the research process, such as design of the current study, participant selection and interpretation. For example, the positive views I hold regarding the role of interesting tools for children such as digital technologies and popular culture led me to think about implementing LPs despite my misgivings that these tools might not receive sufficient support from teachers in the Saudi context. Indeed, to my knowledge there are no prior studies exploring this in a Saudi context. This is supported by my understanding that implementing popular culture or digital technologies has been met with reluctance by educators internationally as I discussed in the Literature Review Chapter. My experience also makes me aware how Saudi kindergarten's follow official curriculum that do not integrate digital technologies which might influence teachers' beliefs about providing opportunities for children to play using these technologies along with popular culture

references. Furthermore, my own early childhood experience in Saudi of the limited integration of technologies for children to use and the work I undertook in early childhood department led me to focus on this age group (5 to 6 years old). I believe that any interpretation I may make of the data might be a reflection of my own personal experience regarding literacy practices in Saudi kindergartens, and my feeling of the potentially positive role technology could play in early childhood education as I felt that I went to the study broadly pre-technology. So, to minimise the impact of my personal beliefs and experience, I have applied different strategies. For example, I decided to utilise a variety of data collection methods; beside a participant observation method, the Leuven Involvement Scale (LIS) was used for structured observations with a volunteer teacher to reduce bias. This is explained further in Section 4.6.1, Non-participant Observations. I also interviewed teachers to obtain views about current literacy practices, including use of digital technologies and feelings regarding the implementation of LPs. I also interviewed parents to gain a better understanding of whether their children had expressed any feelings regarding the new curriculum, or if the parents had noticed any changes. This method is discussed in Section 4.6.3, Interviews. I also shared interview transcripts with teachers to ensure that they accurately reflected what the teachers meant, who could then amend content, if need be, and discuss any interesting points arising from my field notes. After generating codes and themes, I discussed them with my colleagues and supervisors to reduce bias in my analyses. How trustworthiness was ensured in this study is explained further in Section 4.8 Establishing Trustworthiness.

4.4 Qualitative Case Study

The present research draws upon an interpretive paradigm to present a case study based on the qualitative approach using various methods, such as observations and interviews. Qualitative research was defined by Gray (2014) as ‘a naturalistic approach that seeks to understand phenomena within their own context-specific settings’ (p. 160). Bloomberg and

Volp (2016) declared that it is 'suited to promoting a deep understanding of a social setting or activity, as viewed from the perspective of the research participants' and aims to provide answers [to] 'what' questions' (p. 38). Qualitative research 'provides an in-depth, intricate and detailed understanding of meaning, actions, non-observable as well as observable phenomena, attitudes, intentions and behaviours' (Cohen et al., 2018, p. 288). One account of qualitative research is that data are collected in a natural setting by interacting directly with participants and observing their behaviour in their context (Creswell & Creswell, 2018). Therefore, I used this approach to investigate and understand the processes at work in children's engagement, motivation and literacy practices in a kindergarten classroom. To acquire a deep understanding of my subject, I relied on information gathered from sustained interaction with the different participants involved in this research, including children, teachers and parents. Additionally, qualitative research is flexible, allowing the researcher to refine, improvise and change the research questions, sampling techniques or methods of data collection and analysis as the research is carried out (Creswell, 2003; Robson & McCartan, 2016).

My main research question addresses the impact of LPs on children's engagement in literacy and literacy practices. Using the qualitative research perspective, I provide a word-based descriptive and interpretive explanation of the data collected. Quantitative measures and generated numbers would not be enough to help me understand the individuals being studied in my research (Robson & McCartan, 2016) because data must be collected from the study setting, and there must be direct contact with the participants. Given that my research focus was children, the qualitative approach was most appropriate (Greig et al., 2007). Qualitative data collection might be more appropriate to the study of children's worlds because rich data can be acquired from children's words and pictures rather than using quantitative methods, which only produce numbers (Greig et al., 2007).

Many strategies are used in qualitative paradigms, such as case studies, ethnography, grounded theory, participatory action research and culture studies (Gray, 2014). This thesis adopted the case study strategy using the ethnographic approach. I begin by describing this strategy and follow with my justification for choosing it and the ethnographic approach. Eisenhadt (1989) identified a case study as 'a research strategy that focuses on understanding the dynamics present within single settings' (p. 434). It is 'an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-world context, especially when the boundaries between [the] phenomenon and context may not be clearly evident' (Yin, 2014, p. 16). A case could involve an individual, a community, groups of people or an organisation (Gray, 2014; Robson & McCartan, 2016). In the current study, the case is a kindergarten classroom with children aged five to six years. Stake (1994) stated that the case study 'is characterised by the main researcher spending substantial on-site, personal contact with [the] activities and operations of the case, reflecting [and] revising meanings of what is going on' (p. 242).

I chose the case study method based on my research objective and questions. This study explores the impact of a new curriculum called LP on children's motivation, engagement, and literacy practices. By implementing the new curriculum in the kindergarten classroom, a case study enabled me to answer the 'what' questions that are suitable for an exploratory study, the latter being the most adequate form of research to acquire an in-depth understanding of the different phenomena observed in real-life contexts (Yin, 2014). A case study enabled me to address and understand the phenomenon of children's literacy engagement and motivation within the context of a LP, which has not been explored in previous research. While LPs were experimented in the USA, this study explores LPs in a Saudi kindergarten class. I believe that the nature of my research requires in-depth exploration and understanding of the phenomena, which can be acquired via a case study (Creswell, 2013; Eisenhardt, 1989; Yin, 2014). Grix's

(2004) view is that ‘only [an] in-depth case study can provide understanding of the important aspects of a new or persistently problematic research area’ (p. 52). The current study is considered exploring a new area in the context of the current study. Furthermore, this approach helps the researcher obtain deep data from a small sample (Cohen et al., 2018). Case studies enable the use of multiple methods to collect data from multiple types of evidence, which improves rigour, strength, validity, and credibility (Yin, 2014). This case study uses a triangulation approach for multiple sources of evidence, including non-participant observation, participant observation and conversations with children/interviews with teachers and parents, to ensure the collection and verification of clear evidence (Yin, 2014). Finally, applying the case study approach helped me collect examples of real individuals in real-life situations, which will help the reader understand the phenomena being studied rather than using numerical analysis (Cohen et al., 2018).

Robson and McCartan (2016) clarified that ‘A case study can be approached ethnographically’ (p. 160). Ethnography is now being employed in a wide range of fields, such as social science, geography, law, education, management and more (Watt, 2010). Ethnography is a Greek word that combines the words ‘ethnos’ (‘people’) and ‘graphia’ (‘writing’). Literally translated, it means ‘writing about a people’ (Scott-Jones, 2010, p. 13). It is ‘a qualitative design, the researcher describes and interprets the shared and learned patterns of values, behaviours, beliefs and languages of a culture-sharing group’ (Creswell & Poth, 2018, p. 90). The rationale for the ethnographic approach in my study is as follows; first, a daily immersion in a kindergarten class, where data were collected from observing children in their natural setting during various activities (literacy practices), including their vocal communication and interaction throughout these activities. Second, I listened to the children’s conversations, collected artefacts and asked the teachers and parents questions.

It is crucial for the ethnographer to listen to the participants, ask them questions and give attention to their productions (Gobo, 2011). Furthermore, the main method used in ethnography is participant observation, along with other methods, such as interviews (Gobo, 2011). Robson and McCartan (2016) stated the following: 'Participant observation is very closely associated with the process of an ethnographic study' (p. 158). I adopted the role of a participant-observer, which enabled me to collect data from an insider's perspective by engaging with the participants during their activities. Finally, reviewing the literature showed me that ethnography has been applied in a number of literacy studies with children (Dyson, 2018; Heath, 1983; Wohlwend, 2013; Yoon, 2018). Schmidt (2020) found that it is crucial to use ethnographic approaches when studying literacies with children rather than other approaches.

While I used methods both linked to ethnography and inspired by the ethnographic approach, my research does not fall under the category of 'ethnographic study', as explained below.

According to Creswell and Poth (2018), one of the fundamental features of ethnographic research is that participants are studied in their natural setting over a long period. Data collection can take several years to complete, starting with a minimum of six months. Six months to one year is sufficient to engage and allow for researcher observation in an ethnographic study (Watt & Scott-Jones, 2010). Due to the constraints of my PhD, I was limited to a three-month period to conduct and complete my fieldwork. Furthermore, I did not focus on describing children's language, values and beliefs. 'Ethnographers focus on developing a complex, complete description of the culture of a group, a culture sharing group' (Creswell, 2013, p. 91). I focused on the overall impact of a new curriculum on children's motivation, engagement and literacy practices. Finally, I used the LIS, which is not normally part of ethnographic research, to measure children's engagement in literacy activities. Ethnographic

research generally relies on three kinds of data collection: participant observation, interviews and documents, which are often used in a single study (Gray, 2014).

Case studies and ethnographic research are sometimes criticised because of their inability to generate generalisable data (Gobo, 2011; Gray, 2014). My study did not aim to generalise; I planned to work with small sample groups who do not necessarily represent the wider Saudi population but rather aimed to understand and explore the impact of the new curriculum on a single kindergarten which had never been studied in this context. The kindergarten is unique in that it is a private urban middle class context. The results of the current study can be viewed as 'descriptions of the possibility of practice' (Danby et al., 2016, p. 145). More explanation about the site selection is discussed in the following section 4.5.1 Site and Sample Selection. Another criticism is that case studies need greater rigour, and researcher bias may affect the findings (Yin, 2016). This is similar to criticism of ethnographic studies, in which the subjective method might influence the results (Gobo, 2011). To minimise this drawback, I followed strategies that support trustworthiness which are discussed in Section 4.8 Establishing Trustworthiness. Furthermore, I clarify the procedures, steps and methods followed in the case study (Yin, 2014).

4.5 Study Design

4.5.1 Site and Sample Selection

The setting for the present study was a private kindergarten for children aged five to six years in Riyadh, SA, with a normal school day running from 6:30 a.m.–1:00 p.m. daily. Their hourly schedule is as follows: 6:30–7:00 assembly, 7:00–7:30 circle time, 7:30–8:30 Qur'an, 8:30–9:00 mealtime, 9:00–9:30 playing outside, 9:30–10:30, literacy (Arabic), 10:30–11:00 snack, 11:00–11:45 literacy (English), 11:45–12:00 math, 12:00–12:30 corners play/ play

corners and 12:30–1:00 final meeting. The daily schedule for the current kindergarten is presented in Appendix B.

The current kindergarten's location is in a middle-class urban area of the capital city. kindergartens in Riyadh and some big cities in SA such as Jeddah and Dammam are likely to have certain characteristics that are quite different to kindergartens in the rest of SA. For example, they possibly have access to technologies such as computers and interactive boards and so on. Their catchment area is mostly middle-class than the average in SA. It could be assumed that in Riyadh and the big cities most of family's access to technologies with their children in their home. Mostly mothers in these big cities are educated and have jobs.

I chose Riyadh because it is the capital of SA; thus, the latest developments and incorporation of technology and new curriculum start in Riyadh. A key aspect of my study is the implementation of digital technologies and popular culture for children to use, which is generally not used as a source of material in Saudi kindergartens curriculum, as a frame of reference to be used in LPs. Kindergartens in Riyadh are generally open to this kind of research. The definition of popular culture was discussed in the literature review chapter, that being popular texts or characters that most children in the current study are familiar with on TV or YouTube. An additional reason for choosing Riyadh is that I live, study and work there, and have visited many kindergartens in this city. I chose a private kindergarten because public kindergartens in SA only follow the curriculum of the Ministry of Education. While private kindergartens also follow the Ministry of Education curriculum, they are able to add what they think is important, such as new curriculum and languages, and their school day is longer than that of public schools. According to the Ministry of Education, there are 263 private kindergartens (of which 181 are international kindergartens) and 278 public kindergartens in Riyadh (personal communication, 29 August 2021). Purposive sampling, a characteristic of qualitative research, was used in this study (Cohen et al., 2018). According to Gray (2014),

‘Purposive samplings are used when particular people, events or settings are chosen because they are known to provide important information that could not be gained from other sampling designs’ (p. 217).

After I obtained approval to conduct the current study from the Ministry of Education in Riyadh, I contacted the Kindergarten Administration in Riyadh and explained my research. They recommended five kindergartens in Northern Riyadh because these kindergartens were willing to welcome researchers and provide collaboration. They further explained that several kindergartens in Riyadh had access to technology, but they recommended these five in particular because they were confident that these kindergartens had employed the use of digital practices more successfully than others. Furthermore, they knew that their administrations had previous gained experience in early childhood education and assumed that they would be more flexible having provided collaboration with previous researchers. I visited the five private kindergartens recommended by the Kindergarten Administration, where I explained my research. All these kindergartens were interesting, but not all agreed to participate in the study. One of the kindergartens had already worked with other researchers, and another school had a busy schedule that semester, leaving them unwilling to make any schedule changes. Therefore, three kindergartens agreed to participate in the study, but one did not agree to the teacher workshop due to limited time. The private school I chose agreed to the entire study process, and I found that the principal was very interested in my research and willing to help. She has a master’s degree in education from the UK and an interest in literacy. Furthermore, this school has a cinema room, where the children are shown popular media and YouTube (Figure 2). This gave me a sense that the current kindergarten had access to technology and media and teachers potentially were familiar with technologies and media more than other typical kindergartens.

Figure 2: A cinema room in the kindergarten

4.5.1.1 Children participants

The current study included eight children—four boys and four girls—from one kindergarten classroom. Braun and Clarke (2021) indicated that data saturation could be achieved with a small sample. This can include one or two schools, two or three students and particular teachers if the research does not aim to generalise (Cohen et al., 2018). Data saturation according to Braun and Clarke (2021) described as 'information redundancy or the point at which no new themes or codes 'emerge' from data' (p. 221). The chosen kindergarten has only one classroom for kindergarten stage 3 (KG3), which is the year that precedes the first grade in primary education in SA, with the children being approximately five to six years of age. The classroom had 18 children who all speak Arabic. All their parents received a letter with a brief explanation of my study and a request to allow their children to participate. This is the school's normal procedure with any new study. I then passed out information sheets and consent forms and the participants were selected from among those willing to participate. All parents agreed to let their children participate, but three did not approve of me photographing or filming their children. From the 15 children whose parents consented, 4 additional children were excluded as the teacher told me that the four children had special education needs. In the current study I aimed to explore LPs within general children who do not have special needs.

The findings of the current study reflected only children with no special needs. This left 11 children, 7 boys and 4 girls. Because I wanted equal number of girls and boys, all 4 girls were selected. The teacher selected 4 boys of 7 via a blind drawing of names. She gave all the boys names numbers, then the numbers were selected randomly. Table 1 below shows the demographics of the eight participants. The names were left anonymous.

Table 1 : Demographics of the Case Study Children

Name (pseudonyms)	**Gender**	**Age**	**Siblings**	**Language**
Rima	Girl	5y	Brother, aged 3	Arabic-English
Lina	Girl	6y	Brothers, aged 10, 8, 2	Arabic
Salem	Boy	5y 3m	Brother, aged 4	Arabic
Alanoud	Girl	5y 4m	Brothers, aged 16, 8 Sisters, aged 11, 14	Arabic
Mohammed	Boy	5y 6m	Brother, aged 3	Arabic English
Shouq	Girl	5y 9m	Sister, aged 2	Arabic
Mishal	Boy	5y 11m	Sister, aged 3	Arabic-English
Tareq	Boy	5y 1m	Sister, aged 9	Arabic

4.5.1.2 Teachers participants

The current study also included three teachers from the classroom and the principal, the main teacher (Ghaida), the assistant and Arabic teacher (Sara) and the English language teacher (Esraa)—who received the information sheets and consent forms. The names were left anonymous. All the teachers were female, which is standard in Saudi kindergartens. Teacher Ghaida's major is early childhood education (7 years' teaching experience). Teacher Sara's specialisation is in early childhood education (6 years' teaching experience). Esraa is a specialist in English language (8 years' teaching experience) while the principal has 25 years' teaching experience. The process of introducing the LP to the teachers is discussed in Section 4.5.2.2 Conducting Teachers' Workshop. The process of interviews the teachers is outlined in

Section 4.6.3 called interviews. During the LP application, I communicated with the teachers outside working hours if needs be via WhatsApp as they preferred using this method.

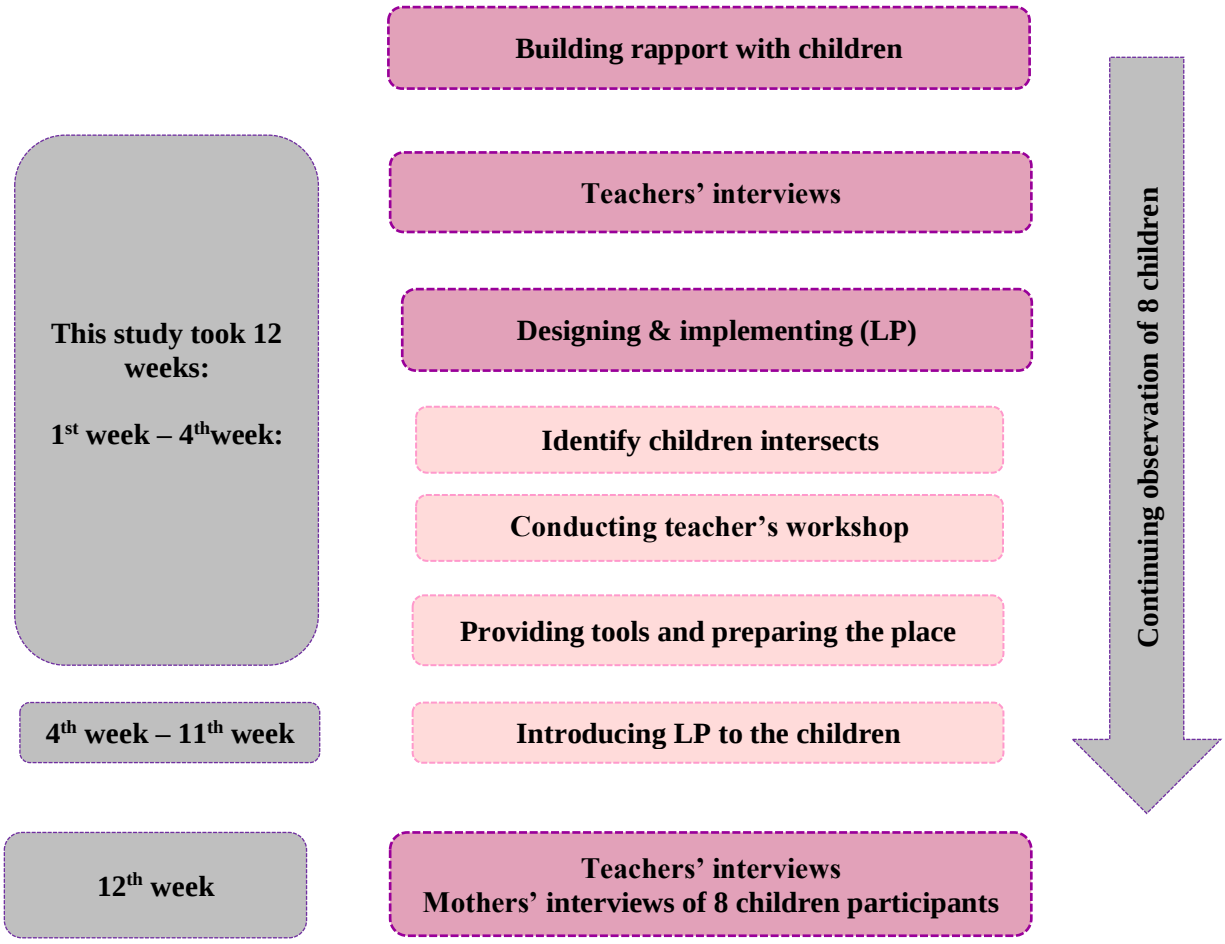
4.5.1.3 Parents participants

The current study also included the parents of the eight children, particularly their mothers, because in Saudi culture, teachers usually have the most contact with the mothers. I met with the eight mothers in the parent meetings and when they came to the school, either in the morning or at the end of the day. I introduced myself and provided my contact number before answering their questions and explaining the research further. I also created a WhatsApp group with the mothers to allow us to communicate easily as they preferred to use this. The eight mothers were interviewed after implementing the LP. The explanation of the interview process is presented in Section 4.6.3 (Interviews).

4.5.2 Designing the Literacy Playshop (LP)

The LP curriculum has already been implemented and tested during one school year in the USA with children aged 3 to 8 (Wohlwend, 2013). The process of, and rationale for, this curriculum were provided in the literature review chapter. In SA (the context of this study), this is the first application of this kind of curriculum. After explaining this curriculum to the principal, I identified the children's interests, conducted the teacher workshops and provided the tools for the study. The overview of designing and conducting the study is outlined in Figure 3.

Figure 3: The overview of designing and conducting the study



4.5.2.1 Identifying Children's Interests.

This study began with observing the children while they were engaged in play to determine their favourite popular characters and ask them, as well as their parents and teachers, about their preferences. Through observation, I also paid attention to the children's artefacts, such as backpacks, lunch boxes and clothing, to gain a better understanding of what the children liked and which popular references they found relatable. After I collected all the information, I found that the most popular character was Mansour, followed by PJ Masks. This is presented in Chapter Five: Findings and Discussions Chapter. These characters served as material within the LPs.

The next section discusses the process of providing choices for children, not forcing them to do something and giving clear instruction and scaffolding.

4.5.2.2 Conducting Teachers' Workshop

I set up a specific teachers' workshop, which included some key LP activities, to help familiarise the teachers with the concept of LPs. The two-day workshop lasted three hours each day—one hour during working time and two hours after. The teachers had volunteered to stay to attend the latter hours of the workshop. The first day was dedicated to introducing the concept of LPs and explaining the theory that underlies it based on the original methodology created in Wohlwend's (2013) study. I explained that a LP aims to be a space where children can play, read, write and incorporate their own cultural references to engage in the creation of multimedia artefacts using various resources and materials, including new technologies to develop their literacy skills and record their productions. I then presented the processes defined by Wohlwend (2013) within the context of her research (play, storying, collaboration, production) and provided the teachers with a printed table of the different processes, along with a suggestion for tools to use and activities to carry out at each stage of the process (Table 2). This was adapted from (Wohlwend, 2013).

The second day was used for practicing. I presented the tools and activities that the teachers would cover at each stage of the process and encouraged them to discuss these activities together to modify or adjust them per their own ideas and classroom settings. After presenting a clear definition of the different activities to be carried out in the classroom, the teachers were invited to put the most challenging among these activities into practice using some of the main tools that I had provided. After completing these activities, the teachers were asked to consider how they could adjust them within the classroom context and transfer them to the children in the most effective and accessible way. Most of the teachers supported using digital cameras in the current study instead of iPads as they believed that children used iPads a lot at home. Some teachers discussed that they do not incorporate popular culture-based media into children's classroom practices. They seemed to be concerned about children mimicking

their heroes in play and causing violence. Teachers' views are discussed further in the Findings and Discussions Chapter. I discussed with the teachers that previous studies had indicated the potential motivational benefits of implementing digital technologies and popular culture with children in educational settings (Friedman, 2018; Marsh, 2014; Rowe & Miller, 2017). Furthermore, I explained that I was there only to explore the new curriculum and assess whether it increases young children's motivation and helps them engage in literacy practices. My rationale was that to date there have been no studies in a Saudi context that have incorporated these elements with young children.

During the workshop, I answered teachers' questions and listened to their views and the challenges they might face during the study. We discussed the appropriate time in the schedule and the optimal place to conduct this study. I asked them about the children's favourite characters, and their answers were similar to what I had found during my observation of the children. Finally, we discussed how LPs could provide a flexible framework that allows children to develop their own ideas based on the activities defined for them beforehand by the teachers. Moreover, it was suggested that LPs be introduced to the children step by step, with each process being covered over a flexible period. The teachers were encouraged to move from one process to the other once they felt that the children were ready for the next step. We discussed encouraging the children's participation but not imposing on them to carry through with the LP activities if they showed signs of reluctance or disengagement and inviting them to engage in other activities (e.g., drawing, playing, etc.) by using tools and materials that make more sense to them.

The kindergarten's schedule allows 30 minutes for 'corner play'. These corners are in most Saudi kindergartens and part of the classroom curriculum. The details of these corners were discussed in Chapter 1. After a discussion with the teachers, it was determined that corner playtime would be appropriate for applying a LP. I spoke with the principal about extending

the time to one hour instead of thirty minutes to give the children time to engage in the LP and satisfy the curriculum requirement of having the children engage in the corners. My suggestion was to divide the children into two groups: group A would engage in the LP for 30 minutes, and group B would use the play corners for 30 minutes, after which they would switch places. In this respect, the LP lasted 60 minutes each day, and overall the study included 40 LP sessions overall.

In addition to the workshop discussion with the teachers, having my working area in the teacher room allowed me to speak with them during their break. As previously stated, a social media group was created to allow communication between us.

Table 2: Prose of the Literacy Playshop Provided for Teachers

Adapted from Wohlwend (2013)

Processes	Description	Tools	Possible activities
Play	The children will be encouraged to draw and create based on their favourite characters. They will then be invited to cut out their paper characters and play with them. To do so, they will be provided with props and character-drawing templates. The children's paper productions will be kept in folders while waiting for completion of the next session. The children will create scenery related to their stories.	White paper, coloured pencils, felt pens Scissors, character-drawing templates, props (e.g., popsicle sticks, eye stickers, masking tape, etc.) Cardboard storytelling folders	• Drawing popular and/or original characters • Cutting out characters • Creating characters using the props and templates • Storytelling through play • Imagining possible scenarios based on the characters • Creating visual settings and props related to the story that the children will build around their character(s), using paper, cardboard, felt
Storying	The children will be shown several short video clips drawn from popular media	Storyboards	

	that they are familiar with to then retell the stories from the video material in a sequence of six storyboard images/drawings. In their storyboards, the children will be encouraged to include settings and props related to their story. The children's storyboards will be kept in folders while waiting for completion of the next session. After storyboarding, the children will play (whether based on their storyboards or on new improvisational ideas) using props and costumes.		pens, scissors, etc. • Drawing on six-block storyboards • Writing on the blank lines on storyboards
Collaboration and production	The teachers will introduce digital cameras as a new story- telling tool in the classroom and will give instructions to the children on how to use it. The children will develop and perform their stories and will be invited to film and record their productions with digital cameras.	Puppets, costumes, play, props, digital cameras	• Presenting the stories through speech, sounds, props, body language • Improvising or not on the storyboard's character(s)'s story during dramatic play • Using digital cameras to record their stories

4.5.2.3 Providing Tools and Preparing the Place.

The LP curriculum requires tools, which Wohlwend (2013) applied in her study, to stimulate children to engage. In this respect, I provided white paper, coloured pencils, felt pens, scissors, storyboards, cardboards, tape, books and figures. I also provided two KidiZoom digital cameras and puppets, costumes, plays and props. After the children seemed interested during their LP play, I added more artefacts, such as toy phones, stick-on moustaches, toy

glasses, small handbags and tools related to objects in the Mansour cartoon, which was their favourite character.

To provide related elements, I started looking for Mansour costumes. Mansour, a popular cartoon in Arab countries, was originally an Emirati cartoon. Mansour is the main character, and he shares adventures with his friends. Arab children's characters are limited, and costumes relating to these characters are not available, such as those from Disney. I could only find a related backpack, shirt and shoes. Therefore, I contacted the creator in Dubai, but they did not have any costumes. To provide similar costumes to the three characters in the show, I went to a dressmaker and had similar costumes made (Figure 4).

The children's second favourite characters in the current study were from the show PJ Masks, which is shown on television and YouTube in English as well as translated into Arabic. The PJ Masks television series is an animated preschool television series developed by UK, French, and Canadian companies. In the show, there are three six-year-old children (the main characters) who can transform into superhero characters called Catboy, Owlette, and Gekko. The costumes, figures, books and toys of these characters are widely available in stores and online in SA and internationally. I was able to obtain these costumes easier than Mansour by ordering them online.

I placed all these tools in a workshop room (teacher resource room). The tools were implemented gradually. The implementation process is explained further in this study.

After providing the tools and, based on discussions with the teachers about the place to conduct this study, I began preparations. There is a small room next to the main classroom that has door between them. While this room is considered part of the classroom, is not used much. It contains only small tables and chairs and empty cupboards. The teachers helped me move some materials, such as a mirror, sofa, puppet theatre, from the workshop room to this room.

During the teacher's workshop, the teachers suggested giving the corner a name to identify it for the children because all corners of the classroom are named. They suggested the name 'authorship and imagination/drama corner'.

Figure 4: Providing similar costumes to characters in Mansour

4.5.2.4 Introducing LP to the Children.

The study spanned 12 weeks. The first two weeks involved building a positive relationship with the participants by being in the classroom to observe the children's play and playing with them. The following week, I conducted teacher workshops and interviewed the teachers. During the next eight weeks, the children engaged in LP activities where I observed them during this time. The last week was devoted to interviewing the parents and teachers.

The first and second processes of the LP (play and storying, respectively) were introduced and covered over approximately two weeks, and the last process (collaboration and production) lasted six weeks. In the daily schedule, the teachers sat with the children in a circle before corner play to introduce any new object added or an activity that they wanted them to complete. This time was also used by the teachers to introduce new elements in the LP.

In the first week of introducing the LP, the teachers spoke with the children about their favourite characters and introduced them to the first process, which Wohlwend (2013) called 'play'. The children then drew pictures based on their favourite characters using the materials that I had provided, such as white paper, coloured pencils, felt pens and scissors. They were free to cut out the characters and play with them. During this week, I added new tools to engage the children, such as cardboard, to help them prepare for making their own stories. In this respect, the children's practice included playing, drawing and writing, and the children developed their work every day (Figure 5).

Figure 5: Introducing art tools in LP

During the second week, the teachers introduced the children to the second process called 'storying' (Wohlwend, 2013). The teachers showed the children short videos about the Mansour series and then explained how to use six-block storyboard tablets to retell the stories. Each child worked individually on their storyboard. The following day, the video was played

a second time so that the children could continue reflecting on their storyboard. They were given the option to write on the lines below the drawing boxes, some children preferred to draw another character, such as PJ Masks or SpongeBob SquarePants. I explained to the teachers that this is expected, and the children should be free to do so (Figure 6). Thus, through storyboarding, the children developed authorship, which Wohlwend (2013) had found in her study. I provided each child with a storytelling folder that was labelled with their name, which allowed the teachers to keep a clear record of the children's productions and enabled the children to resume or complete their projects in the following days.

Figure 6: Introducing storyboards in LP

The last part of the process was collaboration and production, which lasted six weeks. I provided puppets, costumes and props to stimulate play. These tools were introduced gradually. Wohlwend (2018) indicated that 'Children produce action-based stories and imaginary scenarios by enacting pretend identities with bodies or by animating toys, props, and other materials that enable players to virtually inhabit a shared pretend context' (p. 301). The props and puppets helped them become involved in the play and in creating their stories (Pellegrini & Galda, 2000). Furthermore, I provided tasks in the first part of the process, such as making cardboard and masks to use during play. a digital camera was then introduced as a new storytelling tool, and the teachers explained how to use it. In the workshop, the teachers

suggested introducing one digital camera initially, to be followed later by a second camera. Most of the children were excited to use the camera; therefore, the teacher suggested that it would be better to have two camera operators to film the stories each day. This was aimed at achieving equality between the children and organising the work of producing the stories. The children were not limited to using storyboards; they were encouraged to further explore storytelling through collaboration. In this stage, the children filmed their stories and developed them using a variety of resources (Figure 7).

Figure 7: Introducing digital cameras and costumes in LP

Furthermore, I also provided a laptop in which children could connect the camera and watch their videos. Some teachers suggested, to which I agreed, that children could also see their videos by connecting the laptop to the projector during the last classroom meeting. This allowed all the children to view their videos as children were used to reviewing or reading stories in the last meeting (Figure 8).

Figure 8: Introducing the use of projector to show children's videos.

During the LP, the table that I had provided in the first process, which included paper, crayons, etc., continued to be available, which gave the children an alternative if they did not want to participant with other children to make stories, or if they preferred to draw a character or make a mask to use in their stories. To ensure that the activities would keep making sense to the children and depending on their responses to them, the teachers were free to revise or interrupt to avoid a sense of repetition and a feeling of boredom on the part of the children.

Even though I had discussed the elements of this curriculum and provided the teachers with a table of the different processes, along with a suggestion of tools to be used and activities to be carried out during each process, I still reminded them every day before starting the session and discussed what the children expected that day. The teachers introduced the activities and discussed what the children would do that day. Then they completed their work as usual in the classroom to observe, encourage and answer the children's questions. I prepared the materials before the children started the activities every day. Some of the materials were provided after I had listened to the children's conversations and understood their interests, such as their talk about Nano, which is a remote helicopter that can go everywhere to help Mansour in his adventures. I provided the materials and asked the teacher to introduce them to the children. The teacher asked the children how they would make Nano and use it in their play. In the

current study, I used the participant observation method during these activities and conversations with the children to better understand their engagement and practices as well as to collect field notes, videos and artefacts. To help the children, I explained some activities further if they asked, such as how they develop the storyboard, how the cameras worked and how they could see what they had filmed.

4.6 Research Methods

To answer the research questions, I used a variety of research methods (Table 3). My project applied a case study using the ethnographic approach, which included multiple sources of evidence. This was in accordance with Yin's (2014) assertion that 'a major strength of case study data collection is the opportunity to use many sources of evidence' (p. 119). Triangulation helps gather more reliable data (Cohen et al., 2018) and improves the accuracy of the findings (Creswell & Creswell, 2018). Thus, participant and non-participant observation, interviews conducted with parents and teachers and conversations with children comprised the data collection methods used in this study. Table 3 summarises the research questions linked to data collection methods, the timeframe for each method, the tools used, and the data collected.

Table 3: Summary of the Data Collection Methods

Research Questions	Data collection methods	Context	Tools	Data collected	How much of each sort of data
RQ1	Non-participant observation	During normal literacy practices (three times) During implementing (LP) (three times)	Leuven Involvement Scale for young children	Notetaking Photos	Photos (340) Audio recorded (140 minutes total across 5 interviews with two
RQ1,RQ2, RQ3	Teachers' interviews	Before and after the LP	Interview questions	Audio recording Notetaking	

RQ1	Parents' interviews	After the LP	Interview questions	Audio recording Notetaking Whats App	teachers and the principal: 190 minutes total across 6 interviews with 6 mothers)
RQ1, RQ2	Participant observation	During the LP	Observation sheet Digital camera GoPro camera	Field notes include conversations with children Photos Videos Children's artefacts	Videos (59 videos, lasting 290 minutes)

4.6.1 Non-participant Observations

When researching children, observation helps develop a researcher's understanding of an individual or group (Greig et al., 2007). Through the non-participant observation method, the researcher records their observations using a systematic approach that avoids direct involvement with the participants (Gray, 2014). In this context, the observer sits at the back of the classroom away from the subjects, which facilitates the production of data (Cohen et al., 2018). Watching what the participants do and listening to what they say rather than interfering by asking them questions is a key feature of non-participant observation (Gray, 2014). In this thesis, non-participant observation was conducted using the LIS and taking field notes. Observation, when coupled with interviews, allows the researcher to compare the phenomena observed in the classroom with the participants' own perceptions of and reflections on the events. The limitations of this observation method are that it does not consider certain important classroom features, such as creativity, the background of the activities presented and other contextual factors (Cohen et al., 2018). Subjectivity can also affect data collection (Parke & Griffiths, 2008). Furthermore, MacRae & Jones's (2020) critique indicates that instead of

being positioned as ‘outside’ using LIS and not being involved in a given event, we need to develop attentional strategies to become more involved in such events. We can never fully understand children’s engagement based simply on observing external signs. Children might exhibit some signs like paying attention to a teacher, as they think they have to do so, but it may not actually be a sign of their involvement. Recent literacy studies as discussed in LR have clarified that children can embody literacy, meaning using their bodies to make stories, for example, which could also be considered a form of involvement. To minimise subjectivity, triangulation of data collections was applied in the current study, in which the data was collected by using two observation methods (non-participants observation and participant observation) and interviews with teachers and parents.

The LIS for young children was used in this study to observe the children’s engagement in activities related to literacy practices. This tool was created by Ferre Laevers and developed by a team of researchers under his supervision. Laevers (2005) stated, ‘Involvement is a very special state of mind that can be observed both in babies and adults’ (p. 10). Laevers (1993) also stated that involvement is ‘a quality of human activity, characterised by concentration and persistence, a high level of motivation, intense perceptions and experiencing of meaning, a strong flow of energy, a high degree of satisfaction, and based on the exploratory drive and basic development of schemes’ (p. 61); he established a connection between engagement and motivation by indicating that a person cannot be involved if they are forced to do something—they must be inwardly motivated to do it. In this respect, these characteristics of involvement could be applied to understand and compare the level of children’s involvement in traditional literacy and in implementing LPs. The LIS is a five-point development scale intended to measure involvement, with five the highest point of engagement and one being the lowest. When a child is assessed at the highest level, it means they are totally engaged in the activity,

whereas the lowest level indicates an absence of participation or commitment (see Appendix C).

I used the LIS for the eight children three different times during traditional literacy activities and three different times when implementing the LP, using field notes and taking pictures. Notetaking is crucial in all types of observations and is used in addition to any visual modes that have been collected (Gray, 2014). On the second, third and fourth week of conducting the current study, this scale was used during traditional literacy practices: during when the children were writing on their worksheets, in a writing competition on the main writing board, playing letter-matching games using paper and pen, and while singing songs with the teachers relevant to letters. All of these activities were representative of typical teacher behaviours. On the fifth, sixth and seventh weeks of conducting, the scale was used again during implementing LPs. Before observing, I spent time with the children playing both in and outside the classroom to build relationships with them. Therefore, I assumed that they were comfortable when I observed them. Before using the LIS, I read the literature to find an additional tool besides participant observations and interviews to help observe the children's engagement to achieve triangulation. I found that the LIS was used with young children to observe their engagement in educational settings and in several studies (Laevers, 1993, 1994; Marsh et al., 2005; Storli & Sandseter, 2019**)**. The LIS has become a popular way for UK practitioners to assess quality in educational settings (MacRae & Jones, 2020).

Next, I contacted the early learning centre in London to ask how to obtain the training pack. After I bought the manual and DVD on the LIS, I trained myself on its use. The DVD contains 15 video clips in different educational settings with young children and offers a full and clear description of each point in the scale. The next step was piloting the scale before I used it with the participants. When I visited the kindergarten to conduct this study, I asked if any teachers would like to volunteer as co-observers to achieve trustworthiness. One of the

administrative workers volunteered. Her major is in education, and she was a primary teacher with experience in terms of observing children. I trained her to use this scale and, alongside her, observed the same three children in literacy activities on three different occasions. The children for this trial were different from those selected to participate in the study. After each observation, we discussed our observations to discern any similarities and differences. After determining that the results of our observations were close, I also observed the participant children with her. We sat together, and after each observation, we discussed what we had seen and decided on the final result.

This study began with non-participant observation, followed by participant observation in line with Creswell and Poth (2018), who indicated that the most effective way to use participant observation is to start as a nonparticipant and then move to a participant role.

4.6.2 Participant Observation

In qualitative research, observation is one of the methods for collecting data, and the researcher is required to use their five senses (Creswell & Poth, 2018). In participant observation, the observer attempts to become part of the group he/she observes by having 'not only a physical presence and a sharing of life experiences but also entry into [the participants'] social and symbolic world through learning their social conventions and habits, their use of language and non-verbal communication' (Robson & McCartan, 2016, p. 323). Participant observation with children includes, 'watching, listening, reflecting and also engaging with children in conversation, to naturally occurring events and to the researcher's understanding during the process of fieldwork' (Mayall, 2008, p. 217). Using this method helped me generate rich descriptions of data and observe behaviour in the natural setting that could not have been found via other methods, such as surveys (Cohen et al., 2018), from the participants' perspective (Silverman, 2006). Furthermore, participant observation allowed me to collect all actions and recorded data in real time (Creswell & Creswell, 2018; Yin, 2014). I was able to

produce written accounts of my observations, focusing on verbal as well as non-verbal interaction (Gray, 2014). According to Yin (2014), 'participant-observation provides certain opportunities for collecting case study data' (p. 116).

In this study, I started to build rapport with the participants after introducing myself to the principal, the other teachers, the parents and the children. I was in the kindergarten classroom every day, and my working area was in the teachers' room, which facilitated informal conversations with them during their breaks, helping us build relationships. The teachers introduced me to the children. I was both in and outside the classroom during the children's play time each day to build rapport during the first and second weeks. I sometimes played with them, having previous experience in this area. It was important for the children to be familiar with me when I started the participant observation.

During the study, I observed eight children engaged in playshop activities and used my field notes. As mentioned earlier, I adopted the role of 'participant-as-observer' (i.e., being part of the study, participating in activities and recording what happened in depth) (Cohen et al., 2018). Each day, I observed two children during playshops. In total, I observed each child seven times for 30 minutes per session. My written observations included the children's interactions, feelings, engagement in activities, verbal and non-verbal communication, my reflection and some quick notes. After leaving the classroom, I re-read my observations and added anything I had forgotten when making quick notes. During the observations, I had informal conversations with the children, asking for their thoughts, feelings and what sort of activities they liked. To further encourage them to talk, I sometimes used props, such as puppets, during these conversations.

In addition to direct verbal communication, the children were also invited to express themselves through alternative ways of communication, such as drawing. In that case, the children were encouraged to explain what their drawing was about (Christensen & James,

2017). Audio recordings were not made during the conversations with the children because an attempt to do so produced unclear sound due to the noise level in the classroom. so, I wrote down what they said during the conversation. Some children asked me about the activities and how to use some of the tools. During the observation, I took pictures (340), recorded videos (290 minutes) and collected children's artefacts. Although a GoPro camera recorded the observations, it was occasionally paused; in Saudi culture, teachers do not want to be filmed because they do not wear a 'hijab' in the classroom.

Some disadvantages of participant observation included that the challenge of being accepted by the participants, the risk of researcher bias and the time-consuming nature of participant observation (Robson & McCartan, 2016). However, this approach is appropriate when working with small groups, especially with young children, who see the researcher as 'akin' to a teacher (Robson & McCartan, 2016). Further disadvantages of this include the possibility that the subject of study being physically taxed or emotionally depressed, which the observer might find challenging (Yin, 2014). In the current study, the topic of study was not assumed to cause any depression. Children may be more vulnerable than other groups to power imbalances with adult researchers (Einarsdottir, 2007). It was quite challenging to observe the children in a classroom; however, my previous experience as a primary teacher and in my master's practical course enabled me to face the challenges presented and to minimise a power imbalance between me as a researcher and the children. This is discussed in Section 4.7.1 Research with Children.

4.6.3 Interviews

Interviews are 'a data collection method which enables the interviewer to elicit information, feelings and opinions from the interviewee using questions and interactive dialogue' (Matthews & Ross, 2010, p. 219). As such, interviews have become a key feature in

case study research (Yin, 2014). Here, interviews served as a tool for understanding the participants' thoughts and feelings regarding their experiences within the LP. My enquiry drew on constructivist paradigms to address multiple aspects of reality as perceived by the participants through semi-structured interviews—a widely used method in qualitative research (Gray, 2014). In semi-structured interviews, 'Interviewers have their list of topics and want to get responses to them, but they have considerable freedom in the sequencing of questions, in their exact wording, and in the amount of time and attention given to different topics' (Robson & McCartan, 2016, p. 290).

Semi-structured interviews have the benefit of being flexible and conducive to obtaining in-depth information from interviewees in an open, conversational manner. In this respect, they constitute an effective strategy to probe for more explanations from participants and explore their experiences and feelings in a comprehensive manner. They also prove effective for observing and understanding verbal and non-verbal cues. However, the semi-structured interview method is not without its drawbacks and limitations, including its time-consuming nature, which necessitates methodical preparation as well as post-interview transcription and analysis, and a lack of standardisation, which can foster interviewer bias (Robson & McCartan, 2016). Finally, Yin (2014) critiqued that through the semi-structured interview method, the 'interviewee gives what [the] interviewer wants to hear' (p. 106). The interviews in the current study were conducted with a neutral, non-judgemental approach. An interview guide, which was developed based on my research questions, literature and prior knowledge, is crucial in conducting a semi-structured interview. By adapting the interview guide, I identified the main topics or themes in this research based on the research questions (Morris, 2015). I then generated questions under each topic or theme. As preparation, I made the questions clear and understandable and reviewed them with my supervisor. Semi structure interviews were used with both parent and teacher participants.

After passing out information sheets to the teachers and upon consent, I interviewed the teachers of the classroom being studied, including the main teacher, the Arabic teacher and the English teacher, before and after applying the LP. I audio-recorded the interviews with the Voice Recorder app after the teachers approved, with only one teacher asking not to be recorded. I also used notetaking to record the interviews, including comments. The length of each interview was around 25–30 minutes. All the interviews were conducted in the kindergarten at a time chosen by the teachers and in the Arabic language. Before applying the LP, the teachers were asked about the curriculum, their methods for teaching literacy, the classroom environment, time for play and the use of technology and popular culture. After the LPs were implemented, they were asked about the children's level of engagement, enjoyment and motivation regarding the various literacy activities, and they were invited to express their views on the use of popular characters and new technologies in the classroom. They were also asked about their perspectives regarding the new curriculum that was applied. The discussion guide for interviews is provided in Appendix D.

The principal was also interviewed after applying the LP. While this was unplanned, she had observed the children from outside the classroom through a window and had asked to attend some playshops because she wanted to understand why the children were busy. One of the features of qualitative research is flexibility, which allows the researcher to improvise and change techniques or data collection methods (Creswell, 2003; Robson, 2011). During the interview, I asked the principle for her perspective regarding the children's engagement, literacy practices and use of technology and popular culture.

The eight children were also interviewed; I used a conversational tone with the children rather than a formal interview style. As noted earlier, the children were asked for their thoughts, feelings and preferred activities.

A final interview series was conducted with the parents (mothers) of the eight child participants after obtaining the parents' consent. As previously mentioned, I met with and answered the questions of the mothers when they dropped off their children. They were given my phone number, and a WhatsApp group enabled me to contact them easily. Some of the mothers sent me pictures of their children engaging in literacy practices after applying the LP. Additionally, some of the children were excited to show their productions from the playshops to their mothers at pick-up time, which enabled me to have informal conversations with the mothers. During the interviews, the mothers described their children's literacy and play practices at home, time spent using technology and their children's favourite characters. They were asked to comment on any changes they noticed in their children's play and literacy practices at home and whether the children had expressed their feelings regarding the new curriculum. The length of each interview was 25–35 min. Two of the interviews were conducted in the kindergarten classroom, whereas others were conducted by phone because most of the mothers had jobs. I again used an app to audio-record the interview. All the mothers agreed to be recorded except two, for whom I took notes. Comments were written for all interviews, regardless of type.

All the teachers and parents spoke Arabic, so the interviews were conducted in the Arabic language. After writing the questions in English, I translated them from English to Arabic and checked the accuracy of the translation with a colleague in the School of Education at the University of Sheffield who speaks Arabic and English. To pilot the teachers' questions, I posed them to a teacher outside the study to ensure their clarity. Amendments were made based on the feedback from the pilot about the clarity of the questions. Pilots are suggested to improve data collection methods, including questions (Yin, 2014). For the parent interviews, I used the same approach. I interviewed two mothers (my friends) who have children aged five to six years who attended kindergarten in Riyadh. After completing these interviews, I

transcribed them immediately to ensure accuracy. All the participating teachers agreed with the transcripts that I provided to them. Subsequently, we discussed them in the kindergarten and the teachers did not request any changes.

4.7 Ethical Considerations

Ethical consideration is crucial in all types of research, but it is fundamental when the research involves a vulnerable group (Flewitt, 2006), such as the children in the current study. Creswell and Poth (2018) indicated that ethical issues in qualitative research can be described as 'occurring prior to conducting the study, at the beginning of the study, during data collection, in conducting data analysis, in reporting the data, and in publishing a study' (p. 54). In other words, it refers to 'the moral principles that guide research, from its inception through to the completion and publication of results and beyond' (Matthews & Ross, 2010, p. 71). Cohen et al. (2018), stressed that 'educational researchers must take into account the effects of the research on participants; they have a responsibility to participants to act in such a way as to preserve their dignity as human beings' (p. 112). Given that ethical considerations are crucial in the context of education and research involving children, confidentiality and no-harm policies were strictly observed, and all participants were informed of them beforehand. While several ethical considerations were mentioned previously, they are detailed further in the following sections.

4.7.1 Ethical Approval

This study was granted ethical approval by both the Research Ethics Committee of the University of Sheffield and the Ministry of Education in SA in Riyadh (see appendix E & F). This official licence was essential for conducting my study in a kindergarten setting.

4.7.2 Consent and Assent

Informed consent means 'the people who are going to take part in the research understand what they are consenting to participate in' (Mathews & Ross, 2010, p. 73). This study was fully explained to the teacher and mother participants but in terms of children this is discussed further in the following. I visited the kindergarten and met with the principal to explain my research in detail, including the aims, tools, data protection processes and methods to be used. I answered her questions, provided the information sheets for the teachers and parents, explained and provided the consent forms and gave her my phone number. She then gave me a tour of the kindergarten, the classrooms and the teachers' room. I introduced myself to the teachers as a PhD student and explained my presence, the research aims and the methods to be used before passing out the information sheets. The voluntary nature of the study was explained, including the right to withdraw at any time, and the teachers were asked to read and sign the consent forms. To protect the participants' right to anonymity, I explained that the study would use pseudonyms for the participants and that data relating to the participants would be used for research purposes only. To that end, the participants were shown how the audio recordings and collected data would be secured. All digital and paper files will not be accessed by others, and all will be destroyed upon completion of my research. This is indicated in previous literature (Cresswell & Poth, 2018; Matthews & Ross, 2010; Silverman, 2013). Furthermore, I observed Robson's and McCartan's (2016) principle, according to which 'confidentiality should extend beyond not naming participants to not revealing personal details which might give away a participant's identity' (p. 220).

The parents, whom I met at a parent meeting, of the eight participating children also received the information sheets and consent forms. I introduced myself, talked about my research, answered their questions and provided my phone number. I asked them to talk with

their children about the research and explained the use of anonymity for them and their children, the data protection procedures and their right to withdraw from the study at any time.

This research focused on children aged five to six years. In this respect, there is a need for the children's assent as well as their parents' consent. Assent from children in research is required internationally (Baines, 2011). 'Young children are considered to have neither sufficient age nor maturity to provide informed consent to research participation' (Dockett & Perry, 2011, p. 233). Therefore, in the current study after I received the parents' consent forms, children's assent was continually negotiated through discussion and observations (Dockett & Perry, 2011) under the acknowledgement that participating children have a right to refuse and leave the study at any time. I used ongoing processes and negotiation with the children every time they started activities and when introducing new tools (Flewitt, 2006). At each step, I asked the child whether they wanted to participate. If they wanted to draw/play/tell me something, I showed them the camera that was used to record the interaction and allowed them to touch it if they wished. Ongoing conversations between myself and the children helped build our relationships. Young children will forget if they are only asked about giving consent at the beginning of the study (Einarsdottir, 2007). Throughout the study, I watched for signs of potential distress or reluctance to participate, such as self-defensive body language or verbal and non-verbal refusal (Skanfors,2009). Additionally, I explained to the children what the current study involved and used images as a way for it to make sense to them (Yamada-Rice, 2017). I provided a child friendly form for children (Appendix G) and I believe that 'assent, like consent, requires an ongoing discussion that does not end after signing one's name' (Kon, 2006, p. 1808). Furthermore, confidentiality was strongly applied in this study; I ensured that all names were anonymised, that the setting name would not be recognised and that all data collected would be used for research purposes only.

In this thesis, WhatsApp was used for communications with the teachers and the mothers. All the participants agreed to use this app, as it is widely preferred in Saudi communications. After I conducted interviews with the mothers, asking them about their children's engagement and literacy practices at home after implementing the LP, some of the mothers wished to support their interview by sending me photos of their children engaged in literacy practices at home. These photos, utilized in my analysis, were securely kept and were immediately stored on a computer protected by a password. In recent years, WhatsApp has become increasingly recognised for its data-collection capabilities and for using it, it is essential to control access to documents with passwords or other security features (Mudzusi et al., 2022)

4.7.3 Research with Children

This research was conducted with children with the aim of gaining a better understanding of their engagement and experience when applying new curriculum while acknowledging that they are competent to shape and share their own views and experience, as several studies have confirmed (Clark, 2005; Dockett & Perry, 2011). Before implementing the new curriculum into this study, I tried to build relationships with the children by engaging in their activities inside and outside the classroom. As mentioned earlier, I have experience as a primary teacher, academic study experience in early childhood and personal experience as a mother of two young children (aged eight and five years), which gave me the confidence to work with children. However, this was my first time researching with children, so I took considerable time reading about ways to minimise a power imbalance between me as a researcher and the children (Christensen & James, 2017; Clark, 2005; Einarsdottir, 2007; Flewitt, 2006).

Thus, the current study was conducted in a room near to the classroom. These two areas were connected by a door which was left open so the children could at all times feel secure as they could see a place familiar to them. A familiar environment and adult participation in studies helps children feel comfortable (Clark, 2005; Einarsdottir, 2007). In the current study, the teachers introduced the new activities to the children, and I completed the explanation if they needed help. I felt it was best to have someone familiar explain the activities. Another level of comfort was established when the children saw me speaking with their parents at pick-up time.

I used a conversational tone with the children rather than an interview style and asked about their thoughts, feelings and which activities they liked in the playshops, which enabled me to listen intently and collect data (Gollop, 2000; Mayall, 2008). I drew on Christensen and James (2017), who stated that visual materials stimulate children's participation. Therefore, I sometimes used props, such as puppets, during the conversations. In addition to direct verbal communication, the children were invited to express themselves through alternative ways of communication, such as drawing, which is an effective way to understand children's views (Christensen & James, 2017; Clark, 2005). The children were encouraged to explain what their drawing was about. Some children wanted to talk about what they liked about the playshops, while others preferred to draw. Furthermore, I always provided choices (e.g., 'Would you like to be a camera person today or later?'; 'Would you like to produce the story using a puppet show or film?'; 'Would you like to complete your story or start a new one?'). I sometimes spoke with them in twos during their play or drawing and found that for some children, this was more comfortable and supportive than one-on-one conversations (Clark, 2005). Furthermore, Flewitt et al. (2015) found that using digital devices (iPads) in the classroom provides young learners with empowering 'expert' roles that remedy the power imbalance between teachers and children. The current study applied LP which includes using digital

cameras which might allow children to feel enabled and potentially reduce any power imbalance between me as a researcher and the teachers and children.

4.8 Establishing Trustworthiness

Many researchers use the term 'trustworthiness' to refer to validity and reliability in qualitative research (Bloomberg & Volpe, 2016; Robson & McCartan, 2016). In this respect, Cresswell and Poth (2018) declared, 'Interpretive research is a chain of interpretations that must be documented in order for others to judge the trustworthiness of the meanings arrived at in the end' (p. 263). The four main criteria of trustworthiness are credibility, dependability, transferability and confirmability (Shenton, 2004). To ensure trustworthiness in this study, I implemented the strategies described below.

4.8.1 Triangulation

Triangulation involves combining different research methods to collect data. The use of different methods in research enhances the validity of the findings (Silverman, 2006) and is a commonly used strategy to improve rigour (Robson & McCartan, 2016). This study employed non-participant observation with children, followed by participant observation with them, including conversations with them and interviews with their teachers and parents. This strategy elucidated the phenomena in this research from different perspectives with the goal of reducing bias and enhancing trustworthiness.

4.8.2 Thick Description

The use of thick description provided detailed depictions of my observations in accordance with Stake's (2010) assertion that 'a description is rich if it provides abundant, interconnected details' (p. 49). Thick description 'can be an important provision for promoting credibility as it helps to convey the actual situations that have been investigated and, to an

extent, the contexts that surround them' (Shenton, 2004, p. 69). I used field notes for my observations and pictures, videos and audiotaping to record the interviews conducted with the teachers and parents, which were then transcribed. Recording all study processes is crucial, including field notes, transcripts and details of the data analysis (Robson & McCartan, 2016). Yin (2014) indicated that case studies need to be clarified in terms of their steps and processes to enhance trustworthiness. Lankshear and Knobel (2006) stressed that the researcher needs to clarify the methodology and explain the rationale for research decisions. In this thesis, I described the context of the study in Chapter One and Four, clarified the steps that I followed in the case study, described the process of implementing LPs in a Saudi kindergarten, indicated the selection the sample and site, explained the data collection methods and analysis and provided justification for each step to reduce bias and enhance trustworthiness. These were all covered in Chapter Four.

4.8.3 Prolonged Engagement

Prolonged engagement involves spending stretches of time in the study context to build a relationship with all participants, gain acceptance and minimise the risk of reactivity (Robson & McCartan, 2016; Silverman, 2013). To build relationships, I engaged in the children's activities before implementing the new curriculum, had informal conversations with the teachers and the parents while in the kindergarten classroom, conducted workshops with the teachers and established a WhatsApp group with the teachers and parents to ensure an open line of communication. Prior to beginning the study, I ensured that all participants understood their rights to participate or to withdraw from the study at any time and for any reason. Shenton (2004) indicated that it is important to give these choices to all study participants.

4.8.4 Reflexivity

I explored researcher bias through the process of reflexivity, whereby I constantly reflected on my position in this study and provided explanations based on my experiences and perspectives (Creswell & Poth, 2018). Personal background and experience related to a study should be presented to enhance trustworthiness (Shenton, 2004).

From the beginning of the study, I discussed my research questions and shared and discussed my data collection methods, analysis, coding and themes with my supervisors to receive feedback. My methods and study process were also discussed with my colleagues to gather outside perspectives as a way to reduce bias. Shenton (2004) indicated that 'The meeting and probing from others may help the researcher to recognise his or her own biases and preferences' (p. 67). This strategy involves 'an interpretation beyond the researcher and [is] invested in another person', which can enhance trustworthiness (Creswell & Creswell, 2018, p. 201).

Finally, to confirm reliability in the non-participant observation, I used the LIS to observe the eight children alongside a volunteer teacher in the kindergarten and compared and discussed the findings with her. I also shared my interpretations and transcripts with the teachers in the kindergarten to ensure that what I had written reflected their thoughts and views.

4.9 Data Analysis

Data analysis is 'a process of organising and sifting through your data, then looking for and mapping any patterns or regularities in your data as a way to interpret it' (MacNaughton & Hughes, 2009, p. 172). From the perspective of Cohen et al. (2018), qualitative analysis clarifies 'how we move from the data to understanding, explaining and interpreting the phenomena in question' (p. 643). Thematic analysis is used within qualitative research as 'a process of segmentation, categorisation and relinking of aspects of data prior to final

interpretation' (Matthews & Ross, 2010, p. 373). It is 'a method for identifying, analysing, and reporting patterns (themes) within data' (Braun & Clarke, 2006, p. 79). I used this process in the present study to analyse the data from interviews, observations and visual data. The data collected were qualitative (i.e., word-based rather than number-based [i.e. quantitative], images / videos). This study includes essential qualitative research features, such as explanation and interpretation. I followed the popular processes defined by Braun and Clarke (2006, 2012, 2019) to analyse the data, as described below.

To *familiarise myself with the data,* I immersed myself in it by listening to the audio interviews with the teachers and parents, followed by transcribing them individually. I watched video data, read and reread the written data from the field work and transcripts and sorted them to place all transcripts together, all field notes together and all videos and pictures together. Despite this procedure being time consuming, it familiarised me with the data and piqued my curiosity about it. While listening to the recordings and reading the field notes, I took notes based on my research questions and wrote comments, thoughts and interesting points regarding the data.

Next, I *generated codes* from the data collected. A code is 'a word or short phrase that symbolically assigns a summative, salient essence, and/or evocative attribute for a portion of language based or visual data' (Saldana, 2016, p. 4). Codes 'identify a feature of the data that appears interesting to the analyst' (Braun & Clarke, 2006, p. 88). In this phase, I moved to more organised engagement with the data.

I chose MAXDA, a software programme for qualitative and mixed methods data, to organise the codes. It supports different languages, including Arabic, and was recommended by several colleagues. In addition to attending several MAXDA training workshops on their website, I watched many related YouTube videos. I also registered for free virtual workshops

provided by my university in SA to learn how to use MAXDA. This software, like a number of others, helps organise data (Saldana, 2016). I imported all the transcripts, field notes, photos and videos into the software and started coding. When the transcripts were complete, the work on the field notes began. My field notes were massive and interwoven, and I felt that the programme did not help me manage the data well. Thus, I manually wrote the codes using coloured pens. I identified the names of codes and highlighted the text associated with them, then connected them to the transcript. This approach felt comfortable and helped me focus and think deeply. I could see my data, find the codes and read and reread them. It is possible to code either manually or through a computer programme (Kelle, 2004). Braun and Clarke (2012) indicated that there is no wrong or right way to create codes; however, it is essential that coding is inclusive and systematic. 'Both manual and computerized software techniques were found to be reliable and dependable' (Owan & Bassey, 2018, p. 44). After generating the codes, I reread the data to determine whether the same codes could be used or whether new codes were needed to capture the data. In the present study, I generated inductive 'data-driven' codes to see what would emerge from the data based on the research questions. Then I generated deductive 'theory-driven' codes related to SDT. Similar codes were placed together based on the research questions and placed in meaningful groups.

When *searching for themes and reviewing themes,* it is important to note that a 'theme captures something of interest or importance in relation to your research questions' (Robson & McCartan, 2016, p. 468). 'Themes are broad units of information that consist of several codes aggregated to form a common idea' (Creswell, 2013, p. 186). I categorised relevant codes into possible themes and used tables as a visual representation. Braun and Clarke (2006) suggested using different kinds of visual representations to sort data, such as tables, mind maps and categorising into theme piles. After generating the initial themes, I added sub-themes related to the initial themes. After considering the relationships between the themes and how they

worked together, I found that some codes were not categorised under any theme, so I put them in a remaining category. After reviewing the themes, I re-read each theme and the codes under each carefully to ensure that they reflected the data and supported the theme (Robson & McCartan, 2016). Some themes needed to be broken into separate themes, while others required new sub-themes. While this task was challenging because the data were interwoven, it helped me determine whether all the themes formed a coherent pattern, related to the data well and answered the research questions.

Defining and naming the themes was the next step in the analysis. After feeling satisfied with the lists of themes, I ensured that each theme was clear and captured well (Braun & Clarke, 2006). I wrote sentences to describe each theme and ensured that what I wrote fit the data and helped answer the research questions. Each theme/subtheme was reviewed to ensure that it represented the meaning of the data. Finally, I reviewed the names of the themes to ensure that they were clear, informative, concise and understandable for readers, as Braun and Clarke (2012) recommended.

The data analysis concluded with *producing a report.* The data were presented using the themes, and it was important to ensure that the report offered a convincing story about my data, answered the research questions and referred to relevant literature. I ensured that there was sufficient evidence for the themes and gave examples or quotations to capture the data under each theme to prove the merit and trustworthiness of my analysis (Robson & McCartan, 2016). Braun and Clarke (2006) stated, 'Choose particularly vivid examples, or extracts which capture the essence of the point you are demonstrating, without unnecessary complexity' (p. 93). The report is presented in the findings and discussion chapter.

This study used the LIS during non-participant observation. Eight children were observed three different times during traditional literacy activities and three different times

when implementing the LPs. As mentioned previously, the scale has five points to measure involvement (five = highest, one = lowest). The results of the involvement in both activities are presented and compared in the findings and discussion chapter under the involvement theme.

4.10 Chapter Summary

This chapter discussed the methodology that was implemented in the present study. To fulfil the aim of this study and answer the research questions, a qualitative case study was chosen, which allowed me to understand and collect in-depth data using different methods to explore the impact of a new curriculum on children's motivation, engagement and literacy practices in a kindergarten setting. The data collection methods were explained including non-participant observation, participant observations, interviews with teachers and parents. The selection of site and sample was clarified. The process of conducting the LP was explained and the ethical considerations were stated. Furthermore, the processes for ensuring trustworthiness and analysing the data were outlined. In the following chapter, I present and discuss the study's findings.

Chapter Five: Findings and Discussion

5.1 Introduction

This chapter presents the results of applying Literacy Playshops (LPs) in one Saudi kindergarten and discusses the themes that emerged from the data in relation to the literature review. In the previous chapter, I presented the methodology, data collection methods and outlined the data analysis procedures. In this chapter, Table 4 clarifies the themes found in this thesis and provides a summary of each theme. Section 5.2, I provide background information about the eight children who participated in the study. The chapter is divided into three main sections. Section 5.3 answers the first research question, presents the findings and discusses the impact of implementing the LP on children's literacy practices and engagement. Section 5.4 answers the second research question, presents the findings and discusses the impact of the LP on children's motivation, as understood through Self-Determination Theory (SDT). Section. 5.5 answers the third research question, presents the findings and discusses the teachers' feelings about the advantages and disadvantages of the LP approach.

Table 4: The Themes Found in the Thesis

Themes and subthemes	Summary
5.3 The impact of implementing the Literacy playshop on children's literacy practices and engagement.	This theme presents the findings of implementing the LP in children's literacy practices and engagement in the kindergarten setting. It is divided into two themes— the school and home settings.
5.3.1 Impact on literacy practices at school	This presents the findings of implementing the LP in children's literacy practices in the kindergarten setting.
5.3.1.1 Using multiple modes to make their own stories.	This theme analyses and discusses the different ways that children created imaginative stories. Some children used puppets, drew images, wrote words, and letters using storyboards, while others used figures and artefacts.
5.3.1.2 Planning and creating themes.	This analyses and discusses that the children in the current study were observed planning their own imaginative stories
5.3.1.3 Improvisational play	This analyses and discusses that the children were not only planning their stories but also improvising stories by themselves
5.3.2 Impacting on literacy engagement at school	This outlines the impact of implementing the LP on literacy engagement at school. This presented in four subthemes: involvement, high concentration, enjoyment and Frequent participation.

5.3.1.1 Involvement	This theme analyses and discusses children's involvement in classroom during playshops. This was explained by using the Leuven Involvement Scale (LIS), teacher interviews and continued observation.
5.3.2.1.1 Leuven Involvement Scale (LIS)	This theme analyses and discusses the results of applying LIS.
5.3.1.2 High concentration	This theme analyses and discusses that the children exhibited high concentration in their practices after applying the LP.
5.3.1.3 Enjoyment	This them analyses and discusses that the children enjoyment during playshops.
5.3.2.4 Frequent participation	This theme analyses and discusses that the children repeating the activities many times.
5.3.2 Impact on literacy practices at home	This presents the findings of implementing the LP in children's literacy practices at home.
5.3.2.1 Extending activities to children's homes using multiple modes	This analyses and discusses that the children continued their practices from kindergarten at home.
5.3.3 Impact on literacy engagement at home	This presents that the impact of the LP on children's literacy engagement at home. it divides into two themes: Enjoyment and Increased time spent playing.
5.3.4.1 Enjoyment	This analyses and discusses that the children enjoyment as the children's mothers reported.
5.3.4.2 Increased time spent playing	This analyses and discusses the children spending longer than usual on play using elements of the new curriculum.

5.3 The impact of the LP on children's motivations, as understood through SDT	This presents the impact of the LP on the children's motivation through the lens of SDT. This is divided into the following three subthemes three subthemes: autonomy, competence and relatedness
5.4.1 Impact on autonomy	This analyses and discusses the possibility of the LP fulfilling the need for autonomy.
5.4.2 Impact on competence	This analyses and discusses the possibility of the LP fulfilling the need for competence.
5.4.3 Impacts on relatedness	This analyses and discusses the possibility of the LP fulfilling the need for relatedness.
5.5. Teachers' feelings about the advantages and disadvantages of the LP curriculum	This presents teachers' attitudes towards applying the LP. It divides into two subthemes: advantages and disadvantages.
5.5.1 Advantages	This theme analyses and discusses the advantages of applying LPs from the teachers' perspective.
5.5.2 Disadvantages	This theme analyses and discusses the disadvantages and challenges of applying LPs from the teachers' perspective.

5.2 Introducing children participant vignettes

This section presents brief information about the eight children's participants in the current study. The participants included four boys and four girls in a one kindergarten. Each child is individually presented with pertinent information—including gender, age, language, family (siblings, parents' work), literacy practices, and digital technology uses in their home. I briefly describe how each child engaged in traditional literacy and the LP based on my field notes. The previous Table 1 summarises the demographic information of the children. In this chapter, Table 5 outlines information about the children's favourite cartoons and the types of digital technology they use at home.

Table 5 : Children's Use of Media and Technology at Home

Name	Favourite TV cartoon characters	Digital technology used at home	Time spent using technology/ daily
Rima	Mansour, PJ Masks, Masha and the Bear, Miraculous	TV, tablet, phone	2.5 hours
Lina	Masha and the Bear, Frozen, Mansour	TV, tablet, phone, digital camera	3-4 hours
Salem	Spongebob, Mansour, PJ Masks, Captain Khalfan,	TV, tablet, Phone	3-4 hours
Alanoud	Mansour, PJ Masks, Paw Patrol	TV, tablet, phone	3-4 hours
Mohammed	PJ Masks, Mansour, Teletubbies, Sesame Street, Night Garden	TV, tablet, digital camera	2 hours
Shouq	PJ Masks, Miraculous, Sesame Street, Disney characters	TV, tablet, phone, personal computer	3 hours
Mishal	Paw Patrol, Mansour, Captain Khalfan, Khaslan	TV, tablet, phone	3 hours
Tareq	Cocotama, Mansour, Spiderman	TV, phone, personal computer	2.5 hours

5.2.1 Rima

Rima (Figure 9) is five years old and lives in an apartment with her parents and younger brother aged three years. She was born in Riyadh. Both of her parents have bachelor's degrees; her father has private work, and her mother is a housewife. Rima speaks Arabic and a little English. She was in another kindergarten before she joined the current kindergarten.

Rima's mother indicated that she provides a space for her daughter and her young son, which contains a diversity of books, colours, figures, and dolls, especially Barbies and Mickey Mouse toys, as well as costumes, including those of Disney characters and the Miraculous Ladybug. Rima's mother indicated that she sets a specific time for Rima to play and reads to her children every day. She preferred that her parents spend high qualitative time with their

children every day. She has been reading to her daughter Rima since she was two years old. She mentioned that Rima likes reading books, drawing, and playing.

Typically, Rima spends around two and a half hours per day watching TV and one hour using her own tablet. She watches the following programmes: *Mansour, PJ Masks, Masha and the Bear*, and *Miraculous*. Her mother commented that Rima has memorised most of the *Mansour* episodes. Rima likes to use the camera on her mother's phone, especially when they go outside; her mother laughed and described Rima as a 'professional photographer.' Rima sometimes uses her mom's Snapchat app, making videos, commenting, and sending videos to her mom, family members, and friends. After completing the project, Rima's mother asked me about the camera I was using and where she could find one like it.

In the kindergarten classroom, during traditional literacy, I noticed that Rima was active and liked to talk with others. Most of my observations revealed that the teacher asked her to be quiet and focus on the activity they were doing; however, Rima continued to talk (Field notes, October 2019).

During the implementation of the current project, Rima seemed excited to use a digital camera and enjoyed guiding her friends and dividing the roles among them. An explanation is provided later (Field notes, November 2019).

Rima's mother indicated that she felt that Rima enjoyed participating in the current project and talked about the new playshop activities to her cousins. Rima made some characters using wood sticks at home and told her mom that she wanted to take them to school to play with during the playshops. After months of conducting the current field work and completion of the study, Rima's mother sent me a note telling me that her daughter missed the activities we had done in the kindergarten.

Figure 9: Rima during the LP

5.2.2 Lina

Lina (Figure 10) is six years old and the only girl in her family. She was born in Riyadh and speaks Arabic. She has two older brothers aged ten and eight and a younger brother aged two years. She lives with her parents and her brothers in a villa. Her father works for an airline company and her mother works as a teacher in an elementary school.

Lina has had access to a limited number of storybooks for reading. Her mother said that she rarely reads stories to Lina, indicating that she might spend one day per week engaged with her child in playing and reading stories.

Lina's mother indicated that Lina spends time every day on a tablet, watching TV, and using her Hello Kitty–branded digital camera and her mother's phone. Lina uses her tablet more than a TV or other devices, spending around three to four hours every day using digital technology. She said she has Snow White, Frozen, and Miraculous Ladybug costumes and loves them. She enjoys watching *Masha and the Bear*, *Frozen*, and *Mansour*.

During traditional literacy, I noticed that Lina was quiet in the classroom; she only played and talked with one other girl and did so very quietly (Field notes, October 2019)

During the implemented LP, Lina seemed reluctant to participate at the beginning of the current project; she later seemed happy to be making characters and using a digital camera while at kindergarten (Field notes, November 2019).

Lina's mother indicated that Lina's play has changed at home since the project. Lina seemed to be busier and more engaged in long conversations with herself. Lina has continued to use her Hello Kitty–branded digital camera. She has also informed her parents about the new activities she participated in.

Figure 10: Lina during the LP

5.2.3 Salem

Salem (Figure 11) is aged five years and three months. He was born in Riyadh and speaks Arabic. He lives with his parents and younger brother aged four years in an apartment. His father is employed in the Ministry of Health, and his mother is an administrative assistant at a company. This is the second kindergarten that Salem has attended.

Salem's mother indicated that she brings home a variety of books to encourage him to read and write but assumes that he does not like reading and writing even when rewarded for doing so. She has provided him with a drawing board and coloured pencils. She mentioned that she used to engage with him during reading and writing but after having another child she now does not. She said she wishes the kindergarten class would give the children more homework to practice writing.

Salem's mother indicated that her child watches TV for two hours every day and uses a tablet one hour per day, three times a week. She indicated that he watches *SpongeBob SquarePants*, *Mansour*, *PJ Masks*, and *Captain Khalfan*. She mentioned that when these

cartoons are on TV, he takes control of the remote and does not allow anyone to change what is being watched. She indicated that he sometimes uses her phone camera, but she does not like to give him her phone. She also indicated that she prefers to show him educational videos. She reported that Salem has Spider-Man and Batman costumes and wishes to take them to the kindergarten classroom.

During traditional literacy, Salem was an active boy. He liked to explore and move around in the classroom and in most of my observations, he seemed bored during class time (Field notes, October 2019).

During the implementation of the LP, Salem seemed to be more enthusiastic about participating in the new activities except the storyboard. He spent the most time using cardboard and a digital camera (Field notes, October and November 2019).

Salem's mother indicated that she had not noticed any changes in her child's play except that he had recently started drawing characters like SpongeBob and PJ masks. She noted that he seemed happier when he came back from kindergarten that month. He said to his little brother that he 'does not have fun like me' in kindergarten, something he had not said before. She was concerned about Salem's attitude if the activities were not to be continued during the next semester.

Figure 11: Salem during the LP

5.2.4 Alanoud

Alanoud (Figure 12) is aged five years and four months. She was born in Riyadh and speaks Arabic. She is the youngest in her family, with two brothers and two sisters aged sixteen, fourteen, eleven and eight years old and lives with her family in a villa. Her father is a retired high school graduate. Her mother has a bachelor's degree and is a university administrative assistant. The current kindergarten is the first Alanoud has joined since she was three years old.

Alanoud did not have access to a wide selection of books to read at home. Her mother indicated that she likes to tell Alanoud stories from her own mind rather than from books. She said that Alanoud likes drawing on paper and hanging them on the wall in her own room as well as sometimes putting them under her pillows. Her mom said that Alanoud has a variety of toys.

Alanoud's mother indicated that her daughter spends between three to four hours per day using a tablet, watching TV, and using the camera on her mother's phone. Most of the time, Alanoud uses her own tablet to watch YouTube, watching a smaller number of programmes on the TV itself. Alanoud watches *Mansour, PJ Masks,* and *Paw Patrol*. She also likes to watch *SpongeBob,* but her mom does not allow her to watch it as she assumes she may be learning bad behaviour from it. Alanoud said she has a variety of costumes, including PJ Masks, Elsa, and Minnie Mouse, and wishes to take them to the kindergarten to show her friends. She mostly plays alone, being the youngest member of her family.

During my observation of traditional literacy, I noticed that Alanoud was quiet and followed the teacher's rules. She completed what the teachers asked of the students and quietly participated in the activities (Field notes, October 2019).

During playshops, I noticed that Alanoud's personality changed. She was not as quiet as I had observed earlier, but instead was active and a leader to her friends. She enjoyed creating masks, as well as using cardboard and a digital camera. (Field notes, November 2019).

Alanoud's mother indicated that her daughter seemed to enjoy the playshops. She told her mother about making airplanes and how she and Mishal had enjoyed arranging the chairs; they made the airplane very long and used a digital camera to video the airplane. Her mother also added that Alanoud recently created an area in the living room to film herself and then showed her parents the results. The clarification of this example is provided later in the current study.

Figure 12: Alanoud during the LP

5.2.5 Mohammed

Mohammed (Figure 13) is five years and six months. He was born in Riyadh where he lives in an apartment with his parents and a younger brother aged three and will move soon into a villa. His father has a master's degree and is an engineer. His mother plans to complete a master's degree and at present does not work. He was enrolled in two nurseries in the United Kingdom (UK) and then two kindergartens in Riyadh before moving to his current kindergarten. He speaks Arabic and English.

Mohammed's mother indicated that she used to provide him with stories and read to him but now does not. She used to read for him every two weeks. She said that her child is quiet and not very active, and thus she decided to register him in a gymnastics club, also wishing for him to learn to swim. She indicated she feels that he is proficient at mathematics and believes that he began to like math after watching some videos about maths.

Mohammed's mother indicated that he watches TV and uses a tablet every day for around two hours, spending most of this time watching TV. He watches *PJ Masks*, *Mansour*, *Teletubbies*, *Sesame Street*, and *Night Garden*. He uses his mother's phone to play videogames. He also uses a digital camera every weekend when meeting his aunt at his grandma's home, as his aunt is a photographer and encourages Mohammed to use her digital camera. He spends around one hour using the camera, enjoying this time per week. He has Teletubbies and PJ Masks costumes and wishes to bring them to kindergarten.

During my observation in traditional literacy, Mohammed seemed to be quiet and did not talk with many of the children (Field notes, October 2019).

At the outset of implementing the LP, Mohammed did not particularly engage in art to create characters nor use cardboard to construct the story. He did not seem happy participating in drawing on the storyboard. After new costumes, figures, and a digital camera were added, he enjoyed the activities more and spent more time playing although he often preferred to play alone (Field notes, October and November 2019).

Mohammed's mother mentioned that her son seemed happy regarding the LP and played longer than he used to at home. One day in particular, Mohammed excitedly told his dad about the playshops when his father dropped him off at kindergarten.

Figure 13: Mohammed during the LP

5.2.6 Shouq

Shouq (Figure 14) is five years and nine months. She was born and lived in Makkah with her parents, but, because of her mom's work, she moved to Riyadh with her younger sister aged two the same year that I conducted the current study. Her father is an accountant and lives in Makka and her mother is a lecturer at a university. Shouq was in two kindergartens in Makkah before moving to her current one in Riyadh.

Her mother has provided Shouq with a diversity of books and toys, encouraging her to create things using props. Her mother mentioned that she tries to engage in activities with her daughters such as drawing, playing, and creating. She showed me pictures of some activities she has done with her daughter using arts tools, cardboard, and other items. She added that when Shouq sees her mother writing, Shouq copies her.

Shouq watches TV for three hours per day as well as uses a tablet for an hour and a half and a personal computer for one hour each day. She sometimes uses a phone to play videogames and to capture anything she likes on video, but she does not use the phone every day. Her mother indicated that she uses it around two times per week. She likes to watch *PJ Masks*, *Miraculous Ladybug*, *Sesame Street*, and shows with Disney characters. She does not have costumes but does have figures based on her favourite characters.

During my observation of traditional literacy, I noticed that Shouq liked to help her friends and completed her work quickly so that she could do some artwork (Field notes, October 2019).

During the implementation of the LP, Shouq enjoyed using art tools, guiding her friends, and engaging in conversation (Field notes, October and November 2019).

Shouq has never talked about playshops in her kindergarten to her mother, and her mother did not notice any change in her child's play. She was only happy, she told her mother,

when her mother came to the kindergarten class. She also showed the videos she had made to her mother.

Figure 14: Shouq during the LP

5.2.7 Mishal

Mishal (Figure 15) is five years and eleven months. He was born in Riyadh. He lives with his parents and a younger sister aged three in a villa. Both parents have completed bachelor's degrees. His father is retired, and his mother is a special education teacher. He was in one nursery and two kindergartens before moving to the current kindergarten. He speaks Arabic and a little English.

Mishal's mother indicated that, before he goes to sleep, she reads the Qur'an to him, and sometimes he composes oral stories from his imagination, usually in Arabic but occasionally in the English he learned from YouTube. She said she does not engage with her child in playing or reading stories and wishes the kindergarten encouraged the children more in reading and exploring.

Mishal uses his tablet two hours per day to play and very rarely to film or capture pictures. He also watches TV for an hour and a half every day. His mother indicated that he watches various shows such as *Paw Patrol*, *Mansour*, *PJ Masks*, *Captain Khalfan*, and *Khaslan*. Recently, he most likes watching *PJ Masks*. He has Spider-Man costumes and *Paw Patrol* figures. He wishes he had *Mansour* costumes.

During my observation, I noticed that Mishal was quiet and shy. He talked a lot, though, mostly with one friend, and this friend tended to guide him; I noticed this during the traditional literacy lessons (Field notes, October 2019).

After the LP was implemented, Mishal seemed to be very happy, but he did not engage at the beginning of the study. He engaged with and enjoyed the activities more after costumes, nano (a toy with relevance to Mansour text), and a digital camera were added (Field notes, October and November 2019).

Regarding changes in Mishal's play at home, his mother reported that he was organising his play, planning before acting out pretend stories and enjoying using the tablet to film himself creating a story. She mentioned that when they went to his grandmother's home, he saw a small box and then he screamed that it was the 'treasure.' After that, he told his mom that he and his friend were looking for treasure; whereupon they drew a map, and a friend filmed them. She said she thought he had just seen this in a video, but then she recognised that it was relevant to the playshops.

Figure 15: Mishal during the LP

5.2.8 Tareq

Tareq (Figure 16) is five years and one month old. He was born in Jedda and speaks Arabic. He lives in an apartment with his mother and his older sister, who is aged nine. He lives and stays only with his mother who is an assistant manager at an educational institution. His father graduated from high school but had no further formal education; as well, his father and mother were no longer together. Tareq has been in two kindergartens in Jedda before moving to the current kindergarten in Riyadh.

Because of working long hours and being the only carer of Tareq and his sister, his mother was not able to provide a variety of books and toys. She mentioned that she does not have sufficient time to spend with her children.

Tareq watches TV for an hour and half and plays videogames on his mother's phone for an hour every day. He does not have a tablet, as his mother does not allow him to use a significant amount of technology. Sometimes he uses her personal computer. He watches *Cocotama*, *Mansour*, and *Spider-Man*. He once had a Spider-Man costume but lost it. Tareq's mother did not support her son watching *Spider-Man*, as she was concerned that he sometimes copies the character by jumping from high places.

During my observation of Tareq in traditional literacy, I noticed on a number of occasions that he was not concentrating. I observed that more than once, he put his head on the table and closed his eyes during literacy activities (Field notes, October 2019).

After implementing the LP, Tareq seemed to be enthusiastic and enjoyed participating in the playshops (Field notes, November 2019). Tareq's mother indicated that Tareq used to play and film his playing with his sister, but she noticed recently that his play time has been more extensive and creative. He has told her about how he made Mansour's home with his friend. An explanation of his mother's related observations is presented later in the current study.

Figure 16: Tareq during the LP

5.3 The impact of implementing the Literacy playshop on children's literacy practices and engagement

This section answers the first research question and presents the findings of implementing the LP in children's literacy practices and engagement in the kindergarten. I also refer to past studies discussed in the literature review.

5.3.1 Impact on literacy practices at school

5.3.1.1 Using multiple modes to make their own stories

All the children in the sample created imaginative stories in different ways. Some children used puppets, drew images and wrote words and letters using storyboards, while others used figures and artefacts. Some story presentations were filmed. Examples of their imaginative performances are presented in the following field notes:

> Mohammed used figures in his story (Figure 17). He collected PJ Masks figures and sat on a chair at a table. He moved the figures and created a scenario between them. (He whispered, so I could not hear his scenario.)
>
> Salem: 'I will film your story'.
>
> Mohammed: 'Ok' (smiles). He continued his story. One of the children came and held a figure and watched Mohammed's story.
>
> Salem: 'Do you want to join? I will film you, too'.

She smiled. Mohammed continued moving the characters and looked at the camera. Sometimes, he only moved the figures and did not talk (Field notes, November 2019).

Figure 17: Mohammed using figures in his imaginative story

From this example, Mohammed collected figures related to his favourite popular culture text (PJ Masks) and presented his own story by moving these figures. He created a scenario between the figures individually using his language and moving the figures. It seems that Mohammed had gained the attention of another child. She came and looked at him, and he did not seem to mind if she joined him. He seemed happy when Salem filmed his story.

Another observation was of Mishal and Tareq (Figure 18) using a puppet show, which went as follows:

Tareq: 'I like this puppet'. He put the animal puppet on his hand and changed his voice. He moved his hand, pretending to make the puppet talk and said from the show stand, 'Hi, everyone'.

Mishal saw the puppet move and smiled. He ran and held a paper character that he created and joined Tareq. He moved the character and changed his voice, saying, 'Hi. Hello, tiger. I am zebra'.

While Mishal and Tareq had a conversation, two children came and lay down on their tummies, listening to the show for around 10 minutes (Field note, November, 2019).

Figure 18: Mishal and Tareq using puppet show

Similarly, Shouq filmed herself using a puppet show (Figure 19). She put the animal puppet on her hand and talked in the puppet show. She placed the digital camera on the puppet stand facing her and filmed herself while she composed her story. When she finished, she took the camera and watched the recording. She smiled, returned the camera to the stand and repeated her story (Field notes, December 2019).

Figure 19: Shouq using puppet show

Furthermore, Tareq took a circle of paper, cut two eyes in it, used props to make hair and coloured his mask. He used rubber to complete the mask (a character he knew). Then, he took a piece of paper, drew three images and said to Salem:

> This is Nano (a remote helicopter that can go everywhere to help the Mansour character in his adventures). He ran and brought the show stand and started talking with the mask on his face. Salem gave Tareq a paper doll and asked, 'Do you want this?' Tareq took it and held the paper that he had drawn. He wore the mask and changed his voice, laughing while saying, 'I am Shama' (a character in the Mansour cartoon). Then, they completed their conversation (Figure 20) (Field notes, October 2019).

Figure 20: Tareq and Salem using puppet show

The first two observations showed that the children decided to present their stories using a puppet show, which was provided by the teachers after digital cameras were added as tools in the LP. Tareq put the puppet on his hand and changed his voice. This immediately gained the attention of Mishal, who joined him. Mishal tried to emulate and engage with his friend. They developed a scenario between them by changing their voices, which attracted other children. Two children came and lay down, listened to them and concentrated on the story. In a similar presentation using a puppet show, Shouq preferred to film herself making a

story. Her film production, which she performed alone, had puppets moving, talking and changing voices. In the third example, the children had not yet been provided with puppet shows or digital cameras. They were in the second phase of the LPs. Tareq seemed enthusiastic, and during the cut-and-colour time, he immediately went to the library area and brought out the show stand. Thus, Tareq created a mask, drew Nano, talked, changed his voice and pretended to be 'Shama' (a character he knows well) to present his puppet show.

Rima applied another form of story production (Figure 21). When I asked her about her drawing, she pointed at the first box, saying, 'First, this is Mansour and Obid. They go to the park' (pointing to the second box). After pointing to the third box, she said, 'Then [they] go to the mountain'. She pointed to the fourth box: 'After that, they slide from [the] mountain and say 'Ohhh'. She pointed to the fifth box: 'Then, they go to their home'. She pointed to the sixth box: 'Then, they sleep' (Field notes, October 2019).

Figure 21: Rima drawing and writing in storyboard

In the previous observation, Rima seemed happy, and she explained what she meant in her drawing after I asked. Her storyboard contained drawings in the six boxes based on popular culture text, with letters written under some boxes using language to explain her story, and she added sound to show how the characters slid from the mountain ('Ohhh').

Lina and Alanoud (Figure 22) also discussed creating a story as follows:

Lina: ‘We want to use the boat to move to another place’.

Alanoud: ‘I will bring the cardboard’.

Lina: ‘I am [the] leader. She wore the purple dress’.

Alanoud: ‘Let’s jump inside the boat (laughing), and Rima [will] film us’.

Lina: ‘Yes (smile). I will bring the chair’.

Alanoud: ‘No, we can carry it up and enter the cardboard from down [below]’.

Lina and Alanoud raised the carton and entered it from underneath. They laughed and moved their hands outside the boat, saying they were on a river.

Lina: ‘Tochhhh, see? There is [a] dolphin. Let’s move quickly’.

Rima filmed the performance (Field notes, November 2019).

Figure 22: Lina and Alanoud performing their story

Lina and Alanoud developed their imaginary story, and Rima filmed it. They used the cardboard as a tool and thought about how to get inside the carboard, which they called a boat. They used gestures by moving their hands to mimic the movement of a boat on the water. Lina made the sound ‘tochhhh’ it seemed, to represent the sound of water, as she and Alanoud were pretending that they were in a boat; in their previous conversation, they said that they were on

a river. This film contained talking, movement, and the use of cardboard tools in the children' storytelling and gestures.

The previous examples evidence a variety of imaginative stories. The children in the current study used different methods, such as puppet shows, films or live performances, which seemed to have been impacted by the LP curriculum. These stories were mediated by tools related to the new curriculum, such as digital cameras, puppets, masks, cardboard and storyboards. Mediation is a crucial concept discussed in sociocultural theory (Vygotsky, 1997), which enabled children to create stories. The children in the current study created their characters and props to act out their stories in multiple ways, using digital and non-digital forms to tell a story in the kindergarten setting. This is in line with Wohlwend (2013), who found that when LPs were applied in early years setting in the United States of America (USA), there was a variety of presentations.

The participating children presented their stories through writing, drawing, props, changing voices, gestures and movement. For example, Tareq and Mishal changed their voices when they used puppets and Tareq drew images based on popular culture he knew well, Nano (a helicopter in the Mansour cartoon), as Rima did on her storyboard. Tareq moved the puppet and Mishal moved the paper character, as Mohammed did with the PJ Masks figures. Tareq moved his body when he wore a mask, and Alanoud and Lina moved their bodies when they pretended to be on a boat, gesturing for the action of moving along the river and adding sound. Lina said 'tochhh' to imitate the sound water when the boat moved, and Rima showed how the characters slid from the mountain ('Ohhh'). Rima filmed Lina and Abtool, while Salem filmed Mohammed. Shouq filmed herself using language that appeared in all the previous examples. This confirmed Kress's (2010) perspective that meaning can be viewed not only in written language but also in multiple other modes, such as images, writing, drawings, moving images,

speech, gestures, etc. Wohlwend (2018) clarified that these modes can be either embodied (e.g., body movement, voice effects and facial expressions) or environmental (e.g., props and costumes).

The selection of modes or material that the children used in the previous examples in the current study to express meaning was not arbitrary (Kress, 2010). They used a variety of modes available to them in the classroom. For example, Tareq made a mask, drew (Nano), changed his voice and moved his body to present meaning that would not be covered using only other modes (e.g., language or print-based). In social semiotics, as discussed in the literature review chapter, signs are important; they are made from social interaction and shaped through culture. In the use of signs, meanings and forms combine; the form (signifier) is a representation of the meaning (signified). Kress's work (2010) outlines an instance in which a three-year-old boy draws a circle (signifier) to mean a 'wheel' (signified). In the depiction of multiple circles to indicate wheels (signifiers), the child has created (signified) a vehicle. In such an example, the relationship between meaning and form is aptness rather than arbitrary. Thus, it seemed that all modes used in playshops were meaningful for the children. Using multimodal analysis would provide more specifics about the modes. However, the present study did not explore how the modes were used; instead, it examined the whole picture of engagement and literacy practices when applying LPs.

Consistent with the literature on the positive relationship between play and literacy (Dyson, 1997, 2003; Mielonen & Paterson, 2009; Roskos & Christie, 2007, 2011, 2013; Roskos et al., 2010), the LP in the current study aligned with the positive relationship between play and literacy beyond reading and writing skills. The current study views literacy as having a broad meaning beyond simply reading and writing. It has discussed the idea that digital literacy involves reading, writing, as well as multimodal meaning-making in a range of social practices through the use of various digital technologies (Sefton-Green et al., 2016). During playshops

in the current study, all children in the previous examples acted with and used available materials to produce oral, print and visual texts. This is supported by Wohlwend and Peppler (2015) who found that 'playshops expand disciplines, such as literacy, to include printless storying, crafting and other forms of design; this expands the scope of meaning-making practices beyond narrative storytelling in drama and literature disciplines to recognise emerging arts and design' (p. 24). Playshops in the current study did not illustrate play impacting language and print literacy as other studies discussed previously but as a tool for multimodal meaning making (Potter & Cowan, 2020; Wohlwend, 2018).

It seemed that providing materials related to popular culture and digital technology which children had already engaged with in their homes stimulated them to create a variety of productions (digital and non-digital). In the vignette (Table 5), all the children spent between 2–4 hours using digital technology to watch their favourite cartoons/videos or play. Seven of the eight children had their own tablets, and two used a computer. It appeared that the children were embedded in technology and media in their everyday lives in their homes.

This has been reflected in previous studies where children were found to be immersed in technologies, including digital media, in their everyday lives (Marsh et a1., 2005; Palaiologou, 2016a). The technologies in which children were emersed throughout the current study seemed to have motivated them to participate in playshops. Mohammed moved the figures related to PJ Masks and developed a scenario using these figures. Shouq held the camera and filmed herself while presenting her story. Tareq seemed enthusiastic about wearing a mask and said, 'This is Shama' (a character he knew well from watching a show in his home). Rima drew a story related to the Mansour cartoon and was happy to present it. Lina and Alanoud pretended to be sailing on a river, and Alanoud asked Rima to film them. It is assumed that this stimulated them to complete their stories. This aligns with previous studies on popular culture motivating

children in literacy practices (Dyson, 1997, 2003, 2018; Marsh, 2006; Wohlwend, 2011, 2013; Yoon, 2018).

It seemed that the kindergarten in the current study focused completely on traditional literacy, and materials related to popular culture and new technology were excluded when I initially observed the classroom and in the teachers' reports. The classroom had six named areas: Art Centre, Blocks Centre, Discovery Centre, Cognitive Centre, Reading and writing Centre, library Centre and Role play Centre the typical classroom and curriculum in Saudi Arabia (SA) explained in the first chapter). The 'Reading and Writing' corner contained papers, worksheets, cards and small boards. There were no digital devices. The library Centre had a variety of books. There were no iPads or books related to popular culture. The Role-play Centre had toys and play 'home' items, such as kitchen, bed, sofa, and traditional clothes for boys and girls. There were no costumes related to popular culture or technological devices. The only technology I observed in the classroom was a personal computer connected to a projector. This reflected Alothman et al.'s (2015) description of a Saudi kindergarten classroom as a print-rich environment. Furthermore, Ghaida (teacher) stated, 'We use projectors to show children lessons or stories, but [we do] not provide [them with] iPads in the classroom'. Sara (teacher) stated, 'I have not provided costumes related to popular culture'. The principal reported, 'I do not support using iPads in [the] classroom for reading or play. This leads to lowered concentration and less socialisation. Teachers can use technology, such as projectors, to teach children letters'. The principal did not seem supportive of using technology, as she assumed that, for example, using iPads would affect cognitive and social development. Furthermore, although the current kindergarten has a cinema room, in which I assumed on my initial visit that the technologies and media found therein would be familiar to the children and teachers, it later became evident, however, that this cinema room was rarely used, with the teachers stating that they only used it on the monthly open day's as and when they had activities. Thus,

the classroom in the current study was not provided with materials related to technology and popular culture for children to use, and it was assumed that they focused on academic learning and traditional literacy. The interpretation of this in the current study was that kindergartens follow the curriculum applied in SA, in which teachers are required to teach children at the KG 3 level Arabic letters and to read and write these letters and words (Ministry of Education, 2016). Esraa (teacher) reported, 'I have to follow the curriculum and teach the children 13 letters [and] reading and writing in one semester'. The materials are suggested under the reading and writing section related to print text in a guidebook edited by the Ministry of Education and provided for teachers (Ministry of Education, 2016). This is related to Kress's (2000) argument that print literacy is highly regarded in Western countries and prioritised above other modes. Thus, providing a variety of materials for children that include technology and media in the curriculum is assumed to help children extend their literacy practices, as was found in the current study. This is supported by Burnett and Merchant (2018), who claimed that as opposed to denying children practices around technology, which are essential to their lives outside the classroom, schools need to provide children with the opportunity to utilise technologies and media to engage in creative activities.

Therefore, it is essential that early childhood classrooms be provided with a variety of materials so that children can be involved in the process of literacy practices by using artefacts, drawing, speech, images and so forth. This is supported by studies that have explored different modes in kindergarten settings. Friedman (2018) added a digital camera in his study on Israeli kindergarteners aged 3–4 years, in order to encourage children to use both verbal and visual modes. He indicated that children in that age group combine different modes to express meaning using language, pictures and acting. This was also consistent with the findings of Wessel-Powell et al. (2016) for children ages 5–7 years in a USA school context. Their study showed that children use multiple modes of communication to present their storytelling, such

as images, props, film making, puppets and printed words, indicating that allowing children to communicate using multiple modes could enhance their engagement and produce more exciting stories. Furthermore, Rowe and Miller's (2017) study in a school setting in the USA found that children aged 4 and 6 years used multiple modes and languages not only to conduct print activities but also to use new technologies, drawing on their culture and experience. They used digital cameras and tablets to take photos in their school and at home and composed e-books using the Book Creator app. Therefore, in line with previous studies, we can deduce that when the children in the current study were provided with a variety of materials, such as digital cameras and toys, they were able to produce numerous exciting stories, both digital and non-digital. All previous children's practices in school settings in SA (the location of the current study), Israel, the USA and the UK seem to align with the principles for a curriculum of 21st century literacies provided by Burnett and Merchant (2018), which acknowledge the changing nature of meaning-making and the diverse modes and media used in the school context.

5.3.1.2 Planning and creating themes

The children in the current study were seen planning their own imaginative stories, as shown in the following field notes:

> Rima and Shouq negotiated that they wanted to hold an interview (Figure 23).
>
> Rima: 'I will ask questions'.
>
> Shouq: 'I will hold the camera'.
>
> Shouq and Rima asked loudly who wanted to be interviewed. One of the children said, 'Me'.
>
> Rima to Shouq: 'I will ask her about racing and rewarding. I remember when they ran in the race' (smile) (talking about a show she saw).
>
> Rima spent two minutes thinking and then said she would ask her about the adventure, too.

Shouq: ‘Okay, I will start filming you now. One, two, three’.

Rima changed her voice and asked her friend (using a microphone) who had won the race.

Shouq: ‘No, ask this question later’.

Rima: ‘[Who] is your favourite friend in this class?’

Shouq filmed the interview between Rima and the other friend. They repeated the interview, added another question each time and laughed (Field notes, December 2019).

Figure 23: Rima and Shouq making an interview

Similarly, Mishal and Alanoud were observed. Mishal asked Alanoud about making an aeroplane.

Mishal: ‘I will wear [a] Mansour costume’.

Alanoud: ‘We want the aeroplane broken at the end, okay?’

Mishal: ‘No, that’s not what happened’.

They brought six chairs together and organised them into rows of two.

Alanoud: ‘Mishal, sit here’.

Then, one child joined them and sat on the chair next to Mishal. Alanoud said they were going to fly. All of them sat and made sounds like aeroplanes and laughed.

Alanoud: ‘The aeroplane [will] crash now’.

Mishal: ‘Not now; that happened after a while. After five minutes. Crashhhh’.

They laughed and continued playing while another child filmed them (Figure 24). (Field note, November 2019)

Figure 24: Mishal and Alanoud planning to make an aeroplane

In the previous observations, the children seemed to be planning what they wanted to do before acting. Rima, Shouq, Mishal and Alanoud planned their own imaginative stories, which seemed to reflect their knowledge of popular culture (the Mansour cartoon) when they engaged in play. For example, in the first illustration, Rima said, ‘I remember when they ran in the race’. In the second example, Mishal wore a Mansour costume, and when they acted out their stories, Mishal commented, ‘Not now, that happened later,’ which is likely a reference to the cartoon he saw in his home. This is consistent with Dunn (2015), who indicated that children naturally make connections between what exists outside and inside the classroom. The children not only re-enacted what they saw in the show but also seemed to add to and develop their play. For example, when the children discussed the interview that they saw in their favourite cartoon, it seemed that they developed the interview not only from the show but from their imaginations (e.g., when Rima asked about a favourite friend in the classroom, when Alanoud suggested the broken aeroplane and Mishal said that had not happened yet in reference to the Mansour cartoon). This is consistent with Marsh (2014), who indicated that children could create characters and plots in new ways based on popular culture rather than simply

copying them. Similarly, Wohlwend (2009a) argued that children have the ability not only to consume popular media but also to create stories and characters that reflect their own lives.

It seems that popular culture texts that children know well stimulate them to engage, create and plan for their own stories and themes. Previous studies, as discussed in the literature review chapter, have shown that popular culture motivates children in literacy practices (Dyson, 1997, 2003, 2018; Marsh, 2006, 2014; Wohlwend, 2011, 2013; Yoon, 2018). The current study showed that the Mansour text motivated Ratel, Shouq, Mishal and Alanoud to plan and create their own stories.

This finding could be attributed to the impact of the new curriculum, in which children were seen planning, creating their themes and filming their stories. It was assumed that the children in the current study had not practiced these activities previously in school setting, given the limited use of technology in their classrooms. Kindergarten teachers in SA follow the themes provided by the Ministry of Education in the official curriculum. For example, Ghaida (teacher) stated, 'We encourage children to work based on the theme'. A guidebook edited by the Ministry of Education is divided into several units and each unit includes a variety of suggested themes, lessons and songs for teachers to use in their lesson frameworks (the image of the cover of these units are provided in Appendix A). Therefore, teachers can base their lesson plans and classroom activities on the unit itself (Ministry of Education, 2016). For example, one of the themes in the guidebook is called 'food' for a month; therefore, teachers provide lessons, activities and books related to food for one month. Teachers provide learning areas in each classroom, sometimes role-play area, with materials related to this theme. For example, some teachers have created a supermarket and provided a cash register, toy money, paper, pencils and toy food. Thus, the children can play using the provided materials related to the theme rather than making meaning through a variety of modes in which they plan and create the theme, as found in the current study.

5.3.1.3 Improvisational play

The children were not only planning their stories but also improvising stories by themselves. Some examples are as follows:

> Tareq put on a Cat Boy costume (a PJ Masks character) and held a wireless phone. He said, 'Come on. Help. This is fire.'
>
> Salem put his hand next to his ear and asked, 'Where is it? Are there children?'
>
> Tareq: 'It is in the street.' Then he jumped. 'There are two children stuck'. He was in the corner and put four chairs in front of the children, pretending that they were stuck. He tried to help them by going under the chairs and crawling. Salem tried to help him rescue the two children. Alanoud filmed them while they played, and she laughed. Tareq jumped up and said, 'I rescued them now.' He laughed with the children and continued playing.
>
> The teacher: 'Time is up'.
>
> Tareq replied, 'No, no! I want to play more' (Field notes, November 2019).

Similarly, Lina wore an Owlette (a PJ Masks character) costume (Figure 25). Then, she went behind the puppet show and said:

> 'Hi, everyone (changing her voice). Good morning. Are you happy? Are you okay?' While she talked, she moved her arms like wings. Shouq and Rima watched her. Lina held the digital camera and said, 'Shouq, film me'. Shouq held the camera while Lina said, 'I am [a] princess. I am [a] princess (lalalala). I am [a] little girl. I am [a] little girl (lalalala). We are friends. We are friends (lalalala). We are in a school. We are in a school (lalalala). I am flying (loudly, moving her costume wings)'. Then, she left the show and walk between the chairs, completing her song and moving her wings. Shouq

continued filming her. When Lina finished, she and Shouq watched the video and laughed (Field notes, November 2019).

Figure 25: Lina improvising play

From these illustrations, it seems that when Tareq donned a PJ Masks costume, he transformed himself into one of the PJ Masks characters. This immediately gained Salem's attention, and his reaction was to put his hand near his ear (pretending it was a phone). He answered Tareq and tried to provide help while engaging in the imaginative scenario. This caught the attention of other children who pretended to be stuck. Tareq (as a superhero) rescued them, and they completed their story. Similarly, when Lina donned the Owlette costume, she transformed herself into a character who can fly. Lina moved the wings of the costume, pretending to be in flight. This caught the attention of Shouq and Rima. Shouq filmed the acting, and Rima watched it. It was clear that the children improvised and developed their stories or playing without any planning. It unfolded as they played when they put on the costumes and used a digital camera. They transformed themselves into these characters and collaborated with their friends. This aligns with Thiel (2015), who explained in her study that a child named Zach came wearing a Wolverine superhero costume, which triggered the curiosity of his peers. He followed his imagination and collaborated with others, which Thiel (2015) viewed as embodied literacy, and his body produced what Wohlwend (2013) called action text. Action text is a form of embodied literacy that refers to the expression of meaning

through body movement in imaginary play or animating toys and available resources during pretend play (Wohlwend, 2013). In this case, Tareq, Salem and Lina used their body movement to produce action-based stories that they already knew (from PJ Masks) in imaginative play.

Children's role play is naturally improvisation. In the present study, it seemed that the tools applied were related to the LP, such as costumes and digital cameras, and they stimulated the children to improvise their stories. This is supported by Wohlwend (2018), who indicated that materials made available to children facilitated improvisational play. This is also supported by Thiel (2015), who considered a costume as the catalyst that stimulated Zach in her study and extended his play. Here, costumes seem to have impacted the children's performances. Tareq and Lina, when wearing the Cat Boy and Owlette costumes, respectively, extended their play. Tareq continued his story, and Lina composed a song. Dyson (2018) also found a connection between children's participation in popular culture and acts of composition in the school environment.

The findings in the current study align with previously mentioned studies in that children do not simply copy the characters they see in popular culture; rather, they develop their own versions in new ways (Marsh, 2014; Wohlwend, 2009a). Tareq created and improvised the story with his friend Salem by pretending to answer his call. Then, they improvised the story together. Lina composed a song and gestured with her wings while Shouq filmed her. Similarly, Vasquez (2003) found that when a six-year-old engaged with popular culture text, he created his own Pokémon cards.

Burnett and Merchant (2018) identified principles as a charter for 21st century literacies, as presented in the current study's literature review, in which children were encouraged to create, improvise and collaborate in a playful environment using communicative resources to make meaning. Clearly, the children seemed in the current study to improvise their imaginative stories.

5.3.2 Impacting on literacy engagement at school

5.3.2.1 Involvement

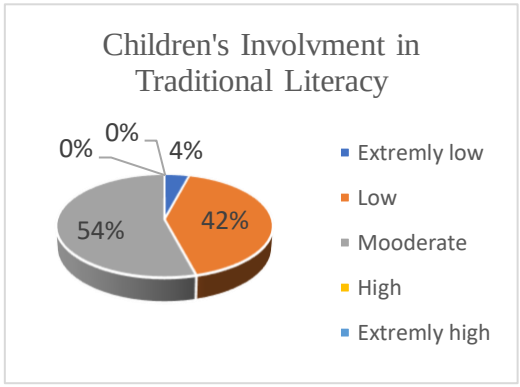
The children's involvement in classroom playshops was clear during their play. The use of multiple modes to make their own stories, including planning and creating themes and improvisational play, provided evidence of their literacy practices after implementing the new curriculum. These practices could also be attributed to children's engagement in playshops, along with other evidence, such as the result of using the Leuven Involvement Scale (LIS), teacher interviews and continued observation. The findings of these methods are discussed further in the following sections.

5.3.2.1.1 Leuven Involvement Scale (LIS)

The LIS was used to assess the eight children in the present study during traditional literacy activities and when implementing LPs. In the traditional literacy setting, the LIS was applied three different times on three different occasions of literacy practices in which the children typically participated in the kindergarten classroom. While the children were writing on their worksheets, they also engaged in a writing competition on the central writing board, playing letter-matching games using paper and pens, and singing songs with teachers relevant to letters or the current theme. All of these activities were representative of typical teacher behaviours. The scale was performed on the second, third and fourth week of the current study (on Sundays, Tuesdays and Thursdays). This scale was also applied again during the implementation of the LP during the fifth, sixth and seventh weeks of conducting this study at three different times (on Sundays, Tuesdays, and Thursdays). As mentioned in the methodology chapter, the LIS is a five-point development scale intended to measure involvement, with five being the highest point of engagement and one being the lowest. When a child is assessed at the highest level, it means they are totally engaged in the activity, whereas

the lowest level indicates an absence of participation or commitment. The results of using the scale for the children in the current study in traditional literacy and LPs are shown in Figure 26. The results for each child after using the scale three times in traditional literacy and three times in LPs are shown in Table 6.

Figure 26: Leuven Involvement Scale Percentages:
Traditional Literacy vs. Literacy Playshop



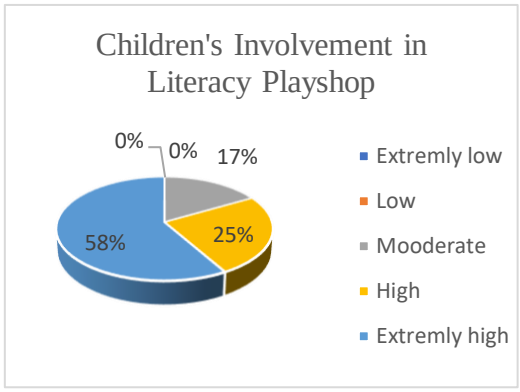


Table 6 : Leuven Involvement Scale Scores: Traditional Literacy vs. Literacy Playshop

	Traditional Literacy			Literacy Playshop		
Child's name	First Involvement	Second Involvement	Third Involvement	First Involvement	Second Involvement	Third Involvement
Rima	3	3	3	5	5	5
Lina	2	3	2	3	5	4
Alanoud	3	3	3	5	5	5
Shouq	2	2	2	3	5	4
Salem	2	3	2	4	4	5
Mishal	3	3	3	3	4	5
Tareq	1	2	2	4	5	5
Mohamed	3	2	3	3	5	5

The findings from using the LIS three different times during traditional literacy and three times during the LP showed that all eight children scored higher during the LP than traditional literacy practices. Each child's score is discussed below.

Rima, Alanoud and Mishal scored a three during all three traditional literacy sessions, indicating moderate engagement. After implementing the LP, Rima and Alanoud received the highest score for involvement (five) three different times, but Mishal improved gradually (from three to four to five). Lina, Salem and Mohammed scored between two and three during traditional literacy, indicating low and moderate involvement, respectively. After implementing the LP, Lina and Mohammed scored three (moderate involvement), but Salem scored four (high involvement), and all of them moved up to five (extremely high involvement). Finally, Shouq and Tareq scored twos and/or ones for traditional literacy (low and extremely low involvement, respectively). Their scores gradually improved to extremely high after applying the LP.

Some of the children (e.g., Lina, Shouq, Mishal and Mohammed) scored three in the first LP observation, indicating moderate involvement, but their score increased in later

observations. Their initial moderate engagement could be attributed to the kind of activity used. The LP began with the children drawing, creating characters and using storyboards, which may have been new to the children and difficult to think about. For example, Mishal drew in the first and second boxes on the storyboard but then asked his friend what else to draw, stating, 'What else can I draw? I do not know!' (Field notes, October 2019). Similarly, I noticed Mohammed pausing and thinking for around three minutes after drawing in the first box and four minutes after drawing in the second box. He then asked the teacher, 'Should we complete the storyboard?' (Field notes, October 2019). It can be assumed that some of the children found it challenging to present their ideas on paper. They did not seem familiar with this activity. This is consistent with Buchholz and Coggin (2013), who indicated that children struggled to complete the storyboards when LPs were applied in the USA. Storyboards became choice tools in Wohlwend's (2013) study and in the current study alongside puppets, costumes and props. After applying materials such as costumes and digital cameras, several children became highly involved according to their LIS scores. Notably, Rima and Alanoud's involvement was extremely high from the beginning of the LP implementation, while Salem and Tareq went from high to extremely high involvement.

The findings regarding LP involvement, whether gradual or direct, could be interpreted as a reflection of interest in the materials provided. Children are likely to become involved in activities related to their own interests (Thiel, 2015). The LP curriculum contained new technologies, costumes related to popular culture texts, figures and artefacts that the children used to produce their own stories. Therefore, we can assume that these resources motivated them. This interpretation is consistent with previously mentioned studies offering an overview of the positive relationship between popular culture and literacy in terms of motivating young learners (Dyson, 1997, 2003, 2018; Marsh, 1999, 2006, 2014; Wohlwend, 2011, 2013; Weld, 2011; Yoon, 2018). This is also consistent with studies that applied new technologies, such as

digital cameras and tablets, in school settings and found that the children produced images and different modes (Friedman, 2018; Rowe & Miller, 2017).

The children's involvement in the current study could also be interpreted as they are already being embedded in digital technology and media in their everyday practices at home, which are key tools in LPs. In the vignettes (Table 5, the mothers reported that seven children used their own tablets, and one used a personal computer to watch their favourite media or to play at home. All of them regularly used their mothers' smartphones. The time spent using these devices ranged from 2–4 hours a day. Two children had their own digital cameras. Thus, all the children engaged in new technologies and popular culture in their everyday practices.

The work of Alroqi, Cameron-Faulkner and Serratrice (2021) also supports this. These researchers conducted a survey among 220 parents of children aged one to three years in Riyadh, SA, as with the present study, and discovered that 90% of the children in the study watched TV and used media devices before they were two years old; 87% had access to their own tablets; and 8% had access to smartphones. In total, these children spent approximately three hours per day on such digital devices. Likewise, a report from the LEGO Foundation (Marsh et al., 2020) based on data from the UK surveyed 2,400 parents of children aged three to eleven years, revealing the following: 82% of the children watched TV, 94% used tablets, 72% used laptops, and 84% used smartphones. Thus, it can be assumed that children bring their knowledge, ability and interests from their homes into the classroom, making them likely to become involved in the new curriculum. Importantly, it is natural for children to bring different 'funds of knowledge' to school settings (Moje et al., 2004).

Although the children in the present study seemed to be embedded in technology and popular culture in their homes, these practices were not applied in the kindergarten setting prior to the LP, as all the teachers indicated. For example, Sara (teacher) reported, 'I [have] rarely used technology, and if I did, [it was] to show children [a] story or song'. This was supported

by Ghaida (teacher), who explained in the previous theme that technology was used by teachers to present lessons and not by children in the context of the current study. Esraa (teacher) reported, 'Last year, we used characters as pictures for decorating the classroom door, but not for children to play with'. This was supported by Sara (teacher), who explained in the previous theme that she had not provided costumes related to popular culture. It seems that the children's use of digital technology technologies and popular culture in the context of the current study before implementing the LP was barred. This claim aligns with previously studies that found popular culture was likely to be banned from the curriculum in early-year classrooms (Dyson, 2018; Yoon, 2018; Marsh et al., 2005). It is possible that the reason for not incorporating these practices in the current kindergarten could be attributed to the official curriculum being focused on academic reading and writing, with limited playtime. In the context of the present study, the hourly schedule for teaching literacy (Arabic and English) and the Qur'an was around 3 hours, whereas playtime in the classroom was limited to 30 minutes. The schedule for the current kindergarten is attached in Appendix B. This claim is supported by Wohlwend (2013, 2017b) and Miller and Almon (2009), who found that playtime is decreasing in early childhood classrooms and being replaced with teaching literacy and math skills. Furthermore, the second reason for not incorporating technologies and popular culture in the current kindergarten could also be attributable to the teacher's perspective. For example, the principal in the previous theme assumed that using iPads could affect children's concentration and socialisation. In terms of popular culture, the teachers seemed concerned about copying characters in the classroom, they discussed these concerns with me in the workshop prior to implementing the LP. Previous studies have shown that adults are concerned that popular culture texts may convey potentially negative overtones regarding violence, racism and gender roles (Arthur, 2005; Dyson, 2018; Marsh, 2006). Teachers' perspectives regarding implementing LPs are discussed further to answer the third research question.

5.3.2.2 High concentration

Based on observations and interviews with the teachers, the children exhibited high concentration in their practices after applying the LP. Some examples are shown in the following field notes:

> In traditional literacy, the teacher asked the children to 'Give me an example of names that start with the letter (س)'. Salem raised his hand and said, 'Me, Salem.' The teacher smiled and said, 'Great'. She passed the notebooks to the children to write the letters. Salem held the pencil and scribbled on the page. The teacher said, 'Who will finish the first one?' He erased some of the scribbles and wrote a letter two times in 15 minutes while moving his chair back and forth. He went to his friend's table and said, 'I will not write all [the] letters'. He went to the end of the classroom and looked out the window (Field notes, October 2019).

During the implementation of the LP, Salem seemed to be enthusiastic about participating in new activities, especially using cardboard and a digital camera:

> Salem held the cardboard and put the tape around it happily, saying loudly, 'This is Mansour['s] home!' He took the pen and drew a window on the cardboard, spending around 20 minutes total drawing a complete home. Then, the teacher said, 'The time is over'. Salem said, 'Oh, no. Could you save it for tomorrow?' The teacher said, 'Yes, I will' (Field notes, November 2019).

Similarly, a field note on observing Lina showed the following:

> Using traditional literacy, the teacher asked the children to complete an activity in the Reading and Writing Centre. Lina went to the area for two minutes. She went to the door, looked around and returned to the writing area for one minute. This was followed by her visiting the cognitive area for one minute and the art area for two minutes, all

without talking to anyone. She then repeated visits to the same corners for similar amounts of time (Field notes, October 2019).

After the project was implemented, Lina seemed to be busy making a mask of a character from the Mansour cartoon (Figure 27). She took the paper and cut it:

Me: 'What are you trying to do?'

Lina (smiles): '[A] Shama mask'.

Me: 'Wow!'

Lina: 'Shama wears a purple tie in her hair. I will use the tape to do the same on my mask'.

She spent 10 minutes on the activity (Field notes, November 2019).

Figure 27: Lina wearing a character mask

It was clear that the children's concentration levels seemed higher during the LP than with traditional literacy. Salem struggled to write two letters, moving his chair back and forth, and Lina kept moving to different areas every two minutes. After the LP was applied, Salem seemed satisfied with creating a home using cardboard for around 20 minutes and unhappy when the time was over. Similarly, Lina remained busy spending 10 minutes making a mask using paper and purple tape to imitate a character that she knew well.

Their increased concentration was also reported by the teachers. Esraa (teacher) reported the following:

> ‘When I used to come back to the class while children [were] doing some activities, I [would] open the classroom door, [and] most of [the] children [would] look at me. Some of them [would] ask me questions, and some of them [would] just say ‘Hi’. I felt [that] they wanted to talk with me, even if they [were] listening to other teachers or doing activities. I think they [are] disrupted easily. After applying the new curriculum, I noticed that the children were so busy, especially with using a digital camera. I came to the class [a] number of times, but the children seemed very busy. They did not even look at me’.

Similarly, Sara (teacher) gave an example of increasing concentration for Tareq:

> ‘I was amazed to see Tareq focus on playshop activities. I used to see him distracted in literacy activities or others in the classroom. Sometimes, he [would] put his head on the table and close his eyes, even if he did not feel sleepy’. Notably, I also observed him in this position during traditional literacy (Field notes, October 2019).

The principal expressed how the children were concentrating during playshops:

> ‘Every day, I tour and see all the children in kindergarten from the windows. I was curious when I saw [that] children in playshops seemed busy and focused on these activities. I discussed the reason that [the] children [were so] focused and busy with some teachers’

These quotations reflect the children’s high concentration during playshop activities. It seems that the resources and materials related to LPs stimulate children to engage and increase their concentration. This could be attributed, as previously mentioned, to the children’s

immersion in new technology and popular culture in their everyday practices at home. These familiar materials seem to be motivators in a kindergarten setting. Digital technology seems to increase children's concentration. Flewitt et al. (2015) found that when iPads were integrated into children's literacy activities, they increased motivation, concentration and communication. The children in their study used apps and cameras on iPads to take photos and record films. Furthermore, the LEGO Foundation reported (Marsh et al., 2020) that playing with technology affects children's cognitive skills, including improvement concentration.

5.3.2.3 Enjoyment

The current study shows that the new curriculum makes participation pleasurable for children. This was evident in the children's facial and verbal expressions and reports from the teachers and mothers. Some examples are as follows:

> Every day, Salem asked, 'Who will hold the camera today?' When he knew his turn was coming, he jumped up and started saying about what he would capture on film. When he saw the other children playing, he filmed them and then sat on the chair to watch what he had filmed. Then, he filmed his friends again. I asked Salem, 'What do you like here?' He smiled and replied, 'All things in the area. I wish we stayed here all the time' (Field notes, November 2019).

> Similarly, I observed Shouq and Mishal sitting on chairs and negotiating their stories.
>
> Me: 'Do you like these new activities?'
>
> Shouq: 'Yes'.
>
> Mishal: 'Of course, [a] million times'.
>
> Me: 'What do you like most?'
>
> Shouq: 'A camera, a camera. I can film and make a story by myself' (smile).

Mishal: ‘I like costumes, a camera and puppet shows’ (Field notes, December 2019).

It was clear that the materials in the new curriculum, such as digital cameras, costumes and puppet shows, brought enjoyment when Salem asked about his turn to hold the camera every time and when Shadad and Mashari expressed what they liked. As previously mentioned, the children in the current study were not provided with digital technologies in the kindergarten, such as digital cameras or iPad. They had not previously drawn or filmed imaginative stories in school. The teachers only used technology (e.g., projectors) to present lessons, such as stories or songs. The children had seen media and used digital devices in their homes. As mentioned previously in the vignettes (Table 5), the mothers of all participating children indicated that their children spent around 2–4 hours/day using digital devices at home, and they named their children’s favourite characters, which they watched on various devices.

Furthermore, the children enjoyed seeing themselves on screen after filming, either on a computer or projector (Figure 28). The children seemed proud when others saw their stories. This is consistent with a study conducted in a primary school in England in (2017) that focused on the Moomins cartoon, in which children created characters and presented them using a shoebox as a theatre and iPads to import the Moomins model into the app. The children were proud to see their work displayed at an exhibition (MakEY, 2020).

Figure 28: The children enjoying seeing their productions

Providing materials that children find interesting in a school setting seems to increase their enjoyment, which improves their engagement in literacy practices. A child who enjoys a specific activity may be likelier to engage in that activity (Baroody & Diamond, 2013). Enjoyment and interest in activities seems to indicate that a child is intrinsically motivated to participate in that activity and not because of any external motivations. Intrinsic motivation refers to participating in an activity for the pleasure of the activity itself; thus, these activities are interesting and enjoyable to the person doing them (Cambria & Guthrie, 2010; Ryan & Deci, 2000). Intrinsic motivation is supported by satisfaction with relatedness, autonomy and competence, according to SDT (Niemiec & Ryan, 2009), which is discussed further to answer the second research question.

The children's enjoyment was also reported by the teachers. Ghaida (teacher) stated, 'I am happy to see children laughing, their production and continued work'. Sara (teacher) said, 'While I observed children in [a] literacy lesson writing on the worksheet, I noticed Tareq and Salem talking about what they would act [out] in the new area'.

The children seemed enthused to go to the new area. They planned and talked about what they would do there beforehand. Literacy for pleasure has been widely discussed in previous research. The difference here is that literacy went beyond reading and writing.

The children's enjoyment was also reported by their mothers. Mohammed's mother reported that her son was joyful regarding the new corner:

> 'While Mohammed was playing in our home, he came to me and said, 'Mommy, I will call my classroom [the] Happiness Classroom'. When I asked him why, he said, 'Because it is the best classroom. The teacher adds new things every time a camera and PJ masks clothes.'

In this example, Mohammed called the classroom the 'Happiness Classroom' and stated what about it made him happy. As previously mentioned, providing materials in the classroom

related to children's interests at home brings them pleasure, which is why they were engaged in the playshops.

5.3.2.4 Frequent participation

After applying the LP, most of the children were observed repeating the activities many times. For example, after observing what they filmed, the children would add to and repeat the story. Some examples based on my observations are as follows:

> Abtool and Rima (Figure 29) negotiated the imaginative stories they wanted to make.
>
> Alanoud: 'I will sleep, then have a dream and wake up suddenly, then look to the window, and you film me'
>
> Rima: 'Okay, okay'.
>
> Rima filmed Abtool, and they completed their stories. Then, they ran and connected the camera to the computer to watch Abtool on screen and laughed loudly. They repeated what they did, but this time, Alanoud filmed and Rima acted out the scene, followed by watching herself on screen. They repeated this again and added more events to their stories. They spent around 15 minutes doing this until the teacher said that playtime was over (Field notes, November 2019).

Figure 29: Alanoud and Rima repeating their acting

In another observation, Lina put on a costume and sat looking in a mirror. She took a mask and put it on. Tareq joined and put a mask on his face. They started talking together while Alanoud filmed them. Lina, Alanoud and Tareq watched the video together and laughed:

> Lina said 'Let's do it again. I will [ask what you are] doing here and move a chair at the same time'. They repeated the scenario and watched the video again. Lina then said, 'Let's do it again. I will [ask what] you are you doing here, move a chair at the same time and then you scream'. They laughed and had the conversation again. Alanoud said, 'I will film you again, but when you scream, Lina, [cover] your ears'. They repeated the conversation again and watched the filmed scene (Field notes, November 2019).

From these illustrations, it seems that the children enjoyed repeating and developing their scenarios. Alanoud and Rima spent 15 minutes filming and repeating their scene to develop the events. Lina initially created a scene but then added a scream after watching the first video of it. Alanoud then suggested a reaction ('cover your ears'). All the children seemed happy to repeat the scene multiple times. Participation frequency and enjoyment signal that children are interested in literacy activities (Baroody & Diamond, 2013). This was also found in the current study within a broader meaning of literacy. It seems that using digital cameras stimulated the children to repeat what they had done and to add new movements or conversations. Marsh et a1. (2020) found that digital technology provides chances for iterative play 'play that allows children to repeat what they have done and to experiment with and test hypotheses' (p. 31). In the current study, when Alanoud, Rima, Lina and Tareq played with a digital camera to record their stories, they had opportunities for iterative play. They added to their scenes and enjoyed watching them after each added change. Iteration and enjoyment are two of the five characteristics of learning through play (LEGO Foundation, 2017) that have been explored in relation to children playing with technology (Marsh et al., 2020).

5.3.3 Impact on literacy practices at home

This study aimed to understand the impact of LPs on children's literacy practices and engagement in a kindergarten setting. Interviewing the mothers allowed exploration from a different perspective. The mothers were asked if their children liked to talk with their parents about the new curriculum and if they noticed any changes in their play. A number of themes emerged, which are discussed in the following sections.

5.3.3.1 Extending activities to children's homes using multiple modes

The current study found that all the children except one continued their practices from kindergarten at home, as shown by the mothers' statements.

Alanoud's mother stated the following:

'My child used to play every day, but I noticed later that there was a change in her play. She selected a corner in the living room and created a house using her toys. She built [it] like a show and [had] a conversation with herself. She used [the] camera on my phone to video herself and put the phone in the corner to start her show. After she saved her work, she showed me and her father. We encouraged her (laughing)'.

Tareq's mother reported the following:

'Tareq used to play, but he [has] been [playing more] for the last three weeks. He [has] spent more time and is being more creative. One day, he brought all the unused cardboard from the kitchen and put it in the living room. He grabbed four cartons and tied them with a rope. He coloured the cartons and asked his sister to help him. He [used] some props [to] decorate the carton. He said, 'This is my boat. Nobody move it'.

Every day, he added something to the boat and [engaged] in imaginative play. He enjoyed playing this. Sometimes, I was not happy because he made a mess (laughing), but it's good [that] he [is] creating and engaging in his play'.

Mishal's mother reported the following:

'I actually feel that his play is organised. He has started to plan what he will do, which is different from before. [Over] the last [few] weeks, he used the iPad to video himself while he played, watched, commented, rewatched it and laughed. He showed me and his father his videos. I feel that's good for my child's confidence'.

Shouq's mother reported the following:

'Shouq has never talked about the new activities in the kindergarten, and I did not notice changes. She used to spend a lot of time pretend playing and using art resources. She recently said, 'I want to draw my story, then act it'. Maybe that's new? I do not know'.

All of the previous examples demonstrate that the children's practices related to LPs seemed to extend to their home settings. Alanoud made a play corner, filmed a show with her mother's camera and showed the film to her parents. Tareq created a boat using unused cardboard, coloured and used props, collaborated with his sister and continued his play. He seemed excited and asked his mother not to remove his boat from the living room. His mother described the change in his play as creative. Mishal demonstrated imaginative play by using an iPad to film himself and showing the results to his parents. His mother described his play as being organised, which I assumed meant it was planned. This was related to the finding that some children plan their playtime, while others improvise. Mishal's mother seemed happy that her child was filming himself and believed it was good for his confidence. Shouq's mother did

not notice any changes, although she said that drawing a story before acting it out might have been new.

It is not new for children to develop imaginative play in their homes, but it seems that practices related to and inspired by the new curriculum, such as using cameras on their iPads or mothers' phones for filming, showed that they were not only using their devices to watch media but also creating themes and shows. The mothers assumed that these practices were new. The children presented their performances in multiple modes, both digital and non-digital. They drew, performed, filmed their productions and showed the results to their parents. Some of the mothers sent me pictures and videos of their children's practices at home. Mishal's and Salem's mothers sent me drawings that their children had made of characters related to popular culture texts. The mothers of Shouq, Rima and Mohammed sent videos of their children's practices that they assumed were new. This finding could be attributed to the children's previous use of different technologies in their homes. They had spent time watching their favourite characters on TVs or tablets, and they had a variety of costumes related to popular culture. Again, the children's surroundings in terms of digital technologies in the home were the same as those reflected in previous studies, such as the previously mentioned study conducted in Riyadh, which found that most parents of young children reported owning TVs, computers, smartphones, and tablets as well as having an internet connection (Alroqi et al., 2021). Internationally, previous studies have indicated that the majority of children studied were immersed in technology and media in the home setting throughout their everyday lives (Marsh et al., 2005; Palaiologou, 2016b). This might have stimulated the children in the current study to engage in playshops in the kindergarten setting. They brought these practices into their home settings because their home environments already provided a variety of technologies and materials related to popular culture.

5.3.4 Impact on literacy engagement at home

Enjoyment and increased time spent playing in the home setting emerged from these data.

5.3.4.1 Enjoyment

Enjoyment emerged not only at school but also at home, as the children's mothers reported. Some of the children told their mothers that they enjoyed the new activities in kindergarten, and some of them enjoyed continuing practices related to LPs at home.

Rima's mother reported:

'Over the weekend, she talked about the new corner to her cousins. She was so happy to explain to them how she filmed a story and used a camera with her friend Alanoud. She repeated what she had made with her friend and was laughing'

Tareq's mother said:

'I remember he smiled and said, 'Mummy, we made [a] Mansour story with my friends at school and used a camera'. This was supported by Mohammed's mother when she said her son called his class the 'Happiness Classroom'.

Shouq's mother stated, 'She was so happy when she came back from school and told me, 'When you come to my school, I will show you my video'.

Conversely, Salem's mother reported:

'He did not talk to me about what they did in school, but he really seemed to be very happy when he came back from school these weeks. When I asked him, he said they had great activities, but he did not tell me what [they were]. She smiled and commented:

I am concerned that he will refuse to go back to school if the activities are not continued next semester'.

From these examples, it is clear that the children's enjoyment was transferred to their home settings. Rima told her cousins about her film with Alanoud. Tareq seemed proud of his Mansour story and the use of a camera. Mohammed called his classroom the 'Happiness Classroom'. Shouq was excited to show her mother the video that she had made in the classroom. Salem did not explain what he had done, but he seemed very happy and mentioned that there were great activities. However, he did not qualify whether he meant activities related to LPs or other activities. Thus, it seems that the children engaged in the new curriculum in kindergarten. Their enjoyment in doing activities could be attributed to their engagement (Baroody & Diamond, 2013), and their participation could have stemmed from intrinsic motivation, which is later discussed further in relation to SDT. As previously argued, the resources and materials applied in the current study, such as digital cameras, costumes, figures, artefacts and props, were all favourite tools for the children because they are embedded in their everyday lives at home.

The mothers were happy that their children enjoyed this curriculum, and some of the mothers wanted to support their children in continuing these practices. Rima's mother said, 'I will bring a digital camera for my girl to engage her more'. Alanoud's mother asked me about the camera I used in the present study, as she wanted to provide one for her child.

It seems that the middle-class socioeconomic status of the parent participants in the current study might play a role in their overall acceptance of the provision of digital devices in kindergarten classrooms, as they are able to provide such devices to their children at home as well.

Conversely, Salem's mother seemed uninterested in applying these practices at school, despite her son's comment that he enjoyed them:

> 'I believe he enjoyed the new activities in school, but I want him learning [to] read and write much of the time and doing homework, not only playing. He can play another time. I saw my friend's boy who is in kindergarten doing homework. I think her boy can write words better than mine. Salem will start year one next year, but he has not learned well'.

Salem's mother seems to believe that he should learn at kindergarten and do homework when he comes home rather than play. This is in agreement with Haroun's (2018) Saudi context study in Riyadh, which investigated the beliefs of 138 Saudi mothers of kindergartens aged 4–5 years about play for their children in kindergarten. The findings showed that mothers agreed that play was important for a child's development, but they thought that play could negatively affect children's academic learning and should be limited to school hours. Furthermore, Alghamdi et al. (2021) found that parents do not support using technologies in early years according to Saudi's student teachers. As discussed previously, playtime has decreased in early childhood classrooms in many countries in the USA (Miller & Almon, 2009; Wohlwend, 2013, 2017b) and in the UK, Bennett et al.'s (In Wood, 2009). Similarly, playtime in the context of the current study was also limited. It appeared that the following of official curriculum and guidelines in the kindergarten class of the current study might be a reason for the students' reduced playtime. Furthermore, it seemed that some parents were satisfied, particularly in the context of a private school, with a focus on academic learning more than play, which could be considered another reason for reduced playtime. This is also supported by Bahatheg (2011), who clarified that several private preschools in SA offer extra literacy (reading and writing) activities to students in order to meet the demand of the parents.

5.3.4.2 Increased time spent playing

Spending longer than usual on play using elements of the new curriculum emerged from the data. Some of the mothers indicated that their children spent more time playing.

Mohammed's mother reported:

'He used to play alone and leave, and I always asked him to play more. To be honest, I noticed he played [with] figures and engaged in conversation for longer than he used to. He created the tools to play with and seemed to be busy. Sometimes, he reused the old games that he had in different ways and engaged with his younger brother in imaginative play'.

Similarly, Lina's mother reported:

'I started to see that in Lina's play last month, after coming back from kindergarten, she took out her costumes, collected her toys together and engaged in playing. She did not tell what they had in the kindergarten'.

And Tareq's mother said:

'He spent [a] longer time than before, and when I asked him to come, he did not'.

From these illustrations, it can be seen that the children spent more time than usual playing. Mohammed played longer and seemed to be busy using figures to engage with his brother. Lina seemed excited as she played immediately after coming home from school using her costumes. Tareq in the previous theme played in the living room and continued his play every day, and he did so for longer than usual. These changes were likely the result of the new curriculum being applied. This reveals that the children were interested in these activities and enjoyed them enough to continue engagement at home for long periods. Students are likelier to persist for longer periods if they find an activity interesting and challenging (Fulmer & Frijters, 2011).

In the following section, responses to the second research question are presented, including findings and a discussion of the impact of the LP on children's motivation as understood through the lens of SDT.

5.3.5 Summary of the section

This section presents the findings as well as a discussion of the impact of implementing the LP on children's literacy practices and engagement. The findings revealed that employing the LP impacted children's literacy practices and engagement in school (kindergarten) and that this impact extended to their home settings. It has been shown that the children use multiple modes to create their own stories, involving performing puppet shows, drawing, writing using letters and words, and using storyboards, figures, and artefacts, both digital and non-digital. The data of the present study revealed that the children generated their stories, planned in terms of creating their own themes, and sometimes improvised play. Applying the LIS revealed that the children's scores during the application of the LP were higher than their scores in traditional literacy practices. The findings showed that the children frequently participated in, enjoyed, and had high concentration levels in regard to these practices. In terms of the home setting, the data showed that the children continued using multiple modes and materials related to the LP in their homes, also enjoying increased time to play.

The next section of the study presents the findings and discussion in respect to answering RQ2, regarding the impact of the LP on children's motivation, as understood through SDT.

5.4 The impact of the LP on children's motivations, as understood through SDT

This section answers RQ2, presents the findings and discusses the impact of the LP on children's motivation through the lens of SDT. Previous findings showed that LPs seemed to impact the children's literacy practices and engagement. They used multiple modes to create

their own stories. They also planned themes and used improvisation in their play. They enjoyed these activities, which was recognised in my observations, in what the children expressed and in what the teachers and mothers reported, all of which indicated that the children were intrinsically motivated (Ryan & Deci, 2000). They seemed to enjoy participating in LPs for pleasure and interest, not because of external factors. According to SDT, intrinsic motivation is supported by satisfaction with relatedness, autonomy and competence (Niemiec & Ryan, 2009). Thus, to answer RQ2, the data were interpreted in relation to supporting these three needs, as outlined below. I also discuss how LPs can satisfy these needs with the children participants in the particular kindergarten. In this study, the LP seems potentially impactful and satisfied the needs of autonomy, competence and relatedness. As discussed in the literature review chapter, it was found that satisfying a learner's need for autonomy, competence and relatedness enhances intrinsic motivation and self-determination in given activities (Niemiec & Ryan, 2009).

5.4.1 Impact on autonomy

De Naeghel et al. (2016) identified the need for autonomy as 'the experience of a sense of volition and psychological freedom when engaging in an activity and being the initiator of one's own behaviour' (p. 233). The data in the current study revealed that LPs seemed to fulfil the need for autonomy, which provided the children with choices and opportunities to ask questions and suggest ideas. Many studies have suggested that providing learners with choices is a popular practice for enhancing motivation (O'Brien & Dillon, 2008). According to SDT, autonomy can be supported by providing choices that enhance it and increase intrinsic motivation (Brophy, 2004; Reeve et al., 2003; Ryan & Deci, 2020).

5.4.1.1 Providing choices

The evidence suggests that the children were provided with choices in the LP curriculum. For example, in the first LP process, the children were provided with a variety of tools to create their own characters and themes for their stories. The children then drew pictures based on their favourite characters, cut out the characters, created new characters using props and templates and created their own visual settings and props. My field notes (October 2019) showed that the children enjoyed using a variety of tools, drew multiple characters and created several masks and used cardboard to set the themes for their stories.

In the second LP process, the teachers introduced the children to storyboards. The children used six-block storyboard tablets to retell stories after watching short videos about the Mansour series. The children were not limited to drawing Mansour, as shown in the following (Field notes, October 2019) (Figure 30):

> Salem started drawing a character other than Mansour: SpongeBob.
>
> Mishal: 'No, this is not Mansour. You do not know how to draw'.
>
> Teacher Ghaida: 'That's fine'.

Figure 30: Salem drew a character other than Mansour

In another example:

> The children were not asked to write letters or words on the line under the boxes on the storyboard. Rima wrote words on the lines under her drawings on the storyboard, but Shouq only drew.

Rima: ‘Why did you not write anything on the line?’

Shouq: ‘I do not want to write’ (Field notes, October 2019).

The first example shows that, even though Mansour was chosen because it was their favourite character, as explained in the methodology and vignette, the children were not forced to draw this character. Salem drew SpongeBob, and I observed some children drawing other characters. In the second example, the children were not forced to write on the lines below the drawing boxes, as Shouq did. They were given the option to either write on the lines below the drawing boxes or draw another character. This was inspired by LPs applied in Wohlwend’s (2013) study, in which children were given the choice to write or draw. I discussed this with the teachers during the workshop and explained in the methodology chapter that children should be given choices.

Finally, in the last LP process, the children were provided with digital cameras, costumes, storyboards and props. They were again offered choices: using a digital camera or not, putting on costumes or not, using the storyboards that they had made earlier or not and using figures or not. The findings revealed that the children created imaginative stories in different ways. Some children chose to use puppets, draw images and/or write words and letters using storyboards, while others chose to use figures and artefacts. Some story presentations were filmed. All the stories presented were based on the children’s choices of the different materials and artefacts provided for them. I observed a variety of stories created by the children, some of which were presented in the previous theme. In the examples discussed previously, some of the children chose to plan their stories, such as when Rima and Shouq were interviewers and Mishal and Alanoud acted out being in an aeroplane. Others improvised their stories, such as when Tareq chose to wear a Cat Boy costume and transform himself into a

superhero to rescue his friends with Salem, while Lina chose the Owlette costume and transformed herself into a character who could fly.

The findings from all the LP processes indicated that the children were provided with a variety of choices, and they were not forced to use certain materials, act out a particular story or play with particular children. These choices seemed to support autonomy, and they potentially motivated the children to participate in the activities. This aligns with SDT that choices lead to greater ownership of activities and greater autonomy, which results in increased intrinsic motivation for learners (Brophy, 2004; Reeve et al., 2003; Ryan & Deci, 2020). Cambria and Guthrie (2010) indicated that providing choices is a favourite motivator for learners in literacy, and in the current study, choices were also realised as motivators for all eight children in terms of the broad meaning of literacy. A previous study found that choices in digital literacy, particularly the use of video games, supported autonomy through the lens of SDT with adult (Peng et al., 2012), as well as the current study, identified the experience of choices during implementing LPs with young children.

Through the lens of multimodality, the children in the current study were considered sign makers who chose resources (artefacts or material) related to LPs from those available to them to produce meaning and create a variety of stories in a social setting (Kress, 2010). Bock (2016) used the word ‘agency’ to refer to the progress of sign-makers, arguing that multimodal pedagogies provide children with the freedom to choose modes that help build agency and voice. She stressed that providing opportunities for children to choose modes would increase their motivation. This aligns with my findings, which were drawn from SDT that providing choices helps children experience a sense of agency and leads to increased intrinsic motivation and self-determination.

This current study's findings revealed that the choices provided in the LP were relevant to the children's interests, which seemed to motivate them to participate in LPs. Additional examples from my field notes (December 2019) are as follows:

> When I observed Rima playing while she held the digital camera, we had a short conversation. Me: 'Did you enjoy this area?'
>
> Rima: 'Yes, I like it'.
>
> Me: 'What do you like here?'
>
> Rima: 'A lot. There are costumes, Nano, [a] camera. I can choose what I want'.
>
> Another example was shown in the previous theme (Field notes, December 2019).

When I asked Shouq and Mishal what they liked, Shouq replied that she liked [the] camera' and Mishal liked [the] costumes, [the] camera and [the] puppet shows.

In the previous theme, Mohammed called his class the 'happiness' classroom and explained to his mum that he used this term because the teacher added new things all the time, such as camera and PJ Masks clothes. As explained at the beginning of this study, the children and their mothers were asked about their favourite characters and interests, and Mansour was indicated as the favourite character. This approach was supported by Brophy (2004), who suggested that teachers could ask students what they were interested in at the beginning of the school year and incorporate themes into the curriculum based on these interests. It has been discussed in the literature that providing children with digital technologies such as digital cameras or tablets motivates them in their literacy practices (Chordia et al., 2019; Flewitt et al., 2015; Friedman, 2018; Rowe & Miller, 2017) and that providing popular culture elements is also motivational in literacy (Dyson, 2018; Marsh, 1999; Marsh, 2014; Vasquez, 2003; Wohlwend, 2011, 2013). The current study found that children' option to use digital cameras and costumes in their activities seemed to motivate them while applying the LP. These findings

are also aligned with the work of Patall et al. (2013), who indicated that autonomy can be supported by providing learners with choices and considering their interests.

During my observation of the children engaging in traditional literacy, there were limited choices, such as papers, pencils and print-based tools. In the classroom, the 'Reading and Writing' corner had papers, worksheets, cards and small boards. There were no other choices. The library corner had traditional books. There were no iPads, other technology or books related to popular culture. All the children were asked to copy letters or words in Arabic or English many times, and there were no other choices for children if they did not want to do this. I noticed that the teachers showed the children a letter or activity and asked them to copy it. This was supported by Teacher Ghaida: 'I used to show the children something as a model, and I asked all of them to do the same'. Teacher Esraa commented, 'After seeing the children in the LPs, I feel I use indoctrination methods when I teach the children. I talk, and they listen. I do not listen to them'. Therefore, the teachers were not providing choices for the children or opportunities to listen to them. It seems that the pressure to teach academic skills and assess children leads to the use of controlling strategies. For example, Teacher Esraa reported in the previous theme that she is required to teach 13 letters and reading and writing in one semester. Roth et al.'s (2007) study, which was conducted in Israel, supports the idea that the external pressure experienced by teachers inspires or encourages them to feel they need to utilise a controlling teaching style instead of giving autonomy. Ryan and Deci (2020) suggested that institutional pressures, mandates, and individual leadership styles influence and constrain teachers in performing their work.

Thus, in the current study the limitations of choices and control conditions in traditional literacy seemed to affect the children's motivation. This aligns with SDT that autonomy is undermined by the experience of being controlled by teachers, who force learners to perform

or think in specific ways, which undermines motivation (Ryan et al., 2020; Turner, 1995). This also agrees with Brophy's (2004) argument that if the curriculum does not support learners' choices and interests, intrinsic motivation will not be developed. Grolnick and Ryan (1987) indicated that when learning is controlled, it is less effective and less intrinsically motivated. This was clear in the low score that all the children received in traditional literacy involvement, according to the LIS.

5.4.1.2 An impactful teaching style

The teaching strategy employed in this study after applying the LP seemed to support the children's autonomy. In the workshop that was undertaken for the teachers in the current study and explained in the methodology chapter, I described to the teachers the process of applying LP to children. The findings showed that the teachers then invited the children to ask questions and suggest ideas, which seemed to support their autonomy. Valas and Sovik (1994) concluded that motivation is enhanced among learners when teachers support autonomy instead of controlling students.

5.4.1.2.1 Inviting the children to ask questions and suggest ideas

The findings suggest that the teachers supported the children in making their own choices and suggesting ideas. An example from my field notes (November 2019) is as follows:

> During circle time, the teacher always introduced the children to the play areas. Teacher Ghaida: 'I think Nano is important in [the] Mansour cartoon'. The children: 'Yes, yes' (loudly). Teacher Ghaida: 'We will have different materials to create Nano so you can use it in your stories. I want you to think [about it]. How can you make it and use it in your story?' Salem: 'We can use yellow crayon to colour paper; then we [can] draw [a] big circle, like electric'. Teacher Ghaida: 'Great idea. Then, how [does] it fly?' Mishal:

‘We [can] make a flight plate with [a] remote’. Teacher: ‘Awesome. How?’ Tareq: ‘We [can] cut paper [and make a] cable using tape’. Rima: ‘We [can] cut [a] cartoon [and] then bring a yellow balloon to put in the middle’. Teacher: ‘Brilliant. So, you need to blow it [up]’. Alanoud: ‘Cut [a] paper circle and then let the circle fly’. Teacher Ghaida: ‘That’s great. I like all your ideas’. The following day, I provided paper, yellow crayons, yellow balloons, eye stickers, tape, scissors and a remote-control quadcopter. The children started colouring on the paper.

Rima: ‘I think we need to cut [a] circle’. Teacher Ghaida: ‘Right’. They cut a circle and put eye stickers on it. Mishal: ‘How can we put the circle on the top?’ Salem: ‘Like this. Use tape’. Rima took the yellow circle paper and stuck it to the remote-control quadcopter. Salem pressed the ‘on’ button and it flew. They all laughed and enjoyed using it while telling their stories.

Figure 31 shows that Tareq and some of the children played with Nano. Other children created different Nanos using the materials provided.

Figure 31: Tareq and some of the children played with Nano


In this illustration, the children were invited to suggest ideas on how to make Nano—a remote helicopter that can go everywhere to help the Mansour character in his adventures. The materials provided were related to Nano. When Teacher Ghaida invited the children to choose materials to create Nano, this seemed inspired by the LP I had discussed and the different processes I had provided at the workshop. I reminded the teachers of the processes every day

before starting the sessions and discussed what the children might be doing that day. As explained earlier, I prepared materials related to the LP before the children started their activity every day. Some of the materials were provided after I had listened to the children's conversations and understood their interests, such as their talk about Nano in the previous example. I observed Salem, Mishal, Tamin and Alanoud talking about the Nano character on three different days (Field notes, November 2019). In the previous example, the children suggested how to make Nano, and the teacher listened. These practices seemed to give the children a voice and support their agency. This aligns with Niemiec and Ryan (2009) who found that giving learners a voice and choices in activities is a good way for teachers to support learners' autonomy rather than pressuring them via assessments. Allowing learners to make decisions regarding their activities in terms of selecting books, selecting friends with which to share their interests and allowing their opinions to be expressed will enhance their interest and engagement (Brophy, 2004; Ryan & Deci, 2000; Turner, 1995). The findings in the current study align with stressing that children should experience agency in their play, and they should be considered as capable (LEGO Foundation, 2017)

The teachers seemed to like inviting the children to suggest ideas and giving them autonomy. For example, after implementing the LP, Teacher Ghaida commented, 'I feel we gave the children freedom, and they expressed what they wanted in their stories'. Teacher Esraa also stated, 'Involving children in ideas is important, as I saw in [the] LP'. The role of teachers in supporting autonomy in the current study has also been reflected in previous studies (De Naeghel et al., 2016; Smedt et al., 2020), indicating that teachers have a key role to play in supporting students' autonomy in literacy learning, in addition to students' other psychological needs. For example, De Naeghel et al. (2016) clarified that when teachers listen to children's opinions, provide autonomy-supporting choices, provide step-by-step directions, and offer encouragement, students' intrinsic motivation for reading is enhanced. Smedt et al. (2020)

found that teachers can support children's autonomy as well as other psychological needs through literacy learning itself. The current study is in line with the previously cited studies on the role of teachers in terms of supporting learner autonomy; however, the present study differs in that it does not look at traditional literacy with older students (De Naeghel et al., 2016; Smedt et al., 2020) and instead focuses on young students in a broader literacy context.

The findings provided in this section are in support of the potential of a LP to offer opportunities for young children to exercise autonomy, rather than such experiences through literacy learning only being made available to older children (De Naeghel., 2016; Guthrie & Cox, 2001; Ng et al., 2006; Smedt et al., 2020; Tegmark et al., 2022). Moreover, the current study makes a distinct contribution to the literature related to providing potential satisfaction of autonomy needs within a broad concept of literacy with young children through the lens of SDT.

The LP seems to not only offer opportunity for young children to exercise autonomy, but also competence and relatedness.

5.4.2 Impact on competence

The need for competence indicates a person's need to feel able to perform and complete an activity (Comanaru & Noels, 2009). This study revealed that LPs seems to have provided opportunities for the children to satisfy their need for competence in the curriculum, providing activities neither very hard nor very easy, and teachers offering clear instructions and informational feedback. This seemed to motivate the children to engage in the LP. Within SDT, a setting that provides optimal challenges and positive feedback satisfies the need for competence (Niemiec & Ryan, 2009). According to SDT, satisfying the three psychological

needs includes the need for competence, which enhances motivation in educational settings (Ryan & Deci, 2020).

5.4.2.1 Optimal challenges

This study showed that the activities in the LP were neither too easy nor too hard, making them optimally challenging (Brophy, 2004). The children spent ample time working on their stories. Sometimes they asked for help from their peers, the teachers or me when using the camera, storyboard and so on. The data showed that the children enjoyed continuing their work, showed good concentration and were proud to see themselves on screen as discussed in the previous theme. The children did not appear to be bored doing LP activities, and they did not complain about or ask to stop any of these activities. For example, previously when Mishal seemed reluctant to act out a story and wear a costume, his friend Mohammed wore a costume and showed him the steps on the storyboard. This seemed to encourage Mishal to engage in play. Mishal might have initially found engaging in the story challenging, but it seemed that he was mediated by a more capable peer (Mohammed) and the use of artwork (storyboard). I observed more knowledgeable children frequently supporting their peers during the LP. I also noted a variety of situations in which the children seemed challenged, but either their peers helped them, or they asked the teachers or me for help. For example, when Mohammed could not see his video in the camera, Lina showed him the steps, and Alanoud showed Rima how to use the camera to capture a particular situation quickly. In addition, I observed Tareq trying to film himself, but he could not. I later observed him filming himself using a puppet show. When I excitedly commented that he could now film himself, he smiled, stating that Shouq had shown him how to do it.

The challenging activities that children faced during playshops might enabled them to feel competence after they received scaffolding from their peers. According to SDT, if tasks

are challenging but not too hard, that will satisfy the need for competence and increase engagement (Niemiec & Ryan, 2009; Tuner, 1995). These challenging activities in the previous examples were mediated by more capable peers. This aligns with Vygotsky's (1978) sociocultural theory study, in which children worked on a given activity in the ZPD and achieved the task with the aid of more capable teachers or peers via social interactions.

It seemed that using certain tools in a LP in the current study, such as digital cameras, enabled the participating children to experience a sense of competence when they filmed their peers and then watched their productions. This has been supported in previous studies which showed that the use of digital technology enables children to feel efficacy and a sense of expertise. In particular, Flewitt et al. (2015) showed that providing iPads in the classroom allows children to feel like experts during their use. Furthermore, the children in the current study appeared to be happy with and proud of their films when they were shown on the projector, as discussed in the context of the previous theme. This is in keeping with a 2017 study performed in a primary school in England, wherein a Moomin cartoon was imported into an app, which allowed children create and view Moomin stories through the use of the app (MakEY, 2020). Furthermore, the study by Chordia et al. (2019) showed that teachers who incorporated digital technologies in early childhood classroom settings were able to scaffold digital literacy learning—for example, through having children take self-portraits with a digital camera. A similar experience was observed in the previous examples of the current study, particularly when Tareq filmed himself. With adults, it has also been confirmed that using digital technology in digital literacy (video games) satisfied the needs of autonomy and competence in the lens of SDT (Rogers, 2017; Peng et al., 2012) in which participants feel competence to see their achievement and indicated feedback.

It seems that the activities related to the LP enabled the children to feel efficacy and confidence. De Naeghel et al. (2016) stated, 'Competence involves the experience of being

confident and effective in action' (p. 233). In the current study, the children produced films by themselves, and their peers watched them. All the teachers in the current study linked LP activities to confidence. For example:

> Teacher Ghaida: 'I feel the camera encouraged the children and gave them self-confidence when they saw themselves on the screen and their friends saw them'.
>
> The principal: '[What I like most] in this curriculum [is] that it gives the child freedom [to] develop confidence and creativity'.
>
> I also observed that when the children planned to perform their story, they put two pieces of cardboard together and three chairs in front of them, while another child held the camera'.
>
> Teacher Ghaida: 'Hello, authors'.
>
> Shouq: 'We are not authors; we are inventing'
>
> They continued their play and talked about Mansour house (Field notes, November 2019).

Providing opportunities to create stories using digital technology and popular culture seemed to give the children confidence, as shown in Shouq's use of the term 'inventing'. This was in alignment with Henderson and Yeow's (2012) study in which children aged between five and twelve years used iPads, finding that the use of the iPads enabled the children to feel proud of their work, conducted through collaborative and engaged learning. Furthermore, providing children with references from popular culture, for example exercises based on children's favourite characters, was shown to help the kindergarten children create and act out stories by themselves and in collaboration with peers, instilling a sense of capability during playshops. This was also in agreement with the work of previous studies by Wohlwend (2013) and Simmons (2014), indicating the positive impacts of incorporating popular culture into educational settings. Wohlwend (2013) has indicated that a LP approach involves children

being placed in the position of expert and offered the opportunity to help their peers during play while creating texts in relation to areas of popular culture known more fully to the children than to adults. Furthermore, Simmons (2014) revealed that the incorporation of popular culture into children's play facilitates children in becoming empowered to share their existing related knowledge during learning and play. Here, Simmons clarifies that popular culture used in this way gives children a chance to experience a feeling of power in a curricular environment that typically places them as powerless.

5.4.2.2 A teaching style that leads to impacts

Ryan and Deci (2020) argued that teachers play a significant role in affecting motivation. In the previous theme, I discussed how the teachers supported autonomy. In the current theme, the evidence suggests that the teachers also supported competence by providing a structure that supported the children and subsequently offering positive feedback. This seemed to fulfil the children's needs for competence and enhance their motivation. This was supported by De Naeghel et al. (2016**)**, who found that when a teaching style supported children's reading needs, their motivation to participate in reading increased. This is related to my findings regarding the broad meaning of literacy, not only reading and writing.

5.4.2.2.1 Providing instruction

The data revealed that the teachers gave the children clear instructions on all LP processes before starting the sessions. The teachers introduced any new tools required, such as costumes, cameras or cardboard. They told the children how to use the camera, to take turns, how to produce a storyboard and how to apply the storyboard in their stories. The teachers sometimes used a projector to present the steps. They did not control the children; rather, they provided step-by-step guidelines to help the children engage in the LP. Ryan and Deci (2020)

differentiated between structured and controlled teaching: structure ‘scaffolds’ and provides clear guidelines and positive or informational feedback, whereas control pressures learners to achieve a particular task. Structure satisfies competence and enhances intrinsic motivation (Ryan & Deci, 2020). I also observed many children following other children, as stated in my field notes from October 2019:

> Lina started to draw on a storyboard. She drew a character in the first box and stopped.
>
> Lina to Alanoud: ‘What do we do next?’
>
> Alanoud: ‘I remember the teacher said complete the story’.
>
> Lina: ‘How?’ This is Shama.
>
> Alanoud: ‘See? This is mine. The teacher said we complete the story [showing] what happened next’.
>
> Lina: ‘Draw Shama again, and draw some food’. She commented that Shama was eating. ‘Teacher, is it like this?’
>
> Teacher Esraa: ‘Excellent. Complete the story in each following box. Then what happened?’.

From this example, it seems that the clear instruction helped Lina complete her drawing and allowed Alanoud to remember the instructions about drawing the storyboard. The teacher showed the steps using the projector, followed by applying them to paper to show the children how to make a storyboard individually. Drawing from SDT, the teachers provided guidance and support when the children faced difficulties in this activity (De Naeghel et al., 2016). This seemed to help satisfy the children’s need for competence and enhanced their motivation to participate in the LP.

5.4.2.2.2 Informational feedback

Within SDT, Ryan (1982) distinguished between two types of feedback: informational and controlling. Controlling feedback decreases intrinsic motivation compared to informational feedback, and both are defined in the literature review chapter. The data from this study showed that teachers applied informational or positive feedback in LPs. One of my observations from my field notes (November 2019) was as follows:

> Salem, Tareq and Lina wanted to create a story. Salem and Tareq were inside the cardboard, and Lina held the camera.
>
> Salem to the teacher: 'We are in Mansour's home'.
>
> Teacher Sara: 'That's great'.
>
> Tareq: 'But we don't know how we can get out'.
>
> Teacher Sara: 'What do you think you need to get out [of a] home?'
>
> Tareq: '[A] window'.
>
> Teacher: 'When you go home, do you enter from the window?' Tareq and Salem laughed.
>
> Salem: 'No, a door' (loudly).
>
> Teacher Sara : 'Perfect'.
>
> Tareq: 'Lina, stop. Don't film us. Give me [some] scissors. We will make a door'.

Another similar example was when the teacher listened to the children's ideas about making Nano. She listened to each idea and provided positive feedback afterwards.

These examples demonstrate how the teacher was scaffolding the children to develop their ideas and providing positive feedback on their answers. Scaffolding and suitable feedback support learners' competence (Barrable & Arvanitis, 2019). This seemed to stimulate the children to continue making suggestions and motivate them to participate in the LP. This aligns with SDT that positive feedback improves intrinsic motivation, while negative feedback

reduces it (Harackiewicz, 1979; Ryan & Deci, 2000, 2017). This is also supported by Deci et al. (2001), who clarified that the informational aspect enhances self-determination and therefore develops intrinsic motivation, while the controlling aspect undermines intrinsic motivation. In line with SDT, positive feedback satisfies the need for competence and enhances motivation (Ryan & Deci, 2020). The interpretation of clear instructions, including positive feedback, which the teachers applied in this study, seemed inspired by the LP applied in Wohlwend's (2013) study in which the teachers mediated engagement in the LP by demonstrating their processes and scaffolding children without pressure. I discussed this with the teachers during the workshop. Furthermore, clear instructions, including positive feedback could be a teaching style that the teacher's in the current study used to use with children in the classroom.

Positive or informational feedback from teachers is not unique to LPs; it is common in other kindergarten practices. However, when I talked about traditional literacy, I observed a variety of motivational tactics, such as teachers telling children before every lesson that they would get stickers if they completed writing their letters. The reward board in the classroom included the children's names, and the children who finished writing their letters received a sticker each day. By the end of the week, the star of the week was whoever had collected the most stickers. The teachers would thank that student and praise him/her in front of their classmates at the start of each week. This practice is considered controlling. Deci et al. (2001) indicated that tangible rewards, when expected, are controlling and undermine intrinsic motivation. It seems that the children would continue writing for the reward—an extrinsic motivation.

The findings outlined in this section demonstrated the potential uses of the LP in terms of offering opportunities for young children to exercise competence, rather than only offering the experience of competence in literacy learning to older children (De Naeghel et al., 2016; Smedt et al., 2020; Tegmark et al., 2022; Wigfield & Guthrie, 1997). The current study makes a distinct contribution to existing literature related to providing the potential to satisfy the needs of competence within a broad conception of literacy with young children through the lens of SDT.

5.4.3 Impacts on relatedness

The literature review in the current study noted that the need for relatedness refers to a 'sense of belonging and connection' (Ryan & Deci, 2020, p. 4) and 'a sense of warmth, security, and connection between the learner and other people in that social context' (Comanaru & Noels, 2009, p. 135). This study revealed that LPs seemed to satisfy the need for relatedness by providing opportunities for the children to cooperate and interact and which may have further motivated them to engage in the LP. Brophy (2004) stated that collaboration is motivational because it responds to learners' relatedness needs, which enhances intrinsic motivation. According to SDT, satisfying the three psychological needs includes relatedness-enhancing motivation in educational settings (Ryan & Deci, 2020).

5.4.3.1 Collaboration

Collaboration was clear in the data in the current study. Most of the findings that answered RQ1 showed that the children were not presenting their imaginative stories individually. For example, Mishal and Tareq created a puppet show together. Lina and Alanoud performed a story together using carboard after brainstorming about how they would get inside the boat. The children were observed planning or improvising their stories together. They

collaborated to make Nano and used tools, such as cardboard, together. Thus, they completed their stories through social interactions and with support from others.

I observed extensive cooperation in this study, one example as shown in my field notes from November 2019:

> Alanoud brought the tape and placed it around the cardboard. She asked her friend to cut the tape. She put the box of colours on top of the cardboard, drew decorations and wrote letters with happiness. Some of her friends joined her (Figure 32). After they had finished, she said, 'Yay! Mansour's room [is] done.'

Figure 32: Alanoud collaborated with her friends

I also observed the children helping their peers use the digital camera during their play. One example, as shown in Figure 33, was in my field notes from December 2019:

> Mohammed tried to show his recording video. He sat on the chair and pressed the camera's ['on' button]. Lina asked what he was doing, and Mohammed replied that he did not know how to use the camera.
>
> Lina: 'See, Press this button and this circle. Then you can see'.

Figure 33: Lina helped Mohammed to use the digital camera

Another example in my field notes from November 2019:

> Alanoud showed Rima her film.
>
> Rima: ‘How [did] you capture [it]?’
>
> Alanoud: ‘Easy. Just hold the camera this way to the wall, and move the camera quickly’.
>
> Rima: ‘I will try’.

From these illustrations, the children collaborated with Alanoud and made Mansour’s home. Lina scaffolded Mohammed’s use of the digital camera by demonstrating how to show the film he had already made. Alanoud was scaffolding Rima’s use of the digital camera by showing her how to film in a particular way. This confirmed Vygotsky’s (1978) perspective that when children work in a given activity in the ZPD, they can achieve the task with the help of more capable teachers or peers through social interactions. The children also occasionally asked me and/or the teachers about using the camera. Thus, their engagement in LPs was mediated by more capable peers and teachers and by cultural tools, such as language, works of art and technologies (John-Steiner & Mahn, 1996). For example, as observed in my field notes from (December 2019) regarding a storyboard:

> Mishal smiled when he saw the Mansour costume.
>
> Me: ‘Would you like to try it?’

He looked at his friend and said, ‘No.’ He seemed to be shy about wearing the costume. When Mohammed wore the Salem costume, Mishal took the Mansour costume and put it on. Mohammed pointed to Mishal to show him the storyboard.

Mohammed: ‘See, first Mansour and Salem [are] walking to go to the train. Let’s do it’. Mohammed organised the chairs to make the train and counted in English from one to ten. He brought the cardboard, put it in front of the chairs, sat on it and made a sound (choo choo). They seemed to enjoy pretending to be on the train and spent 15 minutes playing and laughing.

Mohammed to Mishal: ‘Who will film our story?’ One of the children agreed to do it and held a camera.

Mishal: ‘Wait until I finish. Then film me’.

The findings also revealed that the children collaborated in twos, threes and sometimes in larger groups, as shown in my field notes from December 2019 (Figure 34):

Shouq started to draw on paper.

Lina: ‘What is this?’

Shouq: ‘The circle is where the treasure is’. Lina smiled, and Shouq continued drawing.

Shouq: ‘I think I need another paper’. Mishal and Mohammed observed Shouq drawing for three minutes. Mishal took the cardboard and hid a small toy underneath it. He told Mohammed that it was the treasure. Mishal sat on a table next to Shouq and drew on paper.

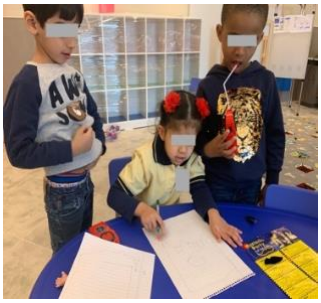
Mishal: ‘This is the map to find treasure’

Shouq smiled and said, ‘We have two maps’. Mohammed took a pen and added a drawing to Mishal’s map.

Mishal: ‘Let’s see where the treasure [is]’. Shouq held her map with Lina and started looking for the treasure. Mishal held the map with Mohammed and walked. Salem joined.

Salem: ‘I will look for the treasure with you. Mishal, follow me’. Shouq said, ‘Mohammed should turn right, like the drawing on the map’. During their play, Rima filmed the children and commented on the video, ‘This is Mishal’s map’. She followed them and filmed them when they looked for the treasure and laughed.

Figure 34: Shouq and her friends collaborated to find the treasure



This note illustrates that all six children played together to find the treasure. This started when Shouq drew on the paper, which Mishal later called a map for finding treasures. This seemed to stimulate the other children to participate in this kind of play. Mishal drew another map, and Lina, Mohammed and Salem joined later to find that treasure. The children seemed to reflect on the stories they knew. Giving them opportunities to collaborate and interact in playshops and seemed to motivate them to enjoy and produce a variety of stories. This was supported by Ng and Graham (2018), who indicated that collaboration motivates learning and makes it more enjoyable. In terms of literacy, Guthrie (1996) argued that when learners develop a sense of belonging among themselves, self-determination increases, which in turn improves the learners’ literacy engagement and affects them long-term motivation for literacy (Cambria & Guthrie, 2010). The current study views literacy more broadly than simply as literacy as in

the previous literature. Collaboration has been identified in previous studies as motivational in literacy learning with older children (Guthrie & Cox, 2001; Guthrie & Wigfield, 2017; Tegmark et al., 2022) and in digital literacy with adults (Rogers, 2017). The current study found that collaboration also appears to motivate young children in the context of broader understandings of literacy.

The findings from the teacher interviews aligned with my field notes, as they also recognised the children's collaboration during the study. For example, when the principal observed the children finding treasure in the previous example, she commented: 'I liked that some of them played around the same idea. I think they [are] looking for something (smile)'. Teacher Sara stated that the reason for collaboration in the LP was the use of the digital camera: 'I think using the digital camera encouraged the children to organise and collaborate to represent a story'. Teacher Ghaida supported this. This aligns with my interpretation that digital technology seemed to stimulate the children's collaboration, which is supported by other studies that I present later. Furthermore, Teacher Esraa commented on the children's play after applying LPs:

> 'I've never seen a child make a story alone, [where] one filmed and [the] other acted. I remember [that] I liked [it] when they made an aeroplane together. Even when they talked to me about their story, they did not say 'I did'; instead, they said 'We did'. I could say collaboration is 100% in the children's play'.

Collaboration in this study could be interpreted in a number of ways. First, collaboration is one of the processes in LPs that was explained by Wohlwend (2013) and discussed previously in the literature review and methodology chapters. Wohlwend (2013) indicated that the children in her study enacted the stories together and were guided by teachers who reminded the children about their roles using the camera and what they had decided on regarding the story. In the current study, the teachers also reminded the children at the beginning of their play who would

hold the camera, to share and take turns. Although the children were not forced to collaborate, they were reminded to share and play together, and they were provided with a variety of tools, such as digital cameras, costumes, artefacts and props. My field notes revealed that, after one month, the teachers no longer reminded the children, the children, nonetheless, continued playing together and collaborating. However, two of the children were sometimes seen playing individually, such as when Mohammed (in the previous example) played with some figures. Generally, all the children interacted to create their productions. Second, the use of the digital camera seemed to play an extensive role in stimulating the children's interaction with one another. Obviously, using a video camera requires at least two people. One holding a camera and another one act. This seemed to increase the children's social interaction and collaboration and could have increased enjoyment during playshops. My interpretations align with previous studies that discussed the potential role of digital technology to enhance collaboration and interactions. For example, Marsh et a1. (2020), who found that children frequently collaborated in playing with digital technologies when they worked in groups or pairs, and that discussions with peers and adults allowed them to produce content together using the children's tablets. This also aligns with Wohlwend's (2015b) study, which indicated that a digital puppetry app offers a chance for children to collaborate when they compose a story using tablets. This was also supported by Flewitt et al. (2015), who found that iPads enhanced children's communication and language and help develop collaboration in literacy learning.

The present work is also in alignment with Alhinty's (2015) study that found the use of iPads motivated older children in the Saudi context in language learning and satisfied a sense of relatedness as defined through the lens of SDT. Students' teachers in the Saudi context in Alghamdi et al.'s (2021) study indicated that integrating digital technology with children's education could support collaboration and facilitate learning. However, a literature review of studies spanning 12 years that explored SDT related to digital technologies in educational

settings found that having digital technologies in educational settings provides opportunities to meet the need for autonomy and competence, but the need for relatedness could be challenging in some forms of digital education, such as online courses (Salikhova et al., 2020). This is supported by the study by Macdonald (2017) which indicated that early childhood teachers thought that digital technologies limited social interaction. This does not align with my findings that using digital technology as a tool in LPs seemed to enable the children to interact and presented stories together as seen in the previously mentioned examples, which assumed that satisfying the need for relatedness was met. Previous studies have connected digital technology to the satisfaction of the three psychological needs in adults (Jeno et al., 2017; Khojah, 2018) as well as autonomy and competence (Salikhova et al., 2020) in older children aged eight through fourteen years (Chiu, 2021). The current study found the connection between incorporating digital technology and satisfying feelings of competence to be the same in children aged five to six years. Third, completing my interpretations of potential collaboration and interactions identified in the current study, I found that when the children worked together on a shared theme, such as Mansour and PJ Masks, it seemed to enhance their interactions with one another. For example, when some of the children tried to create their own stories, other children reminded them that what they proposed had not happened or would be unlikely to happen in the show. They all focused on stories they knew well, which seemed to increase their interactions. This was supported by Wohlwend (2013), who indicated that playing with popular media toys is a great way of stimulating children to negotiate because they bring familiar stories and characters to life that they enjoy playing with and know best. Previous studies have also discussed the potential collaboration among children when incorporating popular culture (Thiel, 2015). Finally, showing their productions on a projector, computer or camera screen seemed to stimulate the children to interact and collaborate. The following examples are from my field notes (November 2019):

Rima and Alanoud saw their film and laughed.

Alanoud: ‘Why did you wake up slowly? You should do it like this. Fast’.

Rima (laughing): ‘Okay, I will do it next time’.

Salem, Tareq, Mohammed and Mishal saw the video of Salem and another friend and wondered how he had jumped.

Tareq: ‘I will do it with you tomorrow’.

Mohammed: ‘Me too’.

Similar evidence was presented earlier under 5.3.2.4 Frequent participation in answering RQ1 in which children frequently performing the activity, when the children saw their film and repeated the stories again together.

Observations of the children in traditional literacy revealed that they worked individually. This could be attributed to the policy applied in the kindergarten, in which the teachers were asked to assess the children individually based on reading and writing skills. This was confirmed by teacher Esraa: ‘I have to assess the children every Wednesday—if a child [can] read and write letters’.

Working individually in traditional literacy in the present study could also be the reason for the children’s low engagement scores, according to the LIS. Contrary to supporting relatedness in SDT, Niemiec and Ryan (2009) clarified that when learners feel disconnected from other learners or teachers, their intrinsic motivation will be lowered and they will only respond to external control. Brophy (2004) suggested shifting classroom practices from lonely seatwork to collaborative activities.

However, it seemed that applying the LP stimulated the children to work and interact with one another. They shifted from individual work on a storyboard, which Wohlwend called independent authorship, to ‘collaborative and interactive’ authorship in new literacies (Buchholz & Coggin, 2013, p.17). This aligns with the expanded meaning of literacy discussed

as opposed to the traditional vision that establishes literacy as an 'autonomous' set of skills (Street, 1984). It was previously discussed in the Literature Review Chapter that new literacies are more 'participatory' and 'collaborative' and less 'published' and 'individuated' than conventional literacies (Knobel & Lankshear, 2007). Collaboration is a fundamental feature in new literacy studies (Undheim & Hoel, 2019) as the meaning of literacy has expanded.

The findings provided in this section outline the potential of a LP to offer opportunities for young children as well as older children, to exercise relatedness in literacy learning (Guthrie & Cox, 2001; Guthrie & Wigfield, 2017; Ng et al., 2006; Tegmark et al., 2022). The current study makes a distinct contribution to the literature related to satisfying students' need for relatedness within a broad meaning of literacy with young children through the lens of SDT.

5.4.4 Summary of the section

This section presented the findings and discussed the impact of the LP on children's motivation through the lens of SDT. This study revealed that the LP seemed to provide opportunities for the children to experience autonomy, competence and relatedness. Each of the three psychological needs were presented and discussed individually in line with the data after applying LPs. The discussion was supported by evidence to show how the children seemed to have had these three psychological needs fulfilled.

The next section of the study presents the findings and discussion to answer RQ3 regarding teachers' feelings about the advantages and disadvantages of the LP approach.

5.5. Teachers' feelings about the advantages and disadvantages of the LP curriculum

This section answers RQ3 regarding teachers' attitudes towards applying the LP. The data revealed that prior to applying the LP, some of the kindergarten teachers and the principal seemed reluctant to allow the children to use digital devices or popular culture forms from media in educational settings at this young age. For example, when I introduced the project to the principal, she suggested using scientific characters instead of media characters, and she did not seem to support using digital technology. She assumed that, for example, using iPads would decrease children's concentration and socialisation. This aligns with Macdonald's (2017) study in the UK, which indicated that some teachers expressed negative views about the impact of technology on young children's cognitive, social and emotional development. In terms of popular culture in the workshop, Teacher Sara and Teacher Ghaida were concerned that the children might mimic violence from the media in class. This was reflected in previous studies (Dyson 2018; Wohlwend 2013; Yoon, 2018) in which popular culture texts were excluded from the curriculum due to their potential to contain violence, racism and gender roles (Arthur, 2005; Marsh, 2006).

Most of the teachers preferred practical or physical activities. Interestingly, after applying the LPs, all the teachers seemed happy that the children were engaged and used a variety of resources to create their own stories, which decreased their initial concerns. The data revealed that the children did not copy the characters, but they were stimulated by them to engage in play and create stories of their own (this has been discussed previously under planning and creating themes in answering RQ1). Furthermore, their use of a digital camera for the first time in the classroom might have attracted the children's attention and inspired them to create different stories using available resources, such as costumes, related to popular culture. The difference in the teachers' attitudes before and after applying the LP was aligned with Flewitt et al. (2015), who indicated that despite some teachers' initial concerns about

technology in terms of harm, cost and lack of language use, they felt positive about implementing iPads in their classrooms after a few weeks of using them. Hesitation to integrate digital devices into early childhood classrooms was also found in Palaiologou's (2016b) study.

The teachers in the current study expressed what they liked about the LP and the challenges of applying the curriculum in the kindergarten classrooms. The teachers' perspectives were analysed and discussed in two main Sections: 5.5.2 analyses and discusses the advantages of applying LPs from the teachers' perspective (e.g., supporting creativity, developing language and enhancing engagement), and 5.5.3 analyses and discusses the disadvantages and challenges of applying LPs from the teachers' perspective (e.g., curriculum and lack of equipment).

5.5.1 Advantages

5.5.1.1. Supporting creativity

Many researchers have written widely about creativity, which is the generation of new ideas and the development of them into new products. Creativity is linked to imagination and involves problem solving (Write, 2010). The children in the current study generated a variety of imaginative stories in different ways, created masks, developed scenarios and used different production methods (digital and non-digital).

Several teachers in the current study expressed that the new curriculum seemed to help the children be creative. For example, Teacher Sara said, 'The children [were] being more creative, and every day, they created ideas. They produced a variety of stories'.

Similarly, the principal reported the following:

> I [did not] expect that the children [would] produce pretend stories, be[come] their favourite characters, try to film and create films and invent a sense in an attractive way. To be honest, I was amazed at what I saw [from] the children. [What I like most] in this curriculum [is] that it gives the child freedom, which leads to confidence and creativity.

Teacher Ghaida added, 'The children [would] dress up [as] characters to take the role of the character and invent more and more'.

From these statements, it seems that the teachers found that the LP developed the children's creativity. Some of the tools related to LP might have stimulated the children to be more creative than others. For example, using a digital camera was highly effective. This was also reflected in a study published by the LEGO Foundation; the creative tool used in their study (a camera) led to the finding that digital devices, such as tablets, help children make creative productions, such as films (Marsh et al., 2020). Livingstone et al. (2014) found that the children in their study used digital devices to take photos and make videos creatively, with their parents helping them edit. Marsh et al. (2020), who researched app and tablet use in a study of 954 UK parents of children under 3 years of age and a case study of 4 children, found that tablet use promoted play and creativity in children of this age group.

In the current study, the principal mentioned that the LP helped the children become confident and creative. Poulsen et al. (2006) indicated that confidence, persistence and creativity are consequences of intrinsic motivation. This supports my finding that the children were intrinsically motivated to participate in the LP in the SDT lens.

However, it seems that the classroom environment also plays an important role in supporting creativity. Teacher Sara said that she assumed that the current classroom limited

and restricted children's ability to be imaginative and creative. She critiqued the daily routine in the kindergarten by reporting, 'We use the same corner and same tools, and this [is] our routine every day. [The] library corner in the classroom, for example, has only books and chairs. [Few] children like to use this corner'. She seemed to imply that providing interesting tools stimulates children and might help them engage and become more creative. This corresponds to my view in the previous theme, where I noted that the classroom in the current kindergarten had no digital devices for the children to use or popular culture/favourite characters to stimulate engagement in the activity. Burnett & Merchant (2018) argued that instead of denying modern technology's role in young children's lives outside school, the school setting is the ideal place for children to engage in creative activities using new media technology. Jewitt (2008) argued that visuals are essential to concepts associated with creativity and education and acknowledged that creativity extends beyond language or writing to visual and other modes. She argued that visual and other non-linguistic resources are often neglected in educational settings, particularly with young children. This was true in the current kindergarten based on the findings of the present study.

The findings in the current study revealed that the LP, which contains digital devices and other tools, supports creativity from the teachers' perspectives, as shown in previous studies. For example, Aseri's (2018) study in SA investigated the influence of technology (especially iPads) on the learning of children aged 5–6 years in kindergarten by observing and interviewing teachers before and after the intervention, with the results showing improvement in creativity, autonomy and self-development in children. Flewitt et al. (2015) showed that self-esteem, engagement in literacy activities and creativity using the Our story app in literacy practices were acknowledged by teachers. However, when Palaiologou (2016b) explored teachers' perspectives regarding incorporating digital technologies into children's play in early childhood education in England, Luxemburg, Malta, Greece and Kuwait by applying a survey

followed by teacher interviews, digital devices were viewed as controlling children's creativity and motivation when integrated into early childhood classrooms.

5.5.1.2 Developing language

Most of the teachers mentioned the language development that they noticed (spoken or written) in the children during the LP. For example, Teacher Ghaida reported the following:

> I remember when providing [a] Mansour costume for the children, everyone was excited and started talking about this cartoon and another favourite character. When they also used the digital camera and saw themselves on screen, they laughed and continued talking together.

Teacher Ghaida believed that the digital camera played an important role in developing language in the LP. She stated, 'I feel the camera encouraged the children and gave them self-confidence when they saw themselves on the screen and their friends saw them, and [their] speaking also improved'.

This follows my previous justification that using digital cameras and then showing the children their videos seemed to stimulate them to interact and talk about what they had done. Sometimes, they repeated scenes many times and developed conversations. This was also noted by Dryden (2017), who found that technology provides many opportunities for children to communicate and develop their language, vocabulary and stories, and when used in imaginative play, it further enhances their development. In their work in Florida (USA), Huffstetter et al. (2010) incorporated the use of a computer programme in the teaching of children aged four and five years. They assessed the students' reading and language skills and interviewed the teachers to understand the use of technology in the classroom as well as the

ways in which technology could be utilised to enhance the development of children's reading and oral language skills. Thus, Huffstetter et al. (2010) concluded that the use of such a computer programme in the classroom could be beneficial to students and a diversity of learners.

However, previous studies provided evidence that teachers were concerned about limited the socialisations that might occur to children using technologies in classroom (Palaiologou's, 2016b; Macdonald, 2017) which is not in line with my findings.

In the current study, some of the teachers believed that the LP enhanced the children's language, and they gave Salem as an example.

Teacher Esraa reported the following:

> I think [there was a] positive impact on and boldness in speaking for the children. Salem, for example, was [a] completely different person in playshops (laugh). Seriously, in my class, he was quiet, even if I [would] do physical activity with them compared to his speaking in playshops. Other teachers also noticed.

The principal supported what Teacher Esraa indicated about Salem: 'I know Salem did not talk a lot. When I toured the classes every day, I saw him interact and talk with friends in [the] playshops. I really like that'.

Applying interesting tools seemed to stimulate Salem to engage in these activities. Kaye (2017) indicated that technology, such as recording supports children who are hesitant to speak by using playful approaches. She clarified how James and Cane (2009) described a child whose first language was not English, felt embarrassed by their accent and was reluctant to speak and how they became confident after using a voice changer. Flewitt et al. (2015) added that the advantages of using tablets with children who are hesitant to speak, those for whom English is

a second language, shy children or those with motor difficulties is that they are encouraged to communicate and cooperate during classroom activities.

Some of the teachers in the current study indicated that the LP seemed to impact written language. For example, Teacher Sara indicated that she noticed Mohammed and Rima attempting to write Mansour in Arabic (منصور) during her Arabic lesson. She said that this surprised her because they had not previously been writing any words. Therefore, it might be that popular culture stimulated the children to develop written language. This aligns with my field notes, in which I observed the children writing and drawing during the LP on several occasions. Using Mansour, a very popular character, seemed to stimulate the children to write. This was supported by Marsh (1999), who integrated the theme of superheroes (Batman and Batwoman) into literacy activities and found that the children became more engaged in literacy practices, such as reading and writing, as a result. It also aligns with previous studies indicated that integrated popular culture motivated children in literacy (Dyson, 1997, 2003; Marsh, 2014; Yoon, 2018)

The positive relationship between dramatic play in a rich literacy environment and developing language in children has been widely discussed in previous studies (Hall, 2000; Ihmeideh, 2015; Mielonen & Paterson, 2009). In the current study, the teachers stated that language seemed to develop as a result of implementing the LP.

5.5.1.3 Enhancing engagement

Most of the teachers in the current study indicated that the children seemed engaged in LPs. For example, Teacher Esraa talked about some of the children's reactions when they had a lesson following a LP:

> After they finished playshops and before I started my new lesson, most of the children [were] enthused and continued talking together about what they did. I sometimes

> [heard] ‘we filmed’ and ‘we pretended to be Mansour’, and [they talked] about other characters. One time, Rima and Alanoud showed me how they filmed their story, and they laughed.

Similarly, Teacher Ghaida stated, ‘I remember they came back with enthusiasm and happiness. I asked them, and they said [they had a] great time’.

Some of the teachers noticed that this level of engagement in the LPs came later in the curriculum. Teacher Ghaida stated, ‘I do not feel that the children really engaged in the beginning when they started using the arts tools and drawing storyboards, but they did after they started role play and used the camera and costumes’.

> Teacher Sara added, ‘Their engagement in activities increased when they played with their favourite characters’.

This supports my findings and justification in answering RQ1. Some of the children initially scored low on the LIS, but their score increased after introducing interesting tools, such as a digital camera, costumes and figures. This study also revealed that the children enjoyed the LP, which was supported by some of the teachers’ reports.

Furthermore, increased concentration was found after the LP had been implemented, as supported by some of the teachers. For example, Teacher Esraa said that when she used to open the door, most of the children just looked at her. When she came to class during the LP, the children seemed busy and did not notice her. The principal also commented that the children seemed busy during the LPs. Teacher Sara noted that Tareq showed a higher level of concentration during the LP than during other activities. Similarly, Teacher Esraa commented that she was happy and proud the first time she saw Salem happily playing and engaging. All the teachers’ reports indicated that the children seemed engaged in the LPs.

Thiel (2015) & Wohlwend (2013) justified that when children dressed up in costumes, they transformed into characters and embodied the literacy they produced in their stories through movement in imaginary play. They also produced stories in multiple modes, as discussed in the first theme which means they engaged in the LP.

Interestingly, some of the teachers talked about an autistic child named Randa, who was not one of the eight children regularly participating in the LP. Randa mostly stood with her back touching the wall and observing the other children playing. The teachers reported that she did not talk to any of the children and did not participate in activities, which I also saw sometimes. After applying the LP, the teachers were amazed to see Randa hold the camera and sometimes try to film other children.

Teacher Sara commented: 'Randa's engagement is really better'.

Teacher Esraa stated, 'The teachers talk about Randa. I wish I saw her holding the camera'.

The principal seemed delighted to see Randa expressing her feelings. She reported, 'I am glad to see Randa smile and this huge transformation in her personality'.

When Randa's mother came to the school to pick her up, she spoke with me and commented that Randa had told her that the classroom had something like what we see on TV (she laughed) in class. Randa had participated in the LP in which the costumes, figures and camera that she saw in the kindergarten seemed related to characters that she had seen on TV. Thus, popular culture seemed to stimulate Randa, even though her participation was limited. Previous studies have found that digital technology supports the learning of children with special education needs and disabilities. For example, Macdonald's (2017) study found that teachers reported the use of digital devices and technologies, particularly Apple's Siri, as motivating autistic students' interactions in the classroom.

The link between popular culture and literacy has been reflected in previous studies. For example, Dyson (2018) indicated that there is a relationship between children's participation in popular culture and acts of composition in the school environment of children in years one and two. Similarly, Vasquez (2003) found that when a six-year-old child engaged and played with the Pokémon cards, he developed a new form of literacy by creating his own cards. Yoon's (2018) study of two children—Lucas and Trevor—playing in a kindergarten using materials related to *Star Wars* found that their literacy practices extended, and engagement in social interactions was observed at the intersection of play, popular culture and literacy.

The current study revealed that LP likely enhanced the children's engagement, as most of the teachers indicated. Several previous studies have shown that teachers acknowledge that using digital devices and popular culture enhances children's engagement. For example, Marsh et al. (2005), who conducted an 11-month survey with 1,852 parents and 524 practitioners to explore the use of popular culture and new technologies with children aged from birth to 6 years in England, asserted that popular culture and new technologies had a positive influence on the motivation of children engaged in literacy. Furthermore, Macdonald (2017) indicated that some of the benefits teachers noticed when using technology with children were that technology motivated and engaged young children who enjoyed using it. Furthermore, Flewitt et al.'s (2015) study showed that iPads motivated children to engage in literacy activities. Children used iPad to take photos and imported them into apps, and the teachers reported that the iPads enhanced the students' concentration levels and engagement. This aligns with my findings, as most of the teachers reported that the LP using digital cameras seemed to enhance children's engagement including concentration.

5.5.2 Disadvantages

Although the teachers in the current study expressed that the LP evidenced many advantages, such as developing creativity and language and enhancing children's engagement, they indicated that there are some challenges to applying this curriculum in kindergarten. As mentioned previously, some of the teachers were initially concerned about children using digital devices and popular culture from media at such a young age. They seemed to prefer using practical activities rather than integrated devices. This aligns with Macdonald (2016), who showed that many teachers had strong opinions regarding the types of hands-on experiences that young children should have during their early childhood years. Similarly, Palaiologou (2016b) argued that despite the teachers in her study having a positive attitude towards using digital devices in their everyday lives, in terms of their use in early childhood, they seemed reluctant because they believed that play-based pedagogy is characterised by first-hand experiences that can be found in the physical environment. Similarly, in Kuwait, Aldhafeeri et al. (2016) found that 46% of teachers thought that the early childhood curriculum should not incorporate digital devices, and 57% affirmed that digital devices should not be used by children during classroom playtime.

However, after applying the LP, all the teachers in the current study did not seem concerned about digital devices or popular culture, but they indicated that the current official curriculum and a lack of resources might make the LP more challenging to apply.

5.5.2.1 Curriculum

Most of the teachers in the current study stated that following the existing kindergarten curriculum seemed to make it challenging to apply LPs. For example, Teacher Esraa reported, 'I have to follow the curriculum and teach the children 13 letters [and] reading and writing in one semester'.

Similarly, Teacher Sara reported the following:

> To be honest, I wish I [could] do [a] lot of things with the children, but I cannot because I have to complete the curriculum. There is no time. All of them need to be [taught] how to write all [the] letters because next semester, they will have dictation. This puts very much pressure on us'.

Teacher Esraa agreed that the kindergarten focuses on academic skills by reporting an example of when the principal entered the classroom one day and asked the children to write letters randomly on the board. Teacher Esraa argued that there are other ways to assess children, and she suggested that they ask the children to draw or sing to see how they had developed. These statements indicate that the pressure on teachers to teach writing is one of the challenges of integrating other curricula, such as LPs. This supports my previous argument that playtime in the kindergarten classroom is limited to 30 minutes, which aligns with previous studies that indicated playtime has been reduced in early childhood classrooms to focus more on academic skills (Wohlwend, 2013, 2017b). Additionally, Saudi mothers supported focusing on academic learning rather than play in a study using a questionnaire (Haroun, 2018). Burnett and Merchant (2018) argued that the pressure on teachers to achieve high standards is not giving children the opportunity to explore and that guidelines for integrating digital media and technologies into national curricula are either unavailable or focus exclusively on functional uses rather than creative or critical aspects. This is also true in the Saudi national curriculum—the context of this study—which does not include integrating new technology into the curriculum (this was explained further in Chapter One); some teachers consider it one of the barriers to technology use in early childhood classrooms in SA (Alasimi, 2018). This finding supports my argument about the lack of digital devices in the kindergarten classroom in the current study. They had only a projector, and only the

teachers used it. The current study does not reduce the importance of reading and writing, but it argues that the focus in kindergarten is only on traditional academic skills, and there is insufficient time scheduled for play and integrating digital technologies and interesting tools for children. Flewitt et al. (2015) argued that as long as innovative uses of new technologies continue to be absent from the school curriculum and pedagogy, then we risk missing the opportunity to illuminate this generation's learning.

Furthermore, some of the teachers felt that the restrictive nature of the kindergarten classroom environment might make it challenging to apply LPs. Teacher Sara reported, 'The corners in the classroom are necessary, and we cannot change the organisation of these corners. I wish we had more flexibility'.

Similarly, Teacher Ghaida believed that children have freedom in playshops. She found it challenging to provide this freedom in the classroom, and she argued that she had to have a rule for the children to enter the corners using cards, and that the corners should be organised in a particular way. She added, 'Whenever roles increase, freedom in education decreases.

Again, it seems that the curriculum applied in the kindergarten and policy play a role in making it challenging for some teachers to apply LPs. The organisation of the classroom the teachers talked of is that the classroom is divided into six main corners, as required of Saudi kindergartens, for implementing the curriculum. The details of the curriculum are explained in Chapter One: Introduction. Based on the curriculum, the teachers were asked to divide the corners into two groups: quiet corners, such as 'library', 'writing' and 'cognitive' close together, and 'blocks', 'role play' and 'exploring and art' close together. There should be a particular number of children for each corner, depending on the size of the classroom. When they enter the corner, they display cards or hang something at the entrance of the corner. This way, if the capacity of the corner is three children, no more children can go in until one of them

leaves. This seemed to restrict the teachers' ability to be more flexible in changing the organisation of the classroom or create other corners.

5.5.2.2 Lack of equipment

Most of the teachers reported that they were not provided with digital devices or interesting tools for the children to use, which made them consider it challenging to apply the LP. Based on my field notes, this statement was correct; there were no digital devices provided for the children to use in the classroom. Some of the teachers reported that there was some but limited use of digital technology in the classroom. For example, Teacher Ghaida reported that she used a projector to show the children lessons. She added that they did not have iPads in the classroom, so the children could not film themselves if applying the LP. Similarly, teacher Esraa stated that she used a projector, but only on Thursdays, as a directive from the administration, which they preferred that the children partake in physical activities. This aligns with Alasimi (2018), who surveyed 304 teachers (190 from public schools and 114 from private schools) in Riyadh. The teachers' responses indicated that the barriers to using technology in early childhood classrooms in SA were a lack of internet access and a lack of technology devices in the classroom. This aligns with previous studies which showed that teachers indicated the challenge of integrating digital technologies into early childhood classrooms as due to limited devices being provided in SA (Alghamdi et al., 2021) and in the UK (Macdonald, 2017). Alasimi (2018) clarified that the technological tools used in most Saudi kindergartens were projectors, laptop and desktop computers.

The lack of digital devices in the current study could be interpreted as a result of the administration's role in approving the use of such devices. This was also reflected in Alghamdi et al.'s (2021) study, which explored the technology readiness of kindergarten student teachers in SA and indicated that even though the student teachers had positive attitudes towards

integrated technology in the classroom, some of the barriers to integrating technology were due to the school environment, including policies set by the administration, which either prevented the use of technology or limited the number of devices available, providing too few for the size of the classroom. The reason for the policies in the current kindergarten may be the belief that hands-on activities are better for children. The principal of that kindergarten seemed unsupportive of using iPads in a classroom with such young children. Furthermore, the lack of digital devices in kindergarten in the current study was likely related to the Saudi curriculum, which does not integrate digital technology for children in kindergarten (Alasimi, 2018). Thus, change is needed in Saudi curricula in early childhood classrooms to include the innovative use of new digital technology and other resources and extended play periods rather than denying these practices and focusing on academic skills only.

5.5.3 Summary of the section

This section presented the findings and discussed the advantages and disadvantages of applying LPs in Saudi kindergartens from the teachers' perspectives. This study revealed that the LPs seemed to support creativity, develop language, and enhance engagement from the teacher's perspective. However, the teachers expressed that the current curriculum and lack of equipment are challenges when applying LPs.

The next Chapter of this study presents the conclusions, implications, limitations and contributions of the current research.

Chapter Six: Conclusions and Recommendations

6.1 Introduction

The current study aimed to explore Literacy Playshop (LP) curriculum design in one Saudi kindergarten to gain a better understanding of the impact of LPs on children's literacy engagement, motivation in literacy and literacy practices in that kindergarten. It also attempted to understand teachers' feelings regarding this new LP curriculum by applying it for the first time in a Saudi context. The theoretical framework that this study draws from, the relevant literature and the identified gaps were presented in Chapter 2 and Chapter 3. To help understand children's motivation in this study, the lens of Self-Determination Theory (SDT) was applied, which was presented and discussed in Chapter 3. A case study using the ethnographic approach was used in which the LP curriculum design was applied in the aforementioned kindergarten. Participant observation and structured observations using the Leuven involvement scale (LIS) were undertaken with eight participants aged five to six years in the classroom. Semi-structured interviews with three classroom teachers, the principal of the kindergarten and the mothers of the eight children were undertaken. The methodology and methods have been explained further in Chapter 4, while the findings of this study and discussion have been outlined in Chapter 5.

This chapter presents the conclusion of this thesis: Section 6.2 summarises the key findings; Section 6.3 clarifies the limitations; Section 6.4 highlights the contributions; Section 6.5 suggests implications for policymakers, teachers, parents and researchers; Section 6.6 suggests recommendations for future research; and Section 6.7 comprises my personal reflections as the researcher.

6.2 Key Findings

The main findings of this study were based on three research questions:

RQ1: What is the impact of implementing a LP on children's literacy practices and engagement in literacy in one Saudi kindergarten?

RQ2: What is the impact of the LP on children's motivation, as understood through SDT?

RQ3: What are the teachers' feelings about the advantages and disadvantages of the LP approach?

The first research question generated data about the influence of implementing the LP on children's literacy practices and engagement in literacy. This study refers to the broader meaning of literacy and theories that have redefined literacy in recent years and discussed them further in the literature review (Chapter 2). The findings revealed that the children's literacy practices and engagement in literacy were developed through an approach that involved play and multimodal creativity. The children used multiple modes to make their own stories, including performing puppet shows, drawing, writing using letters and words and using storyboards and other figures and artefacts. Some stories were filmed. This finding is consistent with Wohlwend (2013), who found that when the LP was implemented in the United States of America (USA) with children aged three to eight years, performances varied. The current findings also revealed that the children planned to create their own themes and improvised play.

In this study, the children's performances were mediated by a variety of tools related to the LP, such as digital cameras, puppets, masks, cardboard, and storyboards. Thus, the children in the current study presented their stories through writing, drawing, props, changing voices and movement in digital and non-digital forms. This confirmed Kress's (2010) view that meaning can be understood not only in terms of written language but also in multiple other

modes, such as images, writing, drawings, moving images and speech. This also confirmed that play is a tool for multimodal meaning making (Potter & Cowan, 2020; Wohlwend, 2018).

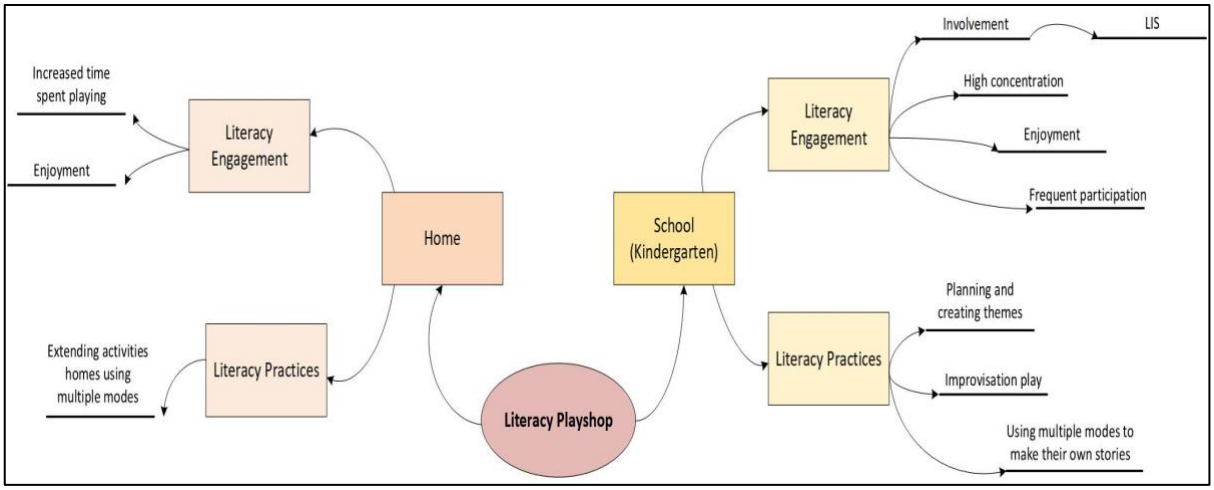
The findings of this study revealed that the children engaged in literacy when the LP was applied in the kindergarten. This was recognised by multiple lines of evidence. The children continued using multiple modes to make their own stories, including planning and creating themes and improvisational play, which showed that they seemed to be engaging in the LP. Furthermore, all of the children scored higher on the LIS during the LP than during traditional literacy. There are five levels of engagement on the LIS, with five being the highest level of engagement and one the lowest level of involvement. The results showed that all the children during traditional literacy scored between one and three which means (low involvement and moderate involvement) while after implementing the LP, the children scored between three to five which means (moderate involvement to extremely involvement). Some of the child participants involvement score increased immediately after implementing the LP while for others, their scores of involvement increased gradually. Additionally, the children frequently participated in the LP and showed a high level of concentration, which was confirmed by observations and indications from the teachers and the principal. Moreover, the children's enjoyment was clear during the LP. The teachers and mothers also indicated that the children seemed to enjoy the new curriculum.

It was assumed that providing a variety of materials for children in kindergarten that they also used at home, such as digital technologies and media, in the curriculum motivated the children to increase their literacy practices. The children improvised and collaborated in a playful environment using a variety of resources related to digital technologies and popular culture to make meaning in an educational setting, which was linked to 21st century literacies identified by Burnett and Merchant (2018) and outlined in Chapter Two: Literature Review.

Interestingly, the children's literacy practices and engagement extended to their homes; the data revealed that some of the children continued using multiple modes and materials related to the LP in their homes. They drew, performed, filmed, and sometimes showed their performance to their parents. Enjoyment and increased time spent playing were also reported by most of the mothers. It was assumed that the enjoyment of the LP transferred from kindergarten settings to home settings.

Therefore, the findings of RQ1, showed that implementing a LP in a Saudi kindergarten developed engagement in literacy and literacy practices. Figure 35 shows a diagram of the findings of the first research question.

Figure 35: Diagram of the findings of the first research question



The second research question attempted to understand the impact of the LP on children's motivation, as understood through SDT. Answering the first research question revealed that the children enjoyed participating in the LP, and it was assumed that they were intrinsically motivated. Intrinsic motivation refers to participating in an activity for the pleasure of the activity itself; therefore, these activities are interesting and enjoyable to the individual

doing them (Cambria & Guthrie, 2010; Ryan & Deci, 2000), regardless of any external influences. According to SDT, intrinsic motivation is supported by the satisfaction of three psychological needs: autonomy, relatedness and competence (Niemiec & Ryan, 2009). The findings of the current study revealed that the LP seemed to fulfil these three psychological needs.

The new curriculum seemed to provide opportunities for children to satisfy their needs for autonomy by providing choices and opportunities to ask questions and suggest ideas to their teachers. From the beginning of implementing the LP, the children had the opportunity to create their own visual settings and props, draw their favourite characters and make their own masks and cardboard visuals using various tools. They also used six-block storyboards to retell the stories they wanted. It was optional for them to write letters or words under the boxes on the storyboards. When the children acted out their stories, they had another opportunity to choose the tools they wanted and how they wanted to perform their stories. They could choose from a digital camera, costumes, storyboards they had made earlier, props, artefacts and figures. Some of their performances were filmed. According to SDT, supporting the needs for autonomy and increasing intrinsic motivation can be achieved by providing choices (Brophy, 2004; Reeve et al., 2003; Ryan & Deci, 2020). The findings also revealed that the children were given the opportunity to suggest ideas while implementing LP, and that their ideas were applied and used as tools during their play.

The needs for relatedness were met in this study by providing opportunities for the children to collaborate and interact during the LP. The data discussed in answering the first research question in Chapter Five: Findings and discussions, showed that most of the children's performances were not conducted individually. It was assumed that applying tools such as a digital camera in a LP might encourage children to collaborate. Using a video camera normally requires the involvement of at least two people. Collaboration among children was also

recognised by the teachers in this study. It was concluded that their engagement in a LP was mediated by more capable peers and teachers (Vygotsky, 1978). This seemed to motivate the children to enjoy and produce a variety of stories. This confirms the findings of previous studies that including digital technologies in play provides opportunities for collaboration (Flewitt et al., 2015; Marsh et al., 2020). Furthermore, all the children in the current study played around either the same theme or a theme they knew well from the media, which motivated them to collaborate (Wohlwend, 2013). SDT states that fulfilling the psychological needs for relatedness enhances motivation in educational settings (Ryan & Deci, 2020).

Likewise, the needs for competence were also satisfied during the LP. The curriculum seemed to provide optimal activities that were neither too hard nor too easy. It was clear that the children had spent a great deal of time working on their stories. The children sometimes sought help from one another, the teachers or me to use the camera, storyboard or other tools. Thus, more knowledgeable children and teachers/another adult supported the children during challenging activities. This seemed to help them achieve their tasks (Vygotsky, 1978). It was also found that clear instructions and informational feedback were provided by the teachers during the application of the LP. All LP processes and applying new tools, such as costumes, cameras or cardboard, were introduced by the teachers in steps. Chapter 3 discussed the differences between giving clear instructions and controlling in educational settings and between informational feedback and controlling feedback. This study also revealed that informational feedback was provided by the teachers during the application of the LP, as opposed to controlling feedback. Informational or positive feedback contributes to a sense of competence and enhances motivation by satisfying the needs for competence (Ryan & Deci, 2020).

Thus, satisfying the three psychological needs by applying the LP seemed to enhance the children's motivations. This was reflected by SDT, which states that fulfilling a learner's

needs for autonomy, competence and relatedness enhances intrinsic motivation and self-determination in given activities (Niemiec & Ryan, 2009).

The third research question explored the advantages and disadvantages of a LP from the teachers' perspectives. The findings suggested that despite some of the teachers not being supportive of children using some of the elements in this curriculum, such as digital technologies and popular culture forms, in an educational setting before implementing the LPs, all the participating teachers seemed to be satisfied that the children were engaged in this curriculum.

The findings of this study revealed that the teachers and the principal noted some advantages of applying LPs, such as supporting creativity. They felt that the new curriculum helped children be creative by generating new ideas (developing stories, creating films, develop scenarios) in which they are producing a range of stories using their imagination. These creative productions in social activities are in line with the perspective of interpretive reproduction (Corsaro 1992). The interpretive approach argues that 'children, through their participation in cultural routines, creatively appropriate information from the adult world to produce their own unique peer cultures' (Corsaro, 1992, p. 160). From this perspective, rather than viewing children as passive recipients, they are viewed as active participants creating their own peer culture (Ozger, 2022). Another advantage noted was the development of language. Most of the teachers expressed that they assumed that applying LPs developed some children's oral language skills, and they believed that some tools, such as a digital camera, when integrated into this approach, might play an important role in children's language development. Other teachers felt that implementing the LP seemed to help develop the children's written language skills. Another advantage recognised by the teachers was that the new curriculum was likely to enhance the children's engagement. Most of the teachers expressed that most of the children seemed to have a higher level of concentration during the LP, and they continued

playing and enthusiastically talking about what they had done in the LP when they moved to another session in their schedule.

Nevertheless, the teachers expressed that they faced some challenges in applying LPs in kindergarten, such as those posed by the existing Saudi curriculum and policies. The teachers mentioned that they were asked to teach a particular number of letters during an academic year, organise the classrooms in a particular way and have seven centre areas available in each classroom. They wanted more flexibility to change the organisation of the classroom or to create other learning environments. An additional challenge was the lack of equipment in the kindergarten. Most of the teachers indicated that they did not have digital devices for children to use in the classroom, and the only device they had previously used was a projector to show lessons or activities. The absence of digital devices is likely due to the current Saudi curriculum, which does not integrate digital technology for children in kindergarten (Alasimi, 2018).

6.3 Limitations of this Study

There are several limitations identified regarding this study. First, it was conducted in only one kindergarten in SA using a case study of eight children, their mothers, three teachers and one principal. Thus, generalisation of the findings is not to be expected due to the small sample size, which does not represent the wider Saudi population. Instead of attempting generalisation, this study aimed to gain an in-depth understanding of children's engagement, motivation and literacy practices during LP implementing. Details about the eight children who participated are presented in Chapter 5, which also describes the study's setting in an urban and middle-class setting and the access to digital technology, clarifies how the LP was implemented and explains the analysis process. This study attempted to ensure trustworthiness, as explained in Section 4.8. These details provided a better understanding of the eight children

and how they engaged in the new curriculum which did not represent all children in SA. In this sense, the results can be viewed as 'descriptions of the possibility of practice' (Danby et al., 2016, p. 145). Indeed, most Saudi kindergartens follow the same curriculum provided by the Ministry of Education. Therefore, it might be possible to use the findings of this study to support implementing the LP in another kindergarten in a similar context: an urban setting with similar economic status and access to technology.

Secondly, another possible limitation is that, arguably, this case study does not fully meet the criteria of an 'ethnographic study'. It was not possible to conduct this study fully under the category of 'ethnographic study', despite daily immersion in a kindergarten and the fact that ethnography has been applied in several literacy studies with children (Dyson, 2018; Heath, 1983; Wohlwend, 2013; Yoon, 2018). One of the challenges of conducting this study using a fully ethnographic approach were the constraints of my PhD and the limitations of a three-month period to conduct and complete the fieldwork. For an ethnographic study, a period of six to twelve months is considered sufficient in order to engage with participants and gather data (Watt & Scott-Jones, 2014). However, using methods linked to ethnography and inspired by the ethnographic approach enabled the collection of in-depth data, and the triangulation approach answered the research questions using multiple sources of evidence, including non-participant observation, participant observation and conversations with children/interviews with teachers and mothers. Further details are presented in Chapter 4 (Methodology).

Third, although this study explored the LP through the lens of children, teachers and parents, it might have provided a broader perspective if it had included policymakers, such as curriculum designers and decision makers in the Ministry of Education. This could be addressed in future research.

Finally, using video as a data collection tool was challenging in the Saudi context. In general, recording videos inside classrooms in the Saudi cultural context is rarely permitted.

Fortunately, the administration approved the recording of videos for this study, and the parents of the participants gave their approval. The challenge was with the teachers, who were all female, as is customary in Saudi kindergartens, because they did not wear a 'hijab' while teaching and therefore did not wish to be filmed. Thus, given Saudi female culture, the video was paused at times during the observations. However, the video was collected, and triangulation methods enabled the collection of in-depth data about the phenomenon being studied, which helped answer the research questions.

6.4 Contributions of the Study

Several gaps in the existing literature were highlighted in the literature review. These gaps were addressed by undertaking this study in the Saudi context, which resulted in several contributions.

First, the playful curriculum design of the LP was implemented and tested in this study for the first time in a Saudi kindergarten setting. Internationally, this curriculum has only been implemented in the USA (Wohlwend, 2013); however, the exploration of children's engagement and motivation in literacy and an understanding of teachers' views about this curriculum have not been previously explored in SA. Some elements of this curriculum, such as the innovative ways children use digital technologies to make their own stories, have been applied in a limited way in previous studies worldwide, particularly with young children in educational settings despite the wide use of digital technologies in homes (non-educational settings). Other elements, such as popular culture (e.g., costumes and toys based on favourite characters), have been explored globally, but it has been shown that these practices are excluded from children's curricula in early childhood settings (Dyson, 2018; Yoon, 2018). However, to the best of my knowledge, elements related to popular culture have never been implemented in the Saudi context with young children. Thus, this study makes a significant

contribution to early childhood curricula and early literacy studies by exploring this kind of curriculum within this context.

Second, this study views literacy from a sociocultural perspective and thus looked beyond reading and writing skills. Indeed, few studies have examined early literacy in the Middle East from a sociocultural perspective, despite the fact that several Middle Eastern researchers have investigated early literacy development in this region (Alothman et al., 2015).

Third, this study investigated children's motivation while applying a LP, as understood from SDT. Although previous research has examined SDT widely through learning and traditional literacy in educational settings (Guthrie, 1996; Khojah, 2018; Miller et al., 1993; Ng et al., 2006; Niemiec & Ryan, 2009), this study extends the application of SDT within the broader meaning of literacy, particularly with young children in an educational setting.

Finally, given the wide efforts made by the Saudi government to achieve Vision 2030, it is my hope that the findings of this study contribute to refining the national curriculum, which is an aim of the Vision, as mentioned in Chapter One (Introduction).

6.5 Implications of the current study

Several implications can be drawn from the findings of this study for policymakers, teachers, parents and researchers.

First, the findings of this study provide essential implications for policymakers in the Ministry of Education regarding early childhood curricula in SA. This study provided clear evidence about children's engagement, motivation and literacy practices after applying a LP. Thus, this could be used to encourage policymakers in the Ministry of Education to support kindergartens in designing LPs or similar curricula, considering children's interests, digital technologies, media and creativity. They would need to ensure that teachers are provided with continuing professional development in applying the LP in their particular contexts. This would

need to be funded so that kindergartens could obtain equipment related to the LPs, such as iPads, digital cameras and so on, as the findings of this study revealed that there is lack of equipment in kindergarten settings, according to the teachers.

Furthermore, this study revealed that children's literacy practices were not limited to print text but rather extended further, as children used multiple modes during play and performed stories using a variety of digital and non-digital tools. The children presented their stories through writing, drawing, props, changing voices and movement. The findings showed that the children were engaged in and motivated by these practices. Thus, acknowledging that literacy includes cognitive skills and beyond must be considered when policymakers design curricula for children. Importantly, this study did not argue for reducing the importance of traditional literacy; rather, it stressed the importance of acknowledging the broader meaning of literacy in educational settings. Children's literacy practices in educational settings must align with 21st century literacies, as discussed in the literature review. Thus, reworking the Saudi national curriculum should include acknowledging the expansion of the meaning of literacy and implementing the use of digital technologies in innovative ways, including offering interesting tools for children to use in kindergarten settings.

The findings of this study are useful for policymakers in terms of increasing awareness of children's everyday lives, which include digital technologies in their homes. This fact should not be neglected by policymakers when designing early childhood curricula.

This study also has important implications for teachers. It provided knowledge about practical approaches for teachers when implementing LPs in kindergartens. Drawing from the findings, Saudi teachers need to understand and adapt the broader meaning of literacy beyond viewing it only as a set of skills that focus on reading and writing. Thus, they need to provide a variety of materials and modes related to children's interests in kindergartens, such as digital technologies and popular culture forms. Teachers should engage with parents to understand

children's 'funds of knowledge' (Moll et al., 1992), which helps in understanding children's literacy practices and interests in their home settings. It could be useful to implement these elements into kindergarten settings to help bridge the gap between school and home.

The findings also show that teachers should acknowledge that play is integral in literacy curricula and demand that policymakers provide sufficient time in the daily schedule for play rather than reducing playtime. A playful approach to literacy, when integrated using digital technologies in innovative ways, must be encouraged by teachers for application in Saudi kindergarten settings.

The findings of this study also provide teachers' opinions about implementing LPs. This could be useful for teachers who are reluctant to implement digital technologies and other elements of a LP in classroom settings in early education settings.

Furthermore, the findings of this research help us understand children's motivations by adapting SDT (Deci & Ryan, 1985) with young children in an educational setting. Thus, satisfying the three psychological needs—autonomy, relatedness and competence—should be considered by teachers for enhancing children's motivation to participate in literacy.

To fulfil the needs for autonomy, teachers need to provide a variety of choices for children and give them the opportunity to select the materials they need. Teachers should not force children to use only particular materials based on the teachers' choices. Teachers should not focus solely on print materials such as pencils and paper; they should present a variety of digital and non-digital materials in kindergartens. Additionally, listening to children's opinions and interests and applying them during play are crucial.

To satisfy the needs for relatedness, teachers should provide opportunities for children to collaborate with one another. Therefore, working individually could be reduced in early education settings. This study found that providing certain materials stimulated collaboration, for example, the digital camera motivated the children to produce stories together. They rarely

used the camera individually. Additionally, engaging in play around the same interesting theme, such as Mansour, motivated them to interact with one another because they were familiar with this character in their homes. Thus, teachers need to provide materials and suggested themes that stimulate children to interact with one another.

Finally, to satisfy the needs for competence, teachers should provide optimally challenging activities to increase children's motivation in literacy and should avoid extremes (i.e., very hard or very easy activities). In this study, the activities related to the LP seemed to help the children feel competent. They spent time thinking, asked questions and worked together to produce their stories. The children were filmed, and their peers watched their productions, which helped their confidence and efficacy. Thus, teachers need to provide tools that have been applied in a LP or something similar in early educational settings to satisfy the need for competence. Teachers also need to provide clear instruction and offer positive feedback to children during their practice. They should avoid controlling children, such as by stating that the children will get a sticker for a particular task, such as writing something specific or completing a particular task.

This study also has implications for parents in SA. According to a study of Saudi mothers in Riyadh, mothers strongly support focusing on academic learning rather than play in kindergarten (Haroun, 2018). Thus, it is assumed that some kindergartens tend to gain parents' satisfaction by dedicating more hours to literacy and reducing the time for play. The findings of this study might be useful for increasing parents' awareness of the advantages of implementing an innovative curriculum in kindergarten settings. The findings revealed that there are enhanced engagement, motivation and literacy practices when using the LP, and the teachers indicated that a LP also supported creativity and developed language.

For researchers, the findings of this study also have important implications for the field of early childhood studies. To the best of my knowledge, this kind of curriculum has never

been researched in the Saudi context. Therefore, my testing of the LP curriculum in the Saudi context might encourage other researchers to explore this or another similar curriculum that integrates a variety of digital technologies and creative tools in other early educational settings. Findings from these kinds of studies should be published at conferences around the country, which might encourage policymakers and influencers to rework the curriculum provided for children in kindergartens.

6.6 Recommendations for Future Research

A number of recommendations for future research in early childhood studies can be made based on this thesis. First, the present study was carried out in one kindergarten in a particular region of Riyadh. Therefore, future research is needed to explore LPs in kindergartens in both urban and rural areas in SA and other kindergartens worldwide to explore children's literacy engagement, motivation and practices.

Second, this study explored the LP in the kindergarten setting and found that children extended their activities from kindergarten to the home setting. Thus, it would be possible for future research to further extend the LP work into the home and explore children's engagement and literacy practices.

Third, SDT offers a sufficient understanding of children's motivation when applying a LP. The literature shows that this theory has been widely applied in educational contexts particularly in learning and traditional literacy. Thus, it would be useful to extend and adapt this theory in future research with new literacies for young children in different contexts.

Fourth, this study provided teachers' views about a LP being applied in one kindergarten. Thus, more research is needed to understand teachers', head teachers' and

policymakers' perspectives about implementing LPs with young children in kindergarten settings in Saudi and international contexts.

Fifth, this study used thematic analysis (Braun & Clarke, 2006) to analyse the collected data to understand children's engagement, motivation and literacy practices. It would be useful for future research to use multimodal analysis to understand how children collaborate through play in relation to the diverse range of modes made available to them by applying a LP.

Sixth, future research investigating LPs could apply the ethnographic approach in kindergartens to explore whether children's motivation and engagement in literacy and literacy practices when applying a LP would change over an extended period of time and to understand the reasons behind any changes.

Seventh, following the children's making and actively creating while using a LP would be beneficial for developing new theories around maker literacies (Marsh, 2018) in future research.

6.7 Personal Reflection

At the completion of this study, I felt that all three research questions had been thoroughly investigated, and it is my hope that the findings will be clear and understandable for readers. When entering the doctoral programme, I hoped to broaden my experience and develop a deeper understanding and knowledge of the particular area of early childhood education in which this study was conducted and explored. Indeed, it has been a long journey filled with ups and downs, and it has exposed me to many challenges and a variety of experiences, each of which has taught me important lessons.

For example, despite the challenges of being far from my home country as a researcher in the United Kingdom (UK), attending many seminars and workshops, reading literature and having discussions with colleagues and academics enabled me to acquire valuable knowledge about developing academic research, enhanced my critical thinking abilities and increased my

knowledge of qualitative research and how to conduct research with children. Attending conferences and seminars in the UK about play and conceptualising literacy increased my knowledge of the broader meaning of literacy and how the relationship between play and literacy has been further developed. During my PhD journey, I read a variety of literature and exposed myself to different experiences about using digital tools with children in innovative ways. I was curious to explore whether children would engage if the tools were available in my context, and conducting this research helped me answer that question. As discussed previously, I was concerned whether a LP would be accepted by both the administration and teachers in my context. I found that despite the challenges indicated initially by the teachers, it was possible to integrate an innovative curriculum like the LP in SA. I assume that the possibility of integrating this curriculum into a similar context as this present study will be greater in the future as some schools gradually integrate technologies in line with vision 2030.

During my long journey, I learnt determination, patience and persistence during challenging times. The support I received from my family, supervisors and colleagues in the education department and my home country taught me how encouragement and support from others is crucial to maintaining focus and drive. Meeting people from the international community enriched my experience, as we discussed education, play and using digital technologies with children in educational settings and the challenges we faced.

As a parent, my PhD journey increased my awareness that children are creative when they are able to use a variety of resources and create different innovative productions by using digital technologies and other interesting tools in new and interesting ways. Thus, despite the challenges of limited time as a mother in the UK, I managed by taking my children to events for children conducted in Sheffield in museums, libraries and parks provided by the University of Sheffield and Maker Futures to let my children experience a variety of digital and non-digital

tools in a supportive environment. I also provided them with a variety of tools at home, digitals and non-digital, and supported them in playing and creating different productions.

Having a variety of challenges and experiences is part of learning. Indeed, this research journey has, in addition to answering my research questions, stimulated my curiosity about conducting more research in early childhood curricula, particularly early literacy.

References

Alasimi, A. A. (2018). *Saudi early childhood teachers' attitudes about the use of technology in early childhood classrooms* (Doctoral thesis, Kent State University). https://etd.ohiolink.edu/apexprod/rws_etd/send_file/send?accession=kent154232167330202 5&disposition=inline

Aldhafeeri, F., Palaiologou, I., & Folorunsho, A. (2016). Integration of digital technologies into play-based pedagogy in Kuwaiti early childhood education: teachers' views, attitudes and aptitudes. *International Journal of Early Years Education*, *24*(3), 342–360. https://doi.org/10.1080/09669760.2016.1172477

Alfarhan,I. (2016). New literacy in Saudi Arabia. *American Research Journal of Humanities and Social Sciences*, 2(1),1-6 https://doi.org/10.21694/2378-7031.16007

Alghamdi, J., Mostafa, F., & Abubshait, A. (2021). Exploring technology readiness and practices of kindergarten student-teachers in Saudi Arabia: A mixed-methods study. *Education and Information Technologies*, *27*(6), 7851-7868. https://doi.org/10.1007/s10639-022-10920-0

Alhinty, M. (2015). Young language learners' collaborative learning and social interaction as a motivational aspect of the iPad. *International Journal of Emerging Technologies in Learning*, *10*(2), 24–29. https://doi.org/10.3991/ijet.v10i2.4313

Aljabreen, H. H., & Lash, M. (2016). Preschool education in Saudi Arabia: Past, present, and future. *Childhood Education*, *92*(4), 311-319. https://doi.org/10.1080/00094056.2016.1208011

Al-Othman, H., Gregory, E., Jessel, J., & Khalil, A. (2015). Early literacy model in a Saudi Arabian preschool: Implementation in a different cultural context. *International Journal for Cross-Disciplinary Subjects in Education*, *5*(2), 2511-2522. https://doi.org/10.20533/ijcdse.2042.6364.2015.0342

Al-Omar, M. (2013). Preschools: Impacts on children personalities. *Knowledge Journal*, *218*, 62-67.

Al-Omar, R. S., Parslow, R. C., & Law, G. R. (2018). Development of two socioeconomic indices for Saudi Arabia. *BMC Public Health*, 18, 791. https://doi.org/10.1186/s12889-018-5723-z

Alotaibi, M. (2021). Early childhood education and the Saudi Vision 2030. *Journal of Education*, *91*(91), 181-204. https://doi.org/10.12816/EDUSOHAG.2021

Alroqi, H., Serratrice, L., & Cameron-Faulkner, T. (2021). The Home Screen Media Environment of Saudi Toddlers. *Journal of Children and Media*, 16(1), 95-106. https://doi.org/10.1080/17482798.2021.1921819

Alroqi, H., Serratrice, L. & Cameron-Faulkner, T. (2022). The home literacy and media environment of Saudi toddlers. *Journal of Children and Media*, 16(1), 95-106. https://doi.org/10.1080/17482798.2021.1921819

Arthur, L. (2005). Popular Culture Views of Parents and educators. In J. Marsh (Ed.), *Popular culture, new media and digital literacy in early childhood* (166-180). Routledge

Aseri, S. (2018). Children' s and Teachers' Experiences of Engaging with ICT in Learning EFL: *A Case Study of Saudi Arabian Preschool Education* (ages 5-6) (Doctoral thesis, University of Roehampton). https://pure.roehampton.ac.uk/ws/portalfiles/portal/1277419/Children_s_and_Teachers_Exp eriences_of_Engaging_with_ICT_in_Learning_EFL.pdf

Bahatheg, R. (2011). How the use of Montessori sensorial material supports children's creative problem solving in the pre-school classroom (Doctoral thesis, University of Southampton). http://eprints.soton.ac.uk/id/eprint/193317

Bailey, C. J. (2017). Investigating the lived experience of an after-school Minecraft club (Doctoral thesis, Sheffield Hallam University). https://shura.shu.ac.uk/id/eprint/15872

Baines, P. (2011). Assent for children's participation in research is incoherent and wrong. *Archives of Disease in Childhood*, *96*(10), 960–962. https://doi.org/10.1136/adc.2011.211342

Baroody, A. E., & Diamond, K. E. (2013). Measures of preschool children's interest and engagement in literacy activities: Examining gender differences and construct dimensions. *Early Childhood Research Quarterly*, *28*(2), 291–301. https://doi.org/10.1016/j.ecresq.2012.07.002

Barrable, A., & Arvanitis, A. (2019). Flourishing in the forest: looking at Forest School through a self-determination theory lens. *Journal of Outdoor and Environmental Education*, *22*(1), 39–55. https://doi.org/10.1007/s42322-018-0018-5

Barton, D., Hamilton, M. (2000). Literacy Practices. In D. Barton, M. Hamilton, and R. Ivanic (Eds.), *Situated literacies: Reading and writing in context*. (pp.7-15). Routledge.

Bearne, E., & Bazalgette, C. (2010). *Beyond Words: Developing children's response to multimodal texts*. United Kingdom Literacy Association.

Bertram, T. and Pascal, C. (2002) What counts in early learning? In O. N. Saracho, and B. Spodek (Eds.), *Contemporary Perspectives on Early Childhood Curriculum* (pp.241-259). Information Age Publishing.

Bezemer, J., & Blommaert, J. (2012). Gunther Kress. In C. A. Chapelle (Eds.), *The Encyclopedia of Applied Linguistics*, 2901-2905. Wiley Blackwell. https://doi.org/10.1002/9781405198431.wbeal0591

Bloomberg, L. D., & Volpe, M. (2016). *Completing your qualitative dissertation: A road map from beginning to end*. Sage Publications. Sage Publications.

Blum-Ross, A., Kumpulainen, K., & Marsh, J. (2020). *Enhancing digital literacy and creativity : makerspaces in the early years*. Routledge, Taylor & Francis Group.

Bodrova, E., & Leong, D. J. (2015). Vygotskian and post-Vygotskian views on children's play. *American Journal of Play*, *7*(3), 371.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101.

Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, and K. J. Sher (Eds.), *APA handbook of research methods in psychology, Vol. 2. Research designs: Quantitative, qualitative, neuropsychological, and biological* (pp. 57–71). American Psychological Association. https://doi.org/10.1037/13620-004

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative research in sport, exercise and health*, *11*(4), 589-597.

Braun, V., & Clarke, V. (2021). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health*, *13*(2), 201–216. https://doi.org/10.1080/2159676X.2019.1704846

Brophy, J. (2004). *Motivating Students to Learn* (2nd ed.). Routledge. https://doi.org/10.4324/9781410610218

Buchholz, B.A., & Coggin, L. S. (2013). Media processes in a K/1 playshop. In K. Wohlwend (Ed.), *Literacy playshop: New literacies, popular media, and play in the early childhood classroom*. (pp. 7-25). Teacher College Press.

Burnett, C. (2010). Technology and literacy in early childhood educational settings: A review of research. *Journal of Early Childhood Literacy*, *10*(3), 247–270. https://doi.org/10.1177/1468798410372154

Burnett, C. (2016). *The Digital Age and its Implications for Learning and Teaching in the Primary School.* Cambridge Primary Review Trust.

Burnett, C., & Merchant, G. (2018). *New media in the classroom: Rethinking primary literacy*. Sage.

Cambria, J., & Guthrie, J. T. (2010). Motivating and engaging students in reading. *New England Reading Association Journal, 46*(1), 16-29,109-110. https://www.proquest.com/scholarly-journals/motivating-engaging-students-reading/docview/755497974/se-2

Chesworth, L. (2016). A funds of knowledge approach to examining play interests: listening to children's and parents' perspectives. *International Journal of Early Years Education*, *24*(3), 294–308. https://doi.org/10.1080/09669760.2016.1188370

Chiu, T. K. F. (2021). Applying the self-determination theory (SDT) to explain student engagement in online learning during the COVID-19 pandemic. *Journal of Research on Technology in Education*, 54 (1), 1–17. https://doi.org/10.1080/15391523.2021.1891998

Chordia, I., Yip, J., & Hiniker, A. (2019*). Intentional Technology Use in Early Childhood Education. Proceedings of the ACM on Human-Computer Interaction*, *3*(CSCW), 1–22. https://doi.org/10.1145/3359180

Christensen, P., & James, A. (2017). *Research with children: perspectives and practices* (3rd ed.). Routledge.

Christie, J. F., & Roskos, K. A. (2002). Play and Literacy in Early Childhood: Research from Multiple Perspectives [Review of Play and Literacy in Early Childhood: Research from Multiple Perspectives]. *Technical Communication Quarterly*, *11*(1), 85–87.

Christie, J. F., & Roskos, K. A. (2009). *Play's Potential in Early Literacy Development. Encyclopedia on Early Childhood Development*. Centre of Excellence for Early Childhood Development. http://www.childencyclopedia.com/documents/Christie-RoskosANGxp.pdf

Clark, A. (2005). Listening to and involving young children: a review of research and practice. *Early Child Development and Care*, *175*(6), 489–505. https://doi.org/10.1080/03004430500131288

Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.

Comanaru, R., & Noels, K. A. (2009*).* Self-Determination, Motivation, and the Learning of Chinese as a Heritage Language. *Canadian Modern Language Review*, *66*(1), 131–158. https://doi.org/10.3138/cmlr.66.1.131

Cope, B., & Kalantzis, M. (2009). *"Multiliteracies": New Literacies, New Learning*. *Pedagogies (Mahwah, N.J.)*, *4*(3), 164–195. https://doi.org/10.1080/15544800903076044

Creswell, J. W. (2003). *Research design*: *Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Sage.

Creswell, J. W. (2013). *Qualitative inquiry and research design: choosing among five approaches* (3rd ed.). SAGE Publications.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: qualitative, quantitative & mixed methods approaches* (5th ed., international student edition.). SAGE.

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

Danby, S., Davidson, C., Ekberg, S., Breathnach, H., & Thorpe, K. (2016). 'Let's see if you can see me': making connections with Google Earth™ in a preschool classroom. *Children's Geographies*, *14*(2), 141–157. https://doi.org/10.1080/14733285.2015.1126231

Davis, W. S., & Bowles, F. (2018). Empowerment and intrinsic motivation: A self-determination theory approach to language teaching. *CSCTFL Report*, *15*, 1-19.

De Naeghel, J., Van Keer, H., Vansteenkiste, M., Haerens, L., & Aelterman, N. (2016). Promoting elementary school students' autonomous reading motivation: Effects of a teacher professional development workshop. *The Journal of Educational Research (Washington, D.C.)*, *109*(3), 232–252. https://doi.org/10.1080/00220671.2014.942032

De Smedt, F., Rogiers, A., Heirweg, S., Merchie, E., & Van Keer, H. (2020). Assessing and Mapping Reading and Writing Motivation in Third to Eight Graders: A Self-Determination Theory Perspective. *Frontiers in Psychology*, *11*, 1678–1678. https://doi.org/10.3389/fpsyg.2020.01678

Deci, E. L., Vallerand, R., Pelletier, L., & Ryan, R. (1991). Motivation and education – the self-Determination perspective. *Educational Psychologist*, *26*(3-4), 325–346. https://doi.org/10.1207/s15326985ep2603&4_6

Deci, E. L., & Flaste, R. (1996). *Why we do what we do: Understanding self-motivation*. Penguin Books.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. Springer Science Business Media, LLC.

Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A Meta-Analytic Review of Experiments Examining the Effects of Extrinsic Rewards on Intrinsic Motivation. *Psychological Bulletin*, *125*(6), 627–668. https://doi.org/10.1037/0033-2909.125.6.627

Deci, E. L., Koestner, R., & Ryan, R. M. (2001). Extrinsic Rewards and Intrinsic Motivation in Education: Reconsidered Once Again. *Review of Educational Research*, *71*(1), 1–27. https://doi.org/10.3102/00346543071001001

Dockett, S., & Perry, B. (2011). Researching with Young Children: Seeking Assent. *Child Indicators Research*, *4*(2), 231–247. https://doi.org/10.1007/s12187-010-9084-0

Dunn, J. (2015). New Literacies in the Classroom: Forging Culturally Responsive Curricula. In S. MacBlain, L. Long, and J. Dunn (Eds.), Dyslexia, Literacy and Inclusion*: Child-centred Perspectives* (pp.158-178). Sage.

Dyson, A. H. (1997). *Writing Superheroes*: *Contemporary childhood, popular culture, and classroom literacy*. Teacher's College Press.

Dyson, A. H. (2003). *The brothers and sisters learn to write: Popular literacies in childhood and school cultures*. Teachers College Press.

Dyson, A. H. (2013). Rewriting the basics: *Literacy learning in children's cultures*. Teachers College Press.

Dyson, A. H. (2018). From Superman Play to Singing the Blues. *Language Arts*, *96*(1), 37–46. https://www.proquest.com/docview/2102838743

Dyson, A. H. (2020). "This isn't my real writing": The fate of children's agency in too-tight curricula. *Theory into Practice*, *59*(2), 119–127. https://doi.org/10.1080/00405841.2019.1702390

Edwards, S. (2016). New concepts of play and the problem of technology, digital media and popular-culture integration with play-based learning in early childhood education. *Technology, Pedagogy and Education*, *25*(4), 513–532. https://doi.org/10.1080/1475939X.2015.1108929

Edwards, S., Mantilla, A., Grieshaber, S., Nuttall, J., & Wood, E. (2020). Converged play characteristics for early childhood education: multi-modal, global-local, and traditional-digital. *Oxford Review of Education*, *46*(5), 637–660. https://doi.org/10.1080/03054985.2020.1750358

Einarsdottir, J. (2007). Research with children: Methodological and ethical challenges. *European Early Childhood Education Research Journal*, *15*(2), 197–211. https://doi.org/10.1080/13502930701321477

Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *The Academy of Management Review*, *14*(4), 532–550. https://doi.org/10.2307/258557

Elkind, D. (2007) *The Power of Play: Learning what Comes Naturally*. De Capo Lifelong Books.

Flewitt, R. (2006). Using video to investigate preschool classroom interaction: education research assumptions and methodological practices. *Visual Communication (London, England)*, *5*(1), 25–50. https://doi.org/10.1177/1470357206060917

Flewitt, R., Messer, D., & Kucirkova, N. (2015). New directions for early literacy in a digital age: The iPad. *Journal of Early Childhood Literacy*, *15*(3), 289–310. https://doi.org/10.1177/1468798414533560

Formby, S. (2014). Practitioner Perspectives: Children's Use of Technology in the Early Years. *National Literacy Trust*. https://files.eric.ed.gov/fulltext/ED560656.pdf

Friedman, A. (2018). To "read" and "write" pictures in early childhood: multimodal visual literacy through Israeli children's digital photography. *Journal of Children and Media*, *12*(3), 312–328. https://doi.org/10.1080/17482798.2018.1443147

Fulmer, S. M., & Frijters, J. C. (2011). Motivation during an excessively challenging reading task: The buffering role of relative topic interest. *The Journal of Experimental Education*, *79*(2), 185-208. http://dx.doi.org/10.1080/00220973.2010.481503

Gahwaji, N. (2013). Controversial And Challenging Concerns Regarding Status Of Saudi Preschool Teachers. *Contemporary Issues in Education Research (CIER)*, *6*(3), 333–344. https://doi.org/10.19030/cier.v6i3.7905

Gardner, R. C. (2006). The socio-educational model of second language acquisition: A research paradigm. In S. H. Foster-Cohen, M. Medved Krajnovic, and J. Mihaljević Djigunović (Eds.) *Eurosla yearbook*, *6*(1), 237-260.

General Authority for Statistics in Saudi Arabia. (2021). https://www.stats.gov.sa/en

Gobo, G. (2011). Ethnography. In D. Silverman. (2011). *Qualitative research: issues of theory, method, and practice* (3rd ed.). Sage.

Gollop, M. M. (2000). Interviewing children: a research perspective. In A. Smith, N. Taylor, and M. Gollop. (Eds), *Children's voices: research policy and practice*. Longman.

González, N., Moll, L. C., & Amanti, C. (2004). *Funds of knowledge: theorizing practices in households, communities, and classrooms*. Lawrence Erlbaum.

Gopalan, V., Bakar, J. A. A., Zulkifli, A. N., Alwi, A., & Mat, R. C. (2017). A review of the motivation theories in learning. *AIP Conference Proceedings*, *1891*(1). https://doi.org/10.1063/1.5005376

Grant, K., & Mistry, M. T. (2010). How does the use of role-play affect the learning of Year 4 children in a predominately EAL class? *Education 3-13*, *38*(2), 155–164. https://doi.org/10.1080/03004270903130796

Gray, D. E. (2014). *Doing research in the real world* (3rd ed.). Sage.

Green, B. (1988). Subject-specific literacy and school learning: a focus on writing *Australian Journal of Education*, *32*(2): 156–179. https://doi.org/10.1177/000494418803200

Green, B. (2002). A literacy project of our own? *English in Australia*, (134), 25-32. https://search.informit.org/doi/abs/10.3316/ielapa.565490488940709

Greig, A. D., Taylor, J., & Mackay, T. (2007). *Doing Research with Children* (2nd ed.) Sage Publications.

Grix, J. (2004). *The foundations of research*. Palgrave Macmillan.

Grolnick, W. S., & Ryan, R. M. (1987). Autonomy in Children's Learning. *Journal of Personality and Social Psychology*, *52*(5), 890–898. https://doi.org/10.1037/0022-3514.52.5.890

Guthrie, J. T., Schafer, W., Wang, Y. Y., & Afflerbach, P. (1995). Relationships of Instruction to Amount of Reading: An Exploration of Social, Cognitive, and Instructional Connections. *Reading Research Quarterly*, *30*(1), 8–25. https://doi.org/10.2307/747742

Guthrie, J. T. (1996). Educational contexts for engagement in literacy. *The Reading Teacher*, *49*(6), 432-445. https://www.proquest.com/scholarly-journals/educational-contexts-engagement-literacy/docview/85605499/se-2

Guthrie, J., & Wigfield, A. (2000). Engagement and motivation in reading. In M.L.Kamil, P. B. Mosenthal, P. D. Pearson, and R. Barr (Eds.), *Handbook of reading research* (3rd ed., pp. 403-422). Longman.

Guthrie, J.,& Wigfield, A. (2017). Literacy engagement and motivation: Rational, research, teaching, and assessment. In Handbook of research on teaching the English language arts (pp. 57-84). Routledge.

Guthrie, J. T., & Cox, K. E. (2001). Classroom Conditions for Motivation and Engagement in Reading. *Educational Psychology Review*, *13*(3), 283–302. https://doi.org/10.1023/A:1016627907001

Hall, N. (2000). Literacy, Play, and Authentic Experience. In K. Roskos and J. Christie (Eds)., *Play and Literacy in Early Childhood: Research from Multiple Perspectives* (189–204). Lawrence Erlbaum.

Harackiewicz, J. M. (1979). The effects of reward contingency and performance feedback on intrinsic motivation. *Journal of Personality and Social Psychology*, *37*(8), 1352–1363. https://doi.org/10.1037/0022-3514.37.8.1352

Haroun, R. (2018). Saudi Mothers' Beliefs about Children's Play at Kindergarten Age. *Journal of Educational Science*, *45*(4), p616-639.

Heath, S. B. (1983). *Ways with words: Language, life, and work in communities and classrooms.* Cambridge University Press.

Hedges, H., Cullen, J., & Jordan, B. (2011). Early years curriculum. *Journal of Curriculum Studies*, *43*(2), 185–205. https://doi.org/10.1080/00220272.2010.511275

Henderson, S., & Yeow, J. (2012). iPad in Education: A Case Study of iPad Adoption and Use in a Primary School. *2012 45th Hawaii International Conference on System Sciences*, 78–87. https://doi.org/10.1109/HICSS.2012.390

Heron-Hruby, A., Hagood, M. C., & Alvermann, D. E. (2008). Switching Places and Looking to Adolescents for the Practices That Shape School Literacies. *Reading & Writing Quarterly*, *24*(3), 311–334. https://doi.org/10.1080/10573560802004258

Houghton, K. L. (2015). *Impacts of intrinsic and extrinsic motivation on reading achievement of first-grade students* (Doctoral thesis, Walden University). https://www.proquest.com/openview/1cd91afa18bfe9565f4a572a5bf7b15f/1?pq-origsite=gscholar&cbl=18750

Huffstetter, M., King, J. R., Onwuegbuzie, A. J., Schneider, J. J., & Powell-Smith, K. A. (2010). Effects of a Computer-Based Early Reading Program on the Early Reading and Oral Language Skills of At-Risk Preschool Children. *Journal of Education for Students Placed at Risk*, *15*(4), 279–298. https://doi.org/10.1080/10824669.2010.532415

Hull, C. L. (1943). *Principles of Behavior* (Vol. 422). Appleton-century-crofts.

Ihmeideh, F. (2015). The impact of dramatic play centre on promoting the development of children's early writing skills. *European Early Childhood Education Research Journal*, *23*(2), 250–263. https://doi.org/10.1080/1350293X.2014.970848

Jang, H., Reeve, J., Ryan, R. M., & Kim, A. (2009). Can Self-Determination Theory Explain What Underlies the Productive, Satisfying Learning Experiences of Collectivistically Oriented Korean Students? *Journal of Educational Psychology*, *101*(3), 644–661. https://doi.org/10.1037/a0014241

Jeno, L. M., Grytnes, J.-A., & Vandvik, V. (2017). The effect of a mobile-application tool on biology students' motivation and achievement in species identification: A Self-Determination Theory perspective. *Computers and Education*, *107*, 1–12. https://doi.org/10.1016/j.compedu.2016.12.011

Jewitt, C. (2008). *The visual in learning and creativity: A review of the literature*. A report for Creative Partnerships Arts Council.

John-Steiner, V., & Mahn, H. (1996). Sociocultural approaches to learning and development: A Vygotskian framework. *Educational Psychologist*, *31*(3), 191–206. https://doi.org/10.1207/s15326985ep3103&4_4

Kage, M., & Namiki, H. (1990). 'The effects of evaluation structure on children's intrinsic motivation and learning', *Japanese Journal of Educational Psychology*, 38: 36–45. https://psycnet.apa.org/record/1991-72670-001

Kaye, L. (2017). Young children in a digital age: teaching and learning with technology in the early years. Routledge.

Kelle, U. (2004). Computer-assisted analysis of qualitative data. In U. Flick, E. von Kardorff, and I. Steinke (Eds.), A companion to qualitative research (pp. 276-283). Sage.

Khojah, M. M. J. (2018). The use of smartphones and task-based language teaching to motivate female Saudi EFL learners in reading classrooms (Doctoral thesis, University of Central Lancashire). https://clok.uclan.ac.uk/30791/

Khomais, S. F. (2007). *Children's early understanding of number in home and preschool contexts in Saudi Arabia (Doctoral thesis,* University of Exeter).

Kim, K., & Kim, K. (2017). Multimodal play – literacy: a preschooler's storytelling, drawing, and performing of dinosaur extinction theories, *4430*. https://doi.org/10.1080/03004430.2016.1225044

Knobel, M., & Lankshear, C. (2007). *A new literacies sampler*. P. Lang.

Knobel, M., & Lankshear, C. (2014). Studying new literacies. *Journal of adolescent & adult literacy*, *58*(2), 97-101. https://www.researchgate.net/publication/262642912_Studying_New_Literacies

Kon, A. A. (2006). Assent in pediatric research. *Pediatrics*- English Edition, 117(5), 1806–1810.

Kress, G. (2000). Multimodality. In B. Cope & M. Kalantzis (Eds.), *Multiliteracies: Literacy learning and the design of social futures* (pp. 182-202). Routledge.

Kress, G. (2010). *Multimodality*. Routledge.

Kress, G. R., & MyiLibrary. (1997). *Before writing: rethinking the paths to literacy*. Routledge.

Laevers, F. (1993). Deep level learning: an exemplary application on the area of physical knowledge. *European Early Childhood Education Research Journal*, *1*(1), 53–68. https://doi.org/10.1080/13502939385207351

Laevers, F. (1994). *The innovative project Experiential Education and the definition of quality in education.* In F. Laevers (Ed.), *Defining and assessing quality in early childhood education* (pp. 157–172). Leuven University Press.

Laevers, F. (2005). *Well-being and Involvement in Care Settings. A Process-oriented Self-evaluation Instrument.* https://www.kindengezin.be/img/sics-ziko- manual.pdf

Lankshear, C., & Knobel, M. (2006). *New literacies: everyday practices and classroom learning* (2nd ed.). Open University Press.

LEGO Foundation (2017). What we mean by learning through play. https://cms.learningthroughplay.com/media/vd5fiurk/what-we-mean-by-learning-through-play.pdf

Macdonald, H. (2017). *Early Childhood Practitioners' Views on the Use of Technology with Young Children* (Doctoral thesis, University of Sheffield). https://etheses.whiterose.ac.uk/19408/

MacNaughton, G., & Hughes, P. (2009). *Doing action research in early childhood studies: a step by step guide*. Open University Press.

MacRae, C., & Jones, L. (2020). A philosophical reflection on the "Leuven Scale" and young children's expressions of involvement. *International Journal of Qualitative Studies in Education, ahead-of-print* (ahead-of-print), 1–13. https://doi.org/10.1080/09518398.2020.1828650

Makerspaces in the Early Years. (2020). Clifford All Saints Primary School. https://makey.sites.sheffield.ac.uk/resources/for-educators/case-studies-schools/clifford-all-saints

Marsh, J. (1999). Batman and Batwoman go to School: popular culture in the literacy curriculum. *International Journal of Early Years Education*, *7*(2), 117–131. https://doi.org/10.1080/0966976990070201

Marsh, J. (2006). Popular Culture in the Literacy Curriculum: A Bourdieuan Analysis. *Reading Research Quarterly, 41*(2), 160-174.

Marsh, J. (2010). *Childhood, culture and creativity: a literature review*. Creativity, Culture and Education.

Marsh, J. (2014). Media, popular culture and play. In L. Brooker, M. Blaise, and S. Edwards (Eds.), *The SAGE handbook of play and learning in early childhood* (pp. 403-414). SAGE Publications Ltd. https://www-doi org.sheffield.idm.oclc.org/10.4135/9781473907850.n34

Marsh, J., & Millard, E. (2000). *Literacy and popular culture: using children's culture in the classroom*. SAGE Publications Ltd.

Marsh, J., Brooks, G., Hughes, J., Ritchie, L., Roberts, S. and Wright, K. (2005). *Digital Beginnings: Young Children's Use of Popular Culture, Media and New Technologies.* Literacy Research Centre, University of Sheffield.

Marsh, J., Law, L., Lahmar, J., Yamada-Rice, D, Parry, B., Scott, F., Robinson, P., Nutbrown, B., Scholey, E., Baldi, P., McKeown, K., Swanson, A., Bardill, R. (2019). *Social Media, Television and Children*. University of Sheffield. https://www.sheffield.ac.uk/education/research/literacies-and-language/stac

Marsh, J., Murris, K., Ng'ambi, D., Parry, R., Scott, F., Thomsen, B.S., Bishop, J., Bannister, C., Dixon, K., Giorza, T., Peers, J., Titus, S., Da Silva, H., Doyle, G., Driscoll, A., Hall, L., Hetherington, A., Krönke, M., Margary, T., Morris, A., Nutbrown, B., Rashid, S., Santos, J., Scholey, E., Souza, L., and Woodgate, A. (2020). *Children, Technology and Play*. Billund, Denmark: The LEGO Foundation. https://cms.learningthroughplay.com/media/rkzfgydz/children-tech-and-play_full-report.pdf

Mata, L. (2011). Motivation for reading and writing in kindergarten children. *Reading Psychology, 32*(3), 272-299. https://doi.org/10.1080/02702711.2010.545268

Matthews, B., & Ross, L. (2010). *Research methods: a practical guide for the social sciences* (1st ed.). Pearson Longman.

Mayall, B. (2008). Conversations with Children: Working with Generational Issues. In P. Christensen & A. James (Eds.), *Research with Children: Perspectives and Practices.* (pp.125-140). Routledge.

Medina, C. L., and Wohlwend, K. (2014). *Literacy, Play and Globalization: Converging Imaginaries in Children's Critical and Cultural Performances*. Routledge.

Mielonen, A. M., & Paterson, W. (2009). Developing Literacy through Play. *Journal of Inquiry & Action in Education, 3*(1), 15-46.

Miller, E., & Almon, J. (2009). Crisis in the kindergarten: why children need to play in school. *The Education Digest, 75*(1), 42.

Miller, S. D., Adkins, T., & Hooper, M. L. (1993). Why teachers select specific literacy assignments and students' reactions to them. *Journal of Reading Behaviour*, 25, 69-95. https://www.proquest.com/reports/why-teachers-select-specific-literacy-assignments/docview/62883215/se-2

Ministry of Education. (2011). Statical report of kindergarten centers in the kingdom of Saudi Arabia. Saudi Arabia: Ministry of Education.

Ministry of Education. (2016). *Teacher's guide to self-learning curriculum for kindergarten*. Saudi Arabia: Ministry of Education..

Ministry of Education. (2021a). *Early childhood Education*.https://moe.gov.sa/ar/education/generaleducation/Pages/Kindergarten.aspx.

Ministry of Education. (2021b). *The Starting of Public Education*. https://www.moe.gov.sa/ar/aboutus/aboutministry/pages/about.aspx

Ministry of Education. (2022). *Kindergarten administration*. https://edu.moe.gov.sa/Riyadh/Departments/FemaleAffairsEducationalAssistant/child_g/Pages/default.aspx

Moje, E. B. (2002). Re-framing adolescent literacy research for new times: Studying youth as a resource. *Reading Research and Instruction*, *41*(3), 211–228. https://doi.org/10.1080/19388070209558367

Moje, E. B., Ciechanowski, K. M., Kramer, K., Ellis, L., Carrillo, R., & Collazo, T. (2004). Working toward third space in content area literacy: An examination of everyday funds of knowledge and Discourse. *Reading Research Quarterly*, *39*(1), 38–70. https://doi.org/10.1598/RRQ.39.1.4

Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into Practice*, *31*(2), 132–141. https://doi.org/10.1080/00405849209543534

Morris, A. (2015). *A practical introduction to in-depth interviewing*. SAGE Publications Ltd.

Munawar, M., Fakhruddin, F., Rodiyah, R., & Prihatin, T. (2021). Digital literacy curriculum management in kindergarten. *Cypriot Journal of Educational Science*, *16*(5), 2100-2114. https://doi.org/10.18844/cjes.v16i5.6226

Ng, C., & Graham, S. (2018). Improving literacy engagement: enablers, challenges and catering for students from disadvantaged backgrounds. *Journal of Research in Reading*, *41*(4), 615–624. https://doi.org/10.1111/1467-9817.12252

Ng, M. M., Guthrie, J. T., Van Meter, P., McCann, A., & Alao, S. (2006). How do classroom characteristics influence intrinsic motivations for literacy?. *Reading Psychology*, *19*(4), 319–398. https://doi.org/10.1080/0270271980190401

Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom. *Theory and Research in Education*, *7*(2), 133–144. https://doi.org/10.1177/1477878509104318

Ntuli, E., & Kyei-Blankson, L. (2012). Teacher assessment of young children learning with technology in early childhood education. *International Journal of Information and Communication Technology Education (IJICTE)*, *8*(4), 1-10. https://doi.org/10.4018/jicte.2012100101

O'Brien, D. G., & Dillon, D. R. (2008). The role of motivation in engaged reading of adolescents. In K. Hinchman, & H. Sheridan-Thomas (Eds.), *Best Practices in Adolescent Literacy Instruction.* (pp. 78-96). The Guilford press

Ofcom. (2020). *Children and parents: media use and attitudes report*. https://www.ofcom.org.uk/__data/assets/pdf_file/0025/217825/children-and-parents-media-use-and-attitudes-report-2020-21.pdf

Owan, V. J., & Bassey, B. A. (2018). Comparative study of manual and computerized software techniques of data management and analysis in educational research. *International Journal of Innovation in Educational Management (IJIEM), 2*(1), 35-46. https://www.researchgate.net/publication/328643814_Comparative_Study_of_Manual_and_Computerized_Software_Techniques_of_Data_Management_and_Analysis_in_Educational_Research

Pahl, K., & Rowsell, J. (2010). *Literacy and education: understanding the new literacy studies in the classroom* (2nd ed.). SAGE.

Palaiologou, I. (2016a). Children under five and digital technologies: implications for early years pedagogy. *European Early Childhood Education Research Journal*, *24*(1), 5–24. https://doi.org/10.1080/1350293X.2014.929876

Palaiologou, I. (2016b). Teachers' dispositions towards the role of digital devices in play-based pedagogy in early childhood education. *Early Years*, *36*(3), 305–321. https://doi.org/10.1080/09575146.2016.1174816

Parke, J., & Griffiths, M. (2008). Participant and non-participant observation in gambling environments. *Enquire, 1*(1), 61-74. https://www.nottingham.ac.uk/sociology/documents/enquire/volume-1-issue-1-parke-griffiths.pdf

Parry, B. (2021). *Playing in a Pandemic*. https://blogs.lse.ac.uk/parenting4digitalfuture/2021/06/23/playing-in-a-pandemic/

Patall, E. A., Dent, A. L., Oyer, M., & Wynn, S. R. (2013). Student autonomy and course value: The unique and cumulative roles of various teacher practices. *Motivation and Emotion*, *37*(1), 14–32. https://doi.org/10.1007/s11031-012-9305-6

Pellegrini, A. D., & Galda, L. (2000). Children's pretend play and literacy. In D. Strickland, and L. Morrow (Eds.), *Beginning reading and writing*. (pp. 58-65). Teachers College Press. https://files.eric.ed.gov/fulltext/ED446335.pdf#page=68

Peng, W., Lin, J.-H., Pfeiffer, K. A., & Winn, B. (2012). Need Satisfaction Supportive Game Features as Motivational Determinants: An Experimental Study of a Self-Determination Theory Guided Exergame. *Media Psychology*, *15*(2), 175–196. https://doi.org/10.1080/15213269.2012.673850

Potter, J., & Cowan, K. (2020). Playground as meaning-making space: Multimodal making and re-making of meaning in the (virtual) playground. *Global Studies of Childhood*, *10*(3), 248–263. https://doi.org/10.1177/2043610620941527

Poulsen, A. A., Rodger, S., & Ziviani, J. M. (2006). Understanding children's motivation from a self-determination theoretical perspective: Implications for practice. *Australian Occupational Therapy Journal*, *53*(2), 78–86. https://doi.org/10.1111/j.1440-1630.2006.00569.x

Pyle, A., Prioletta, J., & Poliszczuk, D. (2018). The Play-Literacy Interface in Full-day

Kindergarten Classrooms. *Early Childhood Education Journal*, *46*(1), 117–127. https://doi.org/10.1007/s10643-017-0852-z

Qurban, B. (2011). The experience of the use of multimedia in teaching in kindergarten schools from the point of view of kindergarten teachers in the city of Makkah. *Studies in curricula and teaching methods*, 175, 53-91. http://search.mandumah.com/Record/129778

Qurban, B. (2012). The experience of using computers in governmental and private kindergartens from the point of view of kindergarten teachers in the city of Makkah. *Studies in Curriculum and Teaching Methods*. 178, 64-92. http://search.mandumah.com/Record/162017

Razfar, A. & Gutiérrez, K. (2013). Reconceptualizing early childhood literacy: the sociocultural influence and new directions in digital and hybrid mediation. In J. Larson, & J. Marsh (Eds.), *Handbook of early childhood literacy.* (pp. 52-79). SAGE Publications Ltd.

Reeve, J. (2012). A self-determination theory perspective on student engagement. In S. Christenson., A. Reschly & C. WYLIE (Eds.), *Handbook of research on student engagement* (pp. 149-172). Springer.

Reeve, J., Nix, G., & Hamm, D. (2003). Testing Models of the Experience of Self-Determination in Intrinsic Motivation and the Conundrum of Choice. *Journal of Educational Psychology*, *95*(2), 375–392. https://doi.org/10.1037/0022-0663.95.2.375

Reeve, J., Ryan, R. M., & Deci, E. L. (2018). Sociocultural influences on student motivation as viewed through the lens of self-determination theory, In G. Liem and D. Mclnerney (Eds.), *Big theories revisited*, *2*, (pp.15-40), Information Age Publisher.

Rideout, V. (2017). *The Common Sense census: Media use by kids age zero to eight*. San Francisco, CA: Common Sense Media. https://cdn.cnn.com/cnn/2017/images/11/07/csm_zerotoeight_full.report.final.2017.pdf

Robson, C., & McCartan, K. (2016). *Real world research: A resource for users of social research methods in applied settings* (Fourth ed.). Wiley.

Rogers, R. (2017). The motivational pull of video game feedback, rules, and social interaction: Another self-determination theory approach. *Computers in Human Behavior*, *73*, 446–450. https://doi.org/10.1016/j.chb.2017.03.048

Roosevelt, F. D. (2008). Zone of proximal development, in N.J. Salkin and K. Rasmussen (Eds.), *Encyclopedia of educational psychology*. (pp.1017-1022). SAGE publication.

Roskos, K., and J. Christie. (2007). Play and Literacy in Early Childhood: Research from Multiple Perspectives. Taylor and Francis Group.

Roskos, K. A., & Christie, J. F. (2013). Gaining Ground in Understanding the Play-Literacy Relationship. *American Journal of Play*, *6*(1), 82-94. https://eric.ed.gov/?id=EJ1016166

Roskos, K. A., & Christie, J. (2011). The Play-Literacy Nexus and the Importance of Evidence-Based Techniques in the Classroom. *American Journal of Play*, *4*(2), 204-224. https://eric.ed.gov/?id=EJ985588

Roskos, K. A., Christie, J. F., Widman, S., & Holding, A. (2010). Three decades in: Priming for meta-analysis in play-literacy research. *Journal of Early Childhood Literacy*, *10*(1), 55–96. https://doi.org/10.1177/1468798409357580

Roth, G., Assor, A., Kanat-Maymon, Y., & Kaplan, H. (2007). Autonomous motivation for teaching: How self-determined teaching may lead to self-determined learning. *Journal of Educational Psychology*, *99*(4), 761–774. https://doi.org/10.1037/0022-0663.99.4.761

Rowe, D. & Miller, M. (2017). The affordances of touchscreen tablets and digital cameras for young children's multimodal, multilingual composing. In C. Burnett, G. Merchant, A. Simpson & M. Walsh (Eds.), *Mobile literacies in education: the case of the iPad* (pp. 159–178). Singapore: Springer. https://doi.org/10.1007/978-981-10-4364-2_10

Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. *Journal of Personality and Social Psychology, 43*(3), 450–461. https://doi.org/10.1037/0022-3514.43.3.450

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Publications. https://www.proquest.com/books/self-determination-theory/docview/2135428562/se-2

Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology, 61*, 101860. https://doi.org/10.1016/j.cedpsych.2020.101860

Ryan, R. M., & Stiller, J. (1991). The social contexts of internalization: Parent and teacher influences on autonomy, motivation and learning. In P. R. Pintrich & M. L. Maehr (Eds.), *Advances in motivation and achievement,* (Vol. 7, pp. 115–149). JAI Press.

Salikhova, N. R., Lynch, M. F., & Salikhova, A. B. (2020). Psychological Aspects of Digital Learning: A Self-Determination Theory Perspective. *Contemporary Educational Technology*, *12*(2), ep280. https://doi.org/10.30935/cedtech/8584

Samadi, H. & Marwa, N. (2006). *A teacher's guidelines, for a kindergarten curriculum*. Saudi Arabia: Ministry of Education.

Schmidt, C. (2020). Ethnographic research on children's literacy practices: children's literacy experiences and possibilities for representation. *Ethnography and Education*, 15(1), 48–63. https://doi.org/10.1080/17457823.2018.1512004

Scott, F.L. and Marsh, J.A. (2018). Digital Literacies in Early Childhood in G.W. Noblit, N. Adams, D. Beach, K. Hytten, F. Khan, Y. Kitamura, J. Lampert, A. Luke, J. Ka Ho Mok, W.T. Pink, P. Groves Price, U. Sharma and P. Thomson (Eds.), The Oxford Research Encyclopedia of Education, Oxford University Press, USA. DOI: 10.1093/acrefore/9780190264093.013.97.

Scott-Jones, J. (2010). Origins and Ancestors a brief history of ethnography. Scull, J., Nolan, A., & Raban, B. (2013). Young learners: Interpreting literacy practice in the preschool years. *Australian Journal of Language and Literacy, 36*(1), 38-47. https://doi.org/10.1007/BF03652088

Sefton-Green, J., Marsh, J., Erstad, O., & Flewitt, R. (2016). Establishing a research agenda for the digital literacy practices of young children. *A White Paper for COST Action IS1410*. https://doi.org/10.13140/RG.2.2.10896.30720

Serin, H. (2018). The Use of Extrinsic and Intrinsic Motivations to Enhance Student Achievement in Educational Settings. *International Journal of Social Sciences & Educational Studies*, *5*(1), 191. https://doi.org/10.23918/ijsses.v5i1p191

Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information, 21*(2), 63-75. https://www.proquest.com/scholarly-journals/strategies-ensuring-trustworthiness-qualitative/docview/57616669/se-2

Silverman, D. (2006). *Interpreting qualitative data: Methods for analyzing talk, text and interaction* (3rd ed.). SAGE. https://www.researchgate.net/publication/31718316_Interpreting_Qualitative_Data_Methods_for_Analyzing_Talk_Text_and_Interaction_D_Silverman

Silverman, D. (2013). *Doing qualitative research* (4th ed.). SAGE.

Simmons, C. A. (2014). Playing with popular culture–an ethnography of children's sociodramatic play in the classroom. *Ethnography and Education*, *9*(3), 270-283. https://doi.org/10.1080/17457823.2014.904753

Skanfors, L. (2009). Ethics in child research: children's agency and researchers' ethical radar'. *Childhoods Today*, *3*(1). http://www.diva-portal.org/smash/record.jsf?pid=diva2%3A494906&dswid=-4401

Skinner, B. F. (1965). *Science and Human Behavior*. Simon and Schuster.

Stake, R. E. (1994). Case studies. In N. Denzin, & Y Lincoln (Eds.), *Handbook of qualitative research* (pp. 236-247). Thousand Oaks, CA: Sage.

Stake, R. E. (2010). *Qualitative research: Studying how things work*. New York: The Guilford Press.

Steinkuehler, C. (2010). Video Games and Digital Literacies. *Journal of Adolescent & Adult Literacy*, *54*(1), 61–63. https://doi.org/10.1598/JAAL.54.1.7

Storli, R., & Sandseter, S. E. B. (2019). Children's play, well-being and involvement: how children play indoors and outdoors in Norwegian early childhood education and care institutions. *International Journal of Play*, *8*(1), 65–78. https://doi.org/10.1080/21594937.2019.1580338

Street, B. (2003). What's "new" in New Literacy Studies? Critical approaches to literacy in theory and practice. *Current issues in comparative education*, *5*(2), 77-91. https://www.tc.columbia.edu/cice/pdf/25734_5_2_Street.pdf

Street, B. V. (1984). *Literacy in theory and practice*. Cambridge University Press.

Stroet, K., Opdenakker, M. C., & Minnaert, A. (2013). Effects of need supportive teaching on early adolescents' motivation and engagement: A review of the literature. *Educational research review*, *9*, 65-87. https://doi.org/10.1016/j.edurev.2012.11.003

Sun, H., & Chen, A. (2010). A Pedagogical Understanding of the Self-Determination Theory in Physical Education. *Quest (National Association for Kinesiology in Higher Education)*, *62*(4), 364–384. https://doi.org/10.1080/00336297.2010.10483655

Sweet, A. P., & Guthrie, J. T. (1996). How children's motivations relate to literacy development and instruction. *The Reading Teacher, 49*(8), 660-662. https://www.proquest.com/scholarly-journals/how-childrens-motivations-relate-literacy/docview/85603576/se-2

Tegmark, M., Alatalo, T., Vinterek, M., & Winberg, M. (2022). What motivates students to read at school? Student views on reading practices in middle and lower-secondary school. *Journal of Research in Reading*, *45*(1), 100–118. https://doi.org/10.1111/1467-9817.12386

The Organization of the Petroleum Exporting Countries [OPEC]. (2022). https://www.opec.org/opec_web/en/

Thiel, J. J. (2015). "Bumblebee's in Trouble!" Embodied Literacies during Imaginative Superhero Play. *Language Arts*, *93*(1), 38–49. https://www.jstor.org/stable/24577556

Turner, J. C. (1995). The Influence of Classroom Contexts on Young Children's Motivation for Literacy. *Reading Research Quarterly*, *30*(3), 410–441. https://doi.org/10.2307/747624

Ugah, A. D. (2008). Motivation and productivity in the library. *Library Philosophy and Practice*. 10(1). https://digitalcommons.unl.edu/libphilprac/195

Undheim, A. M., & Hoel, T. (2019). Children's Collaborative Multimodal Digital Stories. https://digilitey.sites.sheffield.ac.uk/events-and-activities/conferences-and-events/reconceptualising-early-childhood-literacies-an-international-conference

UNESCO. (2010). *World Data on Education*. https://unesdoc.unesco.org/ark:/48223/pf0000211628?posInSet=1&queryId=0248a08e-73cc-4f3a-acaa-2e41f92680fa

UNESCO. (2011). *Early childhood care and education, regional report*: Arab States. https://unesdoc.unesco.org/ark:/48223/pf0000189209?posInSet=2&queryId=f3af9605-fb7c-4d8b-bebe-97b2b163bbb9

UNESCO. (2022a). *Education and Literacy in Saudi Arabia*. http://uis.unesco.org/country/SA

UNESCO. (2022b). *Education and Literacy in the United Kingdom.* http://uis.unesco.org/en/country/gb?theme=education-and-literacy

Ushioda, E. (2013). Motivation matters in mobile language learning: A brief commentary. *Language Learning & Technology, 17*(3), 1-5. https://www.proquest.com/scholarly-journals/motivation-matters-mobile-language-learning-brief/docview/1651855522/se-2

Valas, H., & Sovik, N. (1994). Variables affecting students' intrinsic motivation for school mathematics: Two empirical studies based on Deci and Ryan's theory on motivation. *Learning and Instruction*, *3*(4), 281–298. https://doi.org/10.1016/0959-4752(93)90020-z

Van Deursen, A. J., & Van Dijk, J. A. (2016). Modeling traditional literacy, Internet skills and Internet usage: An empirical study. *Interacting with computers*, *28*(1), 13-26.

Van Leeuwen, T. (2005). *Introducing social semiotics*. Routledge.

Vasquez, V. (2003). What Pokémon can teach us about learning and literacy. *Language Arts*, *81*(2), 118-125. https://www.jstor.org/stable/41484188

Vision 2030. (2016). https://www.vision2030.gov.sa/

Vygotsky, L. S. (1978). Mind in society: *The development of higher psychological processes.* Harvard University Press.

Vygotsky, L. S. (1997). Research method. In L. Vygotsky, and R. Rieber (Ed.), *The collected works of LS Vygotsky: The history of the development of higher mental functions* (Vol. 4). Springer Science & Business Media.

Wang, C. J., Liu, W. C., Kee, Y. H., & Chian, L. K. (2019). Competence, autonomy, and relatedness in the classroom: understanding students' motivational processes using the self-determination theory. *Heliyon*, *5*(7), e01983. https://doi.org/10.1016/j.heliyon.2019.e01983

Watt, S. (2010). 'But it's got no tables or graphs in it. . .' A legacy of scientific dominance in psychology. In S. Jones, and S. Watt (Eds.), *Ethnography in social science practice*. (pp. 42- 55). Routledge.

Watt, S., & Scott-Jones, J. (2010). Let's Look Inside Doing Participant Observation. In S. Jones, S & Watt, S (Eds.), *Ethnography in social science practice*. (pp 107- 125). Routledge.

Weld, J. (2011). Connecting Literacy and Popular Culture (*Education Masters, John Fisher University).* https://fisherpub.sjf.edu/education_ETD_masters/6.

Wertsch, J. (1985). *Vygotsky and the social formation of mind.* Cambridge, MA: Harvard University Press.

Wertch, J. (2007). Mediation. In H. Daniels, M. Cole, & Wertsch (Eds.), The Cambridge Companion to Vygotsky (pp. 178-192). Cambridge University Press. https://10.1017/CCOL0521831040.00

Wessel-Powell, C., Kargin, T., & Wohlwend, K. E. (2016). Enriching and Assessing Young Children's Multimodal Storytelling. *The Reading Teacher*, *70*(2), 167–178. https://doi.org/10.1002/trtr.1491

Wigfield, A., & Guthrie, J. T. (1997). Relations of Children's Motivation for Reading to the Amount and Breadth of Their Reading. *Journal of Educational Psychology*, *89*(3), 420–432. https://doi.org/10.1037/0022-0663.89.3.420

Wohlwend, K. (2008). Research Directions: Play as a Literacy of Possibilities: Expanding Meanings in Practices, Materials, and Spaces. *Language Arts*, *86*(2), 127–136. https://hdl.handle.net/2022/3253

Wohlwend, K. (2009a) 'Damsels in discourse: Girls consuming and producing identity texts through Disney princess play'. *Reading Research Quarterly, 44* (1), 57–83. https://hdl.handle.net/2022/3463

Wohlwend, K. E. (2009b). Early adopters: Playing new literacies and pretending new technologies in print-centric classrooms. *Journal of Early Childhood Literacy*, 117-140. https://doi.org/10.1177/1468798409105583

Wohlwend, K. E. (2011). *Playing their way into literacies : reading, writing, and belonging in the early childhood classroom*. Teachers College Press.

Wohlwend, K. E. (2013a). *Literacy playshop : new literacies, popular media, and play in the early childhood classroom*. Teacher College Press.

Wohlwend, K. E. (2015a). Making, remaking, and reimagining the everyday: Play, creativity, and popular media. In J. Rowsell, & K. Pahl (Eds.), *Routledge handbook of literacy studies.* (pp. 548-560). London: Routledge.

Wohlwend, K. E. (2015b). One Screen, Many Fingers: Young Children's Collaborative literacy play with digital puppetry apps and touchscreen technologies. Theory Into Practice, 54(2), 154-162

Wohlwend, K. (2017a). The Expression of Multiliteracies and Multimodalities in Play. In F. Serafini & E. Gee (Eds.), *Remixing Multiliteracies: Theory and Practice from New London to New Times.* (pp. 179–191). Teachers College Press.

Wohlwend, K. E. (2017b). Who gets to play? Access, popular media and participatory literacies. *Early Years (London, England)*, *37*(1), 62–76. https://doi.org/10.1080/09575146.2016.1219699

Wohlwend, K. E. (2018). Play as the literacy of children: Imagining otherwise in contemporary childhoods. In D. E. Alvermann, N. J. Unrau, and M. Sailors (Eds.), *Theoretical models and processes of literacy.* (7th ed) (pp.301-318). Routledge.

Wood, E. (2009). Developing a pedagogy of play. In A. Anning, J. Cullen & M. Fleer (Ed.), *Early childhood education: Society and culture* (2nd ed, pp. 27–38). SAGE.

Wood, E., & Chesworth, L (2017). Play and pedagogy. BERA-TACTYC Early Childhood Research Review 2003-2017. *Report British Educational Research Association*. https://www.bera.ac.uk/project/bera-tactyc-early-childhood-research-review-2003-2017

Yamada-Rice, D. (2017). Using visual and digital research methods with young children. In P. Christensen, and A. James (Eds), *Research with Children*. (pp. 72-85). Routledge.

Yin, R. K. (2016). *Qualitative research from start to finish* (2nd ed.). The Guilford Press

Yin, R. K. (2014). *Case study research: Design and methods* (5th ed). SAGE.

Yoon, H. S. (2018). "The imperial march" toward early literacy: Locating popular culture in a kindergarten classroom. *Language Arts, 95*(3), 171-181. https://www.proquest.com/scholarly-journals/imperial-march-toward-early-literacy-locating/docview/1987347555/se-2

Appendices

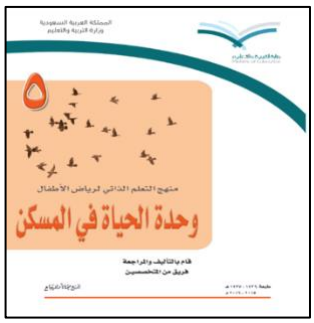
Appendix A: The cover images of the unit books for kindergarten' teachers

Teacher's guide for kindergarten self-learning

Water Unit

Sand Unit

Food Unit



House Unit

Hands Unit

Abstract for learning units

Appendix B: Daily Schedule for the current kindergarten

التوزيع الزمني روضة ثالث

اليوم	6,30	6,30–6,45	7–7,30	8–7,30	8,30–8	8,30–9	9,30–9	10–9,30	10,30–10	10,30–11	11–11,30	11,30–11,45	11,45–12	12–12,30	1–12,30
الأحد	انصراف لمنطقة المتابور	طابور	حلقة وأذكار داخل الفصول	القران الكريم + م الفصل	القران الكريم + م الفصل	وجبة	ملعب رمل	عربي + معلمة الفصل	عربي + معلمة الفصل	وجبة	E	E	اعداد	اركان	القاء
الإثنين	المتابور			القران الكريم + م الفصل	القران الكريم + م الفصل	وجبة	ملعب دراجات	عربي + معلمة الفصل	عربي + معلمة الفصل	وجبة	E	E	اعداد	اركان	الأخير
الثلاثاء				القران الكريم + م الفصل	القران الكريم + م الفصل	وجبة	ملعب خارجي	عربي + معلمة الفصل	عربي + معلمة الفصل	وجبة	E	E	اعداد	اركان	
الأربعاء				القران الكريم + م الفصل	القران الكريم + م الفصل	وجبة	ملعب رمل	عربي + معلمة الفصل	عربي + معلمة الفصل	وجبة	E	E	اعداد	اركان	استكمال الناقص من الكتب أو السجلات مع البقية
الخميس				القران الكريم + م الفصل	القران الكريم + م الفصل	وجبة	ملعب خارجي	عربي + معلمة الفصل	عربي + معلمة الفصل	وجبة	E	E	اعداد	اركان	

* تلتزم كل معلمة بالوقت بالدقيقة .

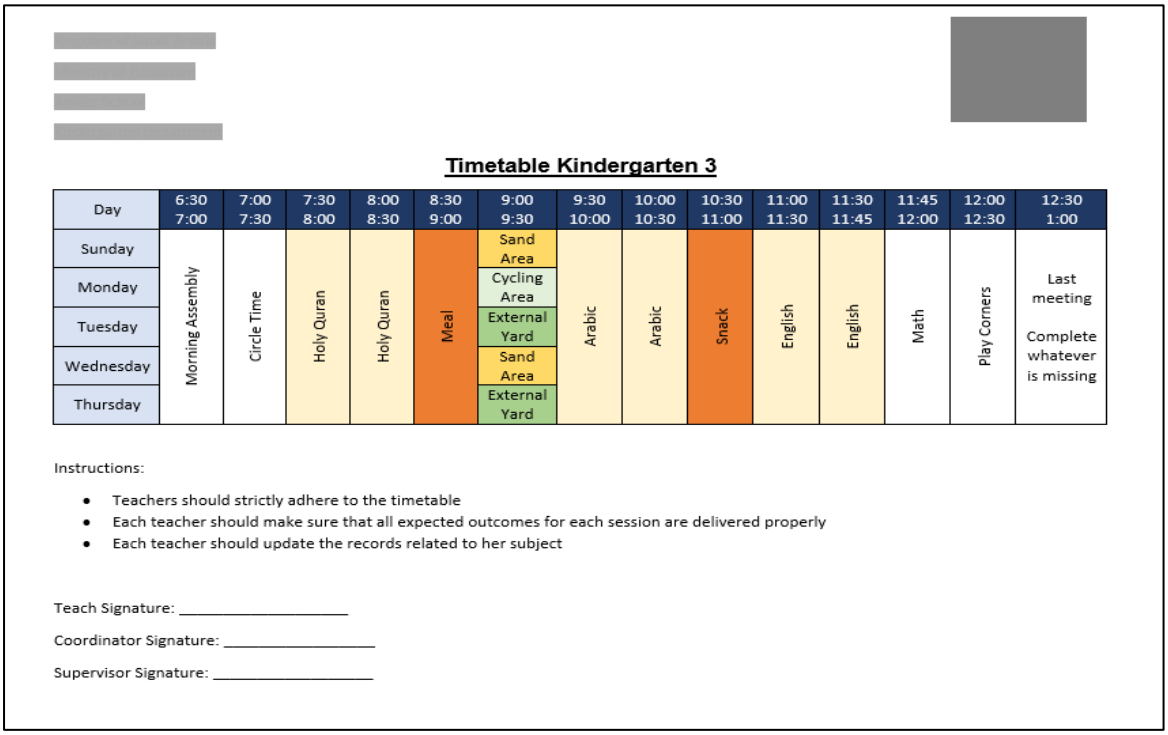
- يجب على معلمة الفصل قبل خروجها من الفصل ضبط الفصل لتتمكن المعلمة من تأدية دورها على الوجه المطلوب .

كل معلمة ملزمة بمادتها وتصحيحها والتعقيب على السجلات الخاصة بمادتها ، وتدوين ذلك في السجل

توقيع المعلمة : .....

اسم الإدارية المسؤولة : .....

توقيع المشرفة المسؤولة: .....



Timetable Kindergarten 3

Day	6:30 7:00	7:00 7:30	7:30 8:00	8:00 8:30	8:30 9:00	9:00 9:30	9:30 10:00	10:00 10:30	10:30 11:00	11:00 11:30	11:30 11:45	11:45 12:00	12:00 12:30	12:30 1:00
Sunday	Morning Assembly	Circle Time	Holy Quran	Holy Quran	Meal	Sand Area	Arabic	Arabic	Snack	English	English	Math	Play Corners	Last meeting Complete whatever is missing
Monday						Cycling Area								
Tuesday						External Yard								
Wednesday						Sand Area								
Thursday						External Yard								

Instructions:

- Teachers should strictly adhere to the timetable
- Each teacher should make sure that all expected outcomes for each session are delivered properly
- Each teacher should update the records related to her subject

Teach Signature: _____

Coordinator Signature: _____

Supervisor Signature: _____

Daily Schedule for the current kindergarten in English (translated by the researcher)

Appendix C: Leuven Involvement Scale

THE SCALE FOR INVOLVEMENT		
Level	Involvement	Examples
1	Extremely low	The child hardly shows any activity: • no concentration: staring, daydreaming; • an absent, passive attitude; • no goal-oriented activity, aimless actions, not producing anything; • no signs of exploration and interest; • not taking anything in, no mental activity.
2	Low	The child shows some degree of activity but which is often interrupted: • limited concentration: looks away during the activity, fiddles, dreams; • is easily distracted; • action only leads to limited results.
3	Moderate	The child is busy the whole time, but without real concentration: • routine actions, attention is superficial; • is not absorbed in the activity, activities are short lived; • limited motivation, no real dedication, does not feel challenged; • the child does not gain deep-level experiences; • does not use his/her capabilities to full extent; • the activity does not address the child's imagination.
4	High	There are clear signs of involvement, but these are not always present to their full extent: ● the child is engaged in the activity without interruption; ● most of the time there is real concentration, but during some brief moments the attention is more superficial; ● the child feels challenged, there is a certain degree of motivation; ● the child's capabilities and its imagination to a certain extent are addressed in the activity.
5	Extremely high	During the episode of observation the child is continuously engaged in the activity and completely absorbed in it: ● is absolutely focussed, concentrated without interruption; ● is highly motivated, feels strongly appealed by the activity, perseveres; ● even strong stimuli cannot distract him/her; ● is alert, has attention for details, shows precision; ● its mental activity and experience are intense; ● the child constantly addresses all its capabilities: imagination and mental capacity are in top gear; ● obviously enjoys being engrossed in the activity.

Appendix D: Interview Questions

Teachers:

Before LP:

1- Teaching literacy in the classroom (20 minutes)

- Literacy curriculum in the kindergarten.
- Strategies used in your classroom.

2- Enhancing children's engagement in literacy activities. Based on your experience, tell me about……. (20 minutes)

- using technology in your literacy lessons.
- using popular culture in your literacy lessons.
- using play in your literacy lessons.

1- Recommendation (5 minute)

Do you have any recommendations on how to enhance children's literacy engagement and practices in kindergarten?

After LP:

1- Teachers' perspective on the impact of the LP in the classroom. Based on your observation, tell me what you think of the impact of LP (20 minutes)

- On children's engagements and motivation.
- On literacy practices.
- On collaboration among children.

- **Teacher's opinion about the LP (20 minutes)**
- Likes/dislikes about the LP
- Most successful aspect(s) of the LP
- Most challenging aspect(s) of the LP

2- Recommendation (5 minute)

- Do you have any recommendations on how to enhance children's literacy engagement and practices in kindergarten?
- Would you like to add anything?

Interview questions for parents:

General information about the child such as age, language, siblings, and typical literacy practices at home (10 minute)

1. **Child and media (20 minutes)**
   a. What is your child digital technologies used at home? what devices do he/she use the most at home? For how long do they use these devices?
   b. What is your child's favourite character /cartoon?
   c. Does your child have toys that relate to the programming that he / she watches on TV or YouTube? If yes, what does your child have and how do they use them?
   d. Does your child's play relate to cartoons or films that he / she watches on TV or YouTube? If yes, please explain in more details.
   D. Does your child wish to bring his / her favourite toys to kindergarten? If yes, please describe some examples.

1. **Child experience at home after LP (20 minutes)**

As you know, your child was involved in LP at his/her kindergarten.

   a. Did your child talk about what happened in LP at all?
   b. Have you noticed any changes at all during the period the project happened? If so, what changes?
   c. Have you noticed any changes regarding your child's engagement in literacy activities over the last few weeks? If yes, give a few examples.

3- Recommendation (5 minute)

- Would you like to add anything?

Appendix E: Ethical approval letter (University of Sheffield)

Downloaded: 25/09/2019 Approved: 25/09/2019

May Alkhunain
Registration number: 180231791
School of Education
Programme: PhD Education- Early Childhood

Dear May
PROJECT TITLE: Exploring Literacy Playshop in a Saudi Arabian Kindergarten

APPLICATION: Reference Number 026448

On behalf of the University ethics reviewers who reviewed your project, I am pleased to inform you that on 25/09/2019 the above-named project was **approved** on ethics grounds, on the basis that you will adhere to the following documentation that you submitted for ethics review:

University research ethics application form 026448 (form submission date: 08/09/2019); (expected project end date: 12/12/2019).
Participant information sheet 1070572 version 1 (08/09/2019).
Participant information sheet 1070571 version 1 (08/09/2019).

Participant information sheet 1070570 version 1 (08/09/2019). Participant information sheet 1069881 version 3 (05/08/2019). Participant consent form 1070574 version 1 (08/09/2019). Participant consent form 1070573 version 1 (08/09/2019). Participant consent form 1069883 version 1 (05/08/2019). Participant consent form 1069882 version 1 (05/08/2019).

If, during the course of the project, you need to deviate significantly from the above-approved documentation please inform me since written approval will be required.

Your responsibilities in delivering this research project are set out at the end of this letter. Yours sincerely

David Hyatt
Ethics Administrator School of Education

Please note the following responsibilities of the researcher in delivering the research project:

The project must abide by the University's Research Ethics Policy:

https://www.sheffield.ac.uk/rs/ethicsandintegrity/ethicspolicy/approval-procedure

The project must abide by the University's Good Research & Innovation Practices Policy:

https://www.sheffield.ac.uk/polopoly_fs/1.671066!/file/GRIPPolicy.pdf

The researcher must inform their supervisor (in the case of a student) or Ethics Administrator (in the case of a member of staff) of any significant changes to the project or the approved documentation.
The researcher must comply with the requirements of the law and relevant guidelines relating to security and confidentiality of personal data.

The researcher is responsible for effectively managing the data collected both during and after the end of the project in line with best practice, and any relevant legislative, regulatory or contractual requirements.

Appendix F: Approval letter (Ministry of Education, Riyadh)

المملكة العربية السعودية
وزارة التربية والتعليم
(٢٨٠)
الإدارة العامة للتربية والتعليم بمنطقة الرياض
Planning & Development
إدارة التخطيط والتطوير

وزارة التربية والتعليم
Ministry of Education

الرقم : .....
التاريخ : ١٤٤٠/١١/٠٩هـ
المشفوعات : .....

" تسهيل مهمة بحث "

الاسم	مي صالح الخنين		
الرقم الجامعي	1048651176	العام الدراسي	١٤٤٠-١٤٤١هـ
الجامعة	جامعة شيفيلد	التخصص	أصول تربية
الدرجة العلمية	دكتوراه	عينة الدراسة	معلمات رياض الأطفال – أطفال الروضة - أمهات
عنوان الدراسة	استكشاف تفاعل الأطفال في مساحة محددة للعب والقراءة والكتابة في رياض الأطفال في المملكة العربية السعودية.		
نوع التسهيل	تسهيل مهمة الباحثة في تطبيق أدوات الدراسة حسب التوضيح التالي : ١- أداة الملاحظة بالمشاركة على عينة (٨) أطفال (وفق ما يسمح به النظام + يشترط موافقة ولي الأمر حسب النموذج المرفق) ٢- أداة الملاحظة بالمقياس على عينة (٨)أطفال (يشترط موافقة ولي الأمر حسب النموذج المرفق) ٣- أداة المقابلة لعينة (٨) أطفال (يشترط موافقة ولي الأمر حسب النموذج المرفق) ٤- أداة المقابلة لعينة من المعلمات + أمهات الأطفال .		

المكرمة : قائدة الروضة .. حفظها الله

السلام عليكم ورحمة الله وبركاته وبعد،

وبناءً على قرار سعادة مدير عام التعليم بمنطقة الرياض رقم ٣٨٩٢٠٧٩٣ وتاريخ ١٤٣٨/٦/٢٣هـ بشأن تفويض الصلاحية لإدارة التخطيط والتطوير لتسهيل مهمة الباحثين والباحثات.وحيث تقدم إلينا الباحثة (الموضحة بياناتها أعلاه) بطلب إجراء دراستها، ونظراً لاكتمال الأوراق المطلوبة نأمل تسهيل مهمتها مع ملاحظة أن الباحثة تتحمل كامل المسؤولية المتعلقة بمختلف جوانب البحث، ولا يعني سماح الإدارة العامة للتعليم، موافقتها بالضرورة على مشكلة البحث أو على الطرق والأساليب المستخدمة في دراستها ومعالجتها.

شاكرين لكم حسن تعاونكم

مدير إدارة التخطيط والتطوير

سعود بن راشد آل عبد اللطيف

وزارة التعليم
إدارة التخطيط والمعلومات ١

ق / الجبالي

ن٦

صفحة ١٠من ١٨ تاريخ الإصدار: ١٤٣٦/٨/٥هـ الإصدار: ١.٠ رمز العملية ت ط. ع٦

Appendix G: Child friendly form

PARTICIPANT INFORMATION SHEET
FOR CHILDREN

Study title:
Exploring a Literacy Playshop in a Saudi Arabian Kindergarten.

1. Why me?

You have been chosen because you are in Kg3 which means that, if you want, you can embark on a great adventure with me!

2. Why is this project being done?

The adventure is called 'Literacy Playshop'. Now you may ask 'But what is a Literacy Playshop'? Well, it is a space in the classroom in which you can play on your own and with your friends to create fun stories and act them out with all kinds of props such as puppets, paper and pen, coloured pencils, and even tablets or digital cameras!. I want to explore the impact of implementing Literacy Playshop in the classroom. I am undertaking this project as part of my studies at the University of Sheffield.

3.What does the project involve?

I will ask you some questions during the activities to know whether you like what you do or not and how you feel about it. These questions will not take a long time. I will also watch you when you play, speak, read and write in the classroom. I will write down some of your words in my study but I will never use your name to ensure that all your information is kept private.

4. Will my answers be shared with and / or told to others?

Anything you write or say will not be told to anyone except if I am aware of criminal activity or risks to your safety or the safety of others.

5. What will happen to my information?

I will use your information to write my research report. I will keep your information in a single, safe place until the end of research. Then, it will be completely deleted. Nobody else will have access to your information except for the reasons given on the last page.

6. Do I have to take part?

No you do not! It is up to you. We would like you to listen to the researcher's instructions before you make up your mind. You can still change your mind later – just tell your teacher and they will let me know.

If you don't want to take part now or at any point in the future, just say no!

7. Giving permission to take part

Please tick the boxes below to let me know if you are happy to take part in each of the activities:

	Yes	No
observation	☐	☐
Interview	☐	☐

Please tick the box below if you are happy for me to take some copies of your work for my project.

Yes	No
☐	☐

Print name: _____

Sign:_____

Date:_____

8. Where can I get more information

Please ask me any questions you have about the project. Your teacher has also been provided with all the details about my research.

If you, or your parent/guardian would like to learn more about my project, I can be contacted at malkhunain1@sheffield.ac.uk

Thank You!