Investigating the Factors that may contribute to the Learning of Children at ISO Quality Certified and Non-Certified Pre-Schools in the United Arab Emirates

التحقيق في العوامل التي يمكن أن تسهم في تعلم الأطفال في شهادة إسو المعتمدة وغير المعتمدة في مرحلة ما قبل المدرسة في الإمارات العربية المتحدة

by

VANDANA KUMAR GANDHI

A thesis submitted in fulfilment of the requirements for the degree of

DOCTOR OF PHILOSOPHY IN EDUCATION

at

The British University in Dubai

Dr. Solomon Arulraj David
September 2017
Investigating The Factors That May Contribute to the Learning of Children at
ISO Quality Certified and Non-certified Preschools in the United Arab Emirates

الفحص في العوامل التي تساهم في تعليم الأطفال شهادة ISO المعتمدة وغير المعتمدة في مرحلة ما قبل المدرسة في الإمارات العربية المتحدة

By
Vandana Kumar Gandhi
120111

A thesis submitted to the Faculty of Education
in fulfilment of the requirements for the degree of

DOCTOR OF PHILOSOPHY EDUCATION

at
The British University in Dubai

Thesis Supervisor
Dr Solomon Anuraj David

Approved for award:

Dr Abdulai Abukari
Internal Examiner

Professor Yusuf Sayed
External Examiner

Professor Bassam Abu Hijleh
Chair of Examiners

Professor Abdullah Alshehri
Chair of Research Degree Committee

Date: 10 September 2017
DECLARATION

I warrant that the content of this research is the direct result of my own work and that any use made in it of published or unpublished copyright material falls within the limits permitted by international copyright conventions.

I understand that a copy of my research will be deposited in the University Library for permanent retention.

I hereby agree that the material mentioned above for which I am author and copyright holder may be copied and distributed by The British University in Dubai for the purposes of research, private study or education and that The British University in Dubai may recover from purchasers the costs incurred in such copying and distribution, where appropriate.

I understand that The British University in Dubai may make a digital copy available in the institutional repository.

I understand that I may apply to the University to retain the right to withhold or to restrict access to my thesis for a period which shall not normally exceed four calendar years from the congregation at which the degree is conferred, the length of the period to be specified in the application, together with the precise reasons for making that application.

_______________________
Signature of the student
COPYRIGHT AND INFORMATION TO USERS

The author whose copyright is declared on the title page of the work has granted to the British University in Dubai the right to lend his/her research work to users of its library and to make partial or single copies for educational and research use.

The author has also granted permission to the University to keep or make a digital copy for similar use and for the purpose of preservation of the work digitally.

Multiple copying of this work for scholarly purposes may be granted by either the author, the Registrar or the Dean only.

Copying for financial gain shall only be allowed with the author’s express permission.

Any use of this work in whole or in part shall respect the moral rights of the author to be acknowledged and to reflect in good faith and without detriment the meaning of the content, and the original authorship.
Abstract

The purpose of this study is to examine the quality of learning in pre-schools and to understand the differences in children’s learning between ISO quality Certified and Non-certified pre-schools, thereby exploring the importance of quality certifications in pre-schools in the UAE. The study which is based on the learning theories from Piaget and Vygotsky, explored global and local literature that assert the importance of quality pre-schooling. The review on ISO certification principles and research indicate linkages to quality in EYE settings.

The study uses mixed methods with strong attention to the quantitative method. This is a longitudinal study that looks at the trends of the growth in learning at the preschool level and the learning outcomes of ISO quality certified and non-certified preschools exploring the trends through test results over period in several schools using trend analysis. A survey was conducted to gain the perceptions of parents and the quality time they spend with children at home. Finally, interviews were conducted with school leaders and parents of the preschools to understand their perception on leadership and quality in learning.

The results point to the importance of quality certifications at pre-schools, leadership influence on the quality at schools and that the involvement of caregivers affects the learning and socialization of the pre-schoolers. The students at the ISO quality certified pre-schools have demonstrated higher ability to learn and acquire skills. The implications of these results are timely and crucial for the UAE, in the absence of sufficient research done on the early year’s education and quality certification. The study claims that quality of learning of children in preschools in the UAE is enhanced through certification such as ISO. In addition, the study further asserts that leadership practices and parental involvement reinforce quality learning among pre-schoolers.
الغرض من هذه الدراسة هو فحص جودة التعليم في الحضانات وفهم الفروقات في تعليم الأطفال بين الحضانات التي تحمل شهادات الجودة "الأيزو" وتلك التي لا تحمل هذه الشهادات، وبالتالي استكشاف أهمية شهادات الجودة في الحضانات في دولة الإمارات العربية المتحدة. إن هذه الدراسة المبنية على النظريات التعليمية لبياجت وفيجوتسكاي استكشفت الأدبيات التي تؤكد أهمية الجودة في التعليم في الحضانات. وإن الاطلاع على أبحاث شهادات الأيزو عبر العالم يشير إلى الربط بينها وبين الجودة.

إن المنهجية المستخدمة في هذه الدراسة هي دراسة كمية تقديرية،شبه تجريبية (درجات الأطفال في الحضانات التي تحمل شهادات الجودة "الأيزو" وتلك التي لا تحمل هذه الشهادات) مع استخدام أدوات اختبار مبدئي واختبار نهائي لقياس التعليم في الحضانات. إن هذه دراسة طولية تنظير في اتجاه التعلم والتقدم في التعليم لدى الحضانات وحصول التعليم لدى الحضانات التي تحمل شهادات الجودة "الأيزو" وتلك التي لا تحمل هذه الشهادات. تم إجراء عملية مسح للاطلاع على مدى إدراك الوالدين ووقت الجودة الذي يقضيانه مع الأطفال في المنزل. وفي الختام تم إجراء مقابلات مع قادة المدارس وأولياء الأمور في الحضانات لفهم إدراكهم حول موضوع القيادة والجودة في التعليم.

لقد أشارت النتائج إلى أهمية شهادات الجودة في الحضانات وأثر القيادة في الجودة في الحضانات، وإلى أثر اشتراك مقدمي الرعاية التعليمية والمجتمعية في الحضانات. لقد أظهر الطلاب في الحضانات التي تحمل شهادات الأيزو قابلية أعلى للتعليم وكمهارات. وفي ظل غياب أبحاث كافية حول التعليم المبكر وشهادات الجودة فإن ضمان هذه النتائج هو أمر حاسم بالنسبة لدولة الإمارات العربية المتحدة. تفترض الدراسة أن جودة التعليم الأطفال في الحضانات في دولة الإمارات العربية المتحدة تعزز من خلال وجود شهادات مثل الأيزو. إضافة لذلك فإن الدراسة تؤكد أيضاً أن الممارسات القيادية واشتراع الوالدين يقوي ويدعم جودة التعليم بين طلاب الحضانات.
I dedicate the labour that I devoted to this research project to my family; to my mother Mrs. Rekha Gandhi and to my father the late Mr. Kumar Gandhi who always insisted on calling me a doctor, who has loved me unconditionally and who has encouraged me to accept challenges and reach new heights. I am grateful to God the Almighty and my Guru Tai who has been my guiding light and a source of inspiration to me to pursue doctoral studies. I also dedicate this work to my loving children Shivali and Krishiv, who give joy and meaning to my existence.
Acknowledgement

I would like to acknowledge the Late Dr Clifton Chadwick, who was my supervisor, for his constant guidance and unflinching support. He inspired me in more ways than I could imagine. His colourful commentary during lectures on world matters has been invigorating and enlightening.

I express my gratitude to Dr Solomon Arulraj David who is my current supervisor and who has been kind and helpful with the transition in taking over the guidance. I would like to take this opportunity to thank all the faculty members and staff at the British University in Dubai for all their support. I extend my sincere thanks to Prof Eman Gaad, the Dean of Education, to Prof Abdullah Al Shamsi, the Vice Chancellor, and to all the members of the Research Degree Committee. I would like to acknowledge my fellow colleagues at BUID who have made this educational journey memorable and meritorious with discussions and debates.

I would also like to thank my colleagues, parents and the children of the British Orchard Nursery, UAE who participated in this study. I do hope to contribute in many ways and give meaning to the implications of this study through further research and be a value-add in this Early Years sector.
# Table of Contents

*Declaration* .......................................................................................................................................................... ii
*Copyright and Information to Users* ....................................................................................................................... iii
*Abstract* ................................................................................................................................................................. iii
*بِنِيَة مختصرة* ................................................................................................................................................ vi
*Dedication* ............................................................................................................................................................. vii
*Acknowledgement* ............................................................................................................................................... viii
*List of Figures* ...................................................................................................................................................... xii
*List of Tables* ......................................................................................................................................................... xiv
*Glossary* ................................................................................................................................................................. xvii

**Chapter 1: Introduction** ........................................................................................................................................ 1
  1.1 Introduction and Background ........................................................................................................................... 1
  1.2 Motivation for the Study .................................................................................................................................... 3
  1.3 Statement of the Problem .................................................................................................................................. 4
  1.4 Purpose and Objectives ..................................................................................................................................... 8
  1.5 Research Questions .......................................................................................................................................... 8
  1.6 Significance of the Study ................................................................................................................................. 9
  1.7 Structure of the Dissertation ........................................................................................................................... 10

**Chapter 2: Theoretical Framework and Literature Review** ............................................................................... 11
  2.1. Overview of the Chapter ................................................................................................................................. 11
  2.2 Contextual Analysis .......................................................................................................................................... 11
    2.2.1 Demographics and Economy of the UAE ................................................................................................. 12
    2.2.2 Education System in the UAE .................................................................................................................. 15
    2.2.3 Early Childhood Education in the UAE .................................................................................................... 16
  2.3 Concepts and Frameworks ............................................................................................................................... 23
    2.3.1 Total Quality Management ........................................................................................................................ 23
    2.3.2 International Standards for Organisations ............................................................................................... 26
    2.3.3 Early Years Education Curricular Framework .......................................................................................... 32
    2.4.1 The Systems theory .................................................................................................................................. 40
    2.4.2 Organisational Theory ................................................................................................................................. 42
    2.4.3 Learning and Development Theories ........................................................................................................... 46
    2.4.4 Parental Support Theories .......................................................................................................................... 54
    2.4.5 Leadership Theories .................................................................................................................................. 60
  2.5 Review of Related Literature .............................................................................................................................. 64
    2.5.1 Relevance of Early Years Education .......................................................................................................... 65
    2.5.2 Importance of Quality at Preschools ........................................................................................................... 67
    2.5.3 Leadership at Preschools ............................................................................................................................ 69
# List of Figures

Figure 2.1: Conceptual Model.................................................................29
Figure 2.2: Percentage of various workforce nationalities in the UAE (World Bank, 2013) .................................................................31
Figure 2.3: Total population estimate 1950-2010 in the UAE (NQA, 2013) .........................................................................................32
Figure 2.4: Proportion of nationals to expatriates in the population ........................................................................................................32
Figure 2.5: General structure of the education system in the Emirate of Abu Dhabi. ..................................................................................34
Figure 2.6: ISO 9001: 2008 – Model (ISO, 2017) ........................................47
Figure 2.7: International Standards Audits for the School (ISO, 2017) .................................................................................................51
Figure 2.8: Theoretical Model....................................................................59
Figure 2.9: Political, Economic, Social, Technological, Ecological, and Demographic forces influencing the school system.................................60
Figure 2.10: Vygotsky’s Approach – Mind map ........................................71
Figure 2.11: Zone of Proximal Development ............................................73
Figure 2.12: Epstein’s Framework of Six Types of Parental Involvement ....74
Figure 2.13: Transformational Leadership Model .......................................82
Figure 3.1: Overview of the mixed-method research design .......................103
Figure 3.2: Site Selection .........................................................................108
Figure 3.3: Framework for Survey Design ...............................................113
Figure 4.1: Year wise pre-test and post-test scores ....................................128
Figure 4.2: Assessment scores of all students in each class for the year 2011-12 .................................................................129
Figure 4.3: Assessment scores of all students in each class for the year 2012-13 .................................................................129
Figure 4.4 Assessment scores of all students in each class for the year 2013-14 .................................................................130
Figure 4.5: Assessment scores of all students in each class for the year 2014-15 .................................................................130
Figure 4.6: Assessment scores of all students in each class for the year 2015-16 .................................................................131
Figure 4.7: Pie chart showing nationality distribution amongst the children of all 7 schools .............................................................................132
Figure 4.8: Distribution of students in ISO and Non-ISO schools ...............132
Figure 4.9: Distribution of students in different nationality groups in ISO and Non-ISO schools .................................................................................133
Figure 4.10: Distribution of children according to the class level ..............134
Figure 4.11: Distribution of children according to the schools..........................134
Figure 4.12: Main respondent’s educational level.............................................139
Figure 4.13: Plots showing pre-test and post-test scores in all schools................167
Figure 4.14: Variation in growth among all nationality groups..........................174
Figure 4.15: Analysing the qualitative Data process..........................................187
List of Tables

Table 2.1: UAE Nurseries by Emirates (Source: UAE nurseries E gate, 2017)......................37
Table 3.1: Summary of Study Phases Aligned with Research Questions..............................104
Table 3.2: Sample size distribution based on sites and methodology..................................109
Table 3.3: Sub-questions & suitable data collection methods..............................................110
Table 3.4: Mapping of concepts to variables (Survey Instrument).......................................114
Table 3.5: Cronbach’s Alpha for the Pilot Study.................................................................115
Table 3.6: Mapping of concepts (interview guide for academic leaders)..............................116
Table 3.7: Mapping of concepts (interview guide for parents)............................................117
Table 3.8: Operational Model ..........................................................................................119
Table 4.1: Summary of Data Collection...............................................................................127
Table 4.2: Cross-tabulation between Nationality Groups and Schools............................135
Table 4.3: Number of children in the household...............................................................137
Table 4.4: In-charge of the child’s care before nursery.....................................................137
Table 4.5: Reason for enrolment in the nursery.................................................................138
Table 4.6: Marital Status of Parents..................................................................................138
Table 4.7: Working hours of parents.................................................................................139
Table 4.8: Nanny at home.................................................................................................140
Table 4.9: Income category of parents...............................................................................140
Table 4.10: Importance of ISO Quality Certificate while choosing a Pre-school..............140
Table 4.11: Skills in order of the most progress made in the child......................................141
Table 4.12: Skills grouped in curricular areas based on school curriculum......................142
Table 4.13: Reason for lack of participation in school activities.........................................143
Table 4.14: Overall Score for quality time spent with child according to Nationality.......145
Table 4.15: Correlation of types of quality time and child’s growth................................145
Table 4.16: Correlation of types of quality time and curricular skills...............................146
Table 4.17: Presence of television in the child’s bedroom...............................................147
Table 4.18: Cross-tabulation of Nationality group and the presence of television in the child’s room..........................................................................................................147
Table 4.19: Television time for the family and the child based on nationality....................148
Table 4.20: Longitudinal Analysis for 5 years’ time span (2011-2016)...............................150
Table 4.21: One-way ANOVA test results indicate that the differences in the mean score are significant. ..........................................................151
Table 4.22: Summary of differences in the pre-test scores over five years.......................151
Table 4.23: Group Statistics, mean scores of students who attended pre-school and who did not

Table 4.24: Output of independent samples t-test for 2011-12

Table 4.25: Mean scores for pre-test and post-test for the year 2012-13

Table 4.26: Output of independent samples t-test for 2012-13

Table 4.27: Mean scores for pre-test and post-test for the year 2013-14

Table 4.28: Output of independent samples t-test for 2012-13

Table 4.29: Mean scores for pre-test and post-test for the year 2013-14

Table 4.30: Output of independent samples t-test for 2012-13

Table 4.31: Mean scores for pre-test and post-test for the year 2013-15

Table 4.32: Output of independent samples t-test for 2013-15

Table 4.33: Comparison of growth scores of new and old students in each year

Table 4.34: Anova Table

Table 4.35: Summary of difference in growth scores of old and new students each year

Table 4.36: Comparison of pre-test scores of new and old students in each year

Table 4.37: Growth in learning of all students in all ISO and Non-ISO schools

Table 4.38: Mean growth scores of students of both groups (ISO and Non-ISO)

Table 4.39: Output of independent samples t-test

Table 4.40: Levene’s Test for Equality of Variances

Table 4.41: Output of independent sample ‘t’ test

Table 4.42: Comparison of growth of foundation year students in ISO and Non-ISO school

Table 4.43: Mean scores of learning between groups of schools led by BSM J and BSM E

Table 4.44: Levene’s Test for Equality of Variances

Table 4.45: Mean scores of pre-tests, post-test and overall growth in all schools

Table 4.46: Non-ISO Schools

Table 4.47: Growth Comparison of BSM J (non-ISO) and BSM E (ISO) headed schools

Table 4.48: Comparison of pre-test, post-test and growth scores in the two types of schools

Year 2011-2012

Table 4.49: Independent Samples Test for 2011-12

Table 4.50: Comparison of pre-test, post-test and growth scores in the two types of schools

Year 2012-2013

Table 4.51: The results of independent samples t-test for 2012-13

Table 4.52: Comparison of pre-test, post-test and growth scores in the two types of schools

Year 2013-2014

Table 4.53: The results of independent samples t-test for 2013-14
Table 4.54: Summary of the mean scores of growths in three years in both types of school 173
Table 4.55: Independent Samples Test ................................................................. 175
Table 4.56: Effect of overall quality time spent on child’s growth .............................. 176
Table 4.57: Effect of quality time on child’s growth .................................................. 177
Table 4.58: Difference in the quality time spent by parents with different perceptions on ISO preschool ........................................................................................................ 177
Table 4.59: Distribution of nationality groups and quality time category ...................... 178
Table 4.60: Quality time spent by parents with different education levels ..................... 179
Table 4.61: Mean score for quality time 3 for each education level .............................. 179
Table 4.62: Distribution of ISO/Non-ISO groups and quality time category .................. 191
Table 4.63: Difference in the quality time spent and growth of the child in two groups of parents (ISO and Non-ISO) ................................................................. 180
Table 4.64: Mean scores assigned by parents to five different skills in all schools .......... 182
Table 4.65: Skills Preference of Parents ..................................................................... 182
Table 4.66: Difference in the perceptions of parents in ISO and Non-ISO schools about importance of different skills ................................................................. 183
Table 4.67: Summary of quantitative findings and their implication ............................ 184
Table 4.68: Demographic Description of the interview participant .............................. 188
Table 4.69: Summary of School Leaders Interview analysis ...................................... 189
Table 4.70: Summary of Parents Interview Analysis ............................................... 203
Table 4.71: Summary of qualitative findings and their implication ............................. 204
## Glossary

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADEC</td>
<td>Abu Dhabi Education Council</td>
</tr>
<tr>
<td>AED</td>
<td>Arab Emirates Dirham</td>
</tr>
<tr>
<td>B</td>
<td>Billion</td>
</tr>
<tr>
<td>BSM</td>
<td>Business Support Manager</td>
</tr>
<tr>
<td>ECLS-K</td>
<td>Early Childhood Longitudinal Study - Kindergarten (USA)</td>
</tr>
<tr>
<td>EPPE</td>
<td>Effective Provision of Preschool Education</td>
</tr>
<tr>
<td>EYE</td>
<td>Early years education</td>
</tr>
<tr>
<td>EYFS</td>
<td>Early Years Foundation Stage (UK Curriculum)</td>
</tr>
<tr>
<td>GCC</td>
<td>Gulf Cooperation Council</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>HR</td>
<td>Human Resources</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>ISO</td>
<td>International Standards for Organization</td>
</tr>
<tr>
<td>KHDA</td>
<td>Knowledge and Human Development Authority</td>
</tr>
<tr>
<td>KPI</td>
<td>Key Performance Indicators</td>
</tr>
<tr>
<td>KSA</td>
<td>Kingdom of Saudi Arabia</td>
</tr>
<tr>
<td>M</td>
<td>Million</td>
</tr>
<tr>
<td>MENA</td>
<td>Middle East and North Africa</td>
</tr>
<tr>
<td>MOE</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>MOSA</td>
<td>Ministry of Social Affairs</td>
</tr>
<tr>
<td>NEGP</td>
<td>National Education Goal Panel</td>
</tr>
<tr>
<td>NHES</td>
<td>National Centre for Education Statistics</td>
</tr>
<tr>
<td>NICHD</td>
<td>National Institute of Child Health &amp; Human Development, U.S.A.</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation of Economic Cooperation &amp; Development</td>
</tr>
<tr>
<td>OFSTED</td>
<td>Office for Standards in Education, Children Services &amp; Skills (in UK)</td>
</tr>
<tr>
<td>PCRS</td>
<td>Preschool Curriculum Evaluation Research (USA)</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>UAE</td>
<td>United Arab Emirates</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>UKAS</td>
<td>United Kingdom Accreditation Services</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational Scientific and Cultural Organisation</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollars</td>
</tr>
<tr>
<td>WPP</td>
<td>World Population Prospects</td>
</tr>
</tbody>
</table>
Chapter 1: Introduction

1.1 Introduction and Background

There has been considerable research in educational systems and pedagogical practices worldwide. Many similar themes emerge in most research studies, as educationists encounter the complex socio-cognitive demands in the context of managing students, creating pedagogy, putting subject matter into action, and participating in the life of the school (Freeman & Richards, 1996). There is a growing recognition that children are directly exposed to the individual experiences and knowledge base of parents and teachers; and process and absorb the teachings imparted to them. Parents, teachers and caregivers influence the child’s development of social skills and self-reliance (National Scientific Council on the Developing Child 2004, 2007, 2008, Thompson 2001; White & Howe, 1998; cited in Gloeckler & Niemeyer, 2010).

A child’s active learning experiences start from birth, and educational stalwarts such as Piaget and Vygotsky in the 20th century expounded the due importance of pre-school experiences and caregivers. Bruner (1999) further states the importance of early year’s education by pointing out that the developing brain is particularly fit to acquire certain skills. The sensitive periods are not rigid, but if certain stimulation is not provided, the nerve cells become less functional. These findings indicate that learning experiences, both structured and unstructured, are required for children before they enter primary school. There seems to be a bi-directional influence between children and teachers creating a “micro level” of influence, apart from the parental influences where the physical, educational and socio-emotional environments children experience, have a phenomenal effect on their growth and development. Kaufmann et, al. (2009) explain in their study that the previous experiences of children in the preschool, greatly affect their adaptive behaviours further on in primary school. The vital early years of a child should not be ignored. They form the basis of his or her lifelong learning.

According to the UNECSO EFA Global Monitoring Report (2012), demand for pre-primary education continues to grow around the world with over 163 million children accessing ECD services globally (46% increment since 1999)” (UNESCO 2012, p.36). An essential ingredient to healthy development and child growth is access to pre-primary education. World Bank (2006) has stated that children who go to preschools are likely to perform better in schooling later compared to those who access poor quality pre-primary education.

Pre-primary education can be defined as the developmental and educational support provided to the child aged between two to five years to instil confidence and prepare a child for primary school, so that the basic skills in numeracy, literacy, knowledge and understanding of the world are acquired, and the development is enhanced socially, physically and emotionally. According to Wawire (2006), Hassan (2007) and Mishra (2009) a quality pre-primary education refers to features of a pre-primary school environment and children’s experiences in this environment which are beneficial to their growth, development and welfare. These features include provision of appropriate physical facilities, teaching-learning materials, qualified and committed staff, safe and secure environment, good health and nutritional services and effective child development outcomes.

Early quality education nurtures and stimulates the young child. It is imperative that the young child’s foundation years are not compromised. Early childhood education creates a sense of security that supports children’s learning to trust, to regulate emotions, to be confident, to resolve interpersonal conflict, to develop independence and empathy, and to learn how to relate to others. (Shonkoff & Phillips, 2000; Weinfield et al. 1999, cited in Gloeckler & Niemeyer, 2010). Quality in schools is a new age topic and institutions generally do not follow regulated quality systems or adopt international frameworks like other corporate organisations. Burnham (1997, p.7) states that quality is the ‘management flavour of the decade’. He highlights the ‘moral imperative’ schools should focus on and that they should be concerned about providing children with the best educational possibilities. Opportunities must be optimised so that children achieve their full potential during their years of schooling. The moral responsibility falls on teachers and managers and therefore values and school culture are important factors that influence education procedures and decisions. The environment of the society and community in which schools serves, have a dynamic interaction. “This environment is becoming increasingly quality conscious” (Burnham, 1997, p.7).

The local management of schools under various authorities is increasing world-wide with inspection procedures being launched at various levels. Consumer protectionism and rights
have made headlines. Society imposes pressures that schools must be managed by skilled and knowledgeable work force. Burnham (1997) calls this the survival imperative. These pressures raise possibilities of redundancies and school closures, especially if schools fail to satisfy customer needs and expectations. The customer driven approach of TQM (Total Quality Management) is therefore a pragmatic response. Post this, the accountability imperative for schools such as data collection, appropriate processes and reporting, assume importance. ‘TQM provides the vehicle for making these procedures intrinsic to school management processes and ensuring effective response” (Burnham, 1997, p.8).

The systems are complex in a pre-school owing to the bigger strength of staff required to manage the small body of children. Social scientists point out that ‘an organisation like an organism is an integrated system of interdependent structures and functions’. According to Harold Leavitt in Owens (1998), the interacting subsystems in complex organisations are: task, structure, technology and people. It is important to note that the human subsystem mentioned is the only one that has a non-rational capability (it is affective and not irrational). Schools have a large body of people and have multi directional forces of play working between all stakeholders.

1.2 Motivation for the Study

The field and focus of this research is ‘quality in the Early Years Education (EYE)’. The study is of high relevance to the researcher, as it is her area of work and specialization. The study was carried out to investigate, if learning and development is happening at pre-schools based on the EYE guidelines of the UK national curriculum, which is followed, by the pre-schools. This leads the researcher to ponder over the common question asked by parents: Are preschools important and do they enhance children’s learning? Are quality frameworks important and do they make a meaningful contribution? The effect of ISO accreditation of the pre-schools under study and the effect of the leadership practices inherent to the ISO framework that may contribute to children’s learning is investigated. Furthermore, the study looks at the possible effect of parental involvement on the pre-schooler’s learning and the bi-directional relationships, if any.

The ISO framework stipulates the importance of quality policies, leadership influence, stakeholder feedback and satisfaction. The ensuing results of the research would throw light on the subject matter which would aid in the formulation of new policies and strategies to be adopted by the pre-schools. The site is also the work place of the researcher and may directly,
affect the community at large. There is negligible literature worldwide on the effect of ISO quality certification on pre-schools. There has been little research if any, done in the early years in pre-schooling segment in the Middle East region. The trend analysis that explored the test results of different groups in different schools over the period before and after and ISO and non-ISO certified schools in the UAE, will aid in establishing causality leading to generalization of results.

The results will help in establishing frameworks for ongoing research and policies in the region and globally as this study addresses the gap of studies and literature on student learning and quality certifications in schools. Educational research is a powerful vehicle for exposing and developing knowledge of teaching and educational practices. Research can be defined as one of the many ways of knowing and understanding. It is a process of systematic inquiry that is designed to collect, analyse, interpret and use data. (Mertens, 2010). Research helps in reflection and in making tacit knowledge explicit through practical experiences and theoretical understanding. Creswell (2008) points out that, researchers are like bricklayers, continually adding on to the brick wall, and in the process, create a stronger structure.

1.3 Statement of the Problem

Government bodies, parents and educationists agree that the preparation for quality education enhances student learning at school. The subject matter holds importance to the government of United Arab Emirates (UAE). The UAE has set the goal to be a powerful knowledge economy and to house world-class schools. It has implemented high inspection standards in primary and secondary schooling, and will introduce the same in preschools (MOSA, 2014). The UAE will introduce regulatory reform, and has increased the budget allocation for the social services and education sector to 47 percent of the total government expenditures since the year 2012 with a seven-year national agenda on education starting 2014 (Gulf News, 2014). Barbara Ischniger, OECD director of education comments, ‘the UAE government should follow the Finnish model in education where teachers are given incentives and they are among the top four professions in the country’ (Gulf News, 2012). Collaboration and acceptance of shared responsibility between all stakeholders gives an opportunity for heightened reflection in stakeholders. Halverson et al. (2005) point out that accountability systems provide standards for achievement and instructional and assessment practices, necessary to reach high standards and incentives for participation. The shift must take place from internal accountability to external accountability. Instructional leaders require frameworks, to create schools that can systematically improve student learning. Quality certifications can play an important role in
helping the paradigm shift.

Since the independence of the UAE in 1971, the Ministry of Education (MOE) has centrally controlled the education system. A huge increase in the number of students during the last two decades has led to a significant shift in the public management of education (Al-Etihad, 2005). The UAE also has experienced a rapid expansion of pre-primary education over the last four decades as seen by an increased enrolment from 177,000 to over 2.2 million children between 1968 to 2009 (MoE, 2011). According to the official UAE Newspaper (Al-Etihad, 2005), the UAE school system needed radical reform and hence the UAE government has chalked new programmes, and a new educational policy was formulated that:

- emphasises the role of active students in a modern knowledge society
- mobilises social and political support for investment in education
- has internationally benchmarked performance expectations
- sets out a national ten-year plan to bring schools up to international standards
- modifies educational management by establishing regional support centres instead of departments of education
- provides the appropriate resources and support to achieve the required adjustments (Macpherson et al., 2007).

In the absence of the quality pre-schooling, which forms the basis of primary schooling and hence lifelong learning, these educational goals may not be achieved soon. Despite considerable efforts to reform the quality of education, the government has not met its goal (Khaleej Times, 2010; Cooper et al, 2015). In UAE, whilst the government aspires to set up world class schools, the number of students qualifying for admission to higher education is currently only 3 per cent of the total number of students graduating from high schools (Khaleej Times, 2010). The effective schooling models in UAE are limited and may not be comparable to similar models in other countries (Ibrahim and Al Taneiji, 2013).

Ibrahim et al. (2013) state that most schools follow rote learning and teachers still must ensure international standards of teaching and classroom management (Troudi & Alwan 2010) and. The results of this report found that leadership often depends on an individual Principal. Preschool leaders have increased supervisory and ethical responsibility in handling the vulnerable section of society. Although there is theoretical recognition of the importance of developing schooling and implementing high standards for school leadership in the UAE by the introduction of effective schooling models, the current situation remains below expectations and may not be comparable to similar developments in other countries (Ibrahim and Al Taneiji,
2013). The UAE 2021 vision for education states that the problem of this research stems from the scarcity of research in the Early Years and leadership quality in UAE preschools, together with the poor outcomes of students as is in PISA scores, especially in the basic subjects, according to national standardised measures (OECD, 2010).

Local scientific research on effective schooling processes would be highly valuable in improving the UAE education system, as the achievement of national strategic educational goals will not be achieved solely by providing high quality resources and state-of-the-art technologies. The scarcity of relevant research in the UAE may be attributed to the lack of a participatory approach that involves teachers, students and parents in the process of assessing the development, improvement and promotion of schools to make them more effective. This is consistent with Samoff (1999:253) who argues that —the voices of teachers, students, and parents can scarcely be heard, and with Levin and Lockheed (1991) who state that research in developing countries faces many constraints, including the disappearance of teachers’ and parents’ voices in developing school improvements.

The ignorance of the authorities and lax behaviour towards the early years’ sector may be due to the apparent shortage of local scientific research conducted at the national level. Such research is important when it comes to formulating strategic plans for a national curriculum in early years like most developed countries and the development of educational policy (Congress, 2007). For instance, the UAE University, which is a leading university of UAE and established in 1976, has not yet been able to conduct a longitudinal research study on either effective schooling or the development of education, or on leading and helping the UAE government’s efforts in this regard (Congress, 2007). Therefore, the current study attempts to shed light on importance of quality in pre-schools, and highlight the role that quality certifications may play to uplift the bar on school reforms in the UAE to meet the UAE vision 2021 and attempts to find out, if parental demographical factors and quality time spent influence child learning. In developed countries, many empirical studies have established a direct relationship between early education and acquired cognitive development, and have suggested that the latter is a strong predictor of success throughout life (Susann et al. 2005; Magnuson 2004, cited in Woldehanna, 2011). However, research on early years’ education in developing countries such as UAE is considerably less prolific, and investment in this sector is not seen as critical.

The scarcity of research is congruent with the lack of prominence of EYE in the national agenda and the limited public investment in UAE. While developed countries e.g. UK, USA, Australia and New Zealand have a research based and documented national curriculum for the EYE, this
critical aspect for EYE is absent in the UAE. Most nurseries are privately owned and teach the UK or the Indian curriculum. The UAE government however has raised the level of importance given to EYE by announcing a policy to introduce pre-school and nursery performance standards and has just taken cognizance of the importance of this pre-primary sector and after having made some standards for the nursery sector in 1983, is now looking at enhancing the same. Public investment in this sector is currently negligible. The major activities in this pre-primary stage are carried out by a handful of organisations in the private sector. It can therefore be inferred that there is low participation and low quality of pre-schooling when compared to powerful knowledge economies. Since EYE forms the foundation of later achievement, it is of critical importance to introduce positive change and reform, increasing participation, investment and research in this field.

The UAE being an expatriate dominated cosmopolitan country, is home to multinationals and offers a dynamic social climate, and a multicultural setting. The researcher besides looking at the importance of learning at pre-schools and the ISO quality framework through a review of literature worldwide will also investigate the effect of the parental variables on the learning outcomes of the pre-schoolers. Many researchers such as Kaufman, Curby, Grimm & Brock (2009) and Berlinski, Galiani & Gertler (2006) have concluded that children having prior preschool experiences perform better in primary school. It is increasingly important that educationists fill in the void of quality leadership in preschools, which in the scheme of the bigger political promises, agendas, and inefficiency in fulfilling main schooling needs gets ignored. Sara et al. (2009) highlight that classroom management has great implications for supporting children’s early development of behavioural skills and is very important in school settings. It is reiterated by many authors that early childhood may be the single most effective program for helping families; poor children, communities and nations break the intergenerational cycle of poverty. (Woodhead 2009, cited in Woldehanna, 2011). In 2007, the government of the Emirate of Abu Dhabi, a member state of the United Arab Emirates, published its first strategic policy agenda. Throughout the agenda, the focus on parental involvement is clear. The policies set forward by all government agencies recognize the importance of narrowing the gaps between the parental expectations for their children’s academic level and the part which they must do within and after school time. (Eldeeb, 2012) “Regardless of government policies, some parents have always been actively involved in enhancing their children’s development and educational progress. This spontaneous activity has taken several forms including “good parenting in the home pre-school” Desforges & Abouchaar (2003) in (Eldeeb, 2012). Reynolds et al. (1996) state that there are very few studies addressing the role of parental involvement. There has been little research in the field of EYE
done in this regard and the subject matter is innovative owing to the uniqueness of the UAE.

1.4 Purpose and Objectives

This study provides an overview of the global literature on Early Years Education, quality certification and school leadership, and applies this theoretical and research-led knowledge to a specific context. In doing so, it explores the importance of quality in pre-schooling in the UAE context. The purpose of the study is; to examine the quality of learning in pre-schools and to understand the differences of learning quality between ISO certified and non-certified pre-schools, thereby exploring the importance of quality certifications in preschools in the UAE. This purpose is further explored in the following objectives:

1. To analyse the effect of early years’ education (EYE) on the learning of pre-schoolers in the UAE.
2. To identify the relationship between the students learning and the ISO accreditation and quality certifications in preschools in the UAE.
3. To examine the impacts of parents’ role in pre-schoolers quality learning.
4. To infer possible policy insights for the identified challenges in the early years’ sector in the UAE and the certifications of schools.
5. To explore the impact of leadership on quality of learning in preschools in the UAE.

1.5 Research Questions

To achieve the aim of this study, the research focused on a broad aim and one main research question and three sub- research questions. The main research question: Is pre-school learning effective and are quality certifications in pre-schools important? The following are the sub-research questions:

RQ 1 - Is there any significant improvements in learning of the children at the preschools in UAE?
RQ 2 - Is there any significant differences in the learning of children between the ISO quality certified and non-certified preschools? Is there any impact of leadership of the schools on quality of learning?
RQ 3 - Do parental demographic factors and quality time spent at home with children impact the pre-schoolers learning?
The study extensively looks at the effective learning in pre-schools when compared to home learning. This is done by looking at the results of a longitudinal trend analysis examining in detail the difference in the assessment scores of the children in the pre-schools under study, and scores of those children that have not had the preschool experience over five years, particularly exploring the quality trend before and after ISO certification and exploring the quality trend in ISO certified and non-ISO certified pre-schools in the UAE. Further investigation was done looking at the leadership style of the differing groups through semi-structured interviews which help answer the question two in detail. The thesis also seeks to discover the perceptions of parents through surveys and interviews on quality in preschools and its curriculum, the quality time that they devote to children and to make linkages with it and the learning and development in the children.

1.6 Significance of the Study

The scope of this study applies to any pre-school or education institute that aims to support implementation of quality frameworks to deliver high quality of teaching and hence, learning for children. The results can be generalizable to other countries who have similar economic and demographic parameters of population and pre-school settings. As UAE is a leading developing economy, most researchers, stakeholders in pre-school education or even higher education in various countries can benefit from this research, as principles of quality frameworks and their advantages to the product or service, apply to all organisations. This study excludes the effects of moderating variables and the control variables and considers them constant as these may affect the research outcome.

This study was designed to determine the effect on learning and socialization of children with regards to the quality certifications of pre-primary education and parental involvement. The study generated information on importance of quality in pre-schools, showing factors such as parents' demographic factors, educational level and type of school influences children learning and up to what extent, highlighting the most important factors that affect student learning. The study findings will therefore be of benefit to various stakeholders in the pre-primary education sub-sector and the education sector who would like to invest in accreditation and quality certification or formulate country wide policies. Personnel in the Ministry of Education and policy makers may use the findings of the study, to consider pre-primary education service standard guidelines, to incorporate quality standards that should be maintained and improved in pre-primary schools. The Ministry of Education, KHDA inspectors and assurance Officers may use the findings of the study to expand their quality assurance supervision and help
education institutes to gain international accreditation or start a national accreditation system which is robust and meets international standards.

The curriculum experts and child department officers may utilize the findings of the study in the development and implementation of learning and socialization programs in pre-schoolers, parents’ mobilization and education programs so that parents may be informed of the pre-primary education quality indicators. Educational managers at the government and school level may use the findings of the study to initiate internationally accredited and time-tested quality programs aimed at raising ‘corporate quality’ and school effectiveness thereby addressing the needs of parents. They will invest in these programs looking at the researched value of quality and learning effectiveness in pre-schoolers that this study points out. School managers may use the findings of the study to strengthen features of their pre-primary education programs that parents are satisfied with and improve the features that parents are not satisfied with. The parents may use the findings of the study to demand quality pre-primary education from schools. They may select preschools based on awards, certifications and accreditations. Most importantly the children will benefit the most as when steps are taken by decision makers of countries, ministries and education bodies, including schools and parents, the young child stands to benefit with enhance learning programs, higher quality in schools and safer and conducive environments to socialization.

1.7 Structure of the Dissertation

This thesis is presented in five chapters. Chapter 1 presents the general introduction to the study with problem statement, objectives, questions and the rationale for the study. Chapter 2 presents the contextual analysis, conceptual mapping, theoretical framework and the review of the related literature. Chapter 3 reports the research approach, the data collection methods, the site and subject selection, ethical considerations, delimitations along with trustworthiness and reliability of data. Chapter 4 presents quantitative and qualitative data analysis and results. Chapter 5 presents the findings, recommendations and the conclusion.
Chapter 2: Theoretical Framework and Literature Review

2.1. Overview of the Chapter

This chapter presents the contextual analysis, the conceptual mapping, the theoretical framework, and the review of the related literature to situate the current study.

Figure 2.1: Conceptual Model

2.2 Contextual Analysis
UAE has set up public schools which are free of charge for all UAE nationals, and which comprise of primary, middle schools and high schools, with Arabic being the medium of instruction. Education at primary and secondary level is universal and compulsory up to grade 9. The UAE therefore has high growth rates of private schools, as the growing expatriate population are not offered free education. Over 40 per cent of students in the UAE attend private schools. This large number of expatriate immigration to the country has created a requirement wherein their children attend private schools which offer different curricula mediated by a language, consistent with their individual nationality, all governed by guidelines set out by the Ministry of Education (UAE Interact, 2012). There is a continuous high demand for an educated workforce in the UAE as the UAE population has also quadrupled in the last decade.

There are approximately 400 nurseries in the UAE, serving the children who go on to join the 250 primary and secondary schools to pursue their education. To analyse the importance of the learning of nursery children in this crucial sector of the UAE, the present study focuses on 7 pre-schools located across the UAE. This research aims to investigate the learning of the pre-schoolers, the effect of quality certifications whose aim is to ensure quality in settings, and explore the perceptions of different stakeholders regarding the importance of quality in preschools, leadership influences on quality, parental demographic influence on learning and the contribution to the learning of children by the quality time spent by parents at home. This research will contribute to the scholarly world wherein a gap is seen in review of early years’ literature, which address such a correlation. Due to the paucity of research on Early Years Education (EYE) in the UAE, the current research focuses on the importance of pre-schooling quality and the socialization of children from birth to five years UAE preschools.

2.2.1 Demographics and Economy of the UAE

The UAE ‘covers a land area of approximately 83,600 km², including some 200 islands. The UAE is bordered in the north by the Arabian Gulf, in the east by the Gulf of Oman and the Sultanate of Oman, in the south by the Sultanate of Oman and the Kingdom of Saudi Arabia and in the West by Qatar and Saudi Arabia’ (UAE Yearbook, 2010). On 2 December 1971, the UAE was formally announced as an independent federation while maintaining a form of autonomy for each Emirate.

The UAE ‘consists of seven emirates, namely (in order of size): Abu Dhabi, Dubai, Sharjah,
Umm Quwain, Ajman, Ras Al-Khaimah and Al Fujairah’ (UAE Yearbook, 2010). Under the Presidency of the UAE comes the Federal Supreme Council, consisting of the rulers of these seven Emirates. The Emirates have evolved alongside the country’s ongoing growth, and differ from one another in policies and economic structure, depending on the variables of degree of development and population, area. The largest and most populous are Abu Dhabi and Dubai housing 60 percent of the UAE population.

Since their inception, the rulers all work under the common presidency and council to bring about development and create a state that by regional standards appears to be progressing towards more efficient and policymaking. Sheikh Zayed bin Sultan Al-Nahyan (1918-2004), ruler of Abu Dhabi and president of the UAE at its inception, planned to improve the living standards of the UAE citizens by using the oil revenues. He oversaw the development of all the Emirates and into a welfare state system with an emphasis on a strong national infrastructure along with healthcare, education and employment.

According to the World Fact Book (CIA, 2013), the UAE ranks 48th in the world for per capita income. The International Monetary Fund (IMF) categorises the country as a promising high-income developing economy. According to Ministry of Labour estimates, the number of registered expatriate workers grew from 3.11 million in 2007 to 4.07 million in 2008, a 31 percent annual increase (Ministry of Economy, 2013). This foreign workforce encompasses various nationalities such as Arabs, Iranians, Filipinos, Indians and large numbers of Europeans and Americans. Figure 2.2 shows the percentage of each nationality.

*Figure 2.2 Percentage of various workforce nationalities in the UAE (World Bank, 2013)*

Expatriates now represent approximately 70 per cent of the UAE population. Figure 2.3 reflects the ever-increasing demand for foreign labour since 1950, which in recent years has amounted...
to 88 per cent of the total workforce in the UAE.

*Figure 2.3 Total population estimate 1950-2010 in the UAE (NQA, 2013)*

The UAE being an expatriate dominated, cosmopolitan country, it is home to over 200 nationalities (Gulf News, 2011). It has a dynamic social climate. The recent influx of expatriate population now contributes to 70 percent of the total UAE population leading to an explosion in all the areas of economy activity especially in the service sector. Young expatriates call UAE their home and have set up nuclear family units, leaving their family homes in their countries of origin. The spouses of the primary bread earners in a family unit take up to working and with UAE leading the happiness index, and with high women safety and respect scores, most women contribute to the knowledge economy, making International Curriculum run schools and Quality Childcare centres invaluable to the well-being of the family unit.

*Figure 2.4 Proportion of nationals to expatriates in the population*

The main cause of the UAE population growth has been the high demand for a workforce to meet the requirements of the huge infrastructure projects undertaken in the country during the 1970s and early 1980s, as well as the ongoing developments in all economic aspects to the
present time. In addition, the UAE government follows liberal trade policies and operates an open business environment underpinned by a stable government structure. The UAE government has developed special fiscal policies to ensure strong economic growth while moving towards the adoption of such International Monetary Fund (IMF) recommendations as medium-term fiscal plans and further fiscal consolidation between federal and Emirate budgets (Kapiszewski, 2003; IMF, 2014). Petroleum and natural gas exports also play an important role in the economy, especially in Abu Dhabi. More than 85 per cent of the UAE economy was based on the export of natural resources in 2009 (UAE Ministry of Economy, 2013). However, the UAE has always tried to reduce its dependency on oil exports by diversifying the economy, particularly in the financial, tourism and construction sectors (Al Ali, 2008; IMF, 2014).

2.2.2 Education System in the UAE

Primary school education is mandatory for all UAE citizens. Government policy is to provide staff/student ratios of 1:20 at kindergarten and primary levels, and 1:15 at preparatory and secondary levels. The existing staff/student ratios are well within this proposed range. The UAE education system has recently been reconstructed into four schooling stages. Figure 2.5 illustrates the education system in the UAE.

By 1972, the Federal Ministry of Education (MOE) was firmly established, and all schools came under its supervision. Significant changes have taken place in the UAE educational system in the 25 years that followed federation. The UAE Constitution specifically identifies education as an essential right of all citizens and specifies that it must be supported by the state (UAE Yearbook, 2010). Hence, the Ministry of Education’s objective is to provide – suitable opportunities so that the learner can, in a fully comprehensive way, develop spiritually, mentally, socially, psychologically and physically to the extreme extent of their potential in a way that assures a balance between self-fulfilment and serving their society through responding to modern age requirements and social and economic development (MOE, 2007:22). The Ministry of Education oversees all Emirate-based education councils and authorities. The Ministry of Social Affairs (UNESCO, 2011) licenses nurseries, day-care centres and crèches. The Ministry of Education, with the consultation and supervision of cabinet affairs, has produced a policy plan outlining a strategy for further educational development by adopting initiatives such as Vision 2020, which aims to create local regional councils in each Emirate of the UAE.

*Figure 2.5 General structure of the education system in the Emirate of Abu Dhabi.*
Departments of education work closely with the Ministry of Education in formulating the vision 2020 and UAE’s education agenda (MOE, 2007). The two important departments are the KHDA (Knowledge and Human Development Authority) in the Dubai and the ADEC (Abu Dhabi Education Council) in the Abu Dhabi. The aim of ADEC is to assist UAE education in becoming an excellent system that qualifies and equips the UAE people with appropriate skills, knowledge and attitudes and to be competitive in the international labour market (ADEC, 2017). Educational zones and local offices make up the second education body that controls the education system. A key component of government strategy has been the decentralisation of educational authority from the Federal Ministry of Education to local education bodies in each Emirate. Three major bodies are the Abu Dhabi Education Council for the Emirate of Abu Dhabi (covering three regions), the Dubai Knowledge and Human Development Authority for the Emirate of Dubai and the Northern Emirates’ Council (including the remaining four Emirates), which have the full jurisdiction of the Ministry of Education and whose task is to improve the education sector (UNESCO, 2011).

### 2.2.3 Early Childhood Education in the UAE

Early education has significant impact on basic health, behaviour and learning of children. Unfortunately, however, most governments spend much more on higher education, such as the university level, than on early education. The UAE’s public spending on education is highly

---

**Kindergarten** (length of programme in years: two)
Children three and a half to five and a half years old.

**Primary Schools** (length of programme in years: five)
Children 6 - 11 years old.

**Preparatory Stage** (length of programme in years: four)
Children 12 - 15 years old.

*Secondary Education divided into two different programmes* (length of programmes: three years, Students 16-18 years old)
- **Public Secondary Schools**
- **Technical Secondary Schools**

**Higher Education**
UAE University and other higher institutions.

*Source: Abu Dhabi Education Council (2010)*
inadequate, at 1.13 per cent of GDP in 2008 (Gulf News, 2011). On average, countries in the MENA region spend five per cent of their GDP on education, similar to most OECD countries. However, the low spend on education is mostly because of the high level of privatisation of the sector. It is imperative that the UAE government either offers financial support to enhance quality in private education, facilitates sponsors and grants or makes it mandatory for the private sector to invest in quality frameworks.

Early childhood, up to four years of age, is a very crucial stage as this is when children begin to recognise and build their character. All previous studies carried out by researchers have proven this across different countries (National Centre for Education Research and Technology, (NCERT), the USA, The Effective Provision of Pre-school Education, (EPPE), the UK). Maximum attention to early childhood education is essential to ensure that the new generation that is moulded has a solid foundation. The UAE has already achieved several milestones in the field of education, although lagging with its social and economic progress. In the industrialized countries, many empirical studies linking the pathway between early education and acquired cognitive development have been done, and have proved that the latter is one of the basic predictor of success throughout life (Susann et al. 2005; Magnuson 2004, cited in Woldehanna 2011). However, very less has been done to studying this link in most developing countries like UAE, and investment in this sector seen not seen as critical. The UAE government has just taken cognizance of the importance of this pre-primary sector and after having made some standards for the nursery sector in 1983, looked at enhancing the same in the year 2012, having made little progress, has now assured that substantial reforms in approvals and assessments of nurseries will take place in 2018.

In the UAE, 25% of the population is under 10 years old, with an annual growth rate of 3.38%. This is double that of Kingdom of Saudi Arabia (KSA), four times that of the USA and 30 times of the European Union (ameinfo, 2016). Whilst there are 300 nurseries that are privately owned as seen in table 2.1, only 27 are run by the government exposing a big lacuna in the early year’s education. The UAE must increase investment in education, especially early education, attract more Emiratis to the sector with better salary and benefits, and provide them with adequate training to involve them actively. Most of the nurseries house expatriate children. Less than 5% of eligible Emirati children are enrolled in nurseries as the clear majority are raised at home up to the age of four years (Gulf News, 2015). This trend needs to change.

Research has proved the importance of this sector on a country’s socio-economic fabric. The U.S Department of Education 2006 states that as of 2005, 47% of all children aged 3-5 years
were enrolled in some form of part or full time early years’ programs (PCER 2008). In Ethiopia, the gross enrolment rate in Kindergarten was only 4.2% in 2008/2009 (Woldehanna, 2011). It is supposed, UAE will find surprising results close to these figures if a survey was to be done. The early years represent a window of opportunity for a lifetime development of an individual (UNESCO, 2010). The theory of human capital emphasizes the significance of the early year’s development for its initial formation (Heckman & Klenow 1997; Cunha & Heckman 2003, cited in Woldehanna (2011).

The UAE statistics proves from the charts that the number of nurseries are very few when compared to the young children’s population. Research must be done into finding and analysing the gross enrolment rate. The total number of nurseries in the country was below 500 in 2016. MOSA issues approx. 20-30 new licences in a year and there were some 30,000 children in the country’s nurseries including those established in government departments. In 2009, there were only 82 private licensed nurseries in Dubai with 7551 children enrolled, aged 0-4. The nurseries and enrolment in nurseries in the UAE are growing at fast pace. This contribution is led by many factors including the growing population of the UAE, growing women job market, better nurturing facilities of nurseries, government controls over nurseries and many more. There has been an economic boom in the UAE in the past few years and this has created opportunities for the many private owned nurseries.

The ‘Child-at-home’ model for children below four is a common phenomenon in the UAE where children spend a considerable amount of time with housemaids and nannies whose first language is not Arabic. The national culture in Dubai is based on extended families and homecare services, provided by housemaids who usually hold no qualification for childcare and they cost considerably less than the fees for a nursery place. The child-at-home model is reinforced by the availability of low-paid, English speaking, female labour from Asian countries, notably from India, Pakistan, the Philippines and Sri Lanka. Most of the maids in Dubai are educated to lower secondary level, speak English as a second language and receive wages ranging from AED 700-1,184 monthly (equivalent to an annual income range of USD 2,292 – USD 3,892), considerably less than the fees for a nursery place which, in 2008, ranged from AED 5,000 (USD 1,369) to AED 50,000 (USD 13,698) annually, depending on the number of hours being used. The use of this labour for rearing young children is widespread in the Gulf States. Housemaids care for 58% of children under the age of three years in the Arabian Gulf for 30-70 hours per week. This length of time is far greater than most institutional childcare hours in the US or Europe, which are increasingly criticised for being too long. Researchers consider that the time spent in housemaid care far exceeds the duration
recommended by major studies to avoid harm to maternal attachment or prevent problem behaviours.

Table 2.1: UAE Nurseries by Emirates (Source: UAE nurseries E gate, 2017)

<table>
<thead>
<tr>
<th>Emirates</th>
<th>Private</th>
<th>Government</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abu Dhabi</td>
<td>68</td>
<td>3</td>
<td>71</td>
</tr>
<tr>
<td>Ajman</td>
<td>6</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Al Ain</td>
<td>16</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>Al Fujairah</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Dubai</td>
<td>122</td>
<td>9</td>
<td>131</td>
</tr>
<tr>
<td>Khalfakan</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Ras Al Khaimah</td>
<td>14</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Sharjah</td>
<td>62</td>
<td>14</td>
<td>76</td>
</tr>
<tr>
<td>Umm Ul Quwain</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300</strong></td>
<td><strong>27</strong></td>
<td><strong>327</strong></td>
</tr>
</tbody>
</table>

The nursery workforce in Dubai is almost entirely non-national (89%) and non-Arabic speaking, which may create an additional barrier for some users. The location of services may also not be ideal; very few companies and office buildings have taken advantage of the existing law that allows them to establish nurseries for their working mothers. Serious research on potential interest in early childhood services in Dubai is not available. Stakeholder consultations conducted by KHDA, however, have indicated the quality and cost of private nurseries in Dubai is variable and that fees are often prohibitive for some families. For all these reasons, demand among national families both for childcare and a pre-kindergarten year may be stronger than enrolment figures suggest. Results of a questionnaire issued by the Dubai Women’s Establishment (DWE) support this assumption (KHDA, 2017).

According to the questionnaire, issued to 1,186 working women in government departments in Dubai, 62% of the children under the age of 4 years were reared at home by housemaids; 32% by extended family members and 5% were enrolled in private nurseries. Yet, when asked whether they would make use of a quality childcare facility if their employers provided it, 92% of the women surveyed confirmed that they would, with 84% stressing their preference for high-quality childcare centres offering the expertise of trained educational specialists. Many UAE expatriate women work and do believe that nurseries provide better developmental opportunities for their child than an in-home nanny or housemaid. The governance of the
private services is divided among different ministries. Responsibility for nursery services was first taken in charge by the then Ministry of Labour and Social Affairs in 1983 and after the separation of these ministries in 2004, was ascribed to the Ministry of Social Affairs. The MOE has since taken over the running of the nurseries in 2016. They will issue a set of guidelines for the nursery sector in UAE along with the inspection process and standards to be maintained by all nurseries. This would be considered as a huge reform in this sector in future.

There are many entry barriers for educational leaders and entrepreneurs to start new nurseries in the UAE. The UAE is a unique country in that it is a multi-cultural, cosmopolitan economy dominated by expatriates and hence it has rigorous public laws and legalities to be adhered to. Nationality is not granted, and hence there is a compulsion to have a local national sponsor to start any set up. The list of requirements for the initial start of a commercial entity is endless, and permissions for a preschool have to be obtained jointly by four ministries. It requires great resilience on the part of an entrepreneur to set up an organisation in the UAE. One of the most important management implications of organisational culture relates to ‘selection decisions’. Common ethics, qualifications and value systems are key indicators for hiring. In a country like the UAE, where the labour laws are extremely rigid, work visas very difficult to obtain, and the workforce being 90% expatriate, the hiring procedures can be daunting for any leader as every application must be approved by three regulatory bodies and takes up to four months! The ongoing problem is also that the population is ‘fluid’ with people constantly moving or relocating. The culture plays a big part in the preschool retaining key talent. Parents tend to be wary of schools where the teacher turnover is high, and this can directly impact the bottom line. Homeostasis is the biological term applied to schools, by new age authors, and refers to ‘the tendency of an open system to regulate itself and stay in balance’ (Chadwick, 2011). Well-developed communication systems and decision-making processes are important tools to have effective homeostatic environments. The myriad of outdated policies and ineffective regulations makes an effective environment hard to achieve.

The pre-school has a 100%-woman workforce in accordance with the laws of UAE. To manage an ‘all women’ organisation is challenging in its own right, more so as most of them come from differing cultural backgrounds. As an example, the pre-school under study employs at least 25 different nationalities of women. Owen (1999) talks about the women issues in organisational behaviour. He talks more from a gender bias point of view saying that by the 1980’s it had become obvious to woman scholars that educational administration had traditionally been a male dominated area. He goes on to point out that some scholars doubted whether women possess the toughness traditionally thought necessary to maintain discipline in schools. We all know that the feminist critique posits that not only can women succeed in administrative work
but also can excel in it. JPMorgan Chase, a global banking firm believes that women perform as well on jobs as men do. Almost 60 percent of the firm’s employees are women, and 50 percent of its managers and professionals are women. (Robbins & Judge 2009). Emotional Intelligence is one of the key skills required to manage an all-women’s organisation. Women tend to be more emotional. Emotional Intelligence (EI) is a person’s ability to be self-aware, detect emotions in others, and manage emotional cues and information. (Robbins & Judge 2009, p.198) highlight that “A study was conducted to look at the successes and failures of 11 American Presidents. They were evaluated on six qualities- communication, organisation, political skill, vision, cognitive style and emotional intelligence. It was found that the key quality that differentiated the successful (Such as Roosevelt, Kennedy, and Reagan) from the unsuccessful (such as Johnson, Carter, and Nixon) was Emotional Intelligence”.

Several different Early Years Education curricula are adapted in the UAE. While developed countries like, the UK, and USA, Australia, and New Zealand, to name a few have a documented and researched national curriculum for the early years, the UAE lags in this regard. This could also be one of the major reasons why this critical area of early childhood education is underdeveloped in the UAE. The USA as a country has considered the importance of looking into preschool curricula and their effects a decade ago. In 2002, the Institute of Education Sciences (IES) commissioned the Preschool Curriculum Evaluation Research (PCER) study to conduct “rigorous efficacy evaluations of available preschool curricula”. Twelve research teams received peer-review grants and set out to accomplish this humungous task of analysing curricula and check on their efficiency in pre-reading skills, language skills, numeracy and social skills. This is important to consider as “early childhood centre-based programs have been a major, sometimes the sole component of a number of federal and state efforts to improve young at-risk children’s school readiness (e.g. Head start, Even start, Public Pre-kindergarten)” (PCER 2008, p. xxxi)

Office for Standards in Education, Children Services & Skills (OFSTED) is the governing body in the UK for the early years. The national curriculum on (EYFS) has been researched to be effective, and the on-going evaluations help the governing body to make changes into it time and again. A positive change in the six areas of the curriculum was announced as recently as in March 2012. Recently in 2016 OFSTED introduced another area. OFSTED do expect every provider to be working towards making his or her provision outstanding. Those who do this will know that to continue outstanding provision means continuing to reflect on what works well and what is not working as well. The very best providers do this all the time. They use their evaluations to strengthen and build on the most effective practice and to remedy any weakness they find in areas that are not as good (OFSTED 2014).
There has been a considerable rise in the progressive and universal education systems. Teachers and caregivers of young children set the daily academic, social and emotional tone and climate of their classrooms, thereby influencing children’s development of self-reliance and social skills, (National Scientific Council on the Developing Child 2004, 2007, 2008; White & Howe 1998; Thompson 2001, cited in Gloeckler & Niemeyer 2010). Julia et al. (2007) state that thousands of classrooms and all the children in them are affected by quality childcare. The PCER study of 2008 (USA) states that a potential avenue for improving school readiness amongst young children, who are at risk of school dropouts or failures, is through early years education.

In the proposal by Adler (Ornstein & Hunkins 2004), he developed three types of curriculum to improve the intellect: acquisition of organized knowledge, development of basic learning skills and ideas and values to be taught. Enhanced learning of sound mathematical skills and social behaviour has also been linked to later school successes. (Downer & Pianta 2006; Miles & Stipek 2006, cited in PCER 2008). Phonological awareness cannot be ignored, and is an integral part of reading ability. Effective curricula set the blue print for a school to ensure the child’s learning. This holds more important for a preschool, owing to the dynamic nature of teaching the young ones.

Quality surely matters. Barnett (2008) comments that research finds that the programs with the largest and longest lasting effects are the most educationally intensive and expensive. The desired outcome will not be achieved through poorly implemented low quality childcare and education, or with instructionally weak or shallow curricula. Educators now must think of incorporating critical thinking skills. There are new age theories on lateral thinking too. Watson & Charles (2008) state that critical thinking can be taught in the classroom from as early as preschool. Gordon Brown at the first Transforming Education Summit in UAE said, “The global financial crisis calls for educational reform that will help develop children into critical thinkers.” He went on to recommend that teachers and parents must tap on children’s creativity even before five years of age. Other experts also speak about establishing a creative curriculum especially in a multi-cultural expatriate dominant society of UAE (Gulf News, 2015).

A rich national curriculum for the UAE is of paramount importance to its diverse community. Learning experiences vary from learning activities, as the different children experience difference outcomes for the same activity. The classroom dynamics and teacher innovation bring out rich experiences for the individual child. The young children’s curriculum experiences should be such that they see life’s wholeness and continuity in activity. Knowledge
always opens new forms and is expansive. These learning experiences are a means, and invaluable in themselves, to attain specified consequences. These experiences are more meaningful if the goals of the Early Learning Program and objectives of the curriculum are aligned. The Education ministries in UAE and their representative bodies (KHDA, ADEC and MOSA) must take cognizance of this and consider curricular reforms as a strategic plan.

2.3 Concepts and Frameworks

The present study focuses on growth and quality in learning, which can be best defined by measures of the ultimate product of schooling (e.g. Rutter et al., 1979; Mortimore et al., 1988a; Bosker and Scheerens, 1989): by students progressing further than expected (Sammons et al., 1995:1), growth in student achievement (Williams, 1992:34), or through consistent observable positive outcomes of students over a period (Hallinger & Heck, 1998). The three key concepts the study deals with are; Total Quality Management (TQM), International Organisation for Standards (ISO) and Curricular frameworks such as Early Years Foundation Stage (EYFS) in the UK and National Education Goal Panel (NEGP) in the USA.

2.3.1 Total Quality Management

Some scholars argue that TQM can be taken from the business sector and be implemented in the same way in education. The purpose of this section is to review the TQM concepts that can be applied in the academic department of higher education to build a new management model that aids universities to maintain professional autonomy and scholarly values.


There is confusion between the difference between Total Quality Management and Quality Management. Quality Management utilizes techniques and tools such as quality assurance and control. It has a focus on planning, improvisation on services, procedures and end products through preventive and corrective actions. However, TQM is much broader, as it has a strategy to incorporate the goals of the whole organisation that covers expectations of all stakeholder’s
customers, suppliers, employees and partners by using all resources in the most efficient manner (Rabah, 2015). Ho (1999) simplified the definition of TQM by saying that ‘Total refers to all who are involved whether suppliers or customers’.

According to quality assurance solution (2017) some of the key Concepts of Total Quality Management include; structured system for exceeding customer expectations, system that empowers employees, drives higher profits, drives lower costs, continuous improvement and management centered approach on improving quality. Feigenbaum (1961) talks about three steps that lead to effective quality. These are: Quality Leadership which enforces management to take the lead in ensuring quality efforts based on good planning; Technology Quality Management which requires old and traditional programs to be changed to latest technological programs ensuring quality and customer satisfaction for the future; Finally, Organisational Commitment because motivation, role-modelling and on-going training of all the employees showcase commitment towards continuous improvement.

Studies have indicated both merits and demerits of TQM. A study (Stefan Lagrosen, 1999) carried out in four Swedish schools aiming to use TQM to improve their functioning, reported that a broader and wider admissible prospect of the organisation and its stakeholders had paved the road for greater job satisfaction. Better communication, especially within parents, was also noted. Higher participation, refined cooperation at the departmental and social level, enhanced leadership of management, higher efficiency in comprehensive evaluations and higher capability for enforcing actions were also to be found.

TQM aids organisations in obtaining results, and its advantages are endless (ASQ, 2017), such as; stronger competitive position, adaptability to changing market conditions and “to government policies, higher productivity, enhanced market image, elimination of defects and waste, reduced costs and better cost management, higher profitability, improved customer focus and satisfaction, increased customer loyalty and retention, increased job security, improved employee morale, enhanced shareholder and stakeholder value, improved and innovative processes” (Rabah 2015, p.89).

The focus of TQM is continuous and consistent improvement, which requires everyone’s efforts for it to be successful. Production of goods and services from consumer’s perspective can help the developers realize what is beneficial and what is not. This allows them to begin amendments as required. Securing the company’s finances by removal of eliminating problems
in the long run is the focus of total quality management (Business Knowledge Source, 2017). Some of the merits of TQM according to Small Business (2017) include;

**Lowers Production Costs:** A well-designed TQM program gets rid of flaws and defects, thereby decreasing production costs. The company continues to obtain decreased costs and higher profits as teams gather to find and dispose flaws in the business. Profits can be earned as quality improvement teams waive errors, decrease lead-time and determine excesses in the production process.

**Employee Participation:** Morale and productivity increases when workers realize that their cooperation is imperative for success of TQM. Involving themselves in quality improvement teams empowers them. Their morale can be further boosted by showing recognition to improvement teams that make significant improvements in the production process to get rid of or reduce waste.

According to Implementing Total Quality Management in Education: Compatibility and Challenges, (Sohel-Uz-Zaman, Anjalin; 2016 in Rabah, 2015, p.95) TQM offers the following benefits: “constant enhancement; integration of people, functions and resources; systematic and structured approach; quality control at every level of the organisation and at every step of the operating process; developing human and organisational capabilities; efficient utilization of resources; people participation; customer satisfaction; creating a quality culture and so on”.

When most of the company focusses on improving the subjects that are not up to the mark, the ones that were already of high quality could be ignored. The developers are then restricted from achieving their full creative potential. Employees are compelled to get their work right the first time with no room for mistakes. TQM has higher expenses at the start of any business. The objective and enforcement may help in avoiding a large withdrawal but there are immediate costs associated with it. The company should stop the production to enforce the changes for implementing TQM. This causes some hiccups in sales and delivery to consumers. Hiring highly-trained professionals to test and re-test the products is an expensive endeavour. Nothing can be taken forward until every member of the organisation is involved in the TQM process (Business Knowledge Source, 2017). The demerits according to Small Business (2017) are;

**Product Disruption:** Employees need considerable amount of training to enforce TQM practices in the system. This includes procedures for problem-solving techniques and tools to assess the problem and find the weaknesses. Productivity may decline in the initial training
period and due to meetings for quality improvement teams which keep the employees distracted from their duties. The initial steps of implementing TQM can decrease output, even though it eliminates waste and productivity.

**Employee Resistance:** TQM requires employees to change their perspective, stance and methods to achieve higher performing jobs. Workers get anxious when management does not communicate well with the team’s approach to TQM, leading to employee resistance. This can reduce employees’ morale and the company’s productivity. The system should improve step by step to take the business ahead. This means that it may take a long time - maybe years – for the company to prosper under the program.

According to *Understanding, Managing & Implementing Quality* (Motwani, Mazur, Antony, Preece; 2001) The barriers to reinforcing TQM in higher education institutions are as follows: for enforcement of any new program, there is a significant amount of resources and personnel required. When an institution plunges the whole firm into the TQM plan, a complete and methodical change to the culture can be an overwhelming requirement. For this reason, higher education institutes go through the slow implementation path, which insists on a few departments at a time to partake in the TQM plan and eventually adding other departments involved in the institution in the plan.

Faculty sometimes feel that TQM enforcement results in more bureaucratic work, which is true, as a lot of their time is spent on work which has no professional profit. The system becomes redundant due to its inability to provide a definitive outcome and standards in the educational world. Moreover, most people working on enforcing TQM assume that results will be apparent almost immediately, and that is usually not how it goes. Planning, organizing and implementing TQM practices take a lot of time.

### 2.3.2 International Standards for Organisations

International Standards for Organisations (ISO 9000) deals with the fundamentals of quality management systems, including the eight management principles on which the family of standards is based (ISO, 2017).

The benefits of ISO to organisations are: improved customer satisfaction, reduced costs, improved communication, improved image, focused efforts, effective team work, well-connected and integrated systems, enhanced business performance, higher ROI / better
operational results, high market share and more profit, to customers & users of the product or service which is conforming, dependable, reliable, available and maintainable.

The benefits to employees are: elimination of bottlenecks in operations and tension-free work environment, leading to good human relations, creation of quality awareness and greater job satisfaction among employees, improving the company’s morale and quality culture, better understanding of process & responsibility, good exposure due to training; thereby improving prospects (enhancing career prospects, and self-worth), better working environment, higher morale, and job satisfaction, greater stability in employment and improved health & safety. (ISO 2017).

The benefits to the suppliers include stability, growth, enduring partnerships and better relationships. And the benefits to society are increased social security, reduced environmental hazardous effects, improved health and safety, fulfilment of legal and regulatory framework (ISO 2017). ISO’s quality management system helps in managing quality in an efficient way. The company will implement a quality policy and prepare a quality manual based on the principles and ISO standards, incorporating all the procedures to be followed. The following are the quality management principles of ISO (2017):

- **Principle 1: Customer focus**
  Organisation should understand the current & future requirements and should strive to exceed customer expectations.

- **Principle 2: Leadership**
  Leaders establish unity of purpose and direction. They should be able to lead the team towards achieving the organisation’s objectives.

- **Principle 3: Involvement of People**
  People of all levels are the essence of an organisation and their full involvement enables their abilities to be used for the organisation’s benefit.

- **Principle 4: System Approach to Management**
  Identifying, understanding and managing interrelated processes as a system contributes to the organisation’s effectiveness and efficiency in achieving its objectives.

- **Principle 5: Continual Improvement**
  Continual improvement of organisation’s overall performance should be a permanent objective of the organisation.

- **Principle 6: Factual approach to Decision**
  Making effective decisions are based on the analysis of data and information.
- **Principle 7: Mutually beneficial supplier relationship**
  
  An organisation and its suppliers are interdependent and a mutually beneficial relationship enhances the ability of both to create value.

- **Principle 8: Process Approach**
  
  A desired result is achieved more effectively when activities and related resources are managed as a process.

The six mandatory procedures required by the ISO standards are: control of documents, control of records, control of non-conformities, internal quality audits, corrective actions, preventive action. The ISO methodology known as “Plan – Do – Check – Act” was applied to all processes and can be briefly described as follows:

![ISO 9001:2008 Model](ISO_9001_2008-Model.png)

*Figure 2.6: ISO 9001: 2008 – Model (ISO, 2017)*

A study (Van den Berghe, 1995) by Manchester Business School titled, "ISO 9001 - Does it work?", discovered eight benefits of using certification (in decreasing order of importance):

1. Increased customer demand for ISO 9000;
2. Increased consistency of operations;
3. Maintains/improves market share;
4. Improved service quality;
5. Customer pressure;
6. Excellent promotional tool;
7. Operations were more efficient;
8. Improved product quality;

According to a study (El Abbadi, Bouayad, Lamrini, 2014), Investing in ISO certifications is beneficial for every educational organisation, as the financial resources to be used may be reduced. As a matter of fact, educational organisations can terminate non-conformities resulting cost, by investing in quality tools and enforcing QMS with ISO 9001. Customers view ISO certification as "quality", which makes it competitive for every organisation in the market. The ISO standards implicates that the products or services, regardless of its roots, are of the same quality. Moreover, organisations all over the world are authorized to implement the same policies to their systems.

Efficiency of operation is the most common advantage of ISO standards. According to many studies (Bevans-Gonzales & Nair, 2004; Chan & Lai, 2002; Doherty, 1995; Moreland & Clark, 1998; Peters, 1999; Singels, Ruel, & Van De Water, 2001; Stimson, 2003; Zuckerman & Rhodes, 2000), researchers dispute that ISO 9000 helps organisations with customer satisfaction and efficiency. Studies consistently also say that staff show higher quality awareness, which aids the cultural and attitudinal shift in the organisation.

A fundamental advantage of ISO 9000 is that it offers a more systematic and standardized method for educational operations. According to case studies in Hong Kong (Sculli, 1996) and Thailand (Ayudhya, 2001), school’s workflow and procedures were more clear and systematic through ISO 9000 mechanism. According to them, schools can consult clearly documented quality manuals by checking whether the educational activities are being taken care of as planned.

Schools have been continuously improving over the years because of ISO standards. To be precise, previous studies (Ayudhya, 2001; Stimson, 2003; Zuckerman & Rhodes, 2000) show that gauging performance and audit system, along with action procedures can help with solving organisational problems and continuous development. ISO 9000 provides external benefits by bringing positive change on the school's relationship with the educational market and customers, i.e., parents, the local community, educational authorities and local companies. A survey titled, Does ISO 9000 certification improve business performance (Chua, Goh, Wan;
2003) from 146 firms shows that non-listed certified firms benefit from better documentation procedures and more effective communication among employees as compared to listed certified firms. It also shows that the certification fails to implement capable monitoring programs to follow a set of procedures; to carry out proper management reviews of the new system and unclear authorization.

Implementing ISO14001 will induce cultural changes that strengthen the management's and employees' commitment to environmentally-sound practices and methods (ISO 2017). the other benefits are: environmental risk reduction, operational efficiency improvement, reducing liability expenses, reducing environmental insurance costs and interest rates, ISO 14001 as a requirement to stay in business, ISO14001 as a marketing tool, less costly assessments and facilitating international trade.

As the implementation of ISO 14001 facilitates image improvement, the certification will secure the highest skill level employees. A study (Jaap van den Heuvel, 2005), was done on how The Red Cross Hospital in Beverwijk, Netherlands that enforced the ISO 9000 quality management system on the whole organisation and obtained ISO 9002:1994 and 9001:2000 certificates. Various advantages were discovered by using ISO in hospitals. Patients received more focus, all processes were recognized and were subject to continuous improvement. Performance was then gauged and that leads to quality care and quality systems improvements. The documentation system provided the organisation’s needs without heading to bureaucracy. Positive impacts on patient’s safety could be compared with 10 other hospitals to show improvements.

**Studies indicating the challenges in the implementation of ISO standards**

Studies have also indicated the challenges of implementing ISO standards. According to an *Application of ISO 9000 standards to education and training* (Van den Berghe, 1995), Here are the crucial hurdles and problems that need to be looked at when ISO 9000 certification is considered:

1. time required to write the manual
2. high volume of paperwork
3. high cost of implementation
4. time required to complete implementation
5. high cost of maintaining the standard
6. lack of free advice
7. lack of consistency between auditors
8. time spent checking paperwork prior to audits

In addition to the above, the exorbitantly high cost of implementation, in addition to time spent, volume, paperwork and money, were seen as drawbacks to ISO 9000. Sometimes, it is seen that the staff of an educational institution tend to develop a negative attitude backed by a sense of exclusion and powerlessness, when subjected to the bureaucratic system of the ISO standards. Some studies (Castle, 2000; Moreland & Clark, 1998; Seddon, 2001; Van Den Berghe, 1997) show that applying ISO 9000 on education has resulted in unfavourable results. Most of the time, the staff’s reaction to the new system is related to the problems. The most frequently seen consequence is the bureaucratization of an organisation. Secondly, a report titled ‘The relationship between the implementation of the ISO 9000 quality management system and educational outcomes of schools’ (Sang Hoon Bae, 2006) states that some of the working staff were showing signs of exclusion and dissatisfaction. It can be assumed that this problem may be the result of the priority given to higher management, and due to strict control on teacher’s professional work by standardized mechanisms.

Furthermore, researchers believe that it takes considerable paperwork and financial resources to build and maintain the new system and to build a certified organisation (Moreland & Clark, 1998; Van Den Berghe, 1997; Zuckerman & Rhodes, 2000). Moreover, some staff felt that the paperwork is not a result of the education and academic system. The educators do not fully interpret the new quality system, which is considered a problem (Bevans-Gonzales & Nair, 2004; Moreland & Clark, 1998; Van Den Berghe, 1997; Zuckerman & Rhodes, 2000; USA Today, May 27, 1998). This is an act of resistance from the academic community to the new quality management system. To conclude, the negative impacts of school SES on overall student achievement of a school, is not induced by ISO 9000 standardization.

According to Case Studies of ISO 14001: A New Business Guide for Global Environmental Protection (Van der Veldt; 1997), internal costs are the prominent cause for expenses when ISO 14001 is implemented. They make up 90% of the total establishment costs and certification. The other 10% is the external costs of the registrar’s fees. Small and Medium Enterprises (SME) should establish an EMS from scratch and must learn the functioning of management systems. SMEs appear to be unaware of the ISO 14001 standards at first, and hence, will find it difficult to afford the high upfront costs that ISO 14001 comes with. There are many differences in environmental laws, enforcement regimes, technology levels, and standards of living among nations. In most countries that are not well developed, higher priority
is given to poverty alleviation, education and access to clean water, whereas, environmental conservation is not given much attention.

Therefore, some countries doubt that an ISO 14001 certified company with poor environmental laws can be at an advantage over companies where environmental laws are severe, as ISO 14001 standards are flexible for each country. The environmental requirements in industrialized countries enforce strict non-tariff trade barriers to developing countries, or a country with less advances in environmental technology. In the United States, the enforcement of ISO 14001 has made it possible to request legal discovery and prosecution by registering environmental incidents. However, companies that do not follow environmental policies might face high fines and are susceptible to civil and criminal prosecution. The following figure showcases the road map on ISO audits for the school and the stringent path that the preschool follows during the standard audit (Gandhi, 2012). This gives an idea into the quality of the ISO school inspection and outcomes, which may influence the research result on effectiveness of quality frameworks.

Figure 2.7: International Standards Audits for the School (ISO, 2017)

2.3.3 Early Years Education Curricular Framework
A Curriculum can be defined as a plan for action or a written document that includes strategies for achieving desired goals or ends. Curriculum can also be broadly defined as dealing with the experiences of the learner. It is also a system for dealing with people and processes. Curriculum can also be viewed as a field of study comprising its own foundations and domains of knowledge as well its own research, principles and analysis and its own specialists to interpret this knowledge. Finally, curriculum can be considered in terms of subject matter and content. (Ornstein & Hunkins, 2004). There has been a considerable rise in the progressive and universal education systems. The progressive movement consisted of child-centred and activity-centred curricularists, Kilpatrick being a famous one, who propagated child centred activities and who asserted that the emphasis of education should be the student, who is interested and active, interacting with his fellow students in school and adults in the community. Hence over time with various theories put together by educationists, the conceptual curriculum evolved and had to be derived not from organized bodies of subject matter but real-life experiences and expressed in terms of purposeful activities.

In the Paideia Proposal by Adler, he developed three types of curriculum to improve the intellect: acquisition of organized knowledge, development of basic learning skills and ideas and values to be taught. Today’s modern education should increase the student’s self-understanding and self-awareness, allow students to personalize and individualize learning, and try and match their personal needs and interests with academic experiences. The classroom is characterized by activity, not passivity; cooperation not competition; and many other learning experiences of the children, not just a teacher-dominated environment.

If curriculum content is the ‘meat’ of the curriculum plan, then experience planned for the children is the ‘heart’. It is the experiences that eventually shape the learner’s orientation to the content and ultimately their understanding of it. When talking on curriculum experiences, the focus is on curriculum as the verb, which is to be lived rather than a noun. Learning experiences vary from learning activities, as the different children experience different outcomes for the same activity. The classroom dynamics and teacher innovation bring out rich experiences for the individual child. The curriculum experience does involve the instructional component of teaching. Student’s curriculum experiences should be such that they see life’s wholeness and continuity in activity. Knowledge always opens new forms and is expansive. These learning experiences are a means, and invaluable in themselves, to attain specified consequences. These experiences are more meaningful if the goals of the program and objectives of the curriculum are aligned. This brings to mind the importance of standardization of curriculum teaching to be
imparted to the various classes within the same school, so that the children have a uniform school standard, and parents and children would benefit with the high quality over time. This also opens debates on the importance of teacher training and ongoing development of all school staff. Directors should also be involved in their self-development as ethos is generally a quality-transferred top down.

Ornstein, & Hunkins (2004) assert that no curriculum, regardless of its design, can ignore content and experiences. Content and experiences do not exist apart; they comprise curriculum unity. Students cannot engage in learning without experiencing some activity and some content, and likewise teachers cannot deal with content without being involved in some activity. As we cannot separate content from activities, in the actual delivery of the curriculum, neither can we separate the experiencing of the content from the environment where it occurs. Educational experiences are surely affected by the environment. A creative environment stimulates the child. The environment should facilitate effective learning, offer the necessary comfort and yet engage and pose constructive challenges to the enquiring mind. The environment should address social and security needs, learning needs, developmental needs of inner awareness, cooperation and appreciation, more so it should enable the student to master the intended learning. The atmosphere should be welcoming where the students can enjoy the learning thereby leading to productive learning.

The school under the study follows the OFSTED guidelines. The curricular practices followed by the school are based on the EYFS framework of U.K. The framework has six areas of learning namely: Personal social emotional development; Communication, language and literacy; Problem solving and reasoning; Creative development; Physical development and Knowledge of the world. The Early Years Foundation Stage (EYFS) sets standards for the learning, development and care of children from birth to 5 years old. All schools and Ofsted- registered Early Years Providers must follow the EYFS, including childminders, preschools, nurseries and school reception classes’ in the UK. ‘The framework supports an integrated approach to early learning and care. It gives all professionals a set of common principles and commitments to deliver quality early education and childcare experiences to all children (EYFS, 2017). OFSTED (The Office for Standard in Education) is the regulatory body in UK. ‘Ofsted inspects and regulates services that care for children and young people, and services providing education and skills for learners of all ages. They directly report the impartial inspections to the UK government. The goal is to achieve excellence in education and skills for learners of all ages, and in the care of children and young people (OFSTED, 2017).
OFSTED responsibilities

- inspecting maintained schools and academies, some independent schools, and many other educational institutions and programs outside of higher education
- inspecting childcare, adoption and fostering agencies and initial teacher training
- publishing reports of the findings so they can be used to improve the overall quality of education and training
- regulating a range of early years and children’s social care services, making sure they’re suitable for children and potentially vulnerable young people
- reporting to policymakers on the effectiveness of these services (OFSTED, 2017)

Key Areas of Inspections:

1. Overall Effectiveness: The Quality and Standards of Education
2. Effectiveness of Leadership and Management
3. Quality of Teaching, Learning and Assessment
4. Personal Development, Behaviour and Welfare
5. Outcomes for Pupils (OFSTED, 2017)

OFSTED do expect every provider to be working towards making its provision outstanding. Those who do this will know that to continue outstanding provision means continuing to reflect on what works well and what is not working as well. Daly (2008) believes that a setting should focus on assessing, evaluating and building quality from the inside and highlight the importance of encouraging practitioners to evaluate their own work closely in order to heighten awareness of high quality practice. The very best providers do this all the time. They use their evaluations to strengthen and build on the most effective practice and to remedy any weakness they find in areas that are not as good. (Ofsted guidelines, 2010)

For a Quality Policy to become imbedded in a setting, it is acknowledged that there should be several components for change management, to be successful:

- Strong leadership
- Clear aims and objectives
- Clear communication
- Providing unambiguous evidence
To maintain quality, it is important that the process of change and continuous evaluation is ongoing. Quality assurance schemes are shown to increase the standards of a setting - (OFSTED guidelines, 2008). OFSTED keeps introducing reforms - has introduced new arrangements for the inspection of state-maintained schools in the UK. Under the revised framework, inspectors will give priority to:

- The well-being of learners and the quality of learning and teaching, including classroom observations.
- The school’s capacity to improve
- A greater focus on governance
- The school’s relationship with parents and the promotion of community cohesion,
- The child protection training record for all staff
- The school’s Safeguarding policy

According to **OFSTED and School Improvement** (Chapman, 2010), teachers face challenging circumstances during the inspection process. It inspects ten secondary schools to address three research questions, (1) How is the inspection process perceived by teachers? (2) Does the OFSTED inspection change teaching and non-teaching practices in schools under difficult situations? (3) Does the Ofsted inspection process prioritises change internally in schools under challenging circumstances? **Teacher Gradings and OFSTED Inspections** (Fidler, Earley, Oyston, & Davies, 2010) states that school inspections that follow the framework of OFSTED in England observe and grade teaching performance of each staff member. In secondary schools, research has discovered prominent disparities between the inspection’s reports and the schools’ judgements.

Garbutt (1996) describes the transfer of TQM to education in **Education + Training**, in which she explores definitions, procedures, assessment methods and analyses from major researchers on the topic and the industry of education. A case study was done in a major chemical company, where research was gathered during the placement process; and this is compared to the educational practices in a junior school. In both the industrial and educational setting, quality is given the highest priority. Hence, the conclusion was that quality needs to be implemented by higher management, and should involve every staff member in the search for continuous improvement. This was found to have a bigger impact on standards, performance and training needs.
Jeffrey and Woods (2006) in *Feeling De-professionalised* explores the social construction of emotions during an OFSTED inspection. A qualitative study was carried out in a primary school, where it was found that the technical approach of an OFSTED inspection impacts the holistic and humanitarian values of the teachers, which induced a high level of stress among them. It is important to consider teachers’ emotions when the government takes major decisions in educational reform. They also suffered personally in the form of mortification, dehumanisation and in the form of pedagogic values. It was found that one way to reduce this trauma was to shift identity and status from professional to technician.

Campbell and Husbands (2010) carried out a case study on the reliability of OFSTED inspection of Initial Teacher Training between 1996 and 1998. The security of internal and external judgements deployed by OFSTED is examined at the pass/fail borderline. Ultimately, the process of inspection was found to be unreliable. The technicity model of inspection and the “informed connoisseurship” model was compared and it was found that there were unresolved issues between the aspiration for improvement and police compliant inspection.

School frameworks and Curriculum evaluation involves analysis on cognitive models, observations and interpretation. Evaluation must remain connected to the totality of curricular activities. (Ornstein & Hunkins, 2009) Educators must question themselves on intrinsic, instrumental, comparative, and decision value when analysing curricula. The curriculum’s goodness, appropriateness, audience value, comparative value and improvisation ability needs to be considered. The CIPP evaluation model considers context evaluation, input evaluation, process evaluation and product evaluation (Sowell, 2005). The criteria for evaluation standards can be classified into utility, feasibility, propriety and accuracy. Analysis and interpretation of data can be done with quantitative and qualitative strategies.

Humanistic evaluators recognize that individuals have different values, abilities and experiences, and hence opt for a holistic approach (Ornstein & Hunkins, 2013). This is more so for very young children as a completely scientific approach cannot be adopted. The evaluation steps involved: Focusing on the curricular phenomena to be evaluated, collecting of information, organizing the information, analysing and reporting the information and finally recycling the information. ‘Evaluation addresses complex activities within complex contexts. It is a cluster of procedures that deal with people as well as programs. Ideally evaluation not only assesses learning but promotes it’ (Ornstein & Hunkins 2013, p.304).
The assessment rubric used by the pre-school setting follows the divisions of the EYFS curricular framework under OFSTED guidelines. The initial and end of the year assessments are carried out on the areas of Personal social emotional development; Communication, language and literacy; Problem solving and reasoning; Creative development; Physical development and Knowledge of the world. (Ann et al., 2004) explain that assessment is an ongoing process. It involves collecting and analysing the information about children, the classroom and the instruction. The teachers use in-depth observations to assess the children at the preschool. Over time with various theories put together by educationists, the conceptual curriculum evolved and had to be derived not from organized bodies of subject matter but real-life experiences and expressed in terms of purposeful activities. The PCER study (2008) did confirm that 8 of the 14 treatment curricula had a positive effect on the student-level outcomes and 10 of the 14 had positive impacts at classroom level on classroom quality and early literacy instruction and 1 had a negative impact.

The current study explained the importance of curriculum design, and warns that children who enter KG with poor literacy skills tend to show poor reading achievement in the early grades, and this poor performance goes on up to early and even late adolescence. (Cunningham & Stanovich 1997; Cunningham, Stanovich & west 1994; Echils et al.1996; Juel 1988; Lentz 1988; Stanovich 1986, cited in PCER 2008). In contrast children who are exposed to a strong curriculum with good emergent literacy and language skills, learn to read earlier and develop better skills, thus gaining a foundation of better academic competence. (Downer & Pianta 2006; Princotta, Flanagan & Germino-Hausken 2006, cited in PCER 2008). Ornstein & Hunkins (2004) assert that no curriculum regardless of its design can ignore content and experiences. Content and experiences do not exist apart; they comprise curriculum unity. Students cannot engage in learning without experiencing some activity and some content, and likewise teachers cannot deal with content without being involved in some activity.

The National Education Goals Panel

“The United States in 1989 had set its National Education Goals 2000 where the first goal was by the year 2000 all children in America will start school ready to learn” (Kagan, et al., 1995, p. 1). This goal has highlighted the “importance of early years’ education and the significant of school readiness in supporting children’s progress towards successful school experiences that ultimately aid in achieving societal objectives in devising a better workforce” (Boyer, 1991; Kelley & Surbeck, 1991 as cited in Winter & Kelley, 2008, p. 261). This importance to the “early years is a result of the recent provided evidence from research regarding the positive
effect that preschool education has in improving children’s readiness for school” (Winter & Kelley, 2008, p. 261). It can therefore be stated that the preschool can be regarded as the most important grade in a child’s life. (Barnett & Hustedt, 2003; Hemmeter, 2000 as cited in Winter & Kelley, 2008).

The National Education Goal Panel (NEGP) has proposed a new perspective kindergarten readiness of pre-schoolers as a ‘multidimensional and interrelated concept’. The NEGP also informs that kindergarten readiness is a topic that is shaped by the “child’s experiences, the environment where he lives with his family, the community, his early experiences in early childhood centres, and his teachers who all work towards providing learning experiences which promotes his education and skills” (Kagan, et al., 1995, p. 5; Cappelloni, 2011, p. 4). The NEGP acknowledges that ‘individual, cultural, and contextual variables influence how children present themselves, understand the world, process information and interpret experiences’ (Kagan, et al., 1995, p. 7). The NEGP states that “learning and development encompass five dimensions which are: 1. Physical well-being and motor development; 2. Social and emotional development; 3. Approaches towards learning; 4. Language development; and 5. Cognition and General Knowledge “(Kagan, et al., 1995, p. 3).

The study undertaken by the researcher has utilized NEGP framework along with EYFS curricular guidelines to develop the survey instrument to ensure validity. The instrument looks at the perception of the parents on the progress of children with regards to curricular skills. ‘The NEGP has been used as a framework for various studies that investigated kindergarten readiness for several reasons. The NEGP has broadened views about kindergarten readiness and children’s progress “beyond the ABCs and 123s and highlighted the interconnections between the five domains’ (Maxwell & Clifford, 2004, p. 2). Moreover ‘it advocated that its three objectives are the basis of successful school life, which are: 1. High-quality preschool education that is available to all children, 2. Parent active participation in the child’s education, 3. A child’s mental and physical health’ (Kagan, et al., 1995, p. 1). A parent is the first educator in a child’s life. Eldeeb (2012) states that past research has brought into being that parental involvement is important and is related with the academic achievement of children.

2.4 Theoretical Framework

The current research covers the areas of EYE and ISO quality framework. The theories of learning and development in EYE, parenting, organisational and leadership theories are reviewed. A theoretical framework is the underlying structure upon which all other aspects of the study rest; therefore, previous literature plays an important role (Merriam 2009). Theories
are essential tools of research in stimulating the advancement of knowledge. “The importance of theory is to help the investigator summarize previous information and guide his or her future course of action” (Bell 2010, p.104). The framework is a socio-cultural one and comprises of two major parts. Learning, development and parental theories (Piaget and Vygotsky) and ISO and curricular frameworks which directly affect children learning. Transformational Leadership theory (Burns) also reviewed as leadership, is a principle component for the ISO quality framework. The ensuing results infer theory linkages between the organisational setting, quality standards, teaching, parenting, leadership, and student learning leading to theory verification. The researcher has reviewed bodies of literature on the EYE under the five sections of international studies on the importance of quality at preschools; leadership at preschools, parental involvement, learning and socialization at preschools and curricula and policies at preschools.

**Figure 2.8: Theoretical model**

![Theoretical Model Diagram]

### 2.4.1 The Systems theory

It is necessary to understand schooling, particularly early years schooling from the system theory that helps us understand the interacting sub-systems in complex organisation. Based on the discussion of studies on TQM and ISO, it can be interpreted that quality frameworks can suitably be applied to schools and educational institutions to enhance product value and customer experience. System Approach to Management is mentioned as Principle 4 under the ISO framework. The principle states ‘that Identifying, understanding and managing interrelated processes as a system contributes to the organisation’s effectiveness and efficiency in achieving its objectives’. Social scientists point out that ‘an organisation like an organism is an integrated system of interdependent structures and functions’. According to Harold Leavitt in Owens (1998), the interacting subsystems in complex organisations are: task, structure, technology and people. It is important to note that the human subsystem mentioned, is the only one that
has a non-rational capability (it is affective and not irrational). Vries (2011, p.83) states that ‘like individuals, each organisation has its own personality’.

Schools have a large body of people and have multi directional forces of play working between all stakeholders. The systems are equally complex in a preschool owing to the bigger strength of staff required to manage the small body of children. Cross collaborations are critical to the handling of an adequate task performance. It should be an important goal for the organisation (Schultz, 1995). Homeostasis is the biological term applied to schools, by new age authors, and refers to the tendency of an open system to regulate itself and stay in balance. Well-developed communication systems and decision-making processes are important tools to have effective homeostatic environments. McDonald’s restaurants are a good example of the standardizations and regulations of the systems theory. They require that employees follow rules for food preparation and service to meet the company’s standards of food quality and safety; and reliable and friendly service. McDonalds requires 72 safety protocols to be conducted every day in each restaurant as part of the daily monitoring routine for managers (Robbins & Judge, 2009).

Figure 2.9: Political, Economic, Social, Technological, Ecological, and Demographic forces influencing the school system

Adapted from Robert. G. Owens, Organisational behaviour in Education, 2009, p.64.

The above chart clearly portrays the preschool as a sociotechnical organisational system under the influence of different forces. The resources and students form the input to the four subsystems interplaying with each other to produce and realize the goal of ‘children
development and learning’. The school is a complex organisation, and therefore the study of the effect of ISO quality framework to achieve the organisational goals of the preschool is important considering that the organisation behaves like a true system. The preschool deploys rational planning models like the Planning, programming, and Budgeting Systems (PPBS) & Management by Objectives (MBO) (Gandhi, 2012). Schultz (1995) states that organisations must adapt to the external environment and integrate its internal processes to ensure the capacity to survive and adapt. Fairholm (2009) mentions that organisations must maintain a stable identity and standard operations to accomplish their goals. OFSTED guidelines (The office for Standard in Education) along with the ISO framework which the preschool follows may ensures that.

### 2.4.2 Organisational Theory

Organisational theory has been very informative to study educational organisations. School is an organisation and it manifests the nature of any typical organisation. A school is a world in which people live and work. Like any other social organisation, the world of the school has power, structure logic, and values, which combine to exert strong influence on the individuals and the group (Guidance Channel, 2017). This interplay between individuals and the social environment of the school is powerful in giving rise to organisational behaviour. Educational leaders must have a clear grasp of organisational NEGP.

While answering the question; why study organisational behaviour? Owens contents that ‘the short answer is because organisational behaviour provides the indispensable foundation of knowledge that is essential if one hopes to achieve success in educational leadership to achieve organisational goals’ (Owens 1998, p. 2). A systematic approach towards this leads us to believe that behaviour is not random and can be predicted. Combining intuition with the systematic study of relationships, managerial decisions can be made on the best available scientific evidence. Understanding organisational behaviour has gained utmost importance today in the era of globalization and information explosion. Managers must be well informed and ‘lead the way’. They should stimulate innovation and change. Organisational behaviour is a field of study that investigates the impact that individuals, groups, and structure have on the behaviour within organisations, for applying such knowledge towards improving an organisation’s effectiveness. (Robbins& Judge, 2009)

Boxall & Purcell (2008, p.55) state that strategic management is imperative, and should be used to develop goals and resources. Managers and leaders are individuals who achieve goals
through other people. Steve Jobs (2007) has said, “All we are is our ideas, or people. That’s what keeps us going to work in the morning, to hang around these great and bright people. I’ve always thought that recruiting is the heart and soul of what we do…” Management functions can be categorized into planning, organizing, leading and controlling. ‘A manager’s roles can be grouped as 1) interpersonal 2) informational 3) decisional. Robert Katz has identified three essential manger skills: technical, human, and conceptual’ (Robbins and Judge 2009, pg. 42). Managers and leaders should be interested in employee’s attitudes, as they influence organisational behaviour. The most important thing managers can do to raise employee satisfaction is to focus on the intrinsic parts of the job, such as making the work challenging and interesting. This will result in heightened organisational effectiveness.

It is always about building human capital and producing extraordinary results through team effort. Owens (1998) says that “people participate in organisations to satisfy certain needs; however, an organisation has needs of its own which are fulfilled by the participants who function in its various roles”. Managers can create satisfied employees by supporting work conditions and internal environments. Succeeding in management today requires good people skills. Jeffrey Immelt, C.E.O of General Electric, is known in the corporate world for his people skills over his 20-year span, and grew from a position in sales and product development and leadership positions to be the top in the line. External forces like neoliberalism and globalisation (Krücken & Meier, 2006) and business management practices that are being imported into universities are affecting them as organisations towards an entrepreneurial pattern (e.g., Clark, 1998)

Owen (1999) describes the six factors of the Organisational Climate Index (O.C.I.) as intellectual climate, achievement standards, personal dignity, organisational effectiveness, orderliness and impulse control. High scores on all indicate a high-quality school. The school climate affects the satisfaction and performance of employees. Organisational culture comprises of shared philosophies, ideologies, values, assumptions, beliefs, expectations, attitudes and norms that knit a community together. Organisational climate is the study of perceptions that individuals have of various aspects of the environment in the organisation. The culture of an organisation exerts a powerful influence on the development of the climate (Ohio Link, 2017). Vries (2011, p.89) comments that ‘cultural change agents must combine rationality and irrationality, hard and soft ways of problem-solving’. This is one of the primary factors that can contribute to the efficiency in the school organisational structure especially in UAE which is a multi-expatriate, multi-cultural melting pot of various nationalities of people.
Robert Likert developed four management systems, exploitative authoritative, benevolent authoritative, consultative and participative systems. To be effective, an organisation must accomplish three core activities over time: achieve its goals, maintain it internally and adapt to its environment (Education Estate, 2017). There are certain specific indicators of organisational health: goal focus, communication adequacy, optimal power equalization, human resources utilization, cohesiveness, morale, innovativeness, autonomy, adaptation, and problem-solving adequacy. (Lrd Yahoo Apis, 2017). Organisational self-renewal is imperative. The self-renewing school would have a culture that supports adaptability, it will have well chalked out procedures and collaborative problem solving and it reaches out to seek appropriate ideas and resources.

ISO framework emphasizes the importance of the quality manual and policy booklet. Organisational development is the new age mantra for all schools. It is a sustained effort at system self-study and improvement. As the organisation behaves like an organism, there should be an ongoing effort on the part of leaders to comprehend and analyse organisational behaviour. An organisation’s human resource policies and practices represent important forces for shaping employee behaviour and attitudes. Snowden & Gorton, (2002) emphasize on a collaborative, shared decision-making approach. They talk on professionalism and empowerment in an organisation. Organisations should help staff achieve a work-life balance and finally also to help staff reduce work-life conflicts. Organisations are modifying the workplaces to accommodate the varied need of the diverse workforce. Women with young children or those who relocate or start lives with new partners need the maximum support. This points out to the importance preschools have in shaping the economy of a country.

Schools have to step up as evolving organisations and involve ‘process consultants’ to delve deep into unchartered territories and improvise systems and introduce positive organisational change. Schools as organisations should be nested learning communities, and should aim at continuous improvement. (Fink & Resnik, 2001). Robbins & Judge (2009) define a learning organisation as an organisation that has developed the continuous capacity to adapt and change. They further go on to provide an example of organisational development at Wal-Mart which has introduced a new voluntary program called the Personal Sustainability Project that seeks to improve employee well-being and organisational effectiveness. Global organisations study behaviour regularly. They adopt new age solutions. C.S.R (Corporate Social Responsibility) and ‘Going Green’ are the new terms sought after by most organisations. We should give back to society, and organisations like organisms have realized that. The question every organisational member needs to ask is, where are we at this moment and where do we need to
go from here. Paradigm shifts do not happen easily and besides the vision of the leader, it requires the action and the contribution of all the members of the organisation.

Leaders in the UAE government should focus on creating this shift towards providing a wholesome early year’s education for the country by creating reforms and encouraging the ‘edupreneurs’. UAE has grown tremendously in its economic outlook and boasts of world class cities. The preschool education sector has however been short changed and while a few nurseries including the authors have made the leap into the quality arena, most others lack the will and resources to do so. It is the vision of the government that needs to implement the much needed ‘paradigm shift’ (Chadwick, 2011). The road is never easy, and meanders its course through challenges and ‘more challenges’. Lance Armstrong quoted “Pain is temporary, Quitting lasts forever”. Ultimately, the buck stops with leaders. Robin Sharma has said that in the new world of business, the riskiest place you can be, is trying to do the same things in the same way as was always done before.

Paradigm shifts must be thought of by leaders and governing bodies. Old behaviour cannot present new results. The concept of paradigms is discussed well in the book ‘Designing Effective Organisations- traditional and transformational views’ (Banner & Gagne, 1995). The authors link these series of changes to organisations and define a paradigm as ‘the set of beliefs, attitudes, expectations, assumptions, and values that determines how people construct their own personal reality’ (Banner & Gagne 1995, p.13). They further state that dramatic shifts in the way a collection of people construct their personal realities are called a ‘paradigm shift’. The authors simplify the answer to the question: Why does a paradigm ‘shift’ happen? They explain that when the need for a new perspective arises through increasing dysfunction in the prevailing paradigm, a shift occurs.

Senior & Fleming (2006) mention that everything exists in the context of a wider environment. This holds true for organisations, which have an external and internal environment. In creating the new paradigm organisation, (Banner & Gagne, 1995) clearly state that Bureaucracy is an enforcer of immaturity. Vries (2011, p.161) states that ‘employee participation and involvement are the key success factors of organisational commitment’. This leads to competitive advantage. Boxall & Purcell (2008, p.303) say that ‘the learning and growth perspective is essentially about people management activities’. His Highness Mohammed bin Rashid Al Maktoum (2012, p.196) states that when ‘we forecast our future; we are speaking about people with adequate educational qualifications, competencies, potentials and independent ways of thinking’. In relations to paradigm shifts in educational establishments,
(Duffy & Reigeluth 2008, p.43) suggest three change paths or interconnected paradigm shifts to create and sustain transformational change:

1) “The Primary work processes teaching and learning- must be transformed into a paradigm that is customized to learner’s individual needs and is focused on attainment of proficiencies.

2) The school’s organisation culture must be transformed from a command and control organisation design to a participatory organisational design.

3) The relationship between a school system and its environment must be transformed from an isolative and reactive stance to a collaborative and proactive stance”.

It is very difficult to achieve the three paradigm shifts and achieve systemic change as school organisations are highly complex and resist change. Transformational leaders need special knowledge and skill set to implement this change. Whilst it is difficult, it is not impossible. Fowler (2013) states that multiple problems are inherent in most implementations processes. These can be people related, program related or setting related. He comments that skilful leaders scan the implementation environment and welcome open discussions to minimize the hurdles. Charismatic leaders such as Steve Jobs and Michael Dell (C.E.O.’s of the U.S.A companies Apple and Dell respectively) have been agents for paradigm shifts in the IT fields. Such leaders have a vision; they are willing to take personal risks to achieve that vision, they are sensitive to follower needs, and they exhibit extraordinary behaviours and implement change. Change is the only constant and organisations must gear up to paradigm shifts.

“Nobody succeeds beyond his or her wildest expectations unless he or she begins with some wild expectations”- Ralph Charell. The ‘inner leader’ must be followed to allow people to offer gifts and their contribution to the world. Leaders must have the courage to dream and act with conviction on their ideas. The bar should be raised. The road is never easy, and meanders its course through challenges and ‘more challenges’. Lance Armstrong quoted “Pain is temporary, Quitting lasts forever”. Ultimately, the buck stops with leaders. Sharma (2011) has said that in the new world of business, the riskiest place you can be, is trying to do the same things in the same way as was always done before. Leaders must think of paradigm shifts. Old behaviour cannot present new results.

2.4.3 Learning and Development Theories

Piaget's approach is central to the school of cognitive theory known as ‘cognitive
constructivism’. Piaget's theory forms the basis of many preschools and primary programs. Piaget provides part of the foundation for constructivist learning suggesting that a child is an active seeker of knowledge. Different research traditions have been propounded in the history of developmental psychology, ranging from behaviourism to nativism to constructivism. Piaget’s believed children would learn in stages. His stage theory has five characteristics: ‘A stage is a structured whole in a state of equilibrium; each stage derives from the previous stage, incorporates and prepares from that stage; the stages follow an invariant sequence; stages are universal; and each stage includes a coming into being and a being (Miller 2011, p. 36). He further describes the stages as the sensorimotor period, pre-operational period, concrete operational period and the formal operational period. Constructivism is a theory that proposes that an individual actively generates knowledge through processes of assimilation and accommodation.

The preschools proposed in this study have a well-researched curriculum based on the UK national curriculum and incorporates cultural sensitivity, Arabic language instruction and discovery learning. The EYFS curriculum looks into the child’s development in stages. The researcher would like to measure learning based on these standards (simply psychology, 2017). Piaget’s (1936) theory of cognitive development sheds light on how children form mental models of the world. He believed that cognitive development occurs due to biological maturation and interaction of the child with the environment, rather than the idea that intelligence is a fixed trait.

Prior to Piaget, it was simply assumed that, psychologically, children are less adept at thinking than adults. His work made it evident that children think in distinctly different ways than adults. According to him, infants have a very basic mental structure on which all the learning and knowledge during their upbringing is based. The theory aims to explain how the infant, and then the child, develops into someone who can speculate using hypotheses.

Piaget called the schema ‘the basic building block of intelligent behaviour’ – a way of organizing knowledge. Certainly, schemas can be thought of as units of knowledge, each unit pertaining to an aspect of the world, like objects, action and abstract concepts. A child’s existing schemas are said to be in a state of equilibrium, i.e. a state of cognitive balance, when it can explain its surroundings. Piaget explained how schemas were developed and indicated their importance in cognitive development. A schema can be defined as linked mental representations of an aspect of the world, which we use to understand and respond to situations. It is assumed that these mental representations are stored and then applied when needed. Piaget
believed that new-born babies have few inherent schemas – even before experiencing the world. Cognitive structures hiding the neo-natal inherent reflexes, like a baby’s sucking reflex, triggered when a nipple, comforter or finger touches the infant’s lips, are the baby’s inherent sucking schema. These reflexes are genetically coded into us. As a child gets older, his/her schemas become more diverse and detailed.

Jean Piaget (1952; see also Wadsworth, 2004) viewed mental growth as a process of adaptation to the world. This happens through:

- **Assimilation**
  Using and existing schema to adapt to new object or situation

- **Accommodation**
  When current schema does not work, and needs to evolve to adapt with new object or situation

- **Equilibration**
  This enforces development. Equilibration is the force which drives curiosity, as we dislike frustration and strive to gain equilibrium by mastering the new challenge (accommodation).

Once we gain this knowledge, the process of assimilation with the new schema will go on until the next adjustment. Piaget suggested four stages of cognitive development which help in refining of children’s thoughts:

1. Sensorimotor stage (birth to age 2)
2. Pre-operational stage (from age 2 to age 7)
3. Concrete operational stage (from age 7 to age 11)
4. Formal operational stage (age 11+ - adolescence and adulthood).

Discovery learning is a concept that suggests that children learn best through actions and probing. It was important to the transformation of primary school’s curricula. As Piaget’s theory is based upon biological growth and stages, the idea of ‘readiness’ is important. According to his theory, children are not ready to be taught certain concepts, until they have reached the appropriate stage of cognitive development. In the classroom, the student must accomplish learning through active discovery and the learning must be student-centred.
The role of the teacher is to aid learning and not give lectures. According to Kamii (1970). The baby’s reflexes are proficient to objects and expand into its construction, representation, reversibility of thought and abstract concepts. Piaget believed that there is complete continuity between a new-born baby’s reflexes and, later, his/her abstract thoughts. Knowledge is not a collection of facts, but a formulated structure of a rather different nature. General knowledge makes it possible for a child to assimilate information. Piaget is not as concerned about how a child acquires knowledge, but the development of an extensive cognitive framework. Piaget calls this framework, “intelligence”. This framework helps the child understand and learn new things. Knowledge and intelligence, extensively, are hence the same thing for Piaget.

For an infant, there are no objects. This is because, the infant cannot comprehend a distinct object until he/she is able to lay down a structure on the incoming mass of information. Piaget also describes in *The Origins of Intelligence* (1952) and *The Construction of Reality in the Child* (1954), how infants’ reflexes adapt to objects and become sensory-motor patterns, through which the infant comes to identify the objects. The baby constructs objects and gradually comes to recognize each object by clamping it, throwing it, picking it up, etc. If there were no actions, there would not be objects for the child (Kamii, 1970). Consequently, if there were no object, time and space, difference could not be structured, and the baby would have no idea about the cause and effect of an action, and there would be no representation, logic, dynamics or history. In a nutshell, if there is no action, the baby would have no knowledge about the object, only its sensation.

It is adequately indicated by Piaget in *Play, Dreams and Imitation in Childhood* (1962), *The Origins of Intelligence* (1952), and *The Construction of Reality in the Child* (1954), that youngsters learn by playing. Every teacher’s most powerful friend is play (Kamii, 1970). We have regrettably not learned how to use play in our classes. However, it is crucial to what we are trying to do in our classrooms. Preschools that incorporate a Piagetian approach that can only be long-term (Kamii, 1970). Nowadays, schools function in anti-Piagetian systems, because of which long term evaluation is not possible. For example, Piaget encourages children to sign up for activities and promote curiosity, whereas schools encourage passive receptivity. His research also suggests that children need to constantly exchange perspectives, but schools prefer quiet passivity. Piaget believes that the solution is not as important as the method of arriving to it, but schools put emphasis on facts and the “correct answer”. As a matter of fact, Piaget believes that a child must go through stages of being wrong before being capable of logical reasoning like an adult, whereas schools facilitate obedience.
This survey (Goodnow, Bethen, 1966) aimed to clarify the difference between children who attended school and the children who didn’t. They also aimed to learn about the impact of Piaget’s tasks on Mental and Chronological age (MA and CA). The research was conducted on several groups of U.S. school children, with a close range of MA or CA and wide range of IQ. This data along with the data from Hong Kong said two things, (1) children who did not attend school had a good sensation of weight, volume and surface, but they were not up to the mark when it came to combinational reasoning; 2) all tasks were linked to MA in school children. The study therefore shows that the unschooled children relied upon perceptually present objects and action models for cognitive development. Piaget’s fundamental theory of mental growth (Hall, 2010) emphasizes activity method. The only thing that makes psychological sense in the primary and to a certain extent, the secondary period of education is a profound amount of activity (Nathan Isaacs, 1965). He describes ‘thought’ as an internal action which indicates that it is the parents’ and teachers’ responsibility to make good thinkers of their children by providing them with enough action to internalize (M. Brearley, 1963). According to Piaget, a child’s growth from an infant to an adult fit into scientific studies.

According to Case and McKeough (1989), A neo-Piagetian model is used to study the development taking place in narrative compositions of children between 4-10 years. An academic plan was then formulated to increase the artistic level of children’s narrative. The curriculum improved the level of stories the children made and their story recall and their understanding of the nature of social interactions. This shows that (1) the reason for the extensive transfer is that the curricula led to the development of the child’s abstract concepts schema; and 2) the method used in making the problem may serve as an example for making similar academic plans in other, more worthy subjects.

The EYFS curriculum has seven areas, which incorporate physical play, knowledge of the environment, social and emotional development and understanding of language, literacy and numeracy. Pre-schoolers continuously process the information through mimicking, assimilation and accommodation. Piaget’s learning development theory emphasizes the importance of assimilation and accommodation as learning techniques. He identified the building blocks of thinking as mental units he called ‘schemes’. When assimilation and accommodation are in balanced coordination, equilibrium is achieved. Equilibration is one of the most important concepts in his theory. It is also most difficult and evasive due to time spans involved. Piaget proposed the four-factor formula for development: Development = physical maturation + experience with the physical environment +social experience+ equilibration. The four strengths of Piaget’s theory are: its recognition of the ‘central role of cognition in
development, its discovery of surprising features of young children’s thinking, its wide scope and its ecological validity’ (Miller 2011, p. 73). His weaknesses could be cited as: ‘Inadequate support for the stage notion, account of mechanisms of development, need of theory of performance, slighting of the social aspects, underestimation of abilities, methodological barriers’ (Miller 2011, p.74).

**Vygotsky’s approach** suggests that the human interface and knowledge sharing in preschools is dynamic and interactive. Lev Vygotsky (1934), a Soviet psychologist, developed a theory, which today has become the foundation of much research in cognitive development. Scholars, known as ‘social constructivists’, such as Vygotsky and Bruner, have laid more emphasis on the part played by parents and caregivers in enabling children to learn. This is where preschools as a ‘socio system’ can contribute to children’s learning with caregivers who are specialised. Vygotsky saw intelligence as a culture relative while Piaget saw the intellect as personal property of the individual. Vygotsky developed the ‘child’s zone of proximal development, which is a period in which the child is cognitively ready to acquire a certain kind of new concept’ (Mitchell & Ziegler, 2007 p. 52). In his theory of the ‘Zone of Proximal Development’ (ZPD), he concluded that when children were tested on tasks on their own, they did not do as well as when they were working with adults.

The process of engagement with the adult enabled them to refine their thinking or their performance to make it more effective. The researcher intends to probe the effectiveness of preschools and the role of parental involvement and make theory linkages. Vygotsky’s strength is the socio-cultural approach, besides the integration of learning and development and sensitivity to diversity of development. The weakness of his theory could be the vagueness of zone of proximal development, insufficient attention to developmental issues, and difficulties of studying cultural – historical contexts (Mitchell & Ziegler, 2007). In Comparison Piaget generally underestimated the role of language as a tool of thought and hence he underestimated it as the driving force in development while Vygotsky stressed the value of language, as it is a tool of thought and a vehicle of cultural transmission.

These various theories go on to explain that teacher and parental involvement is one of the major factors contributing to a child’s learning and development. A preschool environment develops connection with teachers, parents and children. Parenting styles differ greatly and may be authoritarian, authoritative, permissive or uninvolved (Baumrind. D, 1991). Parental styles differ due to their culture, personality, family size, parental background, socioeconomic status, educational level and religion. Developmental psychologists have long been interested in how parents affect child development. These theories and previous research conducted
connect to this study as this study probes the pre-schoolers learning and the impact of parental variables of nationality, educational level, time spent with children etc. However, finding actual cause-and-effect links between specific actions of parents and behaviour of children is very difficult. Nevertheless, researchers have discovered links between parental interaction and child behaviour (Baumrind. D, 1991).

*Figure 2.10: Vygotsky’s Approach – Mind map*

No one thing can be— or rather, a multitude of many things is accounted for the development (of a person.) Development from person to person, although each different, can all be traced to the social and cultural environment in which said person is brought up in. This was where Vygotsky’s Theory was brought to life. His theory is also referred to as Social Development Theory (Saul McLeod, 2007). The Social Development Theory, “*which means the theory emphasizes the importance of society and culture for promoting cognitive development*” (Study, 2017). This sort of development is seen every day, although we don’t recognize it by its psychological name. A simple example is this; a puzzle. At first, a child would not know what to do with it besides toss it about, but with the help and encouragement from someone older, that child will slowly learn, until he wouldn’t need help with the piece a few tries down the line. This is a simple example of cognitive development. Without help from someone
older (a father, mother, or sibling), the child would have continued to be unsuccessful, but with help, he was later able to put the puzzle together without it.

Vygotsky claimed that (although he was not the only one to—Piaget, said the same thing) infants are born with the basic materials and abilities for development. Attention, sensation, perception, and memory is what he refers to as elementary mental functions, and through interaction (within the environment), these develop into more effective processes, which Vygotsky refers to as higher mental functions (Marxists, 2017). To truly understand Vygotsky’s work, one must understand two of his main principles; MKO and ZPD. MKO (More Knowledgeable Other) refers to the person who has more knowledge (which might be obvious with its given title), which might not always be someone older. This knowledge can stretch far beyond academics, and venture instead into electronics, and music, which the younger generation are usually more knowledgeable about, as compared to the older generations. ZPD (Zone of Proximal Development) is the difference between what a child can do on his own, and what he can do with help or guidance. This was explained above with the puzzle, which in future, the child will be able to apply to future problems. This is an effective way to develop skills and strategies; by constant challenges, and interaction (Learning Theories, 2017).

There are both similarities and differences between Vygotsky and Piaget. It is well known, to this day, that Vygotsky was not the only person to create a socio-cultural approach; during this time, there was also Piaget (1980), the Swiss psychologist. Although researching and theorizing the same topic, their opinions and theories clashed on many important points (Simply Psychology, 2017). While Vygotsky stresses more on various cultures and their effects leading to different results in cognitive development, Piaget approaches a more close-minded take, by saying instead that this sort of development is universal across cultures. Another point—which further emphasizes the first - is that Vygotsky strongly emphasizes the effects and the connection cultures will have on the growth and development of children. Simply put, what they (children) see and hear, and ultimately live and grow in, will greatly influence the kind of adults they would become. Here, Piaget instead argues that a large part of cognitive development in children comes instead from independent explorations, where they learn and create, by themselves. According to Piaget, thought comes before language—which makes sense. Vygotsky places a bit more emphasis on this point, and he does so in a different way. Vygotsky said that language and thought are two separate systems in the first three years, which produce inner speech when they merge. He believes that a child’s acceptance of language oils the wheels for cognitive learning - learning, speaking, ultimately what a child does, and does
Piaget stresses the importance of child to child (equal to equal) interactions, as this carries the importance of social perceptiveness. Vygotsky said instead that adults play an important role in cognitive development, as children observe these adults daily (parents, family, etc.), and internalize it.

Summing up “Piaget argued development precedes learning, holding that we interpret the world through mental schema, allowing us to make sense of our environment. Learning happens when facing situations our mental schema cannot easily process, leading to disequilibrium. To re-equalise itself, the mind either assimilates new information or adapts to using new skills. Piaget calls this process of assimilating new information and skills, into our pre-developed schema, learning. “Vygotsky agrees that learning happens by interacting with our environment. However, counter to Piaget, Vygotsky argues that learning precedes development. He holds that our present state of development is enhanced when confronted with a new task just out of reach of our present abilities.” (Burrs, 2009).

Figure 2.11: Zone of Proximal Development

Later, Vygotsky’s ‘followers’ created two types of learning; empirical learning which is learning based on our experiences from meeting various processes. And based on this we form a general idea of said objects. This type of learning we find mainly employed in pre-schoolers, as well as traditional instruction (Gate, 2017). However, theoretical learning is based on a process where the students are given different methods for dealing with problems. This method of learning encourages logic, as well as critical thinking in students. Based on the results gathered from students from different age groups, we see that theoretical learning is more productive than empirical learning. (Karpov & Bransford, 1995).

2.4.4 Parental Support Theories
Definition of parental involvement: ‘The involvement of parents in their children's education by participating in various activities at home and at school’ (Jesse, 1996). Parental motivation, attitude, support, and commitment effect children to do well in school (Bryant, Peisner-Feinberg, & Miller, 2000; Lee & Bowen, 2006; Yan & Lin, 2005). It has also been stated that “lower levels of parent education and economic status do not undesirably affect the act of children if parents have high motivation and aspiration for their child’s achievement” (Ogbu, 1987, 1994 in Eldeeb, 2012, p.78). On the other hand, though parental involvement is essential for all children, “the nature of parental involvement changes according to race/ethnicity, parent education, economic status of parents, and family structure “(Paratore, Hindin, Krol-Sinclair, & Duran, 1999; Schneider & Lee, 1990 in Eldeeb, 2012, p.67)

*Figure 2.12: Epstein’s Framework of Six Types of Parental Involvement (1997)*

Parents’ involvement in their children’s education has been found to “improve students’ attendance (Epstein & Sheldon, 2002), and behaviour in school (Sheldon & Epstein, 2002) as well as their completion of homework (Keith, Keith, Troutman, Bickley, Trivette, & Singh, 1993). There is a general agreement that parents’ involvement enhances academic achievement (Sheldon & Epstein, 2005; Thorkildson & Stein, 1998; Walberg, 1984; Zellman & Waterman, 1998). Students whose parents are involved in their education perform better in school regardless of parental education, or family structure (Bogenschneider, 1997), or income level (Shaver & Walls, 1998)” As cited in (Pryor and Pryor2009 in. (Eldeeb, 2012)

**Epstein** (1987, 1992, 1994) suggested an extensively documented typology, the explanation for diverse stages of parental involvement in their children’s schooling. In her early work,
Epstein (1987) branded four categories of parental involvement in schools: (1) basic obligations, (2) school-to-home communications, (3) parent involvement at school, and (4) parent participation home learning activities. More recently, Epstein (1992, 1994) extended her work and clear six stages, or categories of school-related parental involvement: (1) assisting parents in child-rearing skills, (2) school-parent communication, (3) involving parents in school volunteer opportunities, (4) involving parents in home-based learning, (5) involving parents in school decision-making, and (6) school-community collaborations.

A study conducted by Epstein and Dauber (2001) used data from 171 teachers in 8 inner-city elementary and middle schools to examine the relationship between school programs of parent involvement, attitudes of teachers, and how teachers involve parents. Epstein and Dauber (1991) conducted a joint research that studied 171 teachers in 8 elementary and middle schools to connect school programs of parental involvement, teacher’s attitudes and the different method used by teachers to engage the parents of their students. The study examined two variations of education; elementary and middle school, among different academic subjects, different classroom organisations (self-contained, semi-departmentalised, and departmentalised), and various levels of shared support by parents. The final results validated Epstein’s five theories successfully, which was later used in a three-year long experiment to sample different schools.

Although parental involvement is an effective strategy in classrooms and educational policies across the US, it is both appreciated and deplored. When a student doesn’t engage with the education system, a lack of parental involvement could be the cause. (Barnard, 2004; Desimone, 1999; Hill & Craft, 2003; Hill & Taylor, 2004; Jeynes, 2011; ZeUman & Waterman, 1998). Bower and Griffin (2011) posed the idea of using parental involvement as a tool to engage students in a high-minority, high-poverty elementary school. The experiment was carried out in an exceedingly diverse group of students at Hawk Elementary in Texas. For years, the school struggled with student engagement, despite employing several parental involvement strategies like family workshops, enjoyable homework, and a well-planned parental involvement strategy. They decided to implement the Epstein model following communal disappointment from low parent attendance for meetings and student performance. Some of the techniques incorporated by the school reflect typical values of parental involvement. For example, weekly reports were used by the school staff to embrace constant communication with the parents. Being a culturally diverse elementary school, the reports were also translated into the language suited for the parent, for ease of access. Several home-learning tactics were also introduced to parents at PTA conferences, i.e., teaching measurements and
capacity in terms of teaspoons and milk cans at home. Some limitations included parents that didn’t get fully involved in their child’s progress, which frustrated the school staff. A few parents also expressed some disinterest in the method used to teach children, and proclaimed that this isn’t the traditional way of teaching. At the end of the experiment, three major key themes and four subthemes were concluded as components of parental involvement at the school. They are as follows: Strategies Employed (subthemes include Communication and Home Learning Activities), Frustration (subthemes include Lack of Reciprocity, and Low Attendance), and Engagement. This was one of the first studies carried out by Bower and Griffin (2011) that engages families from different backgrounds and tailor their child’s educational needs specifically to them.

**Parenting:** According to Epstein (2001), in her book School/Family/Community Partnerships, she claims that parenting activities increase families’ understanding of their children’s growth and development. Activities that incorporate their child’s health, safety, nutrition and adolescent development can go a long way in supporting them. They also allow schools to understand families and exchange information between teachers, parents and caregivers; and keeps both parties’ interests in check. Epstein suggests that establishing partnership programs can enrich school, family and community partnerships. This is clearly demonstrated in two experiments conducted at an elementary school level and a secondary school. Both experiments were selected to comply with needs of the families and students in each school and to help the school reach annual goals.

In the elementary school, the educators and parents worked together to provide low-cost effective MMR (measles, mumps, and rubella) shots to students who were graduating to middle school. On the other hand, at the secondary school, parents worked with teacher to come to terms with issues surrounding teenage development in high school. The experiment involved getting parents to attend an evening focus group session for a period of 4 weeks. The challenges they faced were to get the word out about the group and to increase the diversity of the parents. These two experiments could be potentially adopted by elementary or secondary schools to enrich their relationships with parents and the community.

**Communicating:** Epstein (2001) stresses on the importance of home-to-school communications and school-to-home communications in her book, School, Family and Community Partnerships. This also strengthens the relationships between teachers and families, and will inevitably lead to the students’ success in school. Communication can occur through parent-teacher conferences, newsletters, phone calls, report card pickups and over
email. This usually involves families to ensure that they are well-updated about their children’s progress and other school initiatives.

Two experiments were carried out at two different schools; an elementary school in New York, and a high school in Minnesota. At the elementary school in New York, a novel idea was introduced to encourage communication between parents and teachers. A brightly-coloured, bound notepad was designed with a logo on top of the page to help parents and teachers identify with the child. The notepads were circulated to all the parents with a guide explaining how to use them. They were also handed out at parent-teacher conferences, and was proved to be very effective in keeping the communication between the school and the families intact.

On a higher level of schooling at Minnesota, an attendance campaign was introduced to increase student attendance. The goal of the campaign was to increase awareness about the importance of attendance and the school’s policies. Parents were mailed a flyer that stresses on the importance of attendance, which included instructions to follow when their child didn’t attend school. This way, parents could call the school when their child is absent from school. To encourage students to take the campaign seriously, posters were made and displayed in the corridors, that consisted of an inspirational quote on attendance. Students that had perfect attendance rates were rewarded. At the end of the campaign, attendance rates were up, and a considerable difference was see this in attendance rates.

**Volunteering:** The author suggests that different types of volunteering activities can strengthen the bond between the school, teachers and students, while sharing their time and talents. Activities can be held at school, at home or in the community space. Parents can act as volunteers and help teachers in the classroom, the library, the sandbox, cafeteria or post-school special programs. Parents should also make time to support their children at different celebrations like dance events, sports activities and performances. Recruiting is an important task that most schools underestimate. They should ensure that they can accommodate parent volunteers who work, during the weekends or after work hours.

An experiment conducted at Washington Junior High School got together a group of parents to create the Parent Involvement Team to discuss pressing issues like violence in schools in the US. From this discussion, stemmed the idea for a school safety initiative called Washington Greeters. They designed a safety manual that contained a map of the school, emergency evacuation procedures and announcements from the principal and daily events. The result was
a successful experience for the school community and the teachers, and made visitors feel safe and secure.

**Learning at Home:** One of the most important points, learning at Home simulates that it is crucial for parents to help their children at home with their homework, or other activities and decisions. This, in turn, increases the communication between teachers and parents and encourage parent-child conversations about skills, choosing courses and other curricular activities. In Ohio, Woodridge Primary School, a team was formed called the Action Team for Partnerships, that encouraged reading stories at bedtime by parents for their kids. Weekly meetings were held, and it slowly started to garner attention from parents, as their kids enthusiastically donned pyjamas and brought their teddy bears to the storytelling sessions.

The aim of the activity was to encourage intergenerational activity at home, allow parents to meet others who had similar interests, and inevitably build stronger school-parent relationships. This would indirectly help the pre-schoolers to sharpen their reading-aloud and language skills better. To make the session more enjoyable, a professional storyteller was employed, who used felt-board storytelling to get the message across. To get kids interested in reading, picture books, wordless books and homemade books were used.

**Decision Making:** Activities that incorporate Decision Making allows families to participate in after-school programs. It is important for schools to listen to parent voices to receive feedback about how the school functions and to improve it. As the procedure goes, an Action Team for Partnerships is formed that fuses together school, family and community partnerships. At Harbour View Elementary School in Baltimore, Maryland, the ATP chose a chair and a co-chair to take things forward. They also incorporated the six Epstein values of involvement to form specific committees. These committees became advisors to the school in organising and understanding parent activities.

In Wisconsin, Aniwa Elementary School established a School Effectiveness Team to respond to goals and objectives. This team was in touch with a district team that included parents, teachers, administrators and school staff. But they faced a challenge. Getting parents to attend a meeting on decision-making was hard. And most of their meetings only brought together PTO officers and school staff members. Unsurprisingly, potluck dinners at these meetings attracted more people. The potluck dinners brought kids from different cultural backgrounds together and it was later published in monthly newsletters, that was sent to parents. At the end of the experiment, four major roles were defined in the ATP to oversee the partnership program.
in the school; the chairperson who combines the ATP and ensures that every committee makes the most of its goals and creates meeting schedules; the co-chairperson is the vice-president and substitutes for the chairperson when he isn’t there; committee co-chairs make sure that the six types of Epstein values are incorporated; committee members work with co-chairs to organise activities and share leadership with other team members.

**Collaborating with the community:** Activities that collaborate with the community can help both the community and the school. Communities also have a major role to play in schools, in addition to parents and teachers. Human, economic, material, and social resources help enhance home and school activities. In Illinois, an activity was conducted to show how students to liven up and help a community organisation, i.e., a senior citizen’s housing facility, in this way, children and parents were exposed to the outside world and learnt new skills. Some activities included leaving happy notes for the residents; and musical events for the seniors. Several meetings were held at the Assisted Living facility, that allowed the seniors to get a glimpse into pre-schooling; and a few seniors volunteered at the school. On the other hand, in Maryland, a community group provided active learning experience to help students better their math and reading skills. In this way, the community helps children experience out-of-school skills that are necessary. Ten students would visit the Living classroom every day, and attempt to engage in activities like building a boat and designing a chair. This partnership between the school and the community strengthened ties and children developed optimistic attitudes.

2.4.5 Leadership Theories

The internal and external factors affecting the school as an organisation also affect the pre-schooler and the parents. In a nursery school, with constant interaction between the parents and caregivers, this fact must be considered. The second principle under the ISO Quality framework is leadership. It states that ‘Leaders establish unity of purpose and direction. They should be able to lead the team towards achieving the organisations objectives. The first principle of Customer Focus states ‘Organisation should understand the current & future requirements and should strive to exceed customer expectations’. The human interface is extensive in an early year setting, and policies and culture play a major part in the teaching and learning.

Schultz (1995, p.5) talks on culture as a new approach. He states, ‘organisational culture focuses on the beliefs, values and meanings used by members of an organisation to grasp how the organisations uniqueness originates, evolves and operates and metaphor’. Culture is an integral part of organisational theory. Schultz propounds the theories of rationalism, functionalism and symbolism in the cultural debate. He explains that culture has patterns, and
has relations between depth and manifestations. Whilst functionalism has a pattern of basic assumptions, symbolism is a web of meanings.

Schein (2010) explains the levels of culture in an organisation with discussion on macro cultures, sub cultures and micro cultures. He talks on the three levels of culture: artefacts, espoused beliefs and values that comprise of goals, ideals, values, ideologies, rationalizations, and basic underlying assumptions, which are the unconscious set of beliefs of an organisation. The deeper cultural assumptions of human nature, activity and relationships affect all organisations. He further emphasizes that leaders embed and transmit culture, and create organisational cultures and that cultural assessment and a yardstick check is a must for the enhanced study of organisational behaviour. He emphasizes that leaders should become perpetual learners. He emphasizes on

- Leadership as a cultural construction: values, practices, beliefs, and material culture (e.g. variable role and conception of trust)
- Challenge of the multicultural environment
- Cultural Comparison
- Distinctions among management, administration, and leadership concepts

The preschool under research employs a multinational work force and hence the leadership influences will be considered based on the leadership theories with links being made. Analysis will be made on the relationship between leadership and organisational improvement indicating which research results suggest which approaches, interventions, leadership styles, etc., within their current professional situations aid in the quality of preschools.

Leadership can be defined in many ways. It is layered and multi-dimensional with cultural interpretation (Coughlin, Wingard, & Hollihan, 2005 in Soffler, 2011). Whilst a leader can be defined as one who succeeds in getting others to follow; Stodgill (1990) defined leadership as those activities engaged by an individual that contribute significantly to development and maintenance of role structures and goal direction necessary for effective group performance. Warren G. Bennis wrote that all leaders have the capacity to create a compelling vision, one that takes people to a new place, and the ability to translate that vision into reality (Bennis, 1990, p.120). Various leadership concepts and models managerial, distributive, participative, transforming and transformational, transactional, leaderless groups have been studied by researchers.
Misumi (1985) proposed the performance maintenance (PM) leadership theory which provided a theoretical framework for understanding leadership effectiveness, he spoke on leadership styles with behavior oriented towards goal achievement and performance and the behavior oriented towards self-preservation. (Fukada et al, 1994). Theories of leadership such as Transformational Leadership, Contextual Leadership (Bass 1985, Kagan and Hallmark, 2001 in Dunlop 2008), Shared Leadership (Fletcher and Kaufer 2003 & Harris et al, 2002 in Dunlop 2008), and Distributive Leadership that can be considered when looking at leadership within early childhood services. By contrast, shared leadership embeds leadership within the social system of the setting; here teamwork and the group predominate rather than the individual. Both seem to be valid concepts for leadership in the early years.

The development and strengthening of one’s character, the motivation to grow and change and achieve; this is what transformational leadership is. For the followers, and the leaders, done in proper form, this approach helps and strengthens both leaders and their followers in their goals as singular individuals as well as that of a joined group force, the goal being transforming followers into leaders. Transformational leadership widens perspective, and broadens minds, reveals strengths and weaknesses in turn, to help each individual reach optimal performance, as well as reach their maximum potential.

*Figure 2.13: Transformational Leadership*
Transformational leadership (which is also used as a psychological term today) was first introduced by James MacGregor Burns (1978), in his book *Leadership* (1978) while researching political leaders. This whole process happens when "Leaders and followers help each other to advance to a higher level of morale and motivation", as James Burns said. Ultimately, what it does is create a greater change in people’s aspirations and level of expectations, and inspires people to go further and do more for themselves and their organisations (Bass, B. M. (1998). Burns introduced two different kinds of transformational leaderships; transformational and transactional. Transactional leaders work in a sort of give and take approach, while transformational leaders work to change much more, from perceptions to the aspirations of individuals. The most obvious difference would be in their approach of the work culture. These different types - or rather, the full extent of what truly comes with transformational leadership, can be summarized under four points; *Individual Consideration, Intellectual Stimulation, Inspirational Motivation, and Idealized Influence*. For the most part, from these points alone, one can get an idea of what this approach consists of. *Individual Consideration* is exactly that; consideration for the individual - everyone. The leader needs to act as much more than just a leader; he must be a mentor, a coach, even a friend, to an extent where they know how to emphasize, provide support, and encourage communication. The leader encourages, motivates and challenges his followers, which leads to growth and development in each person. He also knows to give recognition to everyone’s contribution, which in turn further strengthens the followers in their motivation, and their tasks.

The encouragement, development and growth of both followers and leaders - this is called *Intellectual Stimulation*. Leaders learn and grow from unexpected situations, while also taking chances by following ideas of their followers, and followers, while broadening their thinking, find more effective ways to achieve their goals. *Inspirational Motivation* is the inspiring of motivation in followers; the future leaders. Motivation is necessary if individuals are ever expected to achieve anything at all. Followers are encouraged and motivated in all ways and in all tasks, to achieve greater results, and greater self-development. Leaders inspire motivation by challenges, inspire with optimistic future ideals, while refraining from handing out meaningless tasks. Meaningless tasks would deter individuals, as well as inspire a sense of depression and dullness, which would ultimately prevent followers from achieving any sort of goal. These optimistic ideals are made powerful and engaging by constant communication between leaders and followers; Communication is key.

*Idealized Influence* is where followers are inspired by their leaders’ respectful behaviour, which further inspires pride and respect, and trust. These leaders are role models to their followers,
who are further inspired to become leaders themselves (which is the goal of transformational leadership). Simply put in more modern terms, the leaders should be what Superman is to kids; someone of great strength and courage to look up to, someone to admire, someone to inspire greatness in whoever follows them (Bernard M. Bass, 1993). Yukl (1994) had drawn up some necessary tips for achieving successful transformational leadership. Transformational leadership is simply put the transformation of individuals into leaders. It shows and teaches that any one single person can aspire to be greater at the tasks they’re faced with, as well as aspire to be simply great. This approach also encourages equality in all forms, if one is willing to work hard and grow. Everyone is encouraged inspired and strengthened to be a leader, for greater results in important tasks in life, for a greater society, and for a greater future.

Burns’ approach, although revolutionary in its own with its regards to leadership and true nature and necessities of a leader, is not often, and not easily, incorporated in ideas today. His book, Leadership, itself is hardly ever mentioned, and when Burns himself is mentioned, it seems to only be out of a certain sense of respect. And this point seems to some the reason why books on leadership often miss its necessary points, today. (The Themes and Theory of Leadership James MacGregor Burns and the Philosophy of Leadership, Matthew R. Fairholm, 2001). Burns (1978) further explains the structure of transformational and moral leadership, and the psychological matrix of leadership. He explains the crucibles of political leadership. He opines on the differences between bureaucracy and leadership. He defines the leader as a policy maker managing decisions and managing dissent. English (2008) states that leadership is an art as it involves a purposive constructive of the self. It is an acquired set of habits and skills. He says that leaders are contextual and culturally specific actors. He expounds various theories of behaviourism, structuralism and post modernism in leadership. He further talks on the feminist/critical theory epoch and queer theory epoch.

2.5 Review of Related Literature

The main bodies of literature are drawn from the learning and developmental theories, organisational theories on EYE and are presented in subsections of quality practices in preschools, leadership, policies and curricula in preschools and parent child interactions. The review also examines a collection of studies, which reflect international conditions of preschools, and are predominantly from English speaking countries. All the studies revolve around active learning through play, exploring the definitions and advantages of quality in the early years, and the role of parents and caregivers in the organisational setting. Most of the studies fall under the interpretivist paradigm and are exploratory in nature. International studies
on the early years have been conducted in at least fifty different settings across US (Keyes, 2002); the UK (Holmes, 2012); Australia (Little & Wyver, 2010); Hong Kong (Ho, 2008); Russia (Diachenko, 2011); East Africa (Malmber et al., 2008); Jamaica (Anderson & Rickets, 2008); Greece (Petrogiannis, 2002); Norway, Sweden, New Zealand and Japan (Synodi, 2010; Sheridan, 2007). Other articles on EYE practices reviewed are by Gifford (2004), Kudrayavtsev (2011), Little and Wyver (2010), Gray (2012), Mwaura et al., (2008), Ricketts & Anderson (2008) and Sylva et al., (2007). These quantitative studies, gave a differing approach to consider the quality of pedagogy in the early year’s education field.

2.5.1 Relevance of Early Years Education

Early Years education is increasingly becoming important in the Arabian Gulf countries. In Early Years Education in Qatar (Al-Khelaif, et al. 2016) the researchers argue the current educational reform is based on a Western-style, child-centred teaching approach for preschools. Qatar’s early childhood education goals follow international standards like Association for Childhood Education International (ACEI), and ACEI Global Guidelines. Additionally, Qatar’s educational standards follow the belief that all children are entitled to basic human rights and the opportunity to develop within a safe and secure environment that values and respects individual differences (ACEI Global Guidelines Assessment, 2011). These guidelines consist of 76 global indicators of programme quality that need to be followed. The Early Years Education Good Practice Guide (GPG) is a publication that helps shape the quality of early childhood education in Qatar. The GPG will allow teachers and educators to structure their programme around what’s important; ensuring children have ample opportunities; facilitating the transition from home to school; and giving the child a strong foundation for future and life-long learning.

In A dynamic learning concept in early years’ education: a possible way to prevent schoolification. (Brostrom, 2017) the author explores education in Copenhagen, Denmark. According to him, the Nordic social pedagogy approach is often put to the test, and results in unproductive either/or thinking. The researcher then infers four particular approaches, after studying Froebel and social-history activity. (1) learning takes place when the child is an active participant and interacts and communicates with others; (2) meaningful activities give way for children’s learning; these are activities where the child's interest aligns with the goal of the activity; and (3) learning is seen as a productive and creative activity characterised by imagination.
The journal, *Contemporary Issues in Early Childhood* published an article titled *Beyond a logic of quality: Opening space for material-discursive practices of ‘readiness’ in early years education.* (Evans, 2016) that focuses on the results of transitioning from a ‘logic of quality’ to a ‘space of meaning-making’. The author looks at ‘quality’ as logic and explores a different direction in thought into a space of ‘meaning-making’. The two binaries, human/material and discourse/matter poses a problem to the intimidating course of ‘readiness’ as an independent entity. In conclusion, a call for a different understanding of ‘readiness’ as a material-effective relation between bodies is imperative.

*Risk burden, participation in early childhood education and care, and child outcomes* (Biddle, Crawford, & Seth-Purdie, 2017) references the Longitudinal Study of Australian Children (LSAC). It analyses two classes of children - the Baby (‘B’) cohort (born March 2003-February 2004) and the Kindergarten cohort (‘K’) (born March 1999 - February 2000). The LSAC hosts information about child outcomes, including social, emotional and cognitive outcomes (Sanson, Smart, & Mission, 2002). The research measured the participation and attendance of the children at day-care without a preschool program. It was finally deduced that when children participated in preschool or day-care activities, it benefits children from at-risk groups (Harrison et al., 2012). It was also found that this didn’t affect associations between risk factors and poor academic outcomes in early school years.

*Computing education in children's early years: A call for debate.* (Manches & Plowman, 2017) examines international changes in policy and curricula that have shed light on computing education in the early years of a child. There has been a growing significance of the role of computing education, as a number of programming tools for young children have hit the market. Lately, the focus is increasingly on just the tools rather than the pedagogy of this type of education. The study focusses on three areas of research: Logo; computational thinking; and teaching STEM subjects of science, technology, engineering and mathematics. Overall, the research paper questions the presence of computing education tools in early years education.

Furthermore, a paper titled *Programmable Toys and Free Play in Early Childhood Classrooms* (Newhouse, Cooper & Cordery, 2017) sheds light on a study that examines how young children behave with discrete programmable digital toys, i.e., robots. This was implemented to meet the Digital Technologies course in the Australian Curriculum. The research involved teachers and students in two early childhood classes, which was carried out in two phases in successive years. The authors worked with the educators to teach children how to use digital toys. As they interacted with them, they were studied using a checklist of behavioural techniques. The
conclusion was that the children didn’t display any ‘programming skills’, but they showcase the drive to learn how to use the devices, which was considered a start.

2.5.2 Importance of Quality at Preschools

There is ample evidence from the U.S. on research demonstrating the benefits of high quality early years’ education. Magnuson (2004) used nationally represented longitudinal data of US children who enrolled for pre-primary school in 1998-99, and concluded that enrolling at a pre-kindergarten increases reading and math skills at kindergarten entry (Woldehanna, 2011). Findings from other studies (Reynolds et al. 2000, cited in Woldehanna, 2011) supported this achievement using the Chicago Longitudinal Study. Whilst the broad studies conducted by EPPE (U.K) & ECLS-K and NICHD (US) considered the positive short-term outcomes (until the age of 7) of preschool experiences, a study by Goodman and Sianesi (2005) measured the longer-term outcomes at ages 16 and 33. They conducted research on the effects of early schooling before age 5 and of pre-schooling on a cohort of British children born in 1958. After controlling for child, parental, family and neighbourhood characteristics, they found that early education yields large improvements in cognitive tests at age 7, which remained significant up to age 16. The research had deeper implications for the labour market by demonstrating that pre-compulsory schooling was found to increase the probability of obtaining qualifications and to be employed at age 33, and there was also a marginal wage gain of 3-4% at age 33.

The 1970 British Cohort Study (Cleveland & Krashinsky 1998, cited in Goodmann & Alissa 2005) has been viewed by the authors as the most statistically convincing study and is described as one of the major studies on British preschool education. They studied a sample of 8500 children, where they measured the effects of social and cognitive development at age 5 and 10 of several different types of ordinary preschool programs, finding similar types of effects for nearly all. Based on ‘analyses of variance’ and controlling for several important socio economic and family factors, they find that pre-school generally boosts cognitive attainment at ages 5 and 10 (Goodmann & Alissa, 2005). Researchers such as Sammons et al. 2003, cited in Woldehanna (2011) conducted a research following young children of two yrs. of age attending preschool. Post pre-school, the children have better cognitive skills of reading, language, and early numbers, and enhanced social skills as compared to children without preschool experience. Longer pre-school attendance leads to higher cognitive gains when entering school, which are substantially higher for disadvantaged children.

Several studies have been conducted in other countries that consider the importance of the EYE
and learning. Looking at the Australian sub-continent, it is found that even the starting age of early childhood education was significant in affecting cognitive skills. “Children who started before age two had higher scores in mathematics, curiosity and reading comprehension. Additionally, parental education levels and family income affected children’s literacy and mathematic scores positively” (Woldehanna 2011, pg. 9). A well-known study from Jamaica shows that children randomly assigned to receive home-based early stimulation have great improvements in cognitive development and future school performance (Powell et al. 2004, cited in Woldehanna, 2011). In Brazil, there were major increases in grade completion rates from 2% to 40%, due to community centred early years programs. A program in Brazil that focuses on including children in good quality programs points out that a child in preschool costs no more than $100, a child on the street costs $200, and a child in the penal system $1000 (Woldehanna, 2011).

Barnett (2008, pg.13) further highlights the importance of learning at preschools and states that in “a randomized trial with long term follow-up of high quality half day pre-kindergarten in Mauritius, results found that short term improvements in children’s learning and behaviour led to reduced crime rates into adulthood”. Similarly, in Argentina (Berlinski et al. 2009, cited in Woldehanna 2011, p.11) found that the increasing number of preschools increased the attendance of preschool education and showed positive effects of non-cognitive skills and cognitive development scores. ‘There was improved classroom attention, effort, discipline, and participation. The study also showed that preschool attendance has a positive impact on the children’s completion of primary and secondary education, accompanied by low dropout rates and repetition rates in each grade for the treated compared to the untreated children’.

The researcher is interested in the effect of EYE on the learning and development of children in UAE. Furthermore, the UAE being a cosmopolitan country, home to diverse nationalities, could there be parental factors playing on the EYE in the country? It is often stated that parental involvement affects children’s learning. Reynolds et al. (1996) comment that several studies have shown the positive effects of family based intervention programs. They further state that direct parent involvement in preschool intervention should increase parent-child interactions as well as school attachments and hence readiness for school.

Other articles on early years’ practices globally by Gifford (2004), Kudryavtsev (2011), Little & Wyver (2010), Diachenko (2011), Gray (2012), Mwaura et al., (2008), Ricketts &Anderson (2008) and Sylva et al., (2007) reviewed used quantitative studies and studied the quality of learning and pedagogy in the EYE field. The various articles reinforce the critical importance of quality in pedagogical practices and the early childhood period in the human development
cycle. Goodmann et al. (2005) suggest that the social, demographic and economic profile of a local environment or a region can exert a strong influence on child development and growth, as well as the pattern of preschool availabilities and usage. The current study of the learning in UAE preschools, parental cultural factors exerting influence on young children therefore assumes importance.

2.5.3 Leadership at Preschools

The article by Roberts-Holmes (2012) entitled ‘It is the bread and butter of our practice: experiencing the Early Years Foundation Stage’ presents the experiences of teachers on the Early Years Foundation Stage Curriculum (EYFS) after being implemented across UK in 2010. The purpose and objective is clearly stated as an aim to ‘elicit head teacher’s views and perceptions of the EYFS’. Roberts-Holmes conducts interviews across six geographical locations in England to reflect a breadth of experience within the UK educational context. He uses phenomenological interviews as he attempts to uncover the essence of the teacher’s experiences (Merriam, 2009). The research can be stated as latest and little has been done in materials evaluation for the EYFS. The introduction, the policy context of the EYFS and the theoretical framework (Vygotsky’s Zone of Proximal Development) along with literature reviews are clearly demarcated. The conclusions are congruent and consistent and clearly stated that all the teachers unanimously1) supported the EYFS and 2) stated that there was a difference in quality between the PVI (Private) sector and maintained sector of the early years’ providers and that 3) the EYFS should be extended to year one. Robert-Holmes provides a clear insight into important professional issues by interviewing key stakeholders of the school as an organisation. The teacher’s feedback on curricular and teachings give an insight to schools to further develop their organisational structure. Furthermore, the author provides political implications and recommendations linked to practice situations.

Other articles on early years’ practices globally by Gifford (2004), Kudryavtsev (2011), Little & Wyver (2010), Diachenko (2011), Gray (2012), Mwaura et al., (2008), Ricketts &Anderson (2008) and Sylva et al., (2007) reviewed by the author used quantitative studies and gave a dynamic perspective to quality and pedagogy in the early years education field. The review of the various articles using qualitative and quantitative studies reinforces the critical importance of the early childhood period in the human development cycle. A school has its organisational challenges. It is imperative that preschools delve into the subject matters of organisational climate, culture and change for enhancing quality and deliver of the learning goals. The early years are the foundation stage not only for education, but also of adult well-being, physical and
mental health. Ornstein, & Hunkins, (2004) assert that no curriculum regardless of its design can ignore content and experiences. Content and experiences do not exist apart, they comprise curriculum unity. Students cannot engage in learning without experiencing some activity and some content, and likewise teachers cannot deal with content without being involved in some activity.

As we cannot separate content from activities, in the actual delivery of the curriculum, neither can we separate the experiencing of the content from the environment where it occurs. Educational experiences are surely affected by the environment. A creative environment stimulates the child. The school environment should facilitate effective learning, offer the necessary comfort and yet engage and pose constructive challenges to the enquiring mind. The environment should address social and security needs, learning needs, developmental needs of inner awareness, cooperation and appreciation, more so it should enable the student to master the intended learning. The atmosphere should be welcoming where the pre-schoolers can play and enjoy the learning thereby leading to productive learning. The research paper on the early years by Christine Stephen, Jennifer Ellis & Joan Martlew (2010) entitled ‘Taking active learning into the primary school: a matter of new practices?’ examines the extension of active learning that takes place in preschools, to the first grade of primary schools through participatory observation. The authors who are from the early years’ field in Scotland introduce curricular excerpts and previous studies with a reference made to the restructuring of the national curriculum in Scotland and hence the need for this study. The curriculum requires the teachers in grade one to adopt an ‘active learning’ pedagogy. Work done by previous authors, studies such as EPPPE and DCSF 2007 in UK and Scotland, High Scope Program of the USA and Scottish Policy documents etc. are referred to and policy implications of the subject matter is highlighted. The origin of experiential learning is described and pioneers such as Isaac (1932) and Montessori (1966) are spoken about. The authors define active learning as learning, which engages and challenges children’s thinking. References are made to Piaget and Vygotsky’s theories.

Travers (2001) comments that conducting an ethnographic qualitative study in educational institutes offer a detailed and rich account of what happens inside an institution, which can be of interest to managers as compared to quantitative studies that mostly identify a problem that needs investigating, but which produce results that can be generalizable. It cannot be concluded that any of the research methods is more legitimate in studying early years education as each study contributes to the literature based on its methodology that strengthens or limits the findings. Organisations like schools must understand the customers i.e. the parents, the school
facilities and the classroom management and formulate policies around parental factors to ensure school goals are met. This study also explores the role of quality certification of the preschools. Travers (2001) comments that conducting an ethnographic qualitative study in educational institutes offers a detailed and rich account of what happens inside an institution, which can be of interest to leaders as compared to quantitative studies that mostly identify a problem that needs investigating, but which produce results that can be generalizable.

The case study report of two preschools in Hong Kong by Choi Wa Dora Ho (2008) constituted research in leadership practices. The researcher seeks to ‘understand effective leadership practice for quality programs from a number of perspectives in two preschools’ (p.224) in Hong Kong. The paper considers the plausible definitions of quality from the multiple perspectives of school stakeholders. The case study describes two highly rated preschools. This study illuminates the readers understanding of the phenomenon and experience on quality in preschools. It is heuristic in nature. Ho comments that EYE is an important area of research, as 95% of young children attend preschool even though it is not compulsory. She asserts that parents and leaders have a direct and indirect influence on the provision of pre-schooling, and contribute to market forces. It can therefore be argued that quality framework in the early years’ education is shaped by educational, economic and cultural context.

In the UAE Al-Taneiji (2012) studies the role of school leadership in engaging parents at schools. She uses questionnaires to consider the answers based on differences of gender, school level and job position. She found that the leaders engage with parents regularly, and involve them in school decisions related to their children’s activities. She recommends regular training of the school leaders and to encourage parent-school partnerships for effective teaching and learning. The EYFS curriculum of UK highlights the importance of parent engagement to enhance the learning of the young pre-schooler. The current study will be using questionnaires to consider parents and staff views on quality accreditations and importance of parent engagement.

2.5.4 Parental Involvement and quality time spent

An article by Stylianides and Stylianides (2010), defines a parental involvement in children’s education and uses a representative sample of American urban kindergartners to examine the effect on urban children’s academic achievement at kindergarten entry. The findings in this article are ‘Isomorphic or similar in the different subject areas and show that children with more access to parental involvement tend to have higher academic achievement than their
peers’ (Stylianides & Stylianides 2010, p.400). This study is like the current research on parental involvement. The result is having a clear message to society and policy makers on the importance of parents giving ‘time’ to children. Ricketts & Anderson (2008) assess the levels of parent-child interaction, and the impact of poverty and parental stress, using data from a national survey in Jamaica. The article describes parenting attitudes primarily the authoritarian and authoritative approaches, with the latter talked about as better as the approach boosts the self-esteem of the child besides having moderate levels of control. The questionnaire administered had three sections:

1) Parent-child interaction
2) Discipline and corporal punishment in the home
3) Parental stress.

The findings indicate that 1 in every 4 parents feel trapped by responsibilities, with the poor at increased risk of high levels of stress, and their children exposed to low level of parent-child interaction and harsher corporal punishments. The findings also indicate a universal feeling about the enjoyment derived from the parenting role, and hence the parents feel that they are doing the best they can. The study highlighted existing weaknesses in parenting practices and further recommends urgent social service and national parent training programs to stressed parents. The supervision of young children and parental roles are further highlighted in the study by Little & Wyver (2010). They conducted a study utilizing self-parent-teacher report questionnaires, informal interviews and stimulus photographs. The study investigated four-year olds ability to appraise risk in playground activities. The results indicated that four-year olds are aware of injurious behaviour and can make relative risk judgments. However, they are less able to judge the severity of the injury. These highlight the importance of adult supervision and links to Vygotsky’s theories. The results have implications ‘for the provision of calculated risk taking on outdoor play and for adult responses to the risk –taking behaviour of children’ (Little & Wyver 2010, p.298).

According to Suzanne Bianchi (2000), in her paper, Maternal employment and time with children: Dramatic change or surprising continuity, she explains that over the years, the time mothers spend with their children is unsteady, despite their interest in the labour force. Although women didn’t work in the 20th century, they were subject to tedious household chores, and this didn’t allow them to spend as much time with their children. But these days, mothers prefer to work from home or take a break from work until their children are old enough. This has also seen a change in fathers; they tend to spend more time with their kids, as their mother’s work full-time jobs.
In a study titled *Allocation of Time to Preschool Children and Educational Opportunity*, Hill and Stafford (1974), an investigation was done on the amount of time allocated by parents for their kids. They studied mothers from two different social statuses, and found that mother who earned well spent more time with their children than those who didn’t earn at all. They concluded that equal educational systems didn’t simply mean equal educational opportunity.

*The Time Squeeze: Parental Statuses and Feelings About Time with Children* (Milkie, Mattingly, Nomaguchi, Bianchi, Robinson, 2004) focusses on the concern shared by policy makers, parents and the public on how little time parents spend with their children. Two studies were conducted which showed that parents, particularly fathers, spent too little time with their children, and this is attributed to long working hours. Ironically, married parents tend to spend lesser time with their kids compared to single parents.

Leibowitz (1977) in *Parental Inputs and Children’s Achievement* states that family-background variables are related to the quantities of time and goods devoted by parents to augmenting the human capital stock of their children. According to her, maternal education has a higher impact on the child, as educated mothers have fewer kids and spend more time with them. The gross income of the family could also be one of the factors, as wives of husbands who earn well as less likely to pursue jobs. Kalil, Ryan and Corey (2012) gathered data from the 2003-2007 American Time Use Surveys (ATUS), where 6640 mothers were studied. They tested the theory that well-educated mothers spend more time with their children, compared to less-educated ones. The results of the survey attested to the theory; educated mothers tend to spend more time with their kids when they are 6-13 years old, rather than when they are younger. It was concluded that the education gradient in the time spent with children is characterized by a “developmental gradient”. Ironically, Storch and Whitehurst (2001) studied the role of family and home in the educational development of children from low-income backgrounds. In the chapter, a model of individual differences in the progress of emergent literacy was suggested. This was meant to evaluate the improvement of different parental factors that affected a child’s literacy skills. It was concluded that eventually, the atmosphere at home was directly related to the literacy of a child.

### 2.5.5 Learning and Socialisation at Preschools

Sheridan (2007) in her article: ‘Dimensions of pedagogical quality in preschool’ explores the four dimensions of society, the teacher, the child, and learning context, and uses a meta-analysis of the results of four empirical studies using ECERS (The Early Childhood Environment Rating
The objective of her research was to consider children’s participation possibilities and their influence in preschools. The results of her study showed that **quality evaluation must consider the perspectives of different stakeholders and most importantly the children’s voice should not be lost but be heard**, otherwise an overall understanding of the quality of pedagogy will be lost. This highlights the importance of Critical thinking and obtaining the young pre-schoolers feedback during teaching and learning including in self-assessments. An important part of children’s social and developmental process in the early years is highlighted by Coates & Coates (2006) who provide a new insight ion the relationship between children’s narrative and their drawing process. Another paper that concludes that ‘including children in the identification and exploration of issues important to them, promotes a positive sense of inclusivity’ (p.191) and such approaches develop pedagogies of citizenship is by Nutbrown & Clough (2009) who argue for and demonstrate the effectiveness of **including young children in commenting on their learning environments**. 16 practitioners developed their own action research projects in their early childhood settings.

Burson (2010) conveyed the importance of classroom quality and academic achievement in the early years field. The study explores the relationship of classroom quality to kindergarten achievement. It examines how **classroom quality in three broad domains- emotional climates, classroom management and instructional support impact kindergarten achievement growth in mathematics and reading**. The proposed survey to be conducted for the researcher’s doctoral thesis covers aspects of classroom management and will look at the perceptions of the various stakeholders through feedback forms to investigate the relationship of classroom management to children’s learning.

The article by Cottle (2011) focuses on the quality issues in the children centres in England. A symbolic interactional approach was selected to focus on the nature and **meanings the early years practitioners constructed in relation with success and quality in their settings**. This is where the importance of quality certifications assumes significance. The research paper by Fisher & Wood (2012), named ‘Changing educational practice in the early years through practitioner led action research: an adult child interaction project’ reports the effectiveness of the adult-child interactions in early years’ education and tracks 14 practitioners thinking as they engage in an interpretivist action based research in England. The paper highlights the **importance of adult child interactions and effective communication**.

### 2.5.6 Curricula and Policies at Preschools:
The proposed research will explore the important area of curriculum delivery by measuring the learning of the pre-schoolers being taught the UK national curriculum and stakeholder’s feedback on learning and hence curriculum. A school as an organisation must explore enhancements in its processes especially the teaching process and curriculum. Ornstein, & Hunkins, (2004) assert that no curriculum regardless of its design can ignore content and experiences. Soler and Miller (2003) in their study: ‘The Struggle for Early Childhood Curricula: A Comparison of the English foundation stage curriculum, Te Whariki and Reggio Emilia’ revealed how early childhood curricula and educational systems are affected by national and local control including culture using a theoretical framework based on Froebelian philosophy. These contexts ‘give rise to differing conceptualizations of knowledge, learning and pedagogy’ (p.57). The article by Evanthia Synodi (2010) compared and analysed the kindergarten curricula of the differing countries and probed whether they recommend pedagogy of play. She highlighted the influence of culture on teaching practices. The author stated that ‘Play can be child-directed, teacher-directed or mutually directed’, and all the three need to be incorporated in the pedagogy of play. She highlights that her country Greece, culturally does not seem to have paid ‘adequate attention to play’ in the curriculum. She refers to the Froebelian philosophy, which emphasizes children’s play, and her theoretical framework has a social constructivist direction. The study is ethnographic in nature as the cultural elements of the countries reflect on the curricula and their effect is discussed. Nationality can affect learning. Cultural factors can play a role.

This is where the current paper also fits in. The findings indicate that ‘Swedish Curriculum recommends a pedagogy of play, whilst most parts of the Norway and New Zealand curriculum also recommend a pedagogy of play; Japan however focuses on child-initiated or teacher-directed play which does not imply a pedagogy of play’. In the current study, the pedagogical practice is a control variable as the curriculum delivery across the preschools is standardized and is based on the EYFS of England, however the moderating variables of teacher motivation and experiences can affect the learning outcomes of students and hence this study. The article by Roberts-Holmes (2012) presents the experiences of teachers on the Early Years Foundation Stage Curriculum (EYFS) after being implemented across UK in 2010. The purpose and objective is clearly stated as an aim to ‘elicit head teacher’s views and perceptions of the EYFS’. He uses phenomenological interviews as he attempts to uncover the essence of the teacher’s experiences (Merriam, 2009).

2.5.7 Role of teachers in early year education
The role of the typical educator has transitioned over the past few years, especially in early childhood education. Globalisation has played an important role in education, and increased the needs of the educator. Hence, the field has gotten more complicated due to social changes, new scientific findings and political developments (Sylva, et al. 2010). Indulging the child in self-employment and activity is the principal goal of developmental research, which leads to the formation of independent personalities and values. Choosing the right pedagogical location of the child’s day-care centres allows the child to freely decide on various activities. So it is really imperative that the location is chosen with care, as children need the preschool teacher’s support to gain recognition.

The educator takes on various roles in the educational agenda, as children need to feel secure in the new environment. (Smidta & Rossbach, 2008). Another role that the educator takes on is that of the pedagogical teacher, as, in this context, the teacher is both a teacher and a learner. This is only fulfilled when they push themselves to the best of their ability to support the child’s development. There are multiple pedagogues; the child and the child’s peers; followed by the educator and finally, the learning environment.

In Contexts for Teacher Practice (Delaney, Neuman, 2016), the authors argue that understanding the context for practical teaching training is essential to the implementation of educational research design. They also discuss randomized trials, which may not be favourable for multi-faceted and complex educational contexts. To make this case, they studied how educators engaged in new activities, at five early childhood centres in high poverty neighbourhoods. It was concluded that context makes a huge impact on educational practice, where interventions take place.

In Preschool Contexts and Teacher Interactions (Goble, et, al. 2016), the study focusses on time spent in child- and teacher-managed environments and the child’s skill development. The children studied were preschool children ($N = 283$, $M$ age $= 52$ months, 48% girls, 70% Mexican or Mexican American) from the lower socioeconomic ladder. Results showed that the child’s academic and social skill development steadily improved in teacher-managed contexts. Finally, it was concluded that when the teacher is engaged with the child, the outcome is positive and improves vocabulary, math and social skills.

A study titled “The role of preschool teacher-child interactions in academic adjustment.” By Craeyevelt, et al. (2017) shows that when children form social relationships between
themselves and their teachers, it can help them adjust better academically, and reduce risk. Playing-2-gether (P2G), a 12-week intervention that improves the quality of every child-teacher relationship was conducted among preschool boys. The academic engagement was rated at three events in one school year (T1 = pre-test, T3 = post-test, and T2 = in-between intervention components). In the end, it was concluded that encouraging teacher-child interactions reduced the risk of externalised behaviour among preschool boys.

A research study, ‘Preschool Children’s Prosocial Behaviour: The Role of Mother–Child, Father–Child and Teacher–Child Relationships’ by Ferreira, et.al (2016) was carried out to investigate (a) the combined associations between mother–, father– and teacher–child relationships, and prosocial behaviour in 168 children aged 36–72 months, and (b) the mediating role of the teacher–child relationship in the association between the parent–child relationship and prosocial behaviour. After extensive research, it showed that there’s a definite connection between the standard of relationships with early caregivers and children’s prosocial behaviour. Dual-earner families where both parents earned also played an important role in the child’s prosocial behaviour. Although the study understands the important role teachers play in enhancing quality in early years, this study predominantly focuses on managing quality in early years, therefore focusing on the role teachers play in quality early years education is not a further explored.

### 2.6 Conclusion

“A theoretical framework and conceptual models provides an appropriate methodology and a basis for evaluation and interpretation of the findings of the research” (Glesne, 2011, p.14-15). The theories and models selected for this study have been carefully considered to match the broad aim of the research which is investigating the learning and socialisation in pre-schoolers. The theories of Piaget and Vygotsky highlight the importance of the early years and have made suitable claims to understand ‘how a child learns’. The researcher would like to investigate the effect of quality certification and hence has considered TQM and ISO frameworks. The system theory and organisational theories have been studied as the Principle 4 under the ISO framework talks about the ‘System approach to management’. Principle 2 emphasises on ‘Leadership’ and hence leadership theories. Burn’s transformational theory is part of the research framework. ISO certification and implementation require ‘change management’ and should establish unity of purpose and direction. Transactional leaders work in the already present work place culture, while transformational leaders try to change it. (James MacGregor Burns, 1978, Scott London, 2008). Vygotsky talks on ‘what a child can do when alone and
what he can achieve with the help of a care giver’. Besides the teachers at the pre-schools, parents have an important role to play in the learning and development of a child. Epstein’s framework of the 6 types of parental involvement have been looked at in this study.

The review of the various articles using qualitative and quantitative studies reinforces the critical importance of the early childhood period in the human development cycle. Quality controls in the early childhood education are gaining ground with educationists and parents concurring on its importance and significance. This has high implications for a country like UAE which has a majority of the population dominated by expatriates who look at UAE as a ‘stop gap’ in their working life and eventually aim to go back to their home countries. Quality child care helps young parents to work effectively in organisations especially with the increase in the working women workforce. Schools must look at total quality management and quality assurance models to streamline school processes and standardise curriculum so that the multi-national children can enjoy quality learning and have a smooth transition when they go back to their home countries for schooling if need be. Woldehanna (2011) comments that although early childhood education is not a panacea, the results obtained reveal that early years educational programs can improve the academic success and cognitive development by far, thereby benefitting the nation. This research attempts to fill the gap in quality certifications and pre-schooling literature especially the gap in the lack of large scale studies in a multicultural society like UAE. There is also a lack of research on determinants of effective learning in the early years. By looking at the effect of quality certification and parental factors on children’s learning the researcher hopes to contribute to the scholarly world of EYE.

Social researchers address issues on social beliefs, values and policies. Research can attract bias. Politics and economic conditions greatly influence research directions. The priorities of politicians and advocacy groups are different from that of the scientific community (Neuman 2011). The opportunity to see things from a political and cultural bias is a potential problem in research (Mertens, 2010). UAE government has missed taking note of the value, importance and economic benefits of the EYE sector and has not invested into its research or growth. Barr (2012), in his study entitled ‘Early years education and the value for money folklore’, debates on the role of human capital in finding out the value for money in early years education. He refers it to a misapplication of human capital theory, and comments that the assessment of value of money is ultimately about value for governments. He points out the political interference in policy decisions, and the poor level of funding by governments. Barr (2012, p.429) states the ‘UNICEF (2003) has stated in the document: ‘A seven-fold return on investment’ that for every dollar spent in the early years seven is saved in the long run.
Chapter 3: Research Methodology

The research approach, rationale for research design and the stages of the study design are described in this chapter to address the three research questions.

3.1 Research Approach

This is an explanatory research with components of evaluation research as the ISO quality framework will be evaluated to see if it contributes to the learning in children. “Explanatory research seeks to identify cause and effect of educational phenomena. This type of research often involves surveys and experiments both of which are most likely to use quantitative methods. Seeking to determine the effect of an intervention or type of program is evaluation research as it deals with cause and effect, that is the effect and implementation of education policies and programs” (Check & Schutt, 2011, p.11).

As the research is primarily quantitative in nature, in the second component the researcher has built on the ensuing result by interviewing key stakeholders through semi-structured interviews to have valuable perspectives aiding in depth of the research. In the research, viewpoints were gathered from the school leaders, teachers, parents and government leaders who aid in policy changes. Semi structured interviews were conducted with 10 stakeholders to get a rich account of the subject matter. According to Creswell (2013) the most appropriate methodological approaches to inquiry for social constructivism under the interpretive framework are inductive methods that can be obtained through interviews. One form of interpretive research is constructivist, where knowledge is constructed and where it is used to make meanings of what participants have said on their world (Merriam, 2009). People’s knowledge of the world they live in is socially constructed (Crotty, 1998). Dilthey (1976, cited in Huberman & Miles 2002) further contends that interpretive researchers can understand their subjects better than the subjects themselves. The reason behind this insightful understanding is the interpretive researcher’s ability to see the effects of power and organisational structure whereas the subjects generally only see personal and emotional meaning. The study employed stakeholder interviews as interacting with the actors in their social world may highlight the leadership ideologies, successful management or issues that hinder effective implementations of quality management (Merriam, 2009).

There is a great divide on views on various methods used in research. Both the quantitative and
qualitative approaches give a portion of reality and on combination; the result is often a more accurate understanding of human reality (Carter 2001). The Mixed method research selected will aid in the credibility of the investigation. The use of multiple research methods to study a research question is triangulation. The triangulation helps as the combination of one or more methods helps reduce the liabilities of the individual research application (Check & Schutt, 2011). ‘The constructivist paradigm extends the interpretivist philosophy by emphasising the importance of exploring how the different stake holders in a societal setting construct their beliefs (Guba & Lincoln, 1989, p: 44-45, in Check & Schutt 2011, p. 16). The research philosophy is therefore balanced between the positivist and the constructivist. Lots of discussion happens on the choices and merits of quantitative and qualitative approaches.). Firestone (1987) asserts that their results jointly can be harmonizing. There has been discussion in the research methods literature for some time over the relative benefits of qualitative versus quantitative methodology. Creswell (2009) argues that it is important to recognize that all methods have limitations. This study uses a mixed method approach so that strengths of both quantitative and qualitative can be drawn. This study is a **sequential research** as the research is carried out in a sequence:  
Sequence 1: Researching the learning and development in children over 5 years and looking at the trends  
Sequence 2: Researching the influence of ISO certification on learning (selecting a population of children’s learning scores over one year)  
Sequence 3: Researching the perceptions and involvement of parents through a survey and looking at its influence on learning (selecting a subset of the population of parents over the same year)  
Sequence 4: Conducting semi structured interviews (leaders, senior teachers, and parents and Government policy maker)  

All the research conducted has initially been piloted. RQ 1 on learning and development is addressed quantitatively with two quasi experiments in a longitudinal trend study, to get the breadth of the question. Perceptions on it are gained to get a richer understanding of the account via interviewees of stake holders. RQ 2 on ISO certification is addressed quantitatively with a quasi-experiment and further explored deeper through qualitative interviews on leaders as leadership is an important component of ISO. RQ 3 on parental involvement is addressed quantitatively through a survey and qualitatively through interviews to understand views of the parents and the depth of the question.

**Definitions and Variables:**
**Learning** definition is operationalized (based on a pre-test and post-test instrument on the seven areas of the UK EYFS curriculum based on OFSTED guidelines).

**Growth:** The difference between the post-test and pre-test scores as a percentage.

**Dependent variable:** learning (operationalized)

**Control variable:** curriculum and pedagogical practices

**Moderating variables:** attitude and motivation of teachers and principal, school facilities, socio economic status of parents

**Independent variables:**
- type of preschool (ISO or Non-ISO quality certified)
- type of children (old: children with prior exposure to the same preschool or new: those that have enrolled in the year),
- parent demographic factors: nationality, educational qualification, parents working status,

**Quality time** (operationalized as short term or long term activity time spent with the child at home or outside (in curricula activities such as reading to child, play time, tv time, school volunteering time, visits to places of interest, socialization with community etc.)

**Toddler** – child’s class level at the pre-school indicating an age of 1-2 years.

**Nursery** - child’s class level at the pre-school indicating an age of 2-3 years.

**Foundation** - child’s class level at the pre-school indicating an age of 3-4 years.

**Curricular definitions used in this research**

- **WRD** - Understanding of the world
- **PSE** - Personal Social & Emotional
- **CRV** – Creative problem solving
- **PD** - Physical development
- **CLL** – Communication, Language and Literacy

**School definitions used in this research**
A pilot study was carried out by the researcher to investigate the learning and socialization of the children in preschools, and look at the parental demographic factors that may contribute to it (Gandhi, 2012). Two preschools which have also been selected in this study (Mankhool and Jumeira) were selected as sites. There were previous studies done on these schools looking at the curricular practices, assessment methodologies, ISO framework policy review and leadership of these schools. Utilizing the preschool assessment rubric (which is also utilised in the study) the learning scores were calculated based on the difference of pre-test and post test scores. The results implied that there was a statistically significant difference. The results of the SPSS output indicated that ‘learning has happened’ over all the age groups. Further correlations were made and with a regression of variables it was observed that the nationality of children had a correlation with learning scores. On probing, it was found that Asian children had higher scores than other nationalities. The researcher looked at an innovative pathway incorporating longitudinal trends and designed this study to look at the influence of quality certification on learning in children.

The description of the research design is provided in table 3.1. The research pathway has been divided into 4 parts:

**Part 1 A and B** is a quasi-experiment in a longitudinal study that answers RQ1
1) Is there a significant improvement in learning of the children at the preschools in UAE?

**Part 2** is an experiment to answer RQ2
1) Is there a significant difference in the learning of children between the ISO accredited and non-accredited preschools? Is there any impact of leadership of the schools on quality of learning?

**Part 3** consists of a survey questionnaire to parents with is analysed to answer RQ 3
1) Do parental demographic factors and quality time spent at home with children impact the pre-schoolers learning?
Part 4 consists of semi-structured interviews that provide the perspective of stakeholders on the above questions and provide valuable insights on the research on gaps observed. The following figure illustrates research design.

Figure 3.1: Overview of the mixed-method research design

Table 3.1: Summary of Study Phases Aligned with Research Questions

<table>
<thead>
<tr>
<th>Research sequence</th>
<th>Research Question</th>
<th>Participants</th>
<th>Type of Instruments</th>
<th>Data used</th>
<th>Data Obtained</th>
<th>Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>QUAN</td>
<td>Data collection Quasi-experiment Longitudinal Trends</td>
<td>Pre-test/ Post-test Instrument (n=934) (School M)</td>
<td>Numeric Data</td>
<td>SPSS v.22 Software</td>
<td>Descriptive and Inferential statistics</td>
</tr>
<tr>
<td>Phase 2</td>
<td>QUAL</td>
<td>Data collection</td>
<td>Semi-Structured Interview (n=11) In-depth Interview (n=1)</td>
<td>Text Data</td>
<td>Qualitative Data Analysis</td>
<td>Discussion, Implications, Future Research</td>
</tr>
</tbody>
</table>

Table 3.1: Summary of Study Phases Aligned with Research Questions
(RQ) | collection | Technique |
--- | --- | ---
I | RQ 1. | QUANT | Assessment instrument | Learning scores | ANOVA |
IV | 934 Students of M branch & 703 students of branch M&N | QUAL | Semi Structured Interviews | Perceptions transcribed as text | Thematic analysis |
IV | 13 interviewees | | | |
II | RQ 2. | QUAN | Assessment instrument | Learning scores | ANOVA |
IV | 490 Students of 7 ISO certified and noncertified branches | QUAL | Semi structured Interviews | Perceptions transcribed as text | Thematic analysis |
IV | 13 interviewees | | | |
III | RQ 3. | QUAN | Survey instrument | Their perceptions, experience possible strategies towards the problem | Chi square analysis, Thematic Analysis |
IV | 100 parents across the 7 ISO and Non-ISO branches | QUAL | Semi structured interviews | | |
IV | 13 interviewees | | | |

Part 1 A: The first phase of trend analysis was carried out with one group in different times. This is essentially a ‘one group time series’ as the one group is given more than one pre-and post-test repeatedly over time. A pre-and post-test instrument is administered to the cohort experiment group over five years making this a ‘prospective longitudinal trend study’ and not a longitudinal study as the sample differs over the years. This is therefore not a ‘cohort’ or ‘panel’ study too as the sample scores are checked for different participants over a period, however using the same treatment in the same conditions making it a trend study. All the children at the nursery branches are assumed to be provided with the similar opportunity of teaching, teacher’s qualifications, skills, school evaluation procedures, and common curricula with common facilities making them matched (out of the scope of this research) and hence this study terms these as moderating and control variables. This researcher uses the ‘before and
after design’ as the control group is absent. All the cases (children) are exposed to the experiment using intact group sampling.

**Part 1 B:** The second phased of trend analysis was carried out with different groups in different schools, namely the ISO certified and non-ISO certified schools. These designs are useful for intervention in the whole population (Check & Schutt, 2011). All the school children will be ‘treated’ to early years’ education to measure the learning and socialization. However, in the absence of a control group, extraneous variables such as factors related to inherent learning in children, parental and social care and involvement at home etc. can threaten to invalidate research efforts. This can be countered if the experiment is conducted over time. A time series conducted has the potential to increase reliability (Check & Schutt, 2011). The same test is done over a different sample of the population each time. This is therefore a cross sectional study; it produces a ‘snap shot’ of the population at a point in time. This is to effectively study the change at the time and for further reliability, a trend is studied in this research. Causal analysis is sustained as the cross-sectional design is repeated over time. “Trend studies focus on factors rather than people, and these factors are studied over time. New samples are drawn at each stage of data collection, but focusing on the same factors. By taking different samples, the problem of reactivity is avoided, i.e. earlier surveys affecting the behaviour of participants in the later surveys. This is particularly useful if the research is sensitive with regards to the issue or subjects” (Cohen, Manion & Morrison, p. 267). The nursery age range is very young and sensitive and hence this approach is meritorious. Moreover, the same children would have had the ‘treatment’ or would have learned with the school and would be tested again leading to a ‘dilution bias’ (Cohen, Manion & Morrison, p.327). This research approach is therefore aptly selected for the sample and setting.

While such research designs are robust, they do have some limitations. Besides cost, sampling, participant issues, time consumption and researcher motivation, a major difficulty faced in conducting this type of research is the “intrusion of unpredictable factors that invalidate forecasts formulated on past data”, therefore short-term trend analysis tend to be more accurate than long term ones. The study here is aptly conducted over five years to counter unpredictable changes in political or the expatriate population which would have affected the outcome. Another limitation could be the variation in data due to the differing samples over time, rather than a change in trends. It is therefore suggested that by using a rolling sample in which a part of the original sample is retained in the second wave of data collection and a portion of this sample is retained for the third wave and so on (Gorard 2001, b:87 in Cohen, Manion & Morrison, p. 267). This is exactly what has been designed in which the toddler age range
children have been treated to the same test again the next year when they are in the nursery class and then further on to the foundation class whilst a small new population is added every year with a new intake. This method helps in analysing the ‘trend’ and answering RQ1 i.e. Is the learning and socialisation happening at the preschool? The effect of home learning is carefully ruled out to a large extent with testing done on old and new students learning scores. Longitudinal studies face a threat to internal validity that stems from testing the same sample again. Dooley, 2001: 120 (in Cohen, Manion & Morrison, p. 268) terms this ‘pre-test sensitisation’ or ‘panel conditioning’ or ‘time -in sample bias’ (Ruspini, 2002:73 in Cohen, Manion & Morrison, p. 268). The trend studies conducted in this research design on different samples of children entering the pre-school overcome this problem by drawing different populations at each stage during the data collection. The issues of history (events), maturation of participants, testing, timing of cause and effect, in longitudinal studies is thus taken care of by suitably doing a trend study at the stipulated time every year which in this study is the start and end of the academic year.

The addition of the control group makes the present design a decided improvement over the previous one group pre-test post-test design used in part 1. The study did not develop any specific tests, it rather relied on the test results from schools over the period to analyse the quality development trends. The equivalence of the group can be strengthened by ‘matching’. As discussed earlier the nursery settings have been matched with variables isolated, controlled and manipulated in that all other factors of the settings are the same as the groups belong to the branches of the same nursery chain following similar pedagogical practices, similar leadership practices and having similar facilities following the common UAE legal framework. The test results from both the ISO and non-ISO certified schools were analysed. This analysis answers our RQ2 to see if there is a difference in learning when the treatment (ISO framework) is applied to the schools to check the outcome of the learning in the pre-schoolers.

Part 3: The survey conducted was not exploratory as the assumption or model is postulated and the relationship or pattern of variables were linked to the NEGP framework and Epstein’s theories. (Cohen et. al, p. 257). The survey form was piloted in a review research on similar early year’s setting for describing the importance that parents placed on time spent in home based activities, curricular practices and kindergarten. A survey method was utilized where an online questionnaire (Diamond, et al., 2000; Kim, et al., 2005; O’Donnell, 2008; Piotrkowski, et al., 2000; West, 1993) was constructed based on the five dimensions outlined in the NEGP to be viewed within the Epstein parental model where quality time spent by parent is supposed to be a function of the parent, the child, the school and the community (West, 1993; Cappelloni,
Part 4: Qualitative study design: Semi structured interviews have been used to get a rich account of stake holder experiences on quality in schools, learning and curriculum, leadership, quality time spent with pre-schoolers and parental involvement. Semi structured interviews on 12 stake holders were conducted. The interviews were conducted by a proxy to rule out ‘researcher bias’ as the research is in the work place of the researcher. 6 academic leaders who are involved in leadership of the schools were interviewed, from the ISO and Non-ISO quality certified preschools. A representative of the Ministry of Education was also interviewed to gain further framework perspectives. 5 parents belonging to different nationalities in both the schools were chosen for the semi structured interviews to understand the quality concepts on preschools and their involvement as parents.

3.3 Site and subject selection

The nursery school chain consisting of 7 preschools participating in the research was selected carefully for this study as they have a mix of age groups of children (toddler, nursery and foundation), mix of ISO- Non-ISO branches across UAE, offer innovative learning practices based on OFSTED framework and deploy the curricular ideologies in assessments. They have won more than 25 national and international awards on business excellence, quality, curricular practices, employee engagement, customer experience, CSR to name a few and have been therefore assessed several times by government bodies and auditors and assessors. They also house the first specialized children’s gym of UAE ensuring quality curricular practices for the school children. Innovation into the pre-schooling industry has been their goal. This makes the study and research meaningful as learning of pre-schoolers is being explored in depth.

In the absence of a standard UAE national curriculum, the management team at the preschools has worked relentlessly to pursue the challenge of doctoring a standardized curriculum based on the U.K. National Curriculum, linking it to baseline assessments for effective monitoring of the academic achievement of the children. This has been researched in the past by the researcher where the curricular concepts have been looked at (Gandhi, 2011). Learning can therefore, be measured in such schools which deploy robust assessment methodologies. Staff
and children attendance is also monitored to ensure quality learning and continuous and documented staff training is provided to ensure high pedagogical skills.

*Figure 3.2: Site Selection*

The estimate of nursery children population in UAE is 20,000 as per MOSA (Ministry of Social Affairs) across 327 nurseries. The researcher has chosen a mix of 7 nurseries (catering to 490 children) in UAE (across Dubai, Abu Dhabi and Sharjah) 2 that are ISO quality certified (Mankhool nd Jumeirah catering to 250 children) and five that are not certified (DSO, Sharjah, Abu Dhabi, Al Quoz and Jumeirah Beach Residence (JBR) catering to 250 children). The selection of the sites is purposeful. The nurseries are the work place of the researcher. The nurseries follow the same curriculum and teaching practices. However, the pre-schoolers are of differing nationalities, based on the varied demographics across each branch due to the differing expatriate location. The sample will thus be stratified. These nurseries are selected based on ISO qualification or not and on the geographical location offering services to the
differing demographics of the community they are in across UAE to capture an international base of parents that have varied perceptions. The sampling is therefore purposeful. The Mankhool (ISO certified) branch of the nursery chain have mostly Asian nationals. The Jumeira (ISO certified), DSO and JBR branches have most Arabs and western expatriates. All these branches are situated in the emirate of Dubai. The non-certified nurseries are in Nahyan in Abu Dhabi, Sharjah and Al Quoz (Dubai) have a mix nationality base. The school has entrusted the school management under two BSM’s E and J who look after many nurseries under them. BSM E leads Mankhool, Jumeira, DSO and JBR. BSM J leads Nahyan, Sharjah and Al Quoz.

This diverse population is the key to the research, as the learning can be measured across the ISO and Non-ISO preschools having a different nationality of students within the schools under differing leadership too across UAE leading to a combination of results. The survey form was sent out to a group of parents across this parent base of the children of the seven schools. A sample of 1053 children’s scores were looked at with 934 fully filled score sheets utilized for the data as some of the sample left the school early or joined late hence leading to invalid scores at start or finish. These were omitted in the research.

Table 3.2: Sample size distribution based on sites and methodology

<table>
<thead>
<tr>
<th>School</th>
<th>Data Collection Method</th>
<th>Students</th>
<th>Ministry Official</th>
<th>Academic Leaders</th>
<th>Parents</th>
<th>ISO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mankhool</td>
<td>Longitudinal Study</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2011-12) Pre-test/Post-Test Instrument</td>
<td>934</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>(2012-13) Pre-test/Post-Test Instrument</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2013-14) Pre-test/Post-Test Instrument</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2014-15) Pre-test/Post-Test Instrument</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2015-16) Pre-test/Post-Test Instrument</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mankhool Yes
Nahyan No
Jumeira Yes
JBR No
DSO No
Al Quoz No
Sharjah No
Longitudinal Study
M (ISO) & N (Non-ISO) (2011-2014) Pre-test/Post-Test Instrument 704

Mankhool  Yes
Nahyan  No
Jumeira  Survey Questionnaire 100 Yes
JBR  No
DSO  No
Al Quoz  No
Sharjah  No

Mankhool  Semi-Structured interviews 4 3 Yes
DSO  interviews 2 1 No
Nahyan  1 1 No

Semi-Structured interviews 1 N/A

3.4 Data Collection Methods

This section discusses the data collection methods involved, including a detailed discussion of each instrument design and how the data from each method was analysed. A copy of each instrument is appended which includes: the pre-and post-test rubric, the survey form and the semi-structured interview guides for school staff and parents. The below table presents the type of data collection used about their relevant research sub-questions.

Table 3.3: Sub-questions & suitable data collection methods

<table>
<thead>
<tr>
<th>Data collection instrument</th>
<th>Research Sub-questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test/Post-test rubric</td>
<td>1) Is there a significant improvement in learning of the children at the preschools in UAE?</td>
</tr>
<tr>
<td></td>
<td>2) Is there a significant difference in the learning of children between the ISO accredited and non-accredited preschools? Is there any impact of leadership of the schools on quality of learning?</td>
</tr>
<tr>
<td>Survey</td>
<td>3) Do parental factors contribute to the learning of the children of the schools?</td>
</tr>
<tr>
<td>Semi-structured Interviews</td>
<td>4) Is there any impact of leadership of the schools on quality of learning?</td>
</tr>
<tr>
<td></td>
<td>5) Do parental factors contribute to the learning of the children of the</td>
</tr>
</tbody>
</table>
The following data collection instruments were used to collect data.

### 3.4.1 Assessment Instrument

Pre-test and post-test scores (appendix) were utilised to collect data to compare the performance of the control and experiment groups before and after the treatment. Pass and van Marrienboer (1993, p. 738) define performance as “the effectiveness in accomplishing a particular task” and state that it can be measured by test scores. The learning scores were collected from the ISO qualified nurseries and Non-ISO qualified nurseries for the batch of the 2011, 2012, 2013 and 2014 and 2015 cohorts making this a longitudinal study. The socialisation and learning was measured by the school developed instrument to test a set of standard questions on the children on the 6 areas of the nursery curriculum (under EYFS curriculum guidelines of OFSTED, U.K). These are communication language and literacy, creative development, knowledge and understanding of the world, problem solving and reasoning, personal, social & emotional development, and physical development. Learning was measured using initial scores at the start of the academic year (in September) and final scores at the end of the academic year (in June) and computed by finding out the difference of the post test scores and pre-test as a percentage. (See Appendix). RQ2 is also tested based on these pre-test post test scores with correlations made to the certification of the school.

The researcher has studied the development of the instrument as part of previous research. The instrument was developed based on the curricular practices (UK EYFS concepts) followed by the school. The initial assessment part of the rubric is thorough in that it captures the details and divisions of each area of learning. The final assessment was done in depth with triangulations and observations throughout the year and discussed with parents every term so that the assessments have a review. The final score is given by the teacher which is a sum of the three school term’s scores indicating growth over the year. The problems presented to the children in the form of continuous questions (formative assessment) engage the children, and teach creative problem solving, involving suspension of judgment and freedom for exploration of the mind leading to construction of knowledge. This is the goal of the curriculum. The progressive movement earlier consisted of child centred and activity centred curricularists, Kilpatrick being a famous one, who propagated child-centred activities and who asserted that the emphasis of education should be the student, who is interested and active, interacting with his fellow students in school and adults in the community (Ornstein & Hunkins, 2004).
The children will then be able to individually discover and transform their own ideas. The linking of the goals and objectives to the assessment booklet is also a very effective tool in evaluating and documenting the results. This is very carefully planned considering the very young age group, where the objectives and documenting of the assessment can be easily missed out considering the dynamic environment and differing absorption capabilities and concentration skills of the pre-schoolers. These reports can be reviewed again, and can be a good source of referencing to evaluate the child’s learning. The teacher has also used anecdotal records, knowledge and performance assessment, through demonstrations. The assessment also incorporates rating scales talking on the degree of learning and performance through their baseline books. Such in depth assessment is adequately planned and imperative considering the young age group, as the onus of the impartial and expert teaching and assessment solely lies with teacher. For the academic years of 2011 and 2012 a simple version of the assessment rubric was used to look at the learning and development of the children, under the areas of colours, numbers, shapers, personal social and emotional development and lastly physical development. This rubric was changed in 2012 to incorporate a rigorous mode of assessment in detail covering the six areas of curriculum as stated above. The same instrument is followed by all schools under the study. Previous studies conducted by the researcher, the school manager’s pilot interviews, and the ministry inspections and other assessments validate the instrument and establish reliability and credibility. Parametric tests were used because of large sample size. Data was analysed via SPSS using ANOVA.

3.4.2 Survey Design

“The survey participants were sent an invitation (Appendix 3: Parent Invitation) via an email that had a link to the online survey so that they would which have given the study the advantage of immediacy” (Cohen, et al., 2011, p. 276).
The survey was administered to parents across the schools under the study. The researcher has carried out research on a sample of 490 parents of nursery children following intact group sampling. Out of this sample size 124 surveys were returned complete. It resulted into the response rate of approximately 32% percent. The main reasons for using a survey instrument were to gain perceptions and views of parents on their involvement with children at home.

The survey uses a 5-level of agreement Likert-scale for responses to the main body of the survey consisting of sets of questions about their views on curricular quality, children’s progress and time spent with children (see Appendix). The survey also asks the opinion of parents on importance of ISO certifications for preschools. A total of 490 parents were sent the questionnaire, out of which 248 started it, 127 completed it and 123 dropped out with a response rate of 32% and an average completion time of 18 minutes. The final sample included responses from 127 parents where 27 were excluded due to missing data leading to a researched sample of 100.

The survey form was designed with questions to be asked of parents within the preschools (ISO and non-ISO) on their perception on importance of ISO certification, on how parents assist in children’s learning, the time they spend with them on differing activities, the time limits on TV etc., do they read to their children regularly, spend time on sports and extracurricular activities etc. This aided in investigating the amount and form of quality time. The survey form was developed and revised to fit the purpose of proposed study and was reviewed by an external
qualified evaluator. The reliability analysis of the form stated that the Cronbach’s alpha score based on both the original and standardized items was 0.919. It indicates high reliability of survey forms.

Table 3.4: Mapping of concepts to variables (Survey Instrument)

<table>
<thead>
<tr>
<th>Concepts block from framework</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Epstein &amp; NEGP)</td>
<td>Item (Number of )</td>
</tr>
<tr>
<td>Perceptions about quality in EYE</td>
<td>1 to 19; 48 to 51</td>
</tr>
<tr>
<td>Perceptions about child development</td>
<td>23 to 47</td>
</tr>
<tr>
<td>Parental Participation</td>
<td>52 to 74</td>
</tr>
</tbody>
</table>

An online questionnaire titled Parental involvement and perceptions about curricular progress of children (Appendix 5: Questionnaire) was made in order to look at the agreement values of parents on importance of curricular and learning skills required for their child’s progress. The questionnaire was divided into 3 parts. The first part asked questions on parent’s demographics like nationality, education level, age, spouse education and working hours, marital status, income child age, and child caretaker before joining the centre.

The second part looked at curricular skills where the parents were asked to rate them as per the progress made by the child after joining the preschool. This was based on a five point Likert scale. These scales are commonly used in research for they provide the researcher with “a degree of sensitivity and differentiation whilst still generating numbers [and they] afford the researcher the freedom to fuse measurement with opinion, quantity and quality” (Cohen, et al., 2011, pp. 386,387).

The curricular skills have been selected based on Epstein’s Parental Theory and the five areas of NEGP namely: “Physical well-being and motor development, social and emotional development, approaches towards learning, language development, cognition and general knowledge” (Kagan, et al., 1995, p. 3). The items were also matched based on OFSTED guidelines for the UK EYFS curriculum that the preschool follows. “The NEGP dimensions have been reviewed by many experts and their input have been incorporated into the document which in turn increases its validity” (Kagan, et al., 1995, p. 5).

The third part of the questionnaire consisted of questions on parents’ weekly, monthly and yearly activities and inquired about children’s television viewing hours. Quality time is
measured as that which a parent spends with a child on activities based on home learning. These activities include telling a story, reading, teaching alphabet and numbers, playing indoor/outdoor games, involvement with household chores etc. Other community development activities such as visiting a grocery stores, museums, libraries, places of worship, aquariums and zoos. Lastly, parents were asked questions on time spent on involvement in school activities, volunteering and communicating with teachers.

**Data Collection:** The purpose of the study, the criteria for selecting the participants, time taken to fill the questionnaire, contact details of the researcher were provided. The survey participation was voluntary and the parents could opt to drop out whenever needed. It was ensured that the anonymity of the participants was maintained. Furthermore, the language was kept simple to achieve a higher response rate. “Follow-up reminders were done on a weekly basis where parents were sent a reminder email and the invitation was re-posted monthly for it has been reported that follow up tend to increase participation” (Cohen, et al., 2011, p. 284).

**Pilot Study for survey instrument:** The researcher conducted a pilot study in another early year setting to look at the clarity of the questionnaire and its simplicity in understanding. It was important to measure Cronbach’s alpha for the curricular items (Cohen, et al., 2011, p. 402). The reliability test is important as it provides “inter-item correlation that is, the correlation of each item with the sum of all other items, and is useful for multi-item scale” (Cohen, et al., 2011, p. 201). A response rate of 76% was achieved as 13 parents commenced the survey, 10 of which completed it. 3 opted out and 2 had missing data. 8 questionnaires were then analysed and no respondent pointed out any major difficulty. SPSS tests were conducted to analyse data. The alpha for the items was found to be 0.931 for 40 items.

*Table 3.5: Cronbach's Alpha for the Pilot Study*

<table>
<thead>
<tr>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>Cronbach's Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.931</td>
<td>.920</td>
<td>40</td>
</tr>
</tbody>
</table>

The survey questionnaire was sent to the parents of all the ISO and non-ISO school children (n=490) through internet. These were correlated to see learning outcomes of the pre-schoolers and if there was any relation or links via SPSS using the Chi square tests.
3.4.3 Interview Guide

Semi-structured Interviews with 6 school leaders, BSM E, a ministry official and parents were conducted. As the sites of the research are the researcher’s work place and hence the academic leaders, her colleagues report to her, the researcher deployed a proxy to conduct interviews to rule out research bias or participant bias. The proxy was a qualified academician who is a trainer of training centre that specialises in training teachers and leaders in the early years centre. Many senior leaders of differing nationality were interviewed by the researcher’s proxy: the principal of Mankhool, DSO, Deputy Principal of DSO, Principal of Abu-Dhabi, Deputy at Mankhool and the Curriculum Coordinator of Mankhool.

They were interviewed to gather more in-depth information and to capture their own experiences, perceptions and interpretations of their immediate leaders BSM E and J who supervise the ISO and non-ISO schools. The semi-structured leader interview guide (see Appendix) was divided into four main sections that reflected elements of transformational leadership, based on Burn’s theory; introductory questions about leadership, quality teaching, personal experience and views of curricular practices in the schools; ISO quality certifications and contextual factors in the organisation. The following table illustrates the mapping of concepts to variables.

Table 3.6: Mapping of concepts (interview guide for academic leaders)

<table>
<thead>
<tr>
<th>Focus of Interview</th>
<th>Interview question number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Perceptions on quality in EYE&amp; ISO</td>
<td>1-5</td>
</tr>
<tr>
<td>2 Perceptions on Parental Participation</td>
<td>6, 7</td>
</tr>
<tr>
<td>3 Leadership style of supervisor</td>
<td></td>
</tr>
<tr>
<td>3A) Individualized consideration</td>
<td>9, 11, 17, 21</td>
</tr>
<tr>
<td>3B) Intellectual Stimulation</td>
<td>8, 13, 14</td>
</tr>
<tr>
<td>3C) Inspirational Motivation</td>
<td>10, 12, 15, 18</td>
</tr>
<tr>
<td>3D) Idealized influence</td>
<td>16, 20, 22</td>
</tr>
</tbody>
</table>

Parent Interviews

Four parents were interviewed, 2 from Mankhool (Dubai), 1 from DSO (Dubai) and 1 from Nahyan, (Abu-dhabi) by the researcher’s proxy. A semi structured parent interview guide (see Appendix) was formulated to gain a thorough understanding of the differing leaders, their
school’s pedagogy practices, importance of ISO quality certifications, senior leadership of the schools, and parental involvement. Interviews get data out of a subject’s pure experience, and by analysis the meanings are drawn and then moulded into a definite form. Robson (2002) states that interviews are an adaptive and flexible way of finding out information. Jarvis (2008) points out that an interview is to get in depth information and is explorative rather than measurement in nature and hence the method of semi-structured interviews is chosen for this study. This allows the interviewee to ‘open up’ and express her thoughts freely. Patton (2002, cited in Merriam, 2009) suggests using six important types of interview questions: experience and behaviour, opinion and values, feeling, knowledge, sensory, and background or demographic. These were used in shaping the questions so that a comprehensive view could emerge in their discussion. Important considerations in designing an instrument guide is to have a flow of questions, smooth transition in topics, and have a rapport and create comfort. The following table illustrates the mapping of concepts to variables

Table 3.7: Mapping of concepts (interview guide for parents)

<table>
<thead>
<tr>
<th>Focus of Interview</th>
<th>Interview question number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Perceptions on quality in EYE&amp; ISO</td>
<td>1-6, 21, 22</td>
</tr>
<tr>
<td>2  Perceptions on Child Development</td>
<td>9-14, 16</td>
</tr>
<tr>
<td>3  Perceptions on Parental Participation</td>
<td></td>
</tr>
<tr>
<td>3A) Parenting</td>
<td>7, 8, 23, 32</td>
</tr>
<tr>
<td>3B) Communicating</td>
<td>15, 25</td>
</tr>
<tr>
<td>3C) Volunteering</td>
<td>18, 19, 20</td>
</tr>
<tr>
<td>3D) Learning at home</td>
<td>24, 26, 30, 31, 33</td>
</tr>
<tr>
<td>3E) Decision Making</td>
<td>34</td>
</tr>
<tr>
<td>3F) Collaborating with community</td>
<td>17, 27, 29, 29</td>
</tr>
</tbody>
</table>

Piloting interviews (leader and parent) were carried out with the specific purposes to build up, modify and fill in the gaps in the interview guide design that would help in generating rich data in the area of academic leadership that requires further attention. The pilot was carried out in the Mankhool School with a parent and a leader by the researcher. The participant selection was based on their role as head of school or a parent who also works with the school in an administrative department who have worked for 5 years or more. Both were of differing nationality. The pilot study provided the researcher a chance to further develop the interview questions, and to gain experience in interviewing participants. It also provided practice in handling sensitive questions and in learning how to generate new questions as follow-ups in a manner that motivated them to be more open to reflect on more sensitive work-related stories
and critical situations. One interview lasted about 40 minutes and the other approximately 30. The participants were given the choice of being audio recorded, and both chose to be. Recording the interview data was beneficial as it allowed focus on the discussed themes where note taking would have made this difficult. Participants were asked to sign a consent form before starting the pilot interview.

The main change because of piloting in the interview guide was removing redundant questions, cutting out the duplicity and reducing the interview time. The interviewees were each provided a consent form that described the research and assured anonymity. They were later thanked for their participation. The main data analysis approach was based on the “thematic content analysis technique of Newell and Burnard (2006). It was followed, as it is an effective way to direct the process of analysis for reaching sound results. These stages include: writing interview memos, writing general themes from transcripts, rereading and generating open coding, higher level headings, and then constructing another higher order codes and finally reporting all organized data. Huberman and Miles’s (2002) process of interpretation was used to look at participant levels of understanding. Outside the school stakeholder level, one member of the ministry who headed the child department and who issued the licenses, who is senior in the ministry, was also interviewed by the researcher for rich experience, the leadership style, views on how nursery and child care quality taking shape in the country focussing mostly on policies and frameworks.

Purposive sampling was used to select 12 stakeholders who participated in face to face interviews with the researcher’s proxy. Purposive sampling was used since the researcher needed a school leader who could express her views on the senior leadership managing the ISO or Non-ISO schools, BSM E and J. Parents were selected who belonged to the two different schools led by BSM E and J, who were willing, of differing nationality, and experienced enough to critically examine and provide a detailed insight of the quality of pre-primary education provided to the children in the school.

**Six steps in analysis:** 1. subjects describe their lived world during the interview, 2. subjects themselves discover new relationship during the interview, 3. interviewer during the interview condenses and interprets the meaning, 4. transcribed interview is interpreted by the interviewer (three parts: structuring, clarifying and analysing, five approaches: condensation – identify central theme, categorization – illustrate main and sub-categories, narrative structuring – analysis in the form of narration, interpretation – researchers perspective, and ad hoc methods – different approaches for meaning generation). Qualitative data from interviews with parents
and teachers were checked for normality and processed manually in a computer. The data were categorized, colour coded and classified for convenience of analysis. The data were then examined thematically to generate a description of the program presented in tables, narratives and excerpts.

3.5 Operational Model for the research

Based on the theoretical model (refer Figure 2.2) and conceptual model (refer Figure 2.1), an operational model was made to identify hypotheses with inferences to theory which are stated below in Table 3.8.

Table 3.8: Operational Model

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Theory / framework Inference</th>
<th>Variables (Dependent &amp; Independent)</th>
<th>Hypothesis and interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Piaget &amp; Vygotsky Children’s communication and cognitive abilities develop due to the social environment</td>
<td>DV–Learning</td>
<td>H1: There is improvement in average growth/learning scores from 2011-2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IV–Skills and abilities of children before and after preschool learning</td>
<td>(learning happens in children in the preschool)</td>
</tr>
<tr>
<td>2</td>
<td>Piaget &amp; Vygotsky Children’s communication and cognitive abilities develop due to the social environment</td>
<td>DV–Learning</td>
<td>H2: There is significant difference in pre-test scores of old and new children from 2011-2016. (children with preschool experience have higher scores at the start of academic year than those who do not have that experience)</td>
</tr>
<tr>
<td>3</td>
<td>Piaget&amp; Vygotsky Children’s communication and cognitive abilities develop due to the social environment</td>
<td>DV–Learning/growth</td>
<td>H3: There is difference in the pre-test and post-test scores of children in all the 7 schools. (There is improvement in growth/learning scores across all branches in UAE)</td>
</tr>
<tr>
<td>4</td>
<td>Organisational theories/ ISO Quality framework (System approach principle)</td>
<td>DV–Learning/growth</td>
<td>H4: Growth scores of children across the ISO schools are higher than those across the Non-ISO schools</td>
</tr>
</tbody>
</table>
### Organisational theories/ISO Quality framework (System approach principle)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>IV – Preschool teaching based on ISO/Non-ISO schools</td>
<td><strong>H₅</strong>: Toddler children in the ISO-schools have higher growth than those in Non-ISO schools</td>
</tr>
<tr>
<td></td>
<td>DV – Learning/growth</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>IV – class(age) &amp; test scores based on ISO/Non-ISO schools</td>
<td><strong>H₆</strong>: Nursery age children in the ISO-school have higher growth than those in Non-ISO schools</td>
</tr>
<tr>
<td></td>
<td>DV - Learning/growth</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>IV – class(age) &amp; test scores based on ISO/Non-ISO schools</td>
<td><strong>H₇</strong>: Foundation age children in the ISO-school have higher growth than those in Non-ISO schools</td>
</tr>
<tr>
<td></td>
<td>DV - Learning/growth</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>IV leadership of school</td>
<td><strong>H₈</strong>: There is significant difference in scores under the different leaders across 7 branches</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(The leadership style of the school leader influences the children’s learning)</td>
</tr>
<tr>
<td>9</td>
<td>IV – Leadership and type of school</td>
<td><strong>H₉</strong>: Students’ in BSM E’s Non-ISO schools and BSM J’s non-ISO schools will not show equal growth</td>
</tr>
<tr>
<td></td>
<td>V Learning/growth</td>
<td>(The leadership style of the school leader may influence the children’s learning and hence quality of school)</td>
</tr>
<tr>
<td>10</td>
<td>IV – leadership and type of school</td>
<td><strong>H₁₀</strong>: The growth scores of children in ISO school (under BSM E) are higher than scores of Non-ISO school (under BSM J)</td>
</tr>
<tr>
<td></td>
<td>DV – Learning/growth</td>
<td>(Implying ISO school certification enhances quality and learning scores in children)</td>
</tr>
</tbody>
</table>
Epstein’s Parental theory

**H11**: parental demographic factors affect children growth

IV – Demographic factors representing parents cultural background

**H12**: Amount of quality time spent by parents has a positive effect on the child’s learning/ growth.

IV – Quality time spent by parent

**H13**: The mean of progress scores assigned by parents in ISO and Non-ISO groups for each skill are not rated equal.

IV – Type of school (ISO or non-ISO)

EYE curricular framework (EYFS & OFSTED)

ISO quality framework

3.6 Ethical Considerations

Ethics is not something that happens at the sampling stage or any particular stage of the research, it needs to guide the entire process of planning and while conducting the research (Mertens 2010). Due ethical considerations were adhered to, with regards to explaining the purpose and aims of the study to the stakeholders. The research was conducted in a fair and credible manner to the best efforts. The privacy, confidentiality of information, anonymity, respect of the individual rights of all the stakeholders viz students, parents, teachers and management of the school were adhered through. An informed consent from all the stakeholders was obtained before conducting the research (Creswell 2008). The academic leaders of the selected preschools were also informed about the research and requested to arrange for parents’ meeting on specific dates for interviews. These were done to ensure proper organisation and co-ordination of data collection.

To ensure informed consent, all participating parents were informed about intention of the study and their co-operation sought. Secondly, privacy and confidentiality was maintained by using codes to hide the identity of the parents if they requested. The participants were also assured that the data obtained were only used for the study and kept confidential. The researcher also ensured that data collection was carried out professionally to reduce chances of suspicion.
This was intended to improve confidence among the school authorities and parents. The interviews were also conducted by qualified proxies who volunteered to support the study, and who also signed duly filled consent and information forms. Leaders were only being investigated about their views regarding factors related to school quality, curricular and their leader’s practices which they would anyway voice out in the appraisal process. There was no coaxing or intimidation felt during the interviews and the proxy and the participant seemed very comfortable. Parents were aware of the research being conducted, and they were involved as surveys were sent out to parents of all seven schools under the study as part of intact group sampling. The children’s scores were obtained from the school through formative assessments done in naturalistic settings of the school by the teacher as per the school routine timetable in the academic year. Children were not subject to any special assessments for this research project. There is therefore a low risk study since all children’s scores were sourced by the school and no children were met or observed. The scores and the survey data are being analysed quantitatively and hence the problem of research bias has been taken care to a large extent as there is minimal influence of the researcher’s ideologies or perception on the data collection and analysis.

3.7 Role of the Researcher

The researcher works in the same site of this study and is therefore at an advantage in obtaining important documents and information. Her prior research conducted in the same organisation with regards to children learning, standardization of policies, curricular practices and leadership in the same preschool branches helped in piloting, understanding the variables better and in the in-depth analysis. This has aided in the new large-scale study to be conducted. The researcher was obliged to conduct the research in her own work organisation because of investigation requirement of ISO certification in the pre-schools. The chain is the only organisation having such a mix of preschool branches in UAE. This type of research however is described by Glesne (2011, p 42). as “Backyard research, which could be both beneficial and challenging to the researcher. The benefits include easy access, already present groundwork for rapport, and an already established familiarity with the organisation and the way that language and concepts are used, saving time and effort”.

Since this study is a predominantly quantitative one, and since the researcher is the sole investigator, Glesne argues that “such conditions and such a project ‘is extremely valuable, but it needs to be entered with heightened consciousness of potential difficulties” (p. 43). Limitations of backyard research were minimized following many approaches as advised by Creswell (2013). “Bias was overcome through several steps: proxy interviewer, the
triangulation of data; noting and reflecting on possible biases”. Interviewing different levels of leaders, ministry department head, and parents and ensuring that interviewees understood that there in the research project would not influence on them professionally or personally controlled the bias. The researcher was interested in investigating the myriad of factors surrounding learning in children, preschool certifications and quality with a view of further exploring it and integrating the wealth of experiences towards future recommendations. These can be assimilated at the institutional, local and national level to attract attention to the preschooling sector. Glesne (2006) argues that the researcher plays two roles in a study including a qualitative one: researcher as researcher and researcher as learner. The researcher’s role includes data gathering through “interviews, reading, observation, and data analysis”. The primary instrument for data collection and analysis in this type of research is the researcher herself. Data collected through inanimate inventory, questionnaire, or machines are mediated through this human instrument, the researcher (p. 19).

In a learner’s role, the researcher includes a sense of self from the beginning of the study. When the investigator acknowledges, and considers her own self bias and pre-disposition throughout the study, she becomes “a curious student who comes to learn from and with research participants” (Glesne, 2006). This appropriately positions the investigator open to new thoughts and ways of looking at the data. Glesne (1999) also points out that in considering validity issues, it is important not only to recognize the researcher’s expertise regarding the study, but also their “subjective relationship to the research topic” (p. 17).

### 3.8 Validity and Reliability

**Credibility & Trustworthiness** can also be enhanced through analytic processes such as:

**Data triangulation:** Using data from different participants or settings or at different times (Santiago-Delefosse et al., 2016). In the current study, different participants (children’s assessment instrument, parent’s perception about learning and quality, school leader’s and ministry official’s perception on quality in EYE, leadership and policies have been investigated.

**Method triangulation:** using multiple methods to collect data (Kuper, Lingard, et al., 2008; O’Brien et al., 2014; Santiago-Delefosse et al., 2016). This is a mixed method study and hence data is collected quantitatively and qualitatively.

**Participant checking:** giving participants the opportunity to comment on transcripts and emerging findings (Elliott et al., 1999; O’Brien et al., 2014; Santiago-Delefosse et al., 2016; Tong et al., 2007) Interviewees were involved in verifying the accuracy of the transcripts as
the same was emailed to them and they reconfirmed the accuracy of the contents

**Investigator triangulation:** Having two or more researchers involved in the data collection and/or analysis (Elliot et al., 1999) Peer review and supervisor debriefing were carried out throughout the research process.

**Theoretical triangulation:** Interpreting the data using two or more theoretical frameworks (Elliot et al., 1999) Ref Fig on Theoretical framework involving 5 frameworks was adapted in this study for investigation of research question (Learning theories, and OFSTED framework for assessment rubric, parenting theory and NEGP framework for assessing learning for the survey instrument, Leadership and parenting theories for interview guides

**Reliability:** Reliability analysis (Cronbach’s Alpha) was carried out on the data collected from the pilot survey instrument and the survey instrument as explained in detail previously. Checking the many facts and interpretations with a mix of parents’ database through surveying the pilot instrument, analysis of methodology and data collection with peers who could offer professional advice have all helped in de limiting and ensuring reliability of the survey instrument. The interview guides were looked at for content reliability and validity through peer-debriefing, making conceptual frameworks for the question, linking to theory and piloting the interview guide instrument

**Validity:** “Validity of an instrument must be assessed to ensure that it measures what it intends to measure and reliability of an instrument must be assessed to measure its consistency and replicability” (Cohen, Manion, and Morrison, 2011, pg. 179,199). Kothari (2004) ‘Content validity’ refers to the subjective agreement among professionals that a scale logically appears to reflect accurately what it purports to measure (Kothari (2004).

The survey instrument has been based on the NEGP dimensions and have been reviewed “by many experts and their inputs have been incorporated into the document, which in turn increases its validity (Kagan, et al., 1995, p.5). The 42 items selected in the survey were primarily based on the NHES survey and “NEGP which is considered to be the most comprehensive framework that provided a multi-dimensional and inter-correlated view of readiness” (Kagan, et al., 1995, p.3).

**Construct validity** of an instrument “ensures that the items used to measure a given construct actually measure that specific construct and do not overlap with other constructs”. (Dani, 2017, p.63). Threats to external validity were countered by usage of multiple treatments in the research design. The threats to internal validity have been countered by probing into aspects of history, maturation, regression, selection, mortality, testing of procedure and instrumentation (Mertens 2010). Bell (1999) points out that the data must be assessed critically to determine its reliability and validity. Before designing the instruments, the researcher reviewed relevant literature to get the theoretical basis of the concepts under study and piloted the instruments.
and making conceptual maps. Secondly, the instrument was presented to educational experts from British University in Dubai. The discussions held with these experts, peer de-briefing ensured that the study meaningfully and accurately measured learning of children, and the parental involvement with the children.

**Feasibility:** The feasibility of the research proposal depended largely on the researcher’s skills and knowledge to efficiently to plan the methodology, collect data, and utilize the quantitative and qualitative methods collectively. The pilot study conducted on a small scale earlier have helped in understanding the sites, subject matter and the aspects of feasibility. Discussion with peers, research and referring of articles in the same field have enhanced the researchers understanding of the subject. Multiple data collection, understanding and analysis can enhance feasibility and prove to be an exacting task (Creswell 2008).
Chapter 4: Results, Analysis and Discussion

4.1 Chapter Overview

As discussed in Chapter three, the research is sequential and was completed in phases so that data from the first phase (quantitative) could guide the work completed in the second phase (qualitative). This would build on results which would then be expanded and elaborated upon through. This chapter presents descriptive statistics about important variables and inferential statistics explaining causal relationships among different pairs of variables. In the first section of this chapter, the phase I quantitative results have been presented via descriptive statistics to identify the demographic characteristics of children and parents at the nursery schools. In the second section of this chapter the phase I inferential statistics have been used to test the various hypotheses from the quasi experiment design and surveys. In the third section of this chapter, Phase 2 qualitative results have been presented to include themes that have emerged following semi-structured interviews with selected leaders and, and interview findings from a ministry official.

Theories and literature suggest that both forms of statistics; descriptive and inferential are to be used in quantitative research to get the maximum results in the study. The descriptive tests investigated the mean, mode and median of the sample under study, whilst the inferential tests (t-tests and ANOVA etc.) tested the hypothesis. The group statistics was conducted on all age groups separately for the samples of the nursery, foundation, and upper foundation students using SPSS, excel, and graphical representations.

The t-test is used to determine whether two means are significantly different from one another. There are three types of t-test: 1. The single sample t-test, which is the simplest, determines whether the observed mean is different from a set value. 2. The independent t-test is used when comparing means from two independent groups of individuals (this test was used as the means of the progress scores were compared from the two independent nursery schools to infer which school has done better). 3. The paired t-test is used when comparing the means of two sets of observations from the same individuals or from pairs of individuals. (This test was used in the research as the scores of the pre-test and post-test of the same nursery school sample was measured to evaluate if learning and socialization has taken place.) All forms of the t-test are parametric tests and make certain assumption about the data: that they are measured at interval or ratio level, meet the assumption of homogeneity of variance and are drawn from population
that has a normal distribution. In this research, the data is collected from three different sources for each research question which is summarized in the following table.

Table 4.1: Summary of Data Collection

<table>
<thead>
<tr>
<th>Data source</th>
<th>Description of Variables</th>
<th>Underlying research question</th>
</tr>
</thead>
<tbody>
<tr>
<td>School records about assessment of children’s development, collected over the last five years.</td>
<td>Year, Class-level, old or new, pre-test scores, post-test scores</td>
<td>Research question 1</td>
</tr>
<tr>
<td>School records about children’s assessment of children’s development in ISO and Non-ISO schools</td>
<td>School type, leader name, class level, pre-test scores and post-test scores</td>
<td>Research question 2</td>
</tr>
<tr>
<td>Data collected from parents’ survey</td>
<td>Demographic variables describing social status of parents, their involvement in child’s development and their perceptions about important aspects of child development</td>
<td>Research question 3</td>
</tr>
</tbody>
</table>

4.2 Descriptive Statistics

Descriptive statistics techniques are used to describe trends and characteristics of the sample data. In this section, frequencies and measures of central tendencies of important independent variables from all data sources are presented. There are three subsections corresponding to the three research questions.

Research question 1 - The data collected from the school records assessment rubric (pre-test post-test instrument) reveals the trends in school performance as measured by the children’s growth while studying in the nursery school. Each child’s physical and cognitive development is assessed at the start of the school year, which is measured by using the standardized assessment instrument as described in the chapter 4. This development is indicated by the variable pre-test score. A similar assessment is done for each child at the end of the school year, which is indicated by the variable post-test score. The dependent variable
growth is calculated as the percent change in these two scores. The following graph shows the trends observed from 2011 to 2016. These are indicated by the mean pre-test score and mean post-test score for each school year.

4.2.1 Mean pre-test and post-test scores for all groups of children from 2011-2016 (Mankhool)

Figure: 4.1: Year wise pre-test and post-test scores

Every year, the post-test scores are higher than the respective pre-test scores, which leads to the inference that children at the nursery school are demonstrating growth. Pre-test scores are highest in the year 2013-2014, as the assessment rubric was changed in 2012 to include thorough formative assessments and to incorporate finer level of assessments based on OFSTED guidelines as discussed in chapter 3 (See Appendix 4 for old and new rubric of assessments). The children (n=934) in school are grouped into three class levels as Toddler, Nursery and Foundation. The following line-graphs illustrate differences or similarities in the pre-test and post-test scores of all students for each year and for each class level.

Figure 4.2: Assessment scores of all students in each class for the year 2011-12
The trend in 2011-12 shows growth with overall growth highest for younger toddlers. The Foundation children have shown lower growth as compared to the nursery children.

Figure 4.3: Assessment scores of all students in each class for the year 2012-13

<table>
<thead>
<tr>
<th></th>
<th>Pre-test scores</th>
<th>Post-test scores</th>
<th>Overall growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation</td>
<td>20.30</td>
<td>40.46</td>
<td>147.76</td>
</tr>
<tr>
<td>Nursery</td>
<td>15.97</td>
<td>37.87</td>
<td>291.91</td>
</tr>
<tr>
<td>Toddler</td>
<td>8.14</td>
<td>27.07</td>
<td>492.79</td>
</tr>
</tbody>
</table>

The trend in 2012-13 shows growth with overall growth highest for younger toddlers. The Foundation children have shown higher growth as compared to the nursery children.

Figure 4.4 Assessment scores of all students in each class for the year 2013-14

<table>
<thead>
<tr>
<th></th>
<th>Pre-test scores</th>
<th>Post-test scores</th>
<th>Overall growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation</td>
<td>30.33</td>
<td>87.33</td>
<td>450.39</td>
</tr>
<tr>
<td>Nursery</td>
<td>23.02</td>
<td>67.00</td>
<td>299.90</td>
</tr>
<tr>
<td>Toddler</td>
<td>4.84</td>
<td>27.56</td>
<td>568.45</td>
</tr>
</tbody>
</table>
In the year 2014-2015 nursery children have shown a higher growth in learning as compared to the toddlers or the foundation, although the difference is minimal and all three groups show similar mean scores. The foundation scores are higher than nursery, with the toddlers having highest mean scores in growth.

Figure 4.5: Assessment scores of all students in each class for the year 2014-15

<table>
<thead>
<tr>
<th></th>
<th>Pre-test scores</th>
<th>Post-test scores</th>
<th>Overall growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation</td>
<td>29.90</td>
<td>84.03</td>
<td>224.86</td>
</tr>
<tr>
<td>Nursery</td>
<td>24.19</td>
<td>82.53</td>
<td>278.78</td>
</tr>
<tr>
<td>Toddler</td>
<td>26.73</td>
<td>76.12</td>
<td>245.30</td>
</tr>
</tbody>
</table>

Figure 4.6: Assessment scores of all students in each class for the year 2015-16

<table>
<thead>
<tr>
<th></th>
<th>Pre-test scores</th>
<th>Post-test scores</th>
<th>Overall growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation</td>
<td>31.55</td>
<td>83.31</td>
<td>281.61</td>
</tr>
<tr>
<td>Nursery</td>
<td>22.01</td>
<td>53.44</td>
<td>212.22</td>
</tr>
<tr>
<td>Toddler</td>
<td>9.38</td>
<td>37.17</td>
<td>396.76</td>
</tr>
</tbody>
</table>
In 2015-16, all age groups of children have shown growth in learning, however, the toddlers have shown a very high score in growth as compared to the foundation and nursery children who show similar growth trends.

In all years the toddlers have shown substantial growth compared to the other children as the pre-test scores are substantially lower. These children come with little knowledge to be expressed during assessments, but acquire skills and learning over the course of the academic year. In the year 2012 in this instrument rubric was changed by the school, showing higher mean scores achieved by the children in that year as the formative assessments carried out were rigorous and probed finer details of the curriculum areas.

**Research question 2** - Two demographic variables in the second data of 490 children across 7 schools are school type (ISO or non-ISO), class type, and the nationality group. The distribution of students according to these two variables is presented in the following graphs.

### 4.2.2 Nationality Distribution of children

*Figure 4.7: Pie chart showing nationality distribution amongst the children of all 7 schools.*
The chart shows that the majority of the children are Asians followed by westerners.

4.2.3 Distribution of students in ISO and Non-ISO schools on various parameters

*Figure 4.8: Distribution of students in ISO and Non-ISO schools*

<table>
<thead>
<tr>
<th>Nationality Groups</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africans / others</td>
<td>11.0%</td>
</tr>
<tr>
<td>Asians</td>
<td>21.4%</td>
</tr>
<tr>
<td>Europeans</td>
<td>10.4%</td>
</tr>
<tr>
<td>Middle East / North Africa</td>
<td>11.0%</td>
</tr>
<tr>
<td>Western</td>
<td>33.5%</td>
</tr>
</tbody>
</table>

Majority (58%) of the children are in the Non-ISO schools.

*Figure 4.9: Distribution of students in different nationality groups in ISO and Non-ISO schools*
The bar graph shows that in the chosen sample, most Asian children go to ISO certified school and the majority of Western parents enrol their children in a Non-ISO school. 78% of parents in the nationality group Emirati enrolled their children in Non-ISO schools and 72% parents from the Western nationality group enrolled their children in Non-ISO schools.

This could be due to the geographical locations of the schools in UAE. Asians prefer to live in Mankhool area, and prefer to enrol their children in nearby nurseries (Mankhool which is ISO) for convenience. Emirati parents prefer to enrol their children in government work place nursery which is not ISO certified. Westerners are in other parts of UAE which house the Non-ISO schools.

Class level (Foundation, Nursery, Toddler).
Figure 4.10: Distribution of children according to the class level

Majority of the children belong to the nursery group, followed by foundation.

Figure 4.11: Distribution of children according to the schools

Mankhool is the biggest school with maximum number of children. Mankhool branch is the oldest branch in the chain, is well established and is the largest in size, hence we can see that
the maximum number of children are from this branch. Out of the above 7 schools, Sharjah, Nahyan and Al Quoz are led by one leader (referred to as BSM J) and the others are led by another leader (referred to as BSM E).

Table 4.2: Cross-tabulation between Nationality Groups and Schools

<table>
<thead>
<tr>
<th>Group name * School Name Cross tabulation</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Group name</td>
<td>School Name</td>
<td>Tota</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Africa / others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>Asian</td>
<td></td>
<td>11</td>
<td>0</td>
<td>6</td>
<td>14</td>
<td>139</td>
<td>48</td>
<td>44</td>
<td>262</td>
</tr>
<tr>
<td>Emirati</td>
<td></td>
<td>4</td>
<td>23</td>
<td>0</td>
<td>3</td>
<td>9</td>
<td>6</td>
<td>9</td>
<td>54</td>
</tr>
</tbody>
</table>

out of school name

115
88% of students in the Al Qouz School are Emiratis whereas 79% of students in Mankhool School are Asians. In Nahyan school majority of students are of Western and Middle Eastern nationality group. This could be due to the geographical locations in UAE.

### Research question 3:

#### 4.2.4 Analysis of parental demographics

**A. Number of children in the household**

The following table shows that majority of respondents reported that there are one or two children in the family (46% and 38% respectively). One respondent reported that there are 16 children in the family.

<table>
<thead>
<tr>
<th>School Name</th>
<th>Count</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle East</td>
<td>7</td>
<td>23.3</td>
<td>7.7</td>
<td>20.7</td>
<td>6.5%</td>
<td>3.4%</td>
<td>9.6%</td>
</tr>
<tr>
<td>North Africa</td>
<td>23.3</td>
<td>7.7</td>
<td>20.7</td>
<td>6.5%</td>
<td>3.4%</td>
<td>9.6%</td>
<td>16.8</td>
</tr>
<tr>
<td>Western Count</td>
<td>8</td>
<td>26.7</td>
<td>3.8</td>
<td>58.6</td>
<td>32.3</td>
<td>10.8%</td>
<td>12.3</td>
</tr>
</tbody>
</table>

One respondent reported that there are 16 children in the family.
Table 4.3: Number of children in the household

<table>
<thead>
<tr>
<th>Number of children</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>7.0</td>
</tr>
<tr>
<td>1</td>
<td>46.0</td>
</tr>
<tr>
<td>2</td>
<td>38.0</td>
</tr>
<tr>
<td>Valid</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>2.0</td>
</tr>
<tr>
<td>16</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>

B. Childcare in charge

Table 4.4: In-charge of the child’s care before nursery

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grandparents</td>
<td>17.0</td>
</tr>
<tr>
<td>Housemaid</td>
<td>16.0</td>
</tr>
<tr>
<td>Nursery</td>
<td>3.0</td>
</tr>
<tr>
<td>Self</td>
<td>33.0</td>
</tr>
<tr>
<td>Sister</td>
<td>2.0</td>
</tr>
<tr>
<td>Spouse</td>
<td>26.0</td>
</tr>
<tr>
<td>Valid</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The above table shows that 16% respondents reported that the housemaid looked after the child at home and remaining 84% children were looked after by some family member. The reason for enrolment was an open ended question. Some responses are summarised in the following table.

C. Reason for enrolment in the nursery
Table 4.5: Reason for enrolment in the nursery

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No response</td>
<td>2.0</td>
</tr>
<tr>
<td>Anticipation of my working full time, nanny can't cope with my 3 children at the same time.</td>
<td>1.0</td>
</tr>
<tr>
<td>Father passed away suddenly and she needed a social environment</td>
<td>1.0</td>
</tr>
<tr>
<td>Improve social interactions and prepare him for Kindergarten</td>
<td>1.0</td>
</tr>
<tr>
<td>No one to take care of him/her at home</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended by a relative or a friend</td>
<td>2.0</td>
</tr>
<tr>
<td>referral</td>
<td>1.0</td>
</tr>
<tr>
<td>S/he would be able to play with children his/her age</td>
<td>21.0</td>
</tr>
<tr>
<td>To Channelize his energy.</td>
<td>1.0</td>
</tr>
<tr>
<td>To prepare him/her for kindergarten</td>
<td>67.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Two respondents did not give any reason. Majority of them (67%) reported that they wanted to prepare their child for the kindergarten. The second highest group (21%) chooses to say that they would like the child to play.

D. Marital Status of Parents

Table 4.6: Marital Status of Parents

<table>
<thead>
<tr>
<th>Marital Status of parents</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>98</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>1</td>
</tr>
<tr>
<td>separated/divorced/widowed</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Majority (98%) of the parents have reported to be married at the time of this study.

E. Respondent’s educational level
Most of the respondents are either graduate or post-graduate (39% and 52% respectively) with 6 parents having a doctoral degree as reported.

**F. Working hours of parents**

Parents were asked to report their working hours. The following table shows the percent frequencies for each category of working hours. The following table shows the percent frequencies for each category of working hours. 59% parents work between 7 to 10 hours. 10% work for more than 10 hours in a day.

*Table 4.7: Working hours of parents*

<table>
<thead>
<tr>
<th>Working hours</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-6 hours</td>
<td>2.0</td>
</tr>
<tr>
<td>7-8 hours</td>
<td>29.0</td>
</tr>
<tr>
<td>9-10 hours</td>
<td>30.0</td>
</tr>
<tr>
<td>Less than 5 hours</td>
<td>3.0</td>
</tr>
<tr>
<td>More than 10 hours</td>
<td>10.0</td>
</tr>
<tr>
<td>Total</td>
<td>74.0</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**G. Nanny at home**

*Table 4.8: Nanny at home*
Parents were asked to report if they have a nanny at home to look after the child. From the chosen sample, 84% reported that there is no nanny at home as a caregiver.

H. Income category of parents

Table 4.9: Income category of parents.

<table>
<thead>
<tr>
<th>Income category</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between AED 10000-25000</td>
<td>26.0</td>
</tr>
<tr>
<td>Between AED 26000-50000</td>
<td>44.0</td>
</tr>
<tr>
<td>More than AED 50000</td>
<td>22.0</td>
</tr>
<tr>
<td>Total</td>
<td>92.0</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The majority of respondents (44%) earn between 26000 and 50000 per month.

4.2.5 Importance of ISO Quality Certificate while choosing a Pre-school

Table 4.10: Importance of ISO Quality Certificate while choosing a Pre-school

<table>
<thead>
<tr>
<th>Parent’s response</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>essential</td>
<td>10.0</td>
</tr>
<tr>
<td>not at all important</td>
<td>5.0</td>
</tr>
<tr>
<td>not very important</td>
<td>16.0</td>
</tr>
<tr>
<td>somewhat important</td>
<td>29.0</td>
</tr>
<tr>
<td>very important</td>
<td>37.0</td>
</tr>
<tr>
<td>Total</td>
<td>97.0</td>
</tr>
<tr>
<td>Missing</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Majority (79%) percent of parents believe that ISO certifications are important but remaining 21% parents think that ISO certification is not important.
4.2.6 Analysis of perceptions of parents on progress of the children on curricular skills

A. Perception of parents on school curricular skills that the child has made the most progress in

Parents were asked to provide their perceived agreement of curricular skills the child has acquired post joining the nursery. The following table 4.8 summarizes percent frequencies of each category of curricular skill. The Table below explains agreement percentages. It highlights the progress made by their child as highest to lowest in descending order of agreement for progress made. It is interesting to note that parents perceive the skills identification of colours, shapes and singing nursery rhymes as those that the children have made the most progress in. Approximately 89% of parents have rated item number 12 (Can identify colours and shapes) as the skill in which the children have made the most progress.

Table 4.11: Skills in order of the most progress made in the child

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Strongly disagree (%)</th>
<th>Somewhat disagree (%)</th>
<th>Neither agree nor disagree (%)</th>
<th>Somewhat agree (%)</th>
<th>Strongly agree (%)</th>
<th>Total percent for agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Can identify colours and shapes</td>
<td>0.9</td>
<td>4.3</td>
<td>20.9</td>
<td>67.8</td>
<td>88.7</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Can sing nursery rhymes</td>
<td>1.7</td>
<td>4.3</td>
<td>27</td>
<td>59.1</td>
<td>86.1</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Identifies common sounds and/or distinguishes different voices</td>
<td>0.9</td>
<td>0.9</td>
<td>6.1</td>
<td>33</td>
<td>53</td>
<td>86</td>
</tr>
<tr>
<td>22</td>
<td>Is eager and curious when presented with new activities</td>
<td>1.7</td>
<td>0.9</td>
<td>4.3</td>
<td>31.3</td>
<td>53.9</td>
<td>85.2</td>
</tr>
<tr>
<td>25</td>
<td>Can ask questions</td>
<td>0.9</td>
<td>3.5</td>
<td>5.2</td>
<td>33</td>
<td>50.4</td>
<td>83.4</td>
</tr>
<tr>
<td>2</td>
<td>Can kick a ball and climb the stairs</td>
<td>0.9</td>
<td>2.6</td>
<td>7.8</td>
<td>19.1</td>
<td>62.6</td>
<td>81.7</td>
</tr>
<tr>
<td>13</td>
<td>Can sort objects into categories</td>
<td>2.6</td>
<td>8.7</td>
<td>30.4</td>
<td>51.3</td>
<td>81.7</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Can use pencil, crayons and paint brushes</td>
<td>0.9</td>
<td>3.5</td>
<td>9.6</td>
<td>33.9</td>
<td>46.1</td>
<td>80</td>
</tr>
<tr>
<td>17</td>
<td>Shows interest in books</td>
<td>0.9</td>
<td>2.6</td>
<td>8.7</td>
<td>26.1</td>
<td>53.9</td>
<td>80</td>
</tr>
<tr>
<td>10</td>
<td>Can communicate in English</td>
<td>1.7</td>
<td>3.5</td>
<td>9.6</td>
<td>23.5</td>
<td>55.7</td>
<td>79.2</td>
</tr>
<tr>
<td>14</td>
<td>Knows the alphabets</td>
<td>1.7</td>
<td>2.6</td>
<td>11.3</td>
<td>28.7</td>
<td>49.6</td>
<td>78.3</td>
</tr>
<tr>
<td>1</td>
<td>Can walk and run with balance</td>
<td>2.6</td>
<td>1.7</td>
<td>11.3</td>
<td>17.4</td>
<td>60</td>
<td>77.4</td>
</tr>
<tr>
<td>21</td>
<td>Finishes a given task</td>
<td>1.7</td>
<td>1.7</td>
<td>12.2</td>
<td>43.5</td>
<td>32.2</td>
<td>75.7</td>
</tr>
<tr>
<td>7</td>
<td>Can wash his hands unaided</td>
<td>3.5</td>
<td>2.6</td>
<td>11.3</td>
<td>27.8</td>
<td>47.8</td>
<td>75.6</td>
</tr>
</tbody>
</table>
B. Parents’ perception on curricular areas in which the child has made the most progress

The differing skills mentioned as items in the survey form have been grouped together as part of the curricular areas (WRD, PSE, CRV, PD, and CLL) of the pre-school EYFS curriculum. It can be seen from the below table, that parents look at understanding of the world and personal, social and emotional development as areas that the children have made the most progress in since joining the preschool. It is also interesting to note that parents have rated all areas equally high and seem to appreciate the progress with high percentages of agreement. This equates to their perception that their children have progressed well in the pre-school.

Table 4.12: Skills grouped in curricular areas based on school curriculum

<table>
<thead>
<tr>
<th>Curriculum Name</th>
<th>Curriculum Meaning</th>
<th>Item Number</th>
<th>Total percent for agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>WRD</td>
<td>Understanding of the world</td>
<td>12, 13, 21</td>
<td>82</td>
</tr>
<tr>
<td>PSE</td>
<td>Personal Social &amp; Emotional Creative problem solving</td>
<td>6, 7, 22, 23, 24, 25</td>
<td>77</td>
</tr>
<tr>
<td>CRV</td>
<td>Creative problem solving</td>
<td>14, 20</td>
<td>76</td>
</tr>
<tr>
<td>PD</td>
<td>Physical development Communication</td>
<td>1, 2, 5, 8, 9, 3, 4, 10, 11</td>
<td>75, 74</td>
</tr>
<tr>
<td>CLL</td>
<td>Communication language literacy</td>
<td>15, 16, 17, 18, 19</td>
<td>74</td>
</tr>
</tbody>
</table>

C. Reason for lack of participation in school activities
Table 4.13: Reason for lack of participation in school activities

<table>
<thead>
<tr>
<th>Hindrance</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of conducive environment in the school</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>Lack of information about activities</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>Lack of time/ conflict with work</td>
<td>11</td>
<td>61.1</td>
</tr>
<tr>
<td>Other, please specify</td>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Lack of time and conflict with work time is the main reason for not participating in school activities. This may give note to the importance the work place nurseries have in the life of young mothers who are working.

4.2.7 Analysis of quality Time

The following survey items measure amount of time parents spend on some daily and routine activities for the following questions:

- Told him/her a story
- Read a book to your child
- Taught him/her a Nursery rhyme or played one
- Did art and crafts activities
- Played games or sports outdoors
- Played with toys or games indoors
- Taught him/her letters, numbers or words

Respondents’ options are as follows: Never / Once / Twice / Three or more time / Every day. In the survey, parents were asked to report how much time they spend with the child on different types of activities on a daily basis as well as periodically. These activities were grouped on the basis of their nature of frequency of their occurrence, skills developed by those activities and their effect on the child’s development. The details of these groups are given below.
**QTime1** indicates the average time spent on daily activities. It represents the amount of parents’ daily time spent on curricular reinforcement practices like reading, telling stories, teaching letters and numbers, and rhymes, doing art and craft, playing indoors or outdoors.

**QTime2** indicates the average time spent on socialization enhancement. This time can be defined as that in which the child is involved community engagement such as a visit to the grocery store; help in household chores, and having dinners together with the family. These are non-curricular activities but which are useful for his or her socialization.

**QTime3** indicates the average time spent on introducing the child to the world knowledge. It represents the time spent on long term activities that are not happening every day and linked to the curricular component *knowledge of the world*. During these activities the child is being exposed to museums, religious places, zoo or an aquarium, athletic activities outside of the school.

**QTime4** is the average time spent on communication with the child, teacher and school.

**QTime5** is the average amount of time actually spent in active participation in school activities.

If the score for QTime1, QTime2, QTime3, QTime4 and QTime5 is less than 4 it indicates that the parent is **not spending quality time** with the child.

If the score for QTime1, QTime2, QTime3, QTime4 and QTime5 is 4 or more then it indicates that the parent **is spending quality time** with the child.

The variable Q Category indicates two categories of parents.

**Q Category=1** indicates the group of parents who spend less quality time with their child.

**Q Category=2** indicates the group of parents who spend more quality time with their child.

A. Overall Score for quality time spent with child according to Nationality
**Table 4.14: Overall Score for quality time spent with child according to Nationality**

<table>
<thead>
<tr>
<th>Overall score for quality time spent with child * Nationality group</th>
<th>Nationality group</th>
<th>Overall score for quality time spent with child</th>
<th>Count</th>
<th>% within Overall score for quality time spent with child</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall score for quality time spent with child</td>
<td>Western</td>
<td>Asian</td>
<td>Arab</td>
<td>Total</td>
</tr>
<tr>
<td>Count</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>% within Overall score for quality time spent with child</td>
<td>14.3%</td>
<td>71.4%</td>
<td>14.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td>High score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall score for quality time spent with child</td>
<td>21</td>
<td>62</td>
<td>10</td>
<td>93</td>
</tr>
<tr>
<td>% within Overall score for quality time spent with child</td>
<td>22.6%</td>
<td>66.7%</td>
<td>10.8%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>67</td>
<td>11</td>
<td>100</td>
</tr>
<tr>
<td>% within Overall score for quality time spent with child</td>
<td>22.0%</td>
<td>67.0%</td>
<td>11.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

There was no correlation found between the nationality groups and score for quality time.

**B. Correlation of types of quality time and child’s growth**

**Table 4.15: Correlation of types of quality time and child’s growth.**

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Growth</th>
<th>QTime</th>
<th>QTime</th>
<th>QTime</th>
<th>QTime</th>
<th>QTime</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>h</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Growth Pearson Correlation</td>
<td>1</td>
<td>-.061</td>
<td>.104</td>
<td>-.003</td>
<td>-.051</td>
<td>-.071</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.588</td>
<td>.361</td>
<td>.980</td>
<td>.661</td>
<td>.534</td>
<td></td>
</tr>
</tbody>
</table>

There was no correlation between the following pairs:
- QTime1 and growth
- QTime2 and growth
- QTime3 and growth
- QTime4 and growth
- QTime5 and growth

C. Correlation of types of quality time and curricular skills

<table>
<thead>
<tr>
<th></th>
<th>QTime1</th>
<th>QTime2</th>
<th>QTime3</th>
<th>QTime4</th>
<th>QTime5</th>
</tr>
</thead>
<tbody>
<tr>
<td>QTime1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTime2</td>
<td>.359</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTime3</td>
<td>-.307</td>
<td>-.242</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTime4</td>
<td>.173</td>
<td>.511</td>
<td>-.028</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTime5</td>
<td>.383</td>
<td>.429</td>
<td>-.144</td>
<td>.762</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>PD</th>
<th>CL</th>
<th>PS</th>
<th>WR</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>QTime1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTime2</td>
<td>.072</td>
<td>.115</td>
<td>.253</td>
<td>.072</td>
<td>.48</td>
</tr>
<tr>
<td>QTime3</td>
<td>.072</td>
<td>.174</td>
<td>.018</td>
<td>.049</td>
<td>.03</td>
</tr>
<tr>
<td>QTime4</td>
<td>.115</td>
<td>.174</td>
<td>.457</td>
<td>.298</td>
<td>.03</td>
</tr>
<tr>
<td>QTime5</td>
<td>.253</td>
<td>.018</td>
<td>.457</td>
<td>.000</td>
<td>.11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>PD</th>
<th>CL</th>
<th>PS</th>
<th>WR</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>QTime1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTime2</td>
<td>.072</td>
<td>.115</td>
<td>.253</td>
<td>.072</td>
<td>.48</td>
</tr>
<tr>
<td>QTime3</td>
<td>.072</td>
<td>.174</td>
<td>.018</td>
<td>.049</td>
<td>.03</td>
</tr>
<tr>
<td>QTime4</td>
<td>.115</td>
<td>.174</td>
<td>.457</td>
<td>.298</td>
<td>.03</td>
</tr>
<tr>
<td>QTime5</td>
<td>.253</td>
<td>.018</td>
<td>.457</td>
<td>.000</td>
<td>.11</td>
</tr>
</tbody>
</table>

Table 4.16: Correlation of types of quality time and curricular skills
Quality time 3 is negatively correlated with 3 skills, PD, PSE and CR. This correlation is significant as highlighted. This leads to the inference that whilst parents who think that these skills are important are not spending enough time in taking children out to museums, aquariums, religious places which involve outdoor physical and intellectual activities.

4.2.8 Analysis of Television time with the child

A. Presence of television in the child’s bedroom

Table 4.17: Presence of television in the child’s bedroom

<table>
<thead>
<tr>
<th>Is the television kept in where child sleeps?</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>83.0</td>
</tr>
<tr>
<td>Valid</td>
<td>16.0</td>
</tr>
<tr>
<td>Total</td>
<td>99.0</td>
</tr>
</tbody>
</table>
Parents were asked to report the TV watching time and the place of TV in their house. Majority of parents (83%) opt not to keep the television in the child’s room.

Table 4.18: Cross-tabulation of Nationality group and the presence of television in the child’s room

<table>
<thead>
<tr>
<th>Nationality group</th>
<th>Is the television kept in where child sleeps?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>No</td>
</tr>
<tr>
<td>Western</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Asian</td>
<td></td>
<td>57</td>
</tr>
<tr>
<td>Arab</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>83</td>
</tr>
</tbody>
</table>

In the survey data, there are not many respondents in the nationality group of African, Emiratis and other Arab nationals; therefore, the respondents are grouped into three main nationality groups.

27.3% Arab parents reported that they keep the TV in child’s room.

B. Time spent by the child in watching TV

Parents reported the time spent by the child in watching TV. The distribution of TV time according to the nationality groups is summarized in the following table. The table also shows the total TV time of the family and the time spent by the child. If both times are same, it could probably an indicator of the fact that the child is allowed to watch the TV with the family.
Table 4.19: Television time for the family and the child based on nationality

<table>
<thead>
<tr>
<th>Nationality group</th>
<th>For how many hours does your child watch television each day?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 to 2 hours</td>
<td>3 to 4 hours</td>
</tr>
<tr>
<td>Western</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Asian</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Arab</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
For how many hours is the television on in your home each day?

<table>
<thead>
<tr>
<th>Hours</th>
<th>1-2 hours</th>
<th>3-4 hours</th>
<th>5-6 hours</th>
<th>More than 6 hours</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>33</td>
<td>23</td>
<td>8</td>
<td>3</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>36</td>
<td>12</td>
<td>4</td>
<td>99</td>
</tr>
</tbody>
</table>

Most parents reported that the TV is on for between 1 to 2 hours in the home, and the child is allowed to watch the TV while it is on, which indicates that the child is allowed to watch TV with other family members between 1 and 2 hours.

### 4.3 Inferential Statistics

“Inferential statistics strive to make inferences and predictions based on the data gathered. They infer or predict population parameters or outcomes from simple measures and use information from a sample to reach conclusions about a population based on probability. Inferential statistics are more valuable for researchers and typically these are more powerful” (Cohen et. al, 2011, p. 606). In this section, the null hypothesis is denoted by $H_0$ and the alternate hypothesis is denoted by $H_A$.

**Research Question 1**: Is there a significant improvement in learning of the children at the preschools in UAE?

#### 4.3.1 Longitudinal trend analysis of growth/learning scores at the pre-school Mankhool (n=934)

In order to investigate longitudinal trends of growth/learning scores of children who attended pre-school and those who did not over five years, independent sample ‘t’ tests were performed, the null and alternate hypotheses are stated as follows.

$H_0$: There is no improvement in growth/learning scores from 2011-2016 of one branch (ISO certified)
**H\text{Al}:** There is improvement in growth/learning scores from 2011-2016 of one branch (ISO certified)

The result of One-way ANOVA test supports the alternate hypothesis as there is statistical evidence **to reject the null hypothesis**. (P-value = 0.025)

*Table 4.20: Longitudinal Analysis for 5 years’ time span (2011-2016)*

<table>
<thead>
<tr>
<th>Report</th>
<th>Growth</th>
<th>Year1</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2011-12</td>
<td>283.26</td>
<td>377.80</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2012-13</td>
<td>294.60</td>
<td>428.82</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2013-14</td>
<td>335.12</td>
<td>386.83</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2014-15</td>
<td>260.40</td>
<td>240.89</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2015-16</td>
<td>236.30</td>
<td>281.66</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>279.97</td>
<td>346.27</td>
</tr>
</tbody>
</table>

*Table 4.21: One-way ANOVA test results indicate that the differences in the mean score are significant.*

<table>
<thead>
<tr>
<th>ANOVA</th>
<th>Growth</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Between Groups</td>
<td>1459688.039</td>
<td>3</td>
<td>486562.680</td>
<td>3.128</td>
<td>.025</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>89911750.550</td>
<td>578</td>
<td>155556.662</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>91371438.590</td>
<td>581</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The null hypothesis was rejected implying that learning has happened in the preschools over all the 5 years (2011-2016). Learning can also happen in the children due to parental teaching and home learning. Studies were carried out to see the difference in the skill of existing preschool children and new children at the start of the academic year who may not have been taught in pre-schools previously.

**4.3.2 Longitudinal trend analysis of pre-test scores of old and new children at the preschool Mankhool**
To investigate longitudinal trends of pre-test scores of children who attended pre-school and those who did not over five years, independent sample ‘t’ tests were performed, the null and alternate hypotheses are stated as follows.

**H₀:** There is no difference in pre-test scores of old and new children from 2011-2016.

**H₁:** There is difference in pre-test scores of old and new children from 2011-2016.

The result of independent samples t-test support the alternate hypothesis as there is statistical evidence to reject the null hypothesis. (P-value=0.0)

**Table 4.22: Summary of differences in the pre-test scores over five years**

<table>
<thead>
<tr>
<th>Year</th>
<th>Difference in the pre-test scores of New and Old students</th>
<th>Sig</th>
<th>Is it significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2012</td>
<td>-6.65</td>
<td>0.00</td>
<td>Yes</td>
</tr>
<tr>
<td>2012-2013</td>
<td>-8.69</td>
<td>0.00</td>
<td>Yes</td>
</tr>
<tr>
<td>2013-2014</td>
<td>-9.81</td>
<td>0.00</td>
<td>Yes</td>
</tr>
<tr>
<td>2014-2015</td>
<td>-4.87</td>
<td>0.00</td>
<td>Yes</td>
</tr>
<tr>
<td>2015-2016</td>
<td>-7.72</td>
<td>0.00</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The above table clearly shows that the pre-test scores of the new students (not attended the preschool) are significantly lower than the old students (those who attended the preschool). This indicates that old students who have pre-school learning have better skills over home-based learning as per the six areas of the assessment rubric (ref Appendix 4 Rubric).

**Year 2011-2012**

**Table 4.23: Group Statistics, mean scores of students who attended pre-school and who did not**

<table>
<thead>
<tr>
<th>Old / New students</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test score</td>
<td>82</td>
<td>13.45</td>
<td>9.42</td>
</tr>
<tr>
<td></td>
<td>Attended preschool</td>
<td>Did not attend preschool</td>
<td>Growth</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------------</td>
<td>--------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Post-test score</td>
<td>103</td>
<td>82</td>
<td>103</td>
</tr>
<tr>
<td></td>
<td>20.10</td>
<td>38.17</td>
<td>44.65</td>
</tr>
<tr>
<td></td>
<td>10.75</td>
<td>11.33</td>
<td>10.90</td>
</tr>
</tbody>
</table>

The mean of pre-test scores of new students who did not attend pre-school is lower than the old students. The below table shows that the mean pre-test and post-test scores of students who attended the preschool are higher than those who did not. The following output of independent samples t-test shows that the above difference in mean scores is significant for all the 5 years as seen in the below tables (2011-2016).

Table 4.24: Output of independent samples t-test for 2011-12

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Pre-test scores</td>
<td>Equal variances assumed</td>
<td>2.42</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>4.41</td>
</tr>
<tr>
<td>Post-test scores</td>
<td>Equal variances assumed</td>
<td>.74</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>3.95</td>
</tr>
<tr>
<td>Growth</td>
<td>Equal variances assumed</td>
<td>7.87</td>
</tr>
</tbody>
</table>
Findings: Difference between the mean scores of pre-test, post-test and overall growth of old and new students is significant. Old children have higher growth.

Table 4.25: Mean scores for pre-test and post-test for the year 2012-13

<table>
<thead>
<tr>
<th></th>
<th>Old and New</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test scores</td>
<td>Did not attend preschool</td>
<td>87</td>
<td>12.44</td>
<td>8.88</td>
</tr>
<tr>
<td></td>
<td>Attended preschool</td>
<td>88</td>
<td>21.13</td>
<td>10.21</td>
</tr>
<tr>
<td>Post-test scores</td>
<td>Did not attend preschool</td>
<td>87</td>
<td>38.78</td>
<td>11.42</td>
</tr>
<tr>
<td></td>
<td>Attended preschool</td>
<td>88</td>
<td>41.47</td>
<td>11.90</td>
</tr>
<tr>
<td>Growth</td>
<td>Did not attend preschool</td>
<td>87</td>
<td>431.69</td>
<td>529.91</td>
</tr>
<tr>
<td></td>
<td>Attended preschool</td>
<td>88</td>
<td>159.05</td>
<td>229.83</td>
</tr>
</tbody>
</table>

Table 4.26: Output of independent samples t-test for 2012-13

Independent Samples Test

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Pre-test scores</td>
<td>Equal variances assumed</td>
<td>1.43</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Post-test scores</td>
<td>Equal variances assumed</td>
<td>.03</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
</tbody>
</table>
Findings: Differences between the mean scores of pre-test and growth of old and new students are significant but the difference between the mean scores of post-test is not significant. It indicates that all students attain the same level of growth irrespective of their prior knowledge. The pre-schools have ensured that the new students have ‘covered up’ in skills and achieved the same level of growth as old students.

Table 4.27: Mean scores for pre-test and post-test for the year 2013-14

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>Old and New</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test scores</td>
<td>Did not attend preschool</td>
<td>92</td>
<td>28.02</td>
<td>15.41</td>
</tr>
<tr>
<td></td>
<td>Attended preschool</td>
<td>77</td>
<td>37.83</td>
<td>20.27</td>
</tr>
<tr>
<td>Post-test scores</td>
<td>Did not attend preschool</td>
<td>92</td>
<td>94.24</td>
<td>35.75</td>
</tr>
<tr>
<td></td>
<td>Attended preschool</td>
<td>77</td>
<td>115.61</td>
<td>34.37</td>
</tr>
<tr>
<td>Growth</td>
<td>Did not attend preschool</td>
<td>92</td>
<td>301.22</td>
<td>181.18</td>
</tr>
<tr>
<td></td>
<td>Attended preschool</td>
<td>77</td>
<td>375.61</td>
<td>537.04</td>
</tr>
</tbody>
</table>

Table 4.28: Output of independent samples t-test for 2013-14

<table>
<thead>
<tr>
<th>Independent Samples Test</th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances</td>
<td>-</td>
<td>1.52</td>
</tr>
<tr>
<td>not assumed</td>
<td>172.85</td>
<td>.13</td>
</tr>
<tr>
<td>Equal variances</td>
<td>19.48</td>
<td>.00</td>
</tr>
<tr>
<td>assumed</td>
<td>4.41</td>
<td>116.96</td>
</tr>
<tr>
<td>Equal variances</td>
<td>4.41</td>
<td>116.96</td>
</tr>
<tr>
<td>not assumed</td>
<td>4.41</td>
<td>116.96</td>
</tr>
</tbody>
</table>
Pre-test scores

<table>
<thead>
<tr>
<th>Equal variances</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>tdf</th>
<th>p</th>
<th>F</th>
<th>Std. Error of Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7.27</td>
<td>.01</td>
<td>3.57</td>
<td>.00</td>
<td>-9.81</td>
<td></td>
</tr>
</tbody>
</table>

Post-test scores

<table>
<thead>
<tr>
<th>Equal variances</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>tdf</th>
<th>p</th>
<th>F</th>
<th>Std. Error of Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.07</td>
<td>.30</td>
<td>3.94</td>
<td>.00</td>
<td>-21.37</td>
<td></td>
</tr>
</tbody>
</table>

Growth

<table>
<thead>
<tr>
<th>Equal variances</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>tdf</th>
<th>p</th>
<th>F</th>
<th>Std. Error of Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9.27</td>
<td>.00</td>
<td>1.25</td>
<td>.21</td>
<td>-74.39</td>
<td></td>
</tr>
</tbody>
</table>

Findings: Difference between the mean scores of pre-test and post-test scores of old and new students are significant but the difference between the mean scores of growth is not significant. It indicates that all students’ growth rates are uniform irrespective of their prior knowledge and according to their ability. The pre-school curriculum could have played a crucial role in growth rates.

Table 4.29: Mean scores for pre-test and post-test for the year 2014-15

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>Old and New</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test scores</td>
<td>Did not attend preschool</td>
<td>134</td>
<td>20.40</td>
<td>14.93</td>
</tr>
<tr>
<td></td>
<td>Attended preschool</td>
<td>80</td>
<td>25.26</td>
<td>10.58</td>
</tr>
<tr>
<td>Post-test scores</td>
<td>Did not attend preschool</td>
<td>134</td>
<td>55.90</td>
<td>23.47</td>
</tr>
</tbody>
</table>
Growth

| Attended preschool | 80 | 70.49 | 20.37 |
| Did not attend preschool | 134 | 288.42 | 284.68 |
| Attended preschool | 80 | 213.46 | 128.29 |

*Table 4.30: Output of independent samples t-test for the year 2014-15*

**Independent Samples Test**

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
<td>df</td>
</tr>
<tr>
<td>Pre-test scores</td>
<td>Equal variances</td>
<td>4.77</td>
<td>.03</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Equal variances</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equal variances</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-test scores</td>
<td>Equal variances</td>
<td>3.68</td>
<td>.06</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Equal variances</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equal variances</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growth</td>
<td>Equal variances</td>
<td>19.28</td>
<td>.00</td>
<td>2.22</td>
</tr>
<tr>
<td></td>
<td>Equal variances</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Findings: Difference between the mean scores of pre-test, post-test and growth of old and new students are significant.

*Table 4.31: Mean scores for pre-test and post-test for the year 2015-16*
### Group Statistics

<table>
<thead>
<tr>
<th></th>
<th>Old and New</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-test scores</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not attend preschool</td>
<td>81</td>
<td>23.68</td>
<td>16.28</td>
<td></td>
</tr>
<tr>
<td>Attended preschool</td>
<td>109</td>
<td>31.40</td>
<td>17.42</td>
<td></td>
</tr>
<tr>
<td><strong>Post-test scores</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not attend preschool</td>
<td>81</td>
<td>55.04</td>
<td>35.74</td>
<td></td>
</tr>
<tr>
<td>Attended preschool</td>
<td>109</td>
<td>76.61</td>
<td>30.84</td>
<td></td>
</tr>
<tr>
<td><strong>Growth</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not attend preschool</td>
<td>81</td>
<td>256.48</td>
<td>280.10</td>
<td></td>
</tr>
<tr>
<td>Attended preschool</td>
<td>109</td>
<td>221.31</td>
<td>283.17</td>
<td></td>
</tr>
</tbody>
</table>

*Table 4.32: Output of independent samples t-test for 2015-16*

#### Independent Samples Test

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Pre-test scores Equal variances assumed</td>
<td>.51</td>
<td>.48</td>
<td>–</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>.51</td>
<td>.48</td>
<td>–</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>1.22</td>
<td>.27</td>
<td>–</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>1.22</td>
<td>.27</td>
<td>–</td>
</tr>
<tr>
<td>Post-test scores Equal variances assumed</td>
<td>.96</td>
<td>.33</td>
<td>.85</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>.96</td>
<td>.33</td>
<td>.85</td>
</tr>
</tbody>
</table>
Equal variances not assumed

Findings: Difference between the mean scores of pre-test, post-test and growth of old and new students are significant but the difference between the mean scores of growth scores is not significant. The old students every year have shown high post-test scores too indicating higher skill development at the end of the academic year. This trend has been seen for 5 years in the above tables.

However, the students who did not attend the preschool showed a higher growth than those who attended. This higher growth indicator is due to their lower pre-test scores. It indicates that the school helped those students to attain the same level of skills as those who attended the preschool.

*Table 4.33: Comparison of growth scores of new and old students in each year*

<table>
<thead>
<tr>
<th>Report</th>
<th>Year</th>
<th>Mean</th>
<th>Old and New</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year 1</td>
<td></td>
<td>Did not attend preschool</td>
<td>365.48</td>
</tr>
<tr>
<td></td>
<td>Did not attend preschool</td>
<td>2011-12</td>
<td>431.69</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attended preschool</td>
<td>2012-13</td>
<td>159.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Did not attend preschool</td>
<td>2013-14</td>
<td>301.22</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attended preschool</td>
<td>2014-15</td>
<td>375.61</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Did not attend preschool</td>
<td>2015-16</td>
<td>288.42</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attended preschool</td>
<td></td>
<td>256.48</td>
<td></td>
</tr>
</tbody>
</table>

The following output of ANOVA test shows that the difference is statistically significant.

*Table 4.34: Annova Table*

**ANOVA Table**
A summary of differences in the mean scores of old and new students in each year is given in the following table. The table also indicates if this difference is statistically significant.

Table 4.35: Summary of difference in growth scores of old and new students each year

<table>
<thead>
<tr>
<th>Year</th>
<th>Difference in the growth scores of Old and New students</th>
<th>Sig</th>
<th>Is it significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2012</td>
<td>52.63</td>
<td>0.72</td>
<td>No</td>
</tr>
<tr>
<td>2012-2013</td>
<td>178.27</td>
<td>0.00</td>
<td>Yes</td>
</tr>
<tr>
<td>2013-2014</td>
<td>77.89</td>
<td>0.33</td>
<td>No</td>
</tr>
<tr>
<td>2014-2015</td>
<td>69.15</td>
<td>0.01</td>
<td>Yes</td>
</tr>
<tr>
<td>2015-2016</td>
<td>53.31</td>
<td>0.15</td>
<td>No</td>
</tr>
</tbody>
</table>

The above table shows the difference in growth trends of old and new students is not consistent over the 5 years. It indicates that the school provides equal opportunity of learning to all students and hence new students show similar growth as the old ones over the academic year as growth is measured at the end of the year. This can point out that the preschool program is effective. The following table indicates the high mean scores for the pre-test scores of existing preschool children as compared to new. This is high every year and the difference as explained in results of hypothesis 2 is significant. This highlights the importance of pre-schooling.
Table 4.36: Comparison of pre-test scores of new and old students in each year

<table>
<thead>
<tr>
<th>Report</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>Old and New Pre-test scores</td>
</tr>
<tr>
<td></td>
<td>Did not attend preschool 13.45</td>
</tr>
<tr>
<td>2011-12</td>
<td>Attended preschool 20.10</td>
</tr>
<tr>
<td></td>
<td>Did not attend preschool 12.44</td>
</tr>
<tr>
<td>2012-13</td>
<td>Attended preschool 21.13</td>
</tr>
<tr>
<td></td>
<td>Did not attend preschool 28.02</td>
</tr>
<tr>
<td>2013-14</td>
<td>Attended preschool 37.83</td>
</tr>
<tr>
<td></td>
<td>Did not attend preschool 20.40</td>
</tr>
<tr>
<td>2014-15</td>
<td>Attended preschool 25.26</td>
</tr>
<tr>
<td></td>
<td>Did not attend preschool 23.68</td>
</tr>
<tr>
<td>2015-16</td>
<td>Attended preschool 31.40</td>
</tr>
</tbody>
</table>

Research Question 2:

4.3.3 Comparison of students’ growth in ISO and Non-ISO schools

Is there a significant difference in the learning of children between the ISO accredited and non-accredited preschools? Is there any impact of leadership of the schools on quality of learning?

To investigate if the children in the school are getting opportunities to develop, paired-sample t-test was applied. The purpose of application of this test is to examine if the difference in the pre-test and post-test scores of each child is significant.

H03: There is no difference in the pre-test and post-test scores of children in all the 7 schools, Hence, there is no improvement in growth/learning scores.

Hₐ3: There is difference in the pre-test and post-test scores of children in all the 7 schools, Hence, there is no improvement in growth/learning scores.

The result of independent samples t-test support the alternate hypothesis as there is statistical evidence to reject the null hypothesis. (t=-44.55, p-value=0.0)

Table 4.37: Growth in learning of all students in all ISO and Non-ISO schools
**Paired Samples Test**

Paired Differences

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paired Differences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test score</td>
<td>-</td>
<td>39.1</td>
<td>26.87</td>
<td>-.88</td>
<td>93</td>
</tr>
<tr>
<td>Post-test score</td>
<td>9</td>
<td></td>
<td></td>
<td>40.91</td>
<td>44.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.00</td>
</tr>
</tbody>
</table>

The above table shows that the post test scores are significantly higher than the pre test scores across all schools. This indicates that learning has happened across all branches. This result supports RQ 1.

The following table of descriptive statistics shows the mean growth scores for students in both the groups. The mean growth scores of students in the ISO schools are higher than the growth scores of students in the Non-ISO schools. The mean growth in ISO schools is 358% while in Non-ISO schools it is 347%.

*Table 4.38: Mean growth scores of students of both groups (ISO and Non-ISO)*

<table>
<thead>
<tr>
<th>%Growth</th>
<th>ISO/Non ISO</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO</td>
<td>358</td>
<td>207</td>
<td>384</td>
<td></td>
</tr>
<tr>
<td>Non ISO</td>
<td>347</td>
<td>283</td>
<td>655</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>352</td>
<td>490</td>
<td>557</td>
<td></td>
</tr>
</tbody>
</table>
4.3.4 Difference of growth rate between ISO and Non-ISO school groups

To investigate if the students in ISO group schools show a higher growth rate than the Non-ISO group, the null and alternate hypotheses are stated as follows.

**H₀⁴:** Quality standards of a nursery school do not affect students’ overall growth.

**Hₐ⁴:** Quality standards of a nursery school affect students’ overall growth.

The result of independent samples t-test below shows that the difference in the mean growth scores between ISO and Non-ISO schools is not statistically significant. (t=7.59, p-value=0.8). **The null hypothesis can be retained.** This can be explored further in segmenting the data of the school class-wise and data segmented as per the leader leading the individual schools to probe the effect of ISO quality certification.

*Table 4.39: Output of independent samples t-test*

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Means</th>
<th>Equality of F</th>
<th>Sig.</th>
<th>t</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>%Growth</td>
<td>Equal variances assumed</td>
<td></td>
<td>8.48</td>
<td>.00</td>
<td>.21</td>
<td>488.00</td>
<td>.83</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
<td>.23</td>
<td>468.04</td>
<td>.82</td>
<td></td>
</tr>
</tbody>
</table>

**A. Comparison of growth of toddler year students in ISO and Non-ISO schools**

**H₀⁵:** Toddlers in the ISO-school and Non-ISO schools show equal growth.

**Hₐ⁵:** Toddlers in the ISO-school show a higher growth than the toddlers in the Non-ISO schools.

The result of independent samples t-test support the alternate hypothesis as there is statistical evidence to reject the null hypothesis. (t=2.56, p-value=0.01). The toddler age group of
children have shown higher learning in the ISO quality certified schools.

Table 4.40: Levene’s Test for Equality of Variances

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances</td>
<td>.849</td>
<td>.358</td>
</tr>
<tr>
<td>%Growth not assumed</td>
<td>2.56</td>
<td>225.66</td>
</tr>
</tbody>
</table>

B. Comparison of growth of Nursery year students in ISO and Non-ISO schools

H_{06}: Nursery level students in the ISO-school and Non-ISO schools show equal growth.

H_{A6}: Nursery level students in the ISO-school show a higher growth than the toddlers in the Non-ISO schools.

The result of independent samples t-test support the alternate hypothesis as there is statistical evidence to reject the null hypothesis. (t=2.38, p-value=0.01). The nursery age group of children have shown higher learning in the ISO quality certified schools.

Table 4.41: Output of independent sample ‘t’ test

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances</td>
<td>.849</td>
<td>.358</td>
</tr>
<tr>
<td>%Growth not assumed</td>
<td>2.56</td>
<td>225.66</td>
</tr>
</tbody>
</table>
C. Comparison of growth of foundation year students in ISO and Non-ISO schools

**H₀**: Foundation level students in the ISO-school and Non-ISO schools show equal growth.

**H₁**: Foundation level students in the ISO-school show a higher growth than the foundation in the Non-ISO schools.

The result of independent samples t-test support the null hypothesis as there is no statistical evidence to reject the null hypothesis. (t=-1.13, p-value=0.26). **The null hypothesis can be retained.**

This may imply that the foundation year children (aged 3-5 years) show equal learning and development in the ISO quality certified and non-certified school. There is a possibility that the school curriculum and learning methodologies that the children acquire in the previous year at nursery level enhances their skills leading to equal growth.

Table 4.42: Comparison of growth of foundation year students in ISO and Non-ISO schools

<table>
<thead>
<tr>
<th>%Growth</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>Sig.</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances</td>
<td>F: 6.271, Sig: 0.013</td>
<td>t: 1.13, df: 156.00, Sig: 0.26</td>
<td>-</td>
<td>1.13</td>
<td></td>
<td></td>
<td>-135.67</td>
</tr>
<tr>
<td>Equal variances</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

145
4.3.5 Comparing leadership effect on learning

Comparison of overall growth of children studying in two types of schools, irrespective of their class-levels is done using independent sample t-test, to examine the overall impact of ISO management on children development (Ref table 4.34). As mentioned above, the difference in the learning happening at the two types of schools is not statistically significant \((p=0.83)\), therefore, a detail investigation was done to determine which factor of ISO quality management can affect the learning outcomes, in particular, the effect of the leadership styles of the school leader were examined. The two groups were led by 2 different leaders BSM E and BSM J, with both leaders trained for quality training on school curriculum and effectiveness. Difference between their achievements was revealed by comparison. The following tables look at analysing the data for growth scores leader-wise and school-wise to answer RQ2.

Table 4.43: Mean scores of learning between groups of school led by BSM J and BSM E

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>School Leader</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>%Growth</td>
<td>J</td>
<td>129</td>
<td>251.62</td>
<td>490.53</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>361</td>
<td>387.74</td>
<td>574.75</td>
</tr>
</tbody>
</table>

Children in E’s school show a higher growth than the children in J’s school. The following table describes the mean scores of the two schools.

\(H_0\): The leadership style of the school leader has no effect on the children’s learning.

\(H_A\): The children in two schools led by two different leaders, exhibit different growth.

It can be seen from the above table, that the difference is statistically significant \((t=-2.40, \ p=0.01)\). The null hypothesis can be rejected.

There is statistical evidence to state that the children in BSM E’s school exhibit higher growth than the children in BSM J’s school.
Table 4.44: Levene’s Test for Equality of Variances

<table>
<thead>
<tr>
<th>Equal variances assumed</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levene's Test for Equality of Variances</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances</td>
<td>.12</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-</td>
</tr>
</tbody>
</table>

As the differing leadership between the schools has shown significant difference in learning growth of the pre-schoolers, further investigation was done to segment data school-wise

Table 4.45: Mean scores of pre-tests, post-test and overall growth in all schools

<table>
<thead>
<tr>
<th>N</th>
<th>Mean Growth</th>
<th>Mean Start (Pre-test scores)</th>
<th>Mean Finish (Post-test scores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al Nahyan</td>
<td>30</td>
<td>122.79</td>
<td>19.80</td>
</tr>
<tr>
<td>Al Qouz Dewa</td>
<td>26</td>
<td>945.05</td>
<td>5.23</td>
</tr>
<tr>
<td>JBR</td>
<td>29</td>
<td>294.22</td>
<td>43.34</td>
</tr>
<tr>
<td>Jumeira</td>
<td>31</td>
<td>234.77</td>
<td>12.90</td>
</tr>
<tr>
<td>Mankhool</td>
<td>176</td>
<td>379.79</td>
<td>30.40</td>
</tr>
<tr>
<td>Sharjah</td>
<td>73</td>
<td>57.58</td>
<td>73.04</td>
</tr>
<tr>
<td>Silicon</td>
<td>125</td>
<td>458.59</td>
<td>32.33</td>
</tr>
<tr>
<td>Total</td>
<td>490</td>
<td>351.91</td>
<td>34.91</td>
</tr>
</tbody>
</table>

Mankhool, Silicon, JBR and Jumeira are led by BSM E. Nahyan, Al Quoz and Sharjah are led by BSM J. The mean scores as seen above of Sharjah is very low and Al Quoz is very
high as compared to other school. As can be seen in the below graphs these schools are considered as outliers and hence these schools have been omitted from further investigation.

*Figure 4.13: Plots showing pre-test and post-test scores in all schools*

Looking at the above graphs, we see that Al Quoz and Sharjah data on pre-test is extreme low and high respectively, after the outliers were removed and significance of difference in learning between the ISO group of preschools and Non-ISO group was again checked through the one way annova test. The result proved that there was no difference as in the previous result of Hypothesis 4 for the learning in ISO and Non-ISO schools. In the above discussion when we compared the effect of two leaders, there was one conflicting factor. The leader BSM E was running both ISO and Non-ISO school. The results seen above could be due to leadership setting. Further tests could now be carried out by selecting the school with differing types (ISO and Non-ISO) and correlating with leadership.

A. Comparison of leadership when both school groups are non-ISO

*Table 4.46: Non-ISO Schools*

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>Leader</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>J- Non ISO</td>
<td>129</td>
<td>251.6188</td>
<td>490.53279</td>
<td>43.18900</td>
</tr>
<tr>
<td>%Growth</td>
<td>E- Non ISO</td>
<td>154</td>
<td>427.6333</td>
<td>758.58398</td>
<td>61.12844</td>
</tr>
</tbody>
</table>

Though the leader E is leading a Non-ISO school, children in her school have a higher growth
compared to children from another Non-ISO school. We aim to investigate if the difference is statistically significant. Independent samples t-test was applied to examine this hypothesis.

**H₀₉**: Students’ in E’s Non-ISO school and J’s Non-ISO school show equal growth.

**Hₐ₀₉**: Students’ in E’s school show a higher growth than the students in J’s school.

The results indicate that **the null hypothesis can be rejected**. \(t=2.352, \ p\text{-value}=0.019\) (Ref Appendix). The results implied that BSM E’s leadership is more effective than BSM J’s.

**B. Comparison of children’s growth ISO schools and Non-ISO schools**

*Table 4.47: Growth Comparison of BSM J (non-ISO) and BSM E (ISO) headed schools.*

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>Leader</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>%Growth</td>
<td>E- ISO</td>
<td>207</td>
<td>358.0682</td>
<td>384.46404</td>
<td>26.72210</td>
</tr>
<tr>
<td></td>
<td>J- Non ISO</td>
<td>129</td>
<td>251.6188</td>
<td>490.53279</td>
<td>43.18900</td>
</tr>
</tbody>
</table>

**H₀₁₀**: Students’ in BSM E’s ISO-school and BSM J’s Non-ISO school show equal growth.

**Hₐ₁₀**: Students’ in E’s school show a higher growth than the students in J’s school.

The results indicate that **the null hypothesis can be rejected**. \(t=2.096, \ p\text{-value}=0.037\) (Leader 1= J; Leader 2= E)

These results clearly state that ISO school certification has made an impact on the learning scores of the group of children in these schools. The scores are significantly higher which point out that quality certifications impact learning in pre-schools.

For further validity, the study looked at differing leaderships in a school setting which is of different type to explore the growth in children of ISO and Non-ISO pre-schools. Omitting the outliers, the only non-ISO school left Nahyan (Non ISO) under BSM J and the Mankhool School (ISO) under BSM E was chosen for investigation to answer RQ2.
C. Comparison of learning scores in ISO school M and Non-ISO school N

Table 4.48: Comparison of pre-test, post-test and growth scores in the two types of schools Year 2011-2012

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>School</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test scores</td>
<td>Nahyan (Non-ISO)</td>
<td>38</td>
<td>20.26</td>
</tr>
<tr>
<td></td>
<td>Mankhool (ISO)</td>
<td>187</td>
<td>16.97</td>
</tr>
<tr>
<td>Post-test scores</td>
<td>Nahyan (Non-ISO)</td>
<td>38</td>
<td>42.05</td>
</tr>
<tr>
<td></td>
<td>Mankhool (ISO)</td>
<td>187</td>
<td>41.64</td>
</tr>
<tr>
<td>Growth</td>
<td>Nahyan (Non-ISO)</td>
<td>38</td>
<td>122.34</td>
</tr>
<tr>
<td></td>
<td>Mankhool (ISO)</td>
<td>185</td>
<td>283.26</td>
</tr>
</tbody>
</table>

It can be seen from the above table that the overall growth scores of children in the ISO school are higher but their pre-test and post-test scores are lower than those in the Non-ISO school. Statistical significance of the difference is examined using independent sample t-test. The following null and alternate hypotheses are defined for each of the three variables pre-test, post-test and growth.

(A) H₀₁₁: The mean of pre-test scores in two types of schools do not differ significantly.

H₁₁: The mean pre-test scores in two types of schools are different.

(B) H₀₁₂: The mean of post-test scores in two types of schools do not differ significantly.

H₁₂: The mean post-test scores in two types of schools are different.

(C) H₀₁₃: The mean of growth scores in two types of schools do not differ significantly.

H₁₃: The mean growth scores in two types of schools are different.

The following table describes the results of independent samples t-test for all three hypotheses.

Table 4.49: Independent Samples Test for 2011-12

<table>
<thead>
<tr>
<th>Levene's Test for</th>
<th>Equality of t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variances</td>
<td></td>
</tr>
</tbody>
</table>

150
The null hypotheses (A) and (B) cannot be rejected as the p-values >0.05, but the null hypothesis (C) can be rejected as the p-value=0.01. This implies that the mean scores of pre-test and post-test are not different but the growth scores in the Mankhool (ISO) schools are higher than the mean scores in the Non-ISO school in the year 2011-2012. Similar analysis was carried out by setting three hypotheses to test the significance of the difference in the mean pre-test, post-test and growth scores in the year 2012-2013.

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>Sig.</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-test scores</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>12.26</td>
<td>.00</td>
<td>1.79</td>
<td>223.00</td>
<td>.07</td>
<td>3.30</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>2.24</td>
<td>70.46</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.35</td>
<td>.56</td>
<td>.21</td>
<td>223.00</td>
<td>.84</td>
<td>.42</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>.22</td>
<td>57.37</td>
<td>.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post-test scores</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>13.75</td>
<td>.00</td>
<td>-</td>
<td>221.00</td>
<td>.01</td>
<td>-160.92</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>5.45</td>
<td>216.63</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Growth</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The null hypotheses (A) and (B) cannot be rejected as the p-values >0.05, but the null hypothesis (C) can be rejected as the p-value=0.01. This implies that the mean scores of pre-test and post-test are not different but the growth scores in the Mankhool (ISO) schools are higher than the mean scores in the Non-ISO school in the year 2011-2012. Similar analysis was carried out by setting three hypotheses to test the significance of the difference in the mean pre-test, post-test and growth scores in the year 2012-2013.

Table 4.50: Comparison of pre-test, post-test and growth scores in the two types of schools Year 2012-2013

<table>
<thead>
<tr>
<th>School</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-test scores</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nahyan(Non-ISO)</td>
<td>85</td>
<td>15.26</td>
</tr>
<tr>
<td>Mankhool (ISO)</td>
<td>192</td>
<td>15.32</td>
</tr>
<tr>
<td><strong>Post-test scores</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nahyan(Non-ISO)</td>
<td>85</td>
<td>38.36</td>
</tr>
<tr>
<td>Mankhool (ISO)</td>
<td>192</td>
<td>38.65</td>
</tr>
</tbody>
</table>
The results of independent samples t-test indicate that the difference in the mean scores of pre-test, post-test and growth are not significant in the year 2012-2013. Children in both the schools demonstrated similar growth. Similar analysis was carried out by setting three hypotheses to test the significance of the difference in the mean pre-test, post-test and growth scores in the year 2013-2014.
Table 4.52: Comparison of pre-test, post-test and growth scores in the two types of schools Year 2013-2014

<table>
<thead>
<tr>
<th></th>
<th>School</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test scores</td>
<td>Nahyan(Non-ISO)</td>
<td>30</td>
<td>19.80</td>
</tr>
<tr>
<td></td>
<td>Mankhool (ISO)</td>
<td>171</td>
<td>32.11</td>
</tr>
<tr>
<td>Post-test scores</td>
<td>Nahyan(Non-ISO)</td>
<td>30</td>
<td>39.40</td>
</tr>
<tr>
<td></td>
<td>Mankhool (ISO)</td>
<td>171</td>
<td>104.33</td>
</tr>
<tr>
<td>Growth</td>
<td>Nahyan(Non-ISO)</td>
<td>30</td>
<td>122.79</td>
</tr>
<tr>
<td></td>
<td>Mankhool (ISO)</td>
<td>169</td>
<td>335.12</td>
</tr>
</tbody>
</table>

Table 4.53: The results of independent samples t-test for 2013-14

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Pre-test scores</td>
<td>Equal variances assumed</td>
<td>22.31</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>-5.88</td>
</tr>
<tr>
<td>Post-test scores</td>
<td>Equal variances assumed</td>
<td>29.53</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>-</td>
</tr>
<tr>
<td>Growth</td>
<td>Equal variances assumed</td>
<td>5.49</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>-6.49</td>
</tr>
</tbody>
</table>
The results of independent samples t-test imply that in the year 2013-2014, the means scores of pre-test, post-test and growth are significantly higher in the ISO school than the Non-ISO school. Summary of the mean scores of growths in three years in both types of school

Table 4.54: Summary of the mean scores of growths in three years in both types of school

<table>
<thead>
<tr>
<th>Year</th>
<th>School type</th>
<th>Mean growth</th>
<th>Is the difference significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2012</td>
<td>Non-ISO ISO</td>
<td>122.34</td>
<td>Yes</td>
</tr>
<tr>
<td>2012-2013</td>
<td>Non-ISO ISO</td>
<td>250.83</td>
<td>No</td>
</tr>
<tr>
<td>2013-2014</td>
<td>Non-ISO ISO</td>
<td>122.79</td>
<td>Yes</td>
</tr>
</tbody>
</table>

As can be seen above, the mean learning scores for ISO schools are higher than the non-ISO. This implies that the children in the ISO School Mankhool have had higher growth in learning as compared to the children in the Non-ISO school Nahyan for all the years. This growth is significant in two years 2011-2012 and 2013-2014. It is important to point out that in the year 2012-13, the assessment rubric was changed in Mankhool to incorporate finer details of curriculum in the formative assessments. The in-depth investigation has clearly pointed out that ISO quality certification can enhance learning in children.

Research Question 3:

Does parental support and home activities affect student learning?

4.3.6 Analysis of the effect of parental demographic variables on children’s learning (growth)

As discussed in the section 4.1 (descriptive statistics), there are several demographic factors which represent parents’ cultural background and parenting habits, such as time spent with the child on daily and periodic activities. In this section, it is examined with the help of independent samples t-test and ANOVA test, to infer correlations.

A. Effect of parent nationality on children’s growth

We aim to investigate if the ethnicity (nationality) is a determining factor for students’ growth.
**H₀₁₄**: Students’ overall growth is uniform irrespective of their nationality.

**Hₐ₁₄**: Students from some nationalities show a higher growth than other nationalities.

One-way ANOVA test is applied to test the null hypothesis and the results of this test indicate that the overall growth in a child is not same across all the nationality groups. The results indicate that **the null hypothesis can be rejected**. (F=6.4, p-value=0.0). Refer to the output of ANOVA test. Post-hoc analysis revealed that the growth in Emirati children is significantly higher than other nationality groups.

![Figure 4.14: variation in growth among all nationality groups](image)

A deeper investigation revealed that the pre-test, post-test and the growth rates of children from Asian and Western nationality groups differ significantly. (For the pre-test scores, t=3.54, p-value=0.001; for the post-test scores, t=4.606, p-value=0.000). From the table 4, the mean test scores are higher in the group of Asian children. The high growth recorded for the Emirati children is due to extremely low-pre- test scores recorded.
Table 4.55: Independent Samples Test

Levene's Test for Equality of Variances

<table>
<thead>
<tr>
<th></th>
<th>Sig.</th>
<th>Mean Difference (2-tailed)</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances assumed</td>
<td>1.6</td>
<td>4.8</td>
<td>314</td>
<td>0</td>
<td>27.03</td>
<td>5.63</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>4.6</td>
<td>73.3</td>
<td>314</td>
<td>0</td>
<td>27.03</td>
<td>5.87</td>
</tr>
<tr>
<td>Start</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.00</td>
<td>.9</td>
<td>3.7</td>
<td>314</td>
<td>14.75</td>
<td>3.96</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>.00</td>
<td>.9</td>
<td>3.7</td>
<td>314</td>
<td>14.75</td>
<td>3.96</td>
</tr>
<tr>
<td>Finish</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.00</td>
<td>.9</td>
<td>3.7</td>
<td>314</td>
<td>14.75</td>
<td>3.96</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>.00</td>
<td>.9</td>
<td>3.7</td>
<td>314</td>
<td>14.75</td>
<td>3.96</td>
</tr>
</tbody>
</table>

156
### B. Effect of parental quality time on children’s growth

Two categories of parents were defined earlier as Q category=1 and Q category= 2 as parents who spend more quality with the child and parents who do not spend enough quality time with their child.

It was examined if there is any effect of the overall quality time on the child’s growth. Null and alternate hypotheses are set as follows:

**H₀₁₅:** Amount of quality time spent by parents does not have any effect on the child’s growth.

**H₀₁₅:** Amount of quality time spent by parents have positive effect on the child’s growth.

The results indicate that the null hypothesis cannot be rejected.

**Table 4.56: Effect of overall quality time spent on child’s growth**

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Time Category</td>
<td>Parents do not spend quality time</td>
<td>8</td>
<td>442.2356</td>
<td>591.04328</td>
</tr>
<tr>
<td>Growth</td>
<td>Parents spend quality time</td>
<td>72</td>
<td>273.0143</td>
<td>209.80392</td>
</tr>
</tbody>
</table>
Table 4.57: Effect of quality time on child’s growth

<table>
<thead>
<tr>
<th>Independent Samples Test</th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Growth</td>
<td>9.190</td>
<td>.003</td>
</tr>
<tr>
<td></td>
<td>.804</td>
<td>7.197</td>
</tr>
</tbody>
</table>

The above output shows that the difference in the child’s growth according to quality time category of parent is not statistically different (p-values>0.05). This implies that there is no impact of quality time on the child’s growth.

4.3.7 Analysis of parental quality time

A. Analysis of quality time spent by parents with regards to their nationality

H₀₁₆: Amount of quality time spent by parents does not differ according to nationality (Group).
H₁₆: Amount of quality time spent by parents varies according to their nationality.

Table 4.58: Difference in the quality time spent by parents with different perceptions on ISO preschool

<table>
<thead>
<tr>
<th>ANOVA</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>QTime1</td>
<td>Between Groups</td>
<td>.269</td>
<td>2</td>
<td>.135</td>
<td>.279</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>46.725</td>
<td>97</td>
<td>.482</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>46.994</td>
<td>99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTime2</td>
<td>Between Groups</td>
<td>.288</td>
<td>2</td>
<td>.144</td>
<td>.248</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>56.326</td>
<td>97</td>
<td>.581</td>
<td></td>
</tr>
</tbody>
</table>
The output of the ANOVA test indicates that the null hypothesis cannot be rejected. (Each p-Value > 0.05). It implies that the parents of all nationality groups spend equal amount

Table 4.59: Distribution of nationality groups and quality time category

<table>
<thead>
<tr>
<th>Nationality group</th>
<th>Count</th>
<th>% within Quality Time Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western</td>
<td>2a</td>
<td>20.0%</td>
</tr>
<tr>
<td>Asian</td>
<td>6a</td>
<td>60.0%</td>
</tr>
<tr>
<td>Arab</td>
<td>2a</td>
<td>20.0%</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Each subscript letter denotes a subset of Nationality group categories whose column proportions do not differ significantly from each other at the .05 level.

B. Analysis of quality time spent by parents with regards to their education level

We considered different levels of education of the first parent who responded to the survey. It is examined if the amount of quality time depends on the education level of parents.

H_{017}: Amount of quality time spent by parents does not differ according to education level
H17: Amount of quality time spent by parents differs according to education level.

Table 4.60: Quality time spent by parents with different education levels

<table>
<thead>
<tr>
<th>ANOVA</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Between Groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTime1</td>
<td>1.630</td>
<td>4</td>
<td>.408</td>
<td>.843</td>
<td>.502</td>
</tr>
<tr>
<td>QTime2</td>
<td>1.836</td>
<td>4</td>
<td>.459</td>
<td>.778</td>
<td>.542</td>
</tr>
<tr>
<td>QTime3</td>
<td>4.349</td>
<td>4</td>
<td>1.087</td>
<td>3.249</td>
<td>.015</td>
</tr>
<tr>
<td>QTime4</td>
<td>3.021</td>
<td>4</td>
<td>.755</td>
<td>1.818</td>
<td>.132</td>
</tr>
<tr>
<td>QTime5</td>
<td>.795</td>
<td>3</td>
<td>.265</td>
<td>2.411</td>
<td>.072</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTime1</td>
<td>44.496</td>
<td>92</td>
<td>.484</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTime2</td>
<td>54.268</td>
<td>92</td>
<td>.590</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTime3</td>
<td>30.451</td>
<td>91</td>
<td>.335</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTime4</td>
<td>37.810</td>
<td>91</td>
<td>.415</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTime5</td>
<td>9.786</td>
<td>89</td>
<td>.110</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTime1</td>
<td>46.126</td>
<td>96</td>
<td>.484</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTime2</td>
<td>56.104</td>
<td>96</td>
<td>.590</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTime3</td>
<td>34.800</td>
<td>95</td>
<td>.335</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTime4</td>
<td>40.831</td>
<td>95</td>
<td>.415</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QTime5</td>
<td>10.581</td>
<td>92</td>
<td>.110</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of ANOVA test indicate that the amount of quality time spent by parents is not uniform across all parents with differing educational levels. The null hypothesis can be rejected. The following table shows that the parents who have doctorate degree spend more quality time than other parents with a lower education level.

Table 4.61: Mean score for quality time 3 for each education level

<table>
<thead>
<tr>
<th>Mean</th>
<th>QTime3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing</td>
<td>1.56</td>
</tr>
<tr>
<td>Diploma</td>
<td>1.67</td>
</tr>
<tr>
<td>Doctorate</td>
<td>2.72</td>
</tr>
</tbody>
</table>
Graduate 1.82
High School or below 1.83
Post- Graduate 1.94
Total 1.92

C. Analysis of quality time with regards to type of school (ISO/ Non-ISO)

**H₀₀₁₀**: Proportion of parents who spend more quality time is uniform in ISO and Non-ISO schools.

**H₁₀₁₁**: Proportion of parents who spend more quality time is uniform in ISO and non-ISO.

A cross-tabulation analysis with Chi-square test was performed to examine if the parents in ISO and Non-ISO schools are divided uniformly in two categories according to the quality time spent by them. The output of the Chi-square test indicates that the null hypothesis cannot be rejected. The proportion of parents from ISO and Non-ISO schools in two different categories of quality time do not differ significantly.

*Table 4.62: Distribution of ISO/Non-ISO groups and quality time category*

**Quality Time Category * ISO/Non-ISO Crosstabulation**

<table>
<thead>
<tr>
<th>Quality Time Category</th>
<th>ISO/NonISO</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents do not spend quality time</td>
<td>ISO</td>
<td>Non ISO</td>
</tr>
<tr>
<td>8ₐ</td>
<td>2ₐ</td>
<td>10</td>
</tr>
<tr>
<td>Parents spend quality time</td>
<td>74ₐ</td>
<td>16ₐ</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>18</td>
</tr>
</tbody>
</table>

Each subscript letter denotes a subset of ISO/NonISO categories whose column proportions do not differ significantly from each other at the .05 level.

*Table 4.63: Difference in the quality time spent and growth of the child in two groups of parents (ISO and Non-ISO)*

**Independent Samples Test**

| Levene's Test for Equality of Variances | t-test for Equality of Means |
4.3.8 Analysis of parent perception on children’s skill development

A. Analysis of children skill development with regards to school type (ISO/ Non-ISO)

The following table summarizes the mean and modal value for each skill for all parents’ irrespective of their choice of school type. The majority of parents think that the two skills WRD and CRV are more important than the other skills.
Table 4.64: Mean scores assigned by parents to five different skills in all schools

<table>
<thead>
<tr>
<th>Statistics</th>
<th>PD</th>
<th>CLL</th>
<th>PSE</th>
<th>WRD</th>
<th>CRV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>4.120</td>
<td>4.126</td>
<td>4.145</td>
<td>4.530</td>
<td>4.280</td>
</tr>
<tr>
<td>Median</td>
<td>4.400</td>
<td>4.286</td>
<td>4.286</td>
<td>5.000</td>
<td>4.500</td>
</tr>
<tr>
<td>Mode</td>
<td>4.40</td>
<td>4.57</td>
<td>4.71</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.6804</td>
<td>.6567</td>
<td>.6304</td>
<td>.6410</td>
<td>.8769</td>
</tr>
</tbody>
</table>

The following table summarizes the mean score for each skill’s preference of parents in two different types of schools.

Table 4.65: Skills Preference of Parents

<table>
<thead>
<tr>
<th>ISO/Non-ISO</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO</td>
<td>4.18</td>
<td>0.63</td>
</tr>
<tr>
<td>Non ISO</td>
<td>3.84</td>
<td>0.84</td>
</tr>
<tr>
<td>ISO</td>
<td>4.40</td>
<td>0.60</td>
</tr>
<tr>
<td>Non ISO</td>
<td>3.76</td>
<td>0.78</td>
</tr>
<tr>
<td>ISO</td>
<td>4.20</td>
<td>0.60</td>
</tr>
<tr>
<td>Non ISO</td>
<td>3.91</td>
<td>0.74</td>
</tr>
<tr>
<td>ISO</td>
<td>4.61</td>
<td>0.59</td>
</tr>
<tr>
<td>Non ISO</td>
<td>4.14</td>
<td>0.74</td>
</tr>
<tr>
<td>ISO</td>
<td>4.34</td>
<td>0.88</td>
</tr>
<tr>
<td>Non ISO</td>
<td>4.03</td>
<td>0.81</td>
</tr>
</tbody>
</table>

It can be seen from the above table that the mean score for each skill assigned by parents in the ISO group is higher than that assigned by parents in the Non-ISO group. It was further examined, if the difference in their preferences is statistically significant.
**H₀₁₉**: The mean scores assigned by parents in ISO and Non-ISO groups for each skill are rated equal

**H₁₉**: The mean scores assigned by parents in ISO and Non-ISO groups for each skill are not rated equal

**The null hypothesis can be rejected.** The results of independent samples t-test indicate that not all skills are rated equally by the parents in the two groups. The ISO school parents **perceive their children to be progressing more** in two areas of the curriculum. The following output illustrates that the skills CLL and WRD rated differently by parents in the two groups.

*Table 4.66: Difference in the perceptions of parents in ISO and Non-ISO schools about importance of different skills*

<table>
<thead>
<tr>
<th>Skill</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>PD</td>
<td>4.122</td>
<td>.045</td>
</tr>
<tr>
<td>CLL</td>
<td>.648</td>
<td>.423</td>
</tr>
<tr>
<td>PSE</td>
<td>1.234</td>
<td>.269</td>
</tr>
<tr>
<td>WRD</td>
<td>1.020</td>
<td>.315</td>
</tr>
<tr>
<td>CRV</td>
<td>.388</td>
<td>.535</td>
</tr>
</tbody>
</table>
4.4 Summary of quantitative findings and their implication

The below table summarizes the hypothesis statement as tested. The statistical inference and interpretation is mentioned.

Table 4.67: Summary of quantitative findings and their implication

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Null Hypothesis statement</th>
<th>Statistical Inference</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>There is no improvement in growth/learning scores from 2011-2016 of one branch (ISO certified)</td>
<td>Reject null hypothesis</td>
<td>There is considerable improvement in young children studying in the preschool implying that preschools are effective</td>
</tr>
<tr>
<td>2</td>
<td>There is no difference in pretest scores of old and new children from 2011-2016.</td>
<td>Reject null hypothesis</td>
<td>Old children (attended preschool) have higher skills at the start of an academic year compared to new children (Not attended pre-school) highlighting pre-school learning is more effective than home based learning</td>
</tr>
<tr>
<td>3</td>
<td>There is no difference in the pre-test and post-test scores of children in all the 7 schools. Hence, there is no improvement in growth/learning scores.</td>
<td>Reject null hypothesis</td>
<td>There is improvement in learning scores in all the 7 preschools for the academic year indicating the effectiveness of pre-schooling</td>
</tr>
<tr>
<td>4</td>
<td>Quality standards of a nursery school do not affect students’ overall growth. Toddlers in the ISO-school and Non-ISO schools show equal growth.</td>
<td>Retain null hypothesis</td>
<td>Quality certifications may not have an impact on student learning. ISO quality certification helps learning in very young children (1-2 years)</td>
</tr>
<tr>
<td>5</td>
<td>Nursery level students in the ISO-school and Non-ISO schools show equal growth.</td>
<td>Reject null hypothesis</td>
<td>ISO quality certification helps learning in young children (2-3 years)</td>
</tr>
<tr>
<td>6</td>
<td>Foundation level students in the ISO-school and Non-ISO schools show equal growth.</td>
<td>Reject null hypothesis</td>
<td>ISO quality certification is not seen to make any difference in learning of foundation children (3-4 years)</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Retain null hypothesis</td>
<td></td>
</tr>
</tbody>
</table>
The leadership style of the school leader has no effect on the children’s learning.

Students’ in Emma’s Non-ISO school and Julie’s non ISO school show equal growth.

The leadership of pre-school affects children’s learning.

BSM E’s leadership has influenced her Non-ISO school to have higher learning score in children than the children in BSM J’s Non-ISO School

All of BSM E’s ISO Schools have showcased higher learning scores for children as compared to BSM J’s Non-ISO school

The entry level skills based on assessment of students are similar

At the end of academic year the skills acquired by children in both schools are similar

The students of the ISO school M have shown higher learning as compared to Non-ISO school N indicating the importance of ISO quality certification in student learning and school effectiveness

Emirati children have shown the highest growth in learning whilst Asians have highest mean scores indicating higher skills achievement

Children’s skill development is not dependent on quality time spent by parents indicating effectiveness of pre-school

Parents of all nationality spend equal amount of quality time

Parents having a doctoral degree have reported spending more quality time

Parents of both types of schools tend to spend the same amount of time with their children

Parents in ISO school consider their children to have progressed most in WRD and CRV.
4.5 Interview Data Analysis

Twelve semi-structured interviews were conducted among school leaders, parents and policy makers. Participants in the interview were selected across all levels of leadership staffing at school, parents across the ISO School and Non-ISO school and one ministerial officer. For generalizability, and all 12 participants were female and of mixed nationality. It is important to note that the ministerial rules are such that no male member of staff can work at nurseries. ‘Representativeness is a qualitative parameter which is most concerned with the proper design of the sample explaining the phenomena as comprehensively as possible, focusing on specific meanings according to Patton’ (2002 in Al Gallaf, 2016). The purpose of this chapter is to:

1) Analyse the results of the one-to-one interviews conducted with the school leaders with reference to their perceptions on quality in EYE, parental involvement and components leadership practices of their supervisor who is the business support manager leading the group of ISO certified and non-certified preschools E and J.

2) Analyse the results of the one-one interviews of the parents considering their perceptions of early years and parenting.

3) To build a holistic picture by exploring some of the similarities or differences between different datasets, in that interview questions often help the researcher to probe more deeply the phenomena being studied ‘(Lodico et al, 2010: 39).

The researcher will also provide extracts from the translated transcriptions of some interviews. These extracts will illustrate key ideas and issues emerging from the data, and will be considered in greater depth in the discussions. Interviews are a common qualitative self-report technique and their usefulness lies in the great amount of information that can be collected just by questioning people about a topic (Polit & Beck, 2006). According to Patton (2002, p.53), “kinds of questions include experience/ behaviour questions, opinion/value questions, feeling questions, knowledge questions, sensory questions and background / demographic questions”.

Kvale and Brinkmann (2006) observe that for data saturation, interview questions should include thematic and dynamic dimensions (p.131). According to Polit and Beck (2006), non-structured interviews are used when the authors do not have a preconceived view of the research problem, whereas semi-structured interviews are conducted when the researcher already has a preliminary knowledge of the problem from related literature or from quantitative findings.
According to Ajjawi and Higgs (2007), interviews serve to explore and gather narratives; they help in establishing conversational relationships and allow for participant storytelling, and while semi-structured interviews are useful particularly for the novice researcher because they provide an interview guide covering all the areas to be discussed, open-ended unstructured interviews questions allow for increased flexibility in responses. In the unstructured interview process, the interviewer and respondents engage in a formal interview, with the interviewer having a clear plan in mind concerning the focus and goal of the interview, and thereby helping to guide the discussion as needed. In this study the interviewer developed rapport with the participants, getting them to express themselves and their line of work, in their own way. Guiding questions would therefore be open-ended allowing freedom for the informants' responses. Thematic analysis can be an essentialist or realist method, which reports experiences, meanings and the reality of participants, or it can be a constructionist method, which examines the ways in which events, realities, meanings, experiences and so on are the effects of a range of discourses operating within society.

It is important that the theoretical position of a thematic analysis is made clear, as this is all too often left unspoken (and is then typically a realist account). Any theoretical framework carries with it many assumptions about the nature of the data, what they represent in terms of the world, reality and so forth. A good thematic analysis will make this transparent. Thematic analysis involves many choices which are often not made explicit (or are certainly typically not discussed in the method section of papers), but which need explicitly to be considered and discussed.

In practice, these questions should be considered before analysis. What counts as a theme? A theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set. Deductive approach. In contrast, a theoretical thematic analysis would tend to be driven by the researcher’s theoretical or analytic interest in the area, and is thus more explicitly analyst-driven. This form of thematic analysis tends to provide less a rich description of the data overall, and more a detailed analysis of some aspect of the data. Latent thematic analysis, the development of the themes themselves involves interpretative work, and the analysis that is produced is not just description, but is already theorised.
The main aim of this chapter is to present the analysis of the qualitative data generated from the interviews. The following diagram, which was modified by the researcher in light of previous related literature, summarises the method followed in analysing the qualitative data (Ary et al., 2006, p. 481). Ary et al (2006:481) stated that —In different texts, the approaches to analysis of qualitative data vary slightly, but we believe they can be described in three stages [...] (1) organizing and familiarizing, (2) coding and reducing, and (3) interpreting and representing]. The researcher added translation as one more step. These stages could be described briefly as follows:

i) Familiarisation and Organisation: the researcher carefully read and reread notes until she became familiar with the data. Then, the notes were put in organised tables according to the interview questions and sub-questions (study components).

ii) Coding and Reducing: the main concepts, categories and themes were identified from the raw data, then reduced into main categories and broad themes that will be scrutinised and discussed later in the final chapter on findings.

iii) Summarising and Interpreting Data: collected data was organised so that they could be easily understood and interpreted.

Table 4.68: Demographic Description of the interview participants

<table>
<thead>
<tr>
<th>Participant</th>
<th>Nationality</th>
<th>No. of years in school</th>
<th>Type/position</th>
<th>School name of leader / Child</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>British</td>
<td>5 years</td>
<td>Principal/BSM in Trainee</td>
<td>BON</td>
</tr>
<tr>
<td>F1</td>
<td>British</td>
<td>2 years</td>
<td>Deputy principal</td>
<td>BON</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DSO</td>
</tr>
<tr>
<td>Code</td>
<td>Nationality</td>
<td>Years of Service</td>
<td>Position</td>
<td>Organization</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>------------------</td>
<td>----------</td>
<td>--------------</td>
</tr>
<tr>
<td>S1</td>
<td>Kenyan</td>
<td>7 years</td>
<td>Teacher Curriculum Coordinator</td>
<td>BON Mankhool</td>
</tr>
<tr>
<td>B1</td>
<td>British</td>
<td>8 years</td>
<td>Principal/ Gym Coach Manager</td>
<td>BON Mankhool</td>
</tr>
<tr>
<td>H2</td>
<td>British</td>
<td>3 years</td>
<td>Deputy Principal</td>
<td>BON DMC</td>
</tr>
<tr>
<td>A2</td>
<td>Sudanese</td>
<td>5 years</td>
<td>Principal/PRO</td>
<td>BON ADCO</td>
</tr>
<tr>
<td>R1</td>
<td>Indian</td>
<td>1 year</td>
<td>School Nurse</td>
<td>BON Mankhool</td>
</tr>
<tr>
<td>M1</td>
<td>Iraqi</td>
<td>2 years</td>
<td>Doctor</td>
<td>BON Mankhool</td>
</tr>
<tr>
<td>H1</td>
<td>Emirati</td>
<td>1 year</td>
<td>IT Official</td>
<td>BON DCL/Mankhool</td>
</tr>
<tr>
<td>E1</td>
<td>British</td>
<td>4 years</td>
<td>School Deputy Principal</td>
<td>BON- DSO</td>
</tr>
<tr>
<td>S1</td>
<td>Indian</td>
<td>1 year</td>
<td>Senior Analyst</td>
<td>BON Nahyan</td>
</tr>
<tr>
<td>M1</td>
<td>Emirati</td>
<td>N/A</td>
<td>Ministry of Social Affairs</td>
<td>N/A</td>
</tr>
<tr>
<td>B2</td>
<td>British</td>
<td>8 years</td>
<td>Business Support</td>
<td>Mankhool, DSO,</td>
</tr>
</tbody>
</table>
The main interview questions for managers were distributed to the five parts of the theoretical framework and questions of the study as follows:

1. Perceptions on quality in early years’ education
2. Perception on parent participation
3. Characteristics of leadership style of the supervisor (Transformational or Managerial) (based on the below 4 styles Burns)
   3a) Individualized consideration  
   3b) Intellectual stimulation  
   3c) Inspirational motivation  
   3d) Idealized Influence  
(see Interview Questions for School leaders - Appendix 7).

The main interview questions for parents were distributed to the six parts of the theoretical framework and questions of the study as follows:

1. Perceptions on quality in early years education
2. Perceptions on child development and learning
3. Actual parent participation (Epstein Theory: Learning at home, decision making, Communicating, parenting, volunteering, collaborating with the community)  
(see Interview Questions for parents - Appendix 8).

Considering the interview analysis, the participants’ views could be displayed as follows:

4.5.1 Interview with Academic Leaders

This section discusses the perceptions and conceptions of academic leaders on quality in early years, quality teaching, parental contribution and leadership style of their supervisor and its impact on the work environment. The participants have different conceptions about the meaning of quality in school settings, child learning, parental influence and leadership, which have been organized into themes. The introductory questions of the interview were on asking the participants on the Early year program of the school. B1 as an interviewee has a rival explanation as she comments on both leaders unbiased, helping in delimiting the qualitative interview analysis. A convincing analysis explicitly seeks out and tests rival explanations (Baskarada, 2014) and counter examples (Spencer et al., 2003), whilst still being internally consistent and coherent, and with a clear match between the analysis and data (Braun & Clarke, 2006). BSM E is B2. She was interviewed to gain understanding about ISO quality and her
leadership style. All seven participants from the varied backgrounds have expressed that the EYE program followed by the school is very ‘important’ and ‘thorough’ (A2, L1). They have commented that there is a robust system of curricular ‘planning and assessments’ (B1, B2, L1) and have all commented especially on the ‘progress of children’ (L1, H2, S1,) which is ‘individualized, through set targets in the teachers plans, the pre- and post-assessment system (L1, S1). They appreciate the ‘learning with play’ way methods (L1, F2 and feel that the EYFS British Curriculum program followed by the school is ‘productive’ (L1, H2, B1, B2, A2). They all concur socialization and learning is happening at the schools effectively.

They also feel that quality certifications and assurance programs are a ‘good thing to follow which set guidelines, helps to learn new things and sets standards high’ ( L1, B1, B2, F1, S1, A2) help in efficiency ( B1, B2, L1, A2, F1, H2, S1) and have a ‘huge impact on running of the school with consistency’ ( B1, B2, H2,), ‘sets the schools high as a leader on the benchmark in UAE’ ( F1, L1), sets ‘clear guidelines, policies and standards, and contributes to learning of Children’ ( L1, F1, B1, B2, A2, H2, B2).

L1 states: “We follow the EYES British Curriculum, it’s very thorough, productive, shows progress, and it’s very individualized”

“I’ve been involved in ISO numerous times we do got ISO Inspections and Audits to ensure we are following things through to different branches, it sets clear guidelines, it’s very structured its helps us learn new things. It gives us guidelines to make sure everything is consistent across all the branches and they keep the standard high, highlight the areas to develop, it’s very structured which is a good thing to follow”

On ISO quality certifications and audits, she says that

“they make sure that everyone has correct paperwork and keep that as the same standard, so you are not having standards drop, across any of them, now if the standards are dropping, the learning we offer to children is dropping, that’s not going to work and it’s not going to bring the best out for the children. It’s a bench mark, it’s something for us to focus on to aim towards, and to keep it consistent across”

BSM B2 states ISO is important and that there is ‘enhanced learning of children and ISO certification has helped me learn important quality parameters and improve my leadership. I like to involve myself totally when we have any change or programs introduced. My team feels supported. Schools must incorporate quality programs in order to increase effectiveness and raise the bar for quality teaching and learning in children’.
B1 says “Yes, because the quality assurance helps us keep the standards high, they make sure we have the ratios correct, the hygiene, the classroom, (amm...), everything is high standards, there for helps for the learning and socialization, and keeps all teachers and staffs at the same level, so the environment is the same across all branches.”

S1 mentions “It will enhance the school effectiveness because first that’s a plus point for the school and therefore for the parents”

Again, all school personnel concur that parents are equal partners (B1, B2), and that quality time is important (S1, B1, B2), parent involvement builds ‘self-esteem’ (A2), “will enhance learning of the children” (L1, F1, B1, B2). They feel that it is important to ‘build relations and working together’ (S1, L1. F1), importance of teaching socializing to c. L1 says on the importance of parental involvement: “Huge, very important, team work is the most important we can do everything to empower the educate the children in the nursery setting, but if a child is going home and having a different approach, that is going to totally confuse them so it’s about working together’. ‘it’s all about learning experiences of going out to the mall, going out on holiday, experiencing being in the world as a family unit and that is hugely important to any child development so its ensuring educating parents to have that balance’.

BSM B2 comments: “Parent partnerships with schools is of paramount importance. Parents have to invest in quality time to support school functions and teaching”. B1 says: “I tell parents, that’s it’s a partnership, what you are doing at home and what we are doing at the school it needs, they both equally is important in every child development. If they are happy at home will be happy at the school, if they are having (amm…) interactive time with parents and activities at home that will show in their work at the school and to their behaviour”.

H2 further feels, that in her school parents are too occupied in developing partnerships due to work schedules. “In Media city so the children are come here for all day so, most of them from seven until six, I think the children …. I mean the parent have minimal behaviour, minimal role in the development of the child. Our parents, don’t spend much time, majority of the parents are corporate parents, so they either work late and they don’t see their children until the weekend, or they have nanny’s maid, things like this, so...they don’t have a big role on their early years”.

Leadership style of the supervisor

All the six school leaders expressed that they have an open-door policy (L1, F1), are team
players call themselves democratic (B1, B2), Mentor (A2, S1) and are approachable to their teams.

3A. Individualised Consideration

All the leaders believe they get enough opportunities for training and development and are supported to grow in the company (L1). They also believe there is continuous training within the nursery (F1). They believe the leader has transformed their school and improved school conditions helping them to implement new changes and supporting them as individuals. (L1, H2, B1, B2). They all perceive the leader as having helped them in self-actualisation and have valued their promotions (H2, A2).

L1, S1, F1, B1 believe their leader E supports them and acts as a mentor and listens to their needs. They do not believe she has a rigid approach or is an extreme authoritarian even when she helps in a lot of the paperwork and administration side of the school (L1, B1). She listens to the staff but does not dictate (S1) and has a good balance (F1). A2 believes her leader J is managerial and is administrative I follow up with ISO policies and procedures. She feels that J is an authoritarian even though being very supportive and being flexible. H2 believes her leader J is rigid whilst B2 also believes that J ‘can be rigid’ and not so administrative as she is relaxed about paperwork. B2 believes, leader E is not an authoritarian, does not force and helps in paperwork on time. L1 also believes that E helps in the paperwork and administration and is flexible and not rigid.

L1 says, “E will see what where my strength and weaknesses are and helped developed any support each of those individually”. “It’s like I said we do work very well together, we are very similar, we have quite very similar approached, in that friendly relaxed manner, E is very familiar with our branch she is being there from the day one as well but when it needs to be she will be quite authorities, and we all respect that.” “No E is very flexible I would not class her as a rigid approached, she very flexible in her approached as a leader”. S1 comments, “Yeah we have too much trainings (giggle) actually there is a lot of trainings before aah we have certain hours I can’t think of it at the top of my head I think it’s around 30 which we do trainings which yes it’s be beneficial to our roles.”

B1 talks on training and says, “We, have a lot of options there, and I’m in the CACHE 5, so the opportunities are there”. “Yes... (amm..), both managers (amm..).Like I said, once I was offered certain roles, (amm...) and told me that they are believed in me, that I could do it (amm...)”
and I’d say, my CEO more, has helped me believed in self-actualization. (amm..) I’ve doubted whether I can study and work at the moment but both of them are J you know, told me I can do it and you know... make me realized that one day ..One day I can get through it and it worth it”. “E is quite administrative (amm...) she I can tell she is more settles if she has email the paper work everything in front of her on time before making decisions. I can tell, it bothers her if she has paper work late (amm..)  She can make decision but in her own she is not an authoritarian, she does not force me to do what she says, she mainly advises. (amm...) J can be more rigid on her final decision once she have taken over something,(amm..) but not so much administrative. She have to have a certain paper works to her but she is much relaxed about that it does not affect, I feel like it does not affect her, if she if she does not, if her paper works are not, not perfect. “

3B) Intellectual Stimulation

All leaders (L1, S1, F1, B1, A2, H2) feel that their BSMs E and J listen & solicit their ideas, challenge, assumptions and nurture and develop them to think independently. They believe that their BSM’s visit their nursery frequently, are there to listen and find a solution to their problems, involving them in decision making, appreciating their ideas and questions, innovating, approaching challenges with high standards in a relaxed way.

H2 does not believe her leader J provides intellectual stimulation. However, she says that J appreciates her ideas and is very knowledgeable and experienced and B2 comments, “Okay, with the, regards to E, She, very much likes to hear every detail of (amm)... problem on email, (amm...) so she can look through it, before replying to me what she advises. J (amm...) will pick up the phone and has no problem having a quick conversation about it, and then giving me some advice she does not ask me to email so that’s, that’s...the main difference.”

When it comes to involving in decision making B2 says, “We had a discussion on it, and then E actually agreed, to change, what she is going to do and went through out the final decision in different way. J (amm), also once I have taken it to her, really she tries to take out of my hand and finalized it without me, and then she just tells me what she decided. "She however praises J as being a go-getter in conferences helping her develop presentation skills in international forums and mentions both E and J make sure policies are followed to keep high standards. L1 says on BSM E, “she is always there to listen, she is always to research and find solution, and to give feedback, and there may be times we are find difficult to get hold to that people now but she’s always there. E will always get back to you at some point with whether
it is the solution or different solution”, “E has ideas again it’s a partnership it’s a team work. I will always approach E with new Ideas”. “She is very relaxed in her approach to different situations in having the bench mark, the high standards, we always make sure that we find that right solution and she does have an approachable manner, and relaxed.”

F1 says, “BSM E does not have much direct time with her but believes that E interacts and appreciates the ideas of F1’s line manager.” H2 says on BSM J, “She always solve the problem there and then. She has always the answer, It’s not very often that she will have to go back and then get back to me, she is very positive. She is a good problem solver”. When asked on involvement in decision making, H2 says, “No…. Not often am… because I’m the deputy I’m not the principal. I’m not directly involved in main decision making.”

On problem solving; A2 believes, “She always, shares with me her previous experienced first and she always reminds me to follow the policies and the procedures we have, and usually she takes the solutions from me like asking my suggestions and asking what I think about it, if it’s right she tells me to go ahead with it, if I could not solve it, the she will give me her opinion on how to do it.”

3C. Inspirational Motivation

All the leaders (L1, F1, S1, B1, H2, and A2) believe that BSMs E and J motivate them, promote a positive learning environment, provide opportunities for promotions, conduct meetings and communicate optimism about future goals. L1 says, “There a lot of what we do at BON, I myself obviously am included equally as an employee so we have a lot of staff appreciation, we have monthly employee of the month, when we do our corporate wide events there are rewards given, we got bonus day, if you worked extra you got bonus days so that you could get a bonus payments in salary for especial occasion event like being involved in, we do competition across branches as well, it brings a healthy competition across branches as well , or could be example a pizza party for the branch, there are lot we encouraged and like I said I’m part of that, as I see myself, there are lots of different ways that staff are rewarded for the hard work.”

On future goals L1 says, “Our end goal is about being open and very open and honest team together, so a lot of that comes from the management meetings, and obviously meeting minutes from those, everything is communicated. It is personally I would say that’s a lot more done to my personal my own future goal that’s why we discussed personal progress and future development areas to work on that’s come to appraisals.” A2 echoes B1’s comments saying
BSM J helps in participating in external conferences. She says, “By encouraging me to be involved in the seminars and trainings and workshops throughout the year.”

None of the leaders have commented on this aspect of external networking and conference participation for BSM E. B1 says, “Really by, both of them by believing me, (amm..) believing on me so I ask E, before I went up to Abu Dhabi, do you think I’m gonna be able to do this? and she said yes. And... Say’s to me that (amm...) the CEO believes in me, then she knows I can do this and there to support me. Also J, every time she came to visits (amm...) when I started in Abu Dhabi, even there is a lot going on she was always very happy and positive and such doing....such great job and that really helped me.”

On future goals B1 says, “So, in the appraisal’s we, obviously have tasks, set for us, for the future, we also discuss our future goals during the appraisals”. On promoting a positive learning environment B1 feels BSM J should do more. She comments, “E come to the branch and I’d like how she walk around and chat to staff (amm.) She does not need me there, she makes everyone feel at ease and okay to ask questions which is good, (amm..) so she stop on the spot and answer a q question and she will always give tips. J when she used to come to Abu Dhabi Branch and also will give great feedback to staff (amm...)I think it could have been done more with J, but when actually does have that time with staff member (amm..) she has great ideas.”

3D) Idealised Influence

All leaders (L1, F1, S1, B1, H2, A2) believe that both BSMs E and J are role models, especially for high ethical behaviour, have been in the school system for a long time, gain respect and trust and instills pride. They believe both are good with school observations with excellent pedagogical knowledge and have technical experience and are qualified as school leaders. They both have risen up the ranks from a teacher level. A2 praises BSM J in managing the instructional programme at school and says, “She does that by checking the baseline assessment regularly, she checks my staff observation and guides me throughout the year, and yes she is qualified and she is a CACHE 4 Holder and our curriculum is three years Plan curriculum.” L1 praises the BSM E’s involvement and the school’s assessment style especially the data feedback on children’s growth which is the child’s initial and end assessments. She says “We have like I mentioned early the data feedback that we give yearly, there are spreadsheets on everything that we do, for example, training tallies, child initial end assessment to monitor their progress, risk assessment data. Staff appraisal data, everything we do is always analysed
and that is about monitoring the progress. Yeah, E is heavily involved in a lot of behind the scene things that happened in head office, and helps to offer that out in clear understandable way to the branches, when you are working with people with different level and understanding and different nationalities so can get lost in translation. We can talk in jargon at times when you are involved in the strategy side of thing, and it’s about she finds that way, and making sure that it’s clearly understood.” S1 further comments that BSM E is very inspirational; “Yes very inspirational. Actually talking individually, we both started of the same exact position and I’ve seen her grow and worked up and so she is definitely and inspiration for me.”

B1 comments on both the BSMs “Yes, both ladies. (amm..) I’ve, come up through the ranks, J started as a Teaching Assistant, I see her particularly more as inspirational role model because, you forget that English is her second language and to me, to talk in your second language day after day and to have been in the company for nine years and to do every role, She also got two children (amm..) I do see that is inspirational because sometimes I wonder how am I going to cope, never mind if I had two children (amm...) E is the same, I found her inspirational when she, was studying, when she was working also she moved up very quickly, (amm..) also has two children, and just the way she balances everything but (amm...) …as also I’ve seen her keep a healthy balance for her and her family and it’s just shape me that you can make contract changes you, you can change hours and you can still be a working mother.”

B1 says, “Yes, I would say that, both ladies are experts, (amm...) Well experts up until now, things are always changing, and they are aware of that, and especially E she will update on the latest EYFS from the UK (amm..) J is heavily involved with the quality side of, speaking of events... (amm..) So I definitely say with regards to our school (amm...) they do have a lot of Knowledge, and experts to us (amm...) They do empower the team by giving us any information they have or they don’t know, they say they find out and they will get back to us.”

Speaking of technical experience and qualifications B1 says, “I’d say as yes (amm...) … E has work here for eight years like I said she comes from teacher to Deputy to BSM and now a greater role in quality and works closely with the CEO she has a PGCE (amm..) but she always reading of... and training, she might take some future, qualification. J from assistant to teacher, to Deputy, to Principal to BSM and also working in head office now she has a CACHE 4 which is in Management and was actually talking that she is considering going on the CACHE 5, (amm..) and also any latest., latest information (amm..) From the UK and how we can improve her...she makes sure keeps up with that.”
### Table 4.69: Summary of School Leaders Interview Analysis

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>L₁ on BSM E</th>
<th>S₁ on BSM E</th>
<th>F₁ on BSM E</th>
<th>B₁ on BSM E &amp; J</th>
<th>H₁ on BSM J</th>
<th>A₂ on BSM J</th>
</tr>
</thead>
</table>

**Themes**

**Perceptions on Quality in EYE & ISO Certification**

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Important &amp; productive</th>
<th>Important &amp; productive</th>
<th>Important &amp; productive</th>
<th>Important &amp; productive</th>
<th>Important &amp; productive</th>
<th>Important &amp; productive</th>
</tr>
</thead>
</table>

**Parental Participation**

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Importance of quality time leading to children’s learning</th>
<th>Importance of quality time leading to children’s learning</th>
<th>Importance of quality time leading to children’s learning</th>
<th>Importance of quality time leading to children’s learning</th>
<th>Importance of quality time leading to children’s learning</th>
</tr>
</thead>
</table>

**Curricular activities & child progress**

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Curriculum is through play, is effective, shows progress, and is individualized.</th>
<th>Curriculum is through play, is effective, shows progress, and is individualized.</th>
<th>Curriculum is through play, is effective, shows progress, and is individualized.</th>
<th>Curriculum is through play, is effective, shows progress, and is individualized.</th>
<th>Curriculum is through play, is effective, shows progress, and is individualized.</th>
</tr>
</thead>
</table>

**Leadership Style of the Supervisor**

- Transformational
- Transformational
- Transformational
- E Transformational
- Managerial
- Managerial

### 4.5.2 Interview with Parents

This section discusses the perceptions and conceptions of parents on quality in early years, quality teaching, and importance of ISO quality certification, actual parent participation and contribution. The participants have different conceptions which have been organized into three themes.

**Perceptions on Quality in EYE**

The introductory questions of the interview were on asking the participants on the early year program of the school and ISO quality certification. All the parents (H1, M1 and R1) have commented that learning and socialisation is happening at the preschool effectively and the curriculum is good and easy for the parents to understand. They feel that the quality assurance programmes are important and believe that the school has improved in standards. The parents have enrolled the child in pre-schools to gain skills, to enhance their socialisation and to be more independent. R1 says, “Yes, yes very good curriculum for the children and it is easy to understand...”
for parent’s point of view also. Yes, I’m very happy with my child growth as well as the curriculum over here. Uhhm more of communication I, feel because it will help for the growth of the child.

On ISO quality certification she says, “I’m very much happy with the standards of the school because it’s always on the top so I’m very much happy. The quality... it shows that how the school has improved.” M1 feels pre-schools are better than home and their quality certificates help. She comments, “It is very nice, actually, it is very helpful for my kids. Both of my kids, very helpful for them, better than to stay at home. I’d see the difference, if they are staying at home I see the difference because everything is here, everything is available in the school. I feel that Quality certificates help us. ....Of course ... Of course ... to progress like in other institute.” H1 believes pre-schooling helps to enter mainstream schooling and recommends schools to have more writing and sport activities and feels the difference the quality assurance has brought to the school.

A. Perception on child development

All three parents (R1, H1, M1) rate importance of social skills, academic skills and physical development equal. However, when it comes to home learning H1 and M1 state that children watch three hours or more of television especially on the weekends when they watch cartoons and sometimes discovery channel. R1, however says, that her child watched less cartoons on television and more of discovery channel. All three have commented that their children use iPads to play games.

On importance of the differing skills H1 comments, “No uumm I don’t think one of them will have priority because social skills academic skills and physical development all of them like aa they are working as one one hand... all of them will uhhm uhm will cooperate will cooperate together so you know it will be like aah if you have these systems together you know it will come with aaaa perfect outcome.” M1 comments, “In the learning okay social academic. All is actually is good.... I... Because I don’t see anything .... Everything is good... So you see all equally important? Yeah... Yeah.... equally for all maybe the most things is socially at this age.” R1 comments, “I rate there is a good standard of the school so everything is fine for me and I rate at a good rate. Aah all are equally important and over here all are given equal priority so I feel like this is a standard maintained already.”

B. Perception of Parental Participation
All five believe that the school supports parents and that they would like to spend more time with children at home. They attend nursery events and believe the nursery encourages them to attend and have volunteering activities in school. H1 believes it is difficult for her to attend school events as she is working during school hours.

R1 comments, “if the parent has any concern they always support which is always helpful for a mother especially a working mother for the child development. Especially nowadays they have started with activity at home which is very helpful for us where I can put my son to repeat those activities and it will help for me also to socialize with him easily. E1 and S1 comment that parental age, level of education, income or cultural attributes may not play a big role in the learning of children. E1 says, “No. I really don’t, as long as the parents have common sense, and they are loving and caring, the other things are just an adding bonus…”

1) Parenting (Epstein’s Theory)

On nursery events M1 says, “In every event I come with my child and of course, everyone in the nursery encourage us if there will be event outside, everything they will encourage.” E1 has flexible working hours and attends all events and the nursery gives plenty of notice to do so. She is proud to see her child in the events and feels all curriculum areas are covered throughout the year. S1 cannot attend, however, is happy to relive the moments through photographs on social media.

2) Communicating

All participants communicate with the teacher regularly while picking up the child and through parent teacher conferences. S1 says, “I think I have almost a daily conversation as I said, whoever I feel that there are some issues around or I need answer for I can immediately reach out to the teacher and she is very supportive and very cooperative in that perspective.” E1 says her child loves to communicate when he comes back from school. “Yep he loves it. He always very positive about his teacher, about his teaching assistants (amm) he is always very, very bubbly and we make a point from...he will sit down for dinner and we will talked about what we’ve been doing that day what are they favourite part of the day was, or anything that they did not like things like that.”

3) Volunteering
R1 comments, “Aah yes there a lot of volunteering held in our school and British Orchard Nursery and few of those have attended also and and aaa it is also very helpful for the parents to know more about the schools. Aah doing the events it’s a great chance for the mother to see how the child is performing in front of the crowd and like it’s a confident level is developing.” E1 is not aware of any programs for volunteering but would do so if the school needed it. S1 however, has constraints in volunteering.

4) Learning at home

All parents read to their child every day and reinforce learning at home. E1 says, “Mostly verbally (umm) to be honest, making fun play a lots of games . His favourite is I spy, and we play counting games, adding and subtracting things like that. So he does not actually realize his learning his just having fun. I would read books. We play with his dinosaurs, build Lego structures, we do puzzles, enjoying playing with his little kitchen and his favourite is playdough.”

On parent’s quality time with the child at home, S1 says, “I think this is very critical because ah it I think the parents are the role model for the kids when they learn to grow right so it’s important you spend more time with them, valuable time where you show your current concern which is very helpful in nurturing them and their developments, I think this is very critical and the amount of quality time that you spend with the kid”

On household chores she says, “Well I try to, especially when I’m trying to put the clothes to dry up he actually helps me, please pick it up from the bucket, it think it’s important that you get them involve at the early age and they get the sense of that responsibility and they feel good about the fact that you know, I am ..Actually helping out mama, so I think that very helpful.” E1 says, “I feel that parent, is still the most important people in the child’s life and we should be working together, with the nursery as one, then hopefully we will be following the same guidelines. I think that it is really important, that we spent time with our children. It is important to talk to them regardless of their age, and especially reading stories we do this a lot in bed time”. M1 says, “It should be long time, about here the area of working... is always too much time they are spent time here more in the school more than other and with us.”

On the importance of pre-schooling S1 and E1 say that both are completely different and pre-schools help further in social skills. “Yes, it’s completely different, because it’s obviously it’s just you and yourself, (umm) you and your child at home, I should say (amm) where in nursery
it’s again it’s a social side, it’s important for freedoms, to mix with other the children at her similar age” (E1)

5) Decision Making

The parents feel that the nursery listens and they work as a team in deciding what is important for the child. S1 comments, “I think the team is very supportive, taking care for longer periods than what is expected because they understand it gets difficult for working mothers…. All concerns that I have and raise is solved then and there and I get the feedback.” E1 says, “Yeah I do feel, that the nursery listens and I feel that it is important that we work together as a team. Absolutely…”

6) Collaborating with the community

The parents spend time taking the children out on weekends and encourage the children to participate in outside events. E1 says, “(Amm) as long as the weather is good and not too hot we will got the beach, but we tend to go to the pool at any time of the year. We go to the park, cinema and as, I said we love going on holiday as a family (amm) trying different places, but also we go back to UK and catch with family and friends there as well.” S1 says, “Yeah so it’s like a. If its summers we go to mall or if it’s a pleasant time we like to go to parks and he plays and he sees other kids around have fun together, and mostly, he is outgoing person, he loves… you know. We let him go out his happy, you know. Just leave him and he is happy, have fun this...” E1 also says, “Yep, he plays with his friends and he actually about to starts attending group golf lessons as well which is a very good opportunity in Dubai as well”.

Table 4.70: Summary of Parents Interview Analysis

183
Interviewee Themes

<table>
<thead>
<tr>
<th>Perceptions on quality in EYE &amp; ISO certification</th>
<th>R1</th>
<th>M1</th>
<th>H1</th>
<th>E1</th>
<th>S1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important &amp; productive</td>
<td>Important &amp; productive</td>
<td>Important &amp; productive</td>
<td>Important &amp; productive</td>
<td>Important &amp; productive</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perceptions on Curricular activities &amp; child progress</th>
<th>All Curricular Skills are equally important</th>
<th>All Curricular Quality time at home, Communication, Volunteering, Community Involvement are Important for Children’s Learning</th>
<th>All Curricular Skills are equally important</th>
<th>All Curricular Quality time at home, Communication, Volunteering, Community Involvement are Important for Children’s Learning</th>
<th>All Curricular Skills are equally important</th>
<th>All Curricular Quality time at home, Communication, Volunteering, Community Involvement are Important for Children’s Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important &amp; productive</td>
<td>Important &amp; productive</td>
<td>Important &amp; productive</td>
<td>Important &amp; productive</td>
<td>Important &amp; productive</td>
<td>Important &amp; productive</td>
<td>Important &amp; productive</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perceptions on Parental Participation</th>
<th>Quality time at home, Communication, Volunteering, Community Involvement are Important for Children’s Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important for</td>
<td>Important for</td>
</tr>
<tr>
<td>Children’s</td>
<td>Children’s</td>
</tr>
<tr>
<td>Learning</td>
<td>Learning</td>
</tr>
</tbody>
</table>

**4.5.3 Interview with Policy Maker**

The interview with the child department head M at Ministry of Social Affairs revealed that she firmly believed she was an agent for motivation, change and an initiating leader in an all-women’s team supporting this crucial sector of childcare, and social services in the country largely dominated by women workforce. She considered herself to be an innovative leader who has restructured the department and carried out major projects.

Kelloway et al., (2002) comment that ‘Leaders follow idealized influence when they make improvements in performance by closely monitoring and participating in risks with their followers, maintain consistency in their behaviour, and are dependable’. The department leader spoke on expansion of the department with the help of team feedback and sharing of best practices, values and skills. She strongly commented on the importance of professional development and training for her team. She spoke on the importance of parental involvement and quality in nursery schools. She went on to comment that the Ministry would soon be introducing an inspection process for all nurseries to ensure quality standards and would certify them from A to E. A being outstanding and E being below Average. Leaders define policies. Distributed leadership focuses on the practice of leadership rather than on a single leader.
She stated firmly that the federal government has set up clear targets to improvise the quality of the nurseries in UAE with nearly 10 percent of nurseries to be rated as outstanding, this number to gradually go up in subsequent years so as to raise the bar on quality child care in line with the international preschool environment the world over.

Halverson et al, (2005) point out that accountability systems provide standards for achievement and instructional and assessment practices; necessary to reach high standards and incentives for participation. The shift must take place from internal accountability to external accountability. Instructional leaders require frameworks, to create schools that can systematically improve student learning.

4.6 Summary of Qualitative Findings

Table 4.71: Summary of qualitative findings and their implication

<table>
<thead>
<tr>
<th>Participants</th>
<th>Perceptions on quality in EYE &amp; ISO certification</th>
<th>Perceptions on Curricular activities &amp; child progress</th>
<th>Leadership Style of the Supervisor</th>
<th>Perceptions on Parental Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1 (Academic leader)</td>
<td>Important &amp; productive</td>
<td>Curriculum is through play, is effective, shows progress, and is individualized.</td>
<td>Transformational (BSM E)</td>
<td>Importance of quality time leading to children’s learning</td>
</tr>
<tr>
<td>F1 (Academic leader)</td>
<td>Important &amp; productive</td>
<td>Curriculum is through play, is effective, shows progress, and is individualized.</td>
<td>Transformational (BSM E)</td>
<td>Importance of quality time leading to children’s learning</td>
</tr>
<tr>
<td>S1 (Academic leader)</td>
<td>Important &amp; productive</td>
<td>Curriculum is through play, is effective, shows progress, and is individualized.</td>
<td>Transformational (BSM E)</td>
<td>Importance of quality time leading to children’s learning</td>
</tr>
<tr>
<td></td>
<td>Important &amp; Productive</td>
<td>Curriculum is through play, is effective, shows progress, and is individualized.</td>
<td>Managerial (BSM J)</td>
<td>Importance of quality time leading to children’s learning</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>B1</td>
<td>Academic leader</td>
<td>Important &amp; productive</td>
<td>Curriculum is</td>
<td>Productive</td>
</tr>
<tr>
<td>H2</td>
<td>Academic leader</td>
<td>Important &amp; productive</td>
<td>Managerial (BSM J)</td>
<td>Important &amp; productive</td>
</tr>
<tr>
<td>A2</td>
<td>Academic leader</td>
<td>Important &amp; productive</td>
<td>Managerial (BSM J)</td>
<td>Important &amp; productive</td>
</tr>
<tr>
<td>R1</td>
<td>Parent</td>
<td>Important &amp; productive</td>
<td>All Curricular</td>
<td>Important &amp; productive</td>
</tr>
<tr>
<td>M1</td>
<td>Parent</td>
<td>Important &amp; productive</td>
<td>All Curricular</td>
<td>Important &amp; productive</td>
</tr>
<tr>
<td>H1</td>
<td>Parent</td>
<td>Important &amp; productive</td>
<td>All Curricular</td>
<td>Important &amp; productive</td>
</tr>
<tr>
<td>E1</td>
<td>Parent</td>
<td>Important &amp; productive</td>
<td>All Curricular</td>
<td>Important &amp; productive</td>
</tr>
</tbody>
</table>
Important & productive All Curricular Skills are equally important N/A

Community Involvement important for Children’s Learning
Quality time at home, Communication, Volunteering,

S1 (Parent)

Important & productive All Curricular Skills are equally important Transformational Leadership helps in change management

Parental quality time at home, Communication, Volunteering,

M1 (Ministry Official)

Important & productive All Curricular Skills are equally important Transformational Leadership helps in change management

Parental quality time at home, Communication, Volunteering,

B2 (BSM E)

Important & productive All Curricular Skills are equally important Transformational Leadership helps in change management

Parental quality time at home, Communication, Volunteering,

Data was collected through quasi-experiments, questionnaires, semi-structured interviews for several reasons. Greene, Carcelli and Grahan (1989) list five rationales for using mixed design in research, including triangulation, complementarity, development, initiation and expansion. Two of the above five rationales - triangulation and complementarity - support the adoption of mixing qualitative and quantitative data in this study. Triangulation relates to use of “convergence and corroboratation of results from different methods studying the same phenomenon” according to Johnson and Christensen (2004, in Johnson and Onwuegbuzie, 2004). The intention in triangulation was to use questionnaires and interview results along with an analysis of the policies to increase the credibility of the results. In complementarity, the rationale was for “the investigator to seek elaboration, enhancement, illustration, and clarification of the results from one method with results from the other method” (p. 439). The data obtained from the interviews helped expand the understanding of the information collected from the questionnaire by asking participants to elaborate on their ideas. When examining both the quantitative and the qualitative data collected from all parts of the study, several findings can be extracted and meanings ascertained.
Effective leadership is the single most important factor to run efficient organisations. Employee trust and commitment to the firm tend to be based on trustworthiness and fairness in management and in decision making (Boxall & Purcell, 2008). Robbins & Judge (2009) state that the personal qualities of Richard Branson, chairman of the Virgin group, make him a great leader. He exhibits transformational leadership. His employees describe him as fun loving, sensitive, hardworking, innovative, charismatic, enthusiastic, energetic, and decisive and risk taking. Fairholm (2009) states that power flows from charisma. He further comments that charismatic people command compliance from others. Power is central to defining individual self-esteem within an organisation and power is the essence of leadership.

The top brass in any organisation face and efficiently manage conflict. Vries (2011) states that one of the most obvious destroyers of the team and the team spirit is conflict. Conflict must be ably brought out and addressed. ‘Conflict management’ strategies range from collaboration, to bargaining to power. The most productive resolution is through the win-win approach. Collaboration is the process in which both the parties collaborate to define their problems, and then engage in mutual problem solving. Bargaining is a compromise; and power struggle is of course the effort by each party to win (Owen, 1999). There are conflicts that arise often in an innovative organisation embracing constant change, and the preschool is a classic example of such issues happening often, especially amongst the various stakeholders. It is imperative that the leader makes rational decisions and resolves conflicts. Participative decision-making can reduce conflicts to a certain extent. Leadership is different from management. They are often confused for each other. Good management brings about order and consistency in the organisation structure; leadership in contrast is about ‘coping with change’. (Kotter in Robbins & Judge, 2009).

The two BSM’s studied are active leaders managing the preschools, where in Leader B2 manages the four branches of Mankhool (ISO certified), Jumeira (ISO certified), DSO. She speaks highly of the guidance given to her through the ISO quality framework and mentions that she works hard to ensure the positive change gets implemented timely. This transformational type of leadership sets her apart and all her principals have praised her for it. The principals assume roles that oscillate between being a leader to being a manager when they need guidance for change. The researcher attempted to validate the findings of the quantitative data analysis. It was clearly seen that Business support manager E has showcased change management and influenced her school quality and praises the ISO framework for positive contribution and influence. BSM J has a managerial style of leadership which may not support change management fully and hence the quality principles and effectiveness of the ISO program which she was aware about may not have
been transferred to her schools Nahyan, Sharjah and Al Qouz. The BSM’s are good instructional leaders and hence the academic leader satisfaction scores are high as reported by all interviewees. A leader needs to build on the social capital as well as intellectual capital through a ‘hands on’ and ‘on the ground’ approach. (Fink & Resnik, 2003). Contemporary society demands results from its organisations and leaders (Fairholm, 2009).

In the quantitative data analysis of children scores, the Non-ISO schools although having effect curricular practices and quality standards have matched up to the ISO certified schools, supervised by BSM E who due to her transformational Leadership Style and effective change management policies, rigorous procedure checks and inspections has been able to transfer the ISO quality standards of Non-ISO schools, thereby, helping in the enhanced growth of all children’s learning in her schools: Mankhool and Jumeira (ISO certified), Dubai Silicon Oasis (DSO) and JBR (Non – ISO certified). This could be the reason and the answer of the in-depth investigation question in the quasi-experiment conducted to look at the growth scores of the ISO group versus the Non-ISO group with the differing leaders. It was seen that when this common leadership influence was removed and the data checked, the learning scores of the students in the ISO quality certified school Mankhool (BSM E) were higher and statistically different in growth than the Non-ISO certified school Al Nahyan under BSM J. The interview analysis across all participants including BSM E pointed out to the importance of quality certification and they felt that such programmes may enhance child development. This is also echoed by M, the ministry official at the child department at the Ministry of Social Affairs. She has stated the importance of inspections and quality frameworks and the department has clearly achieved a lot under the able leadership of M. The direction and future strategies are clear and aim to follow best practices across the globe. The UAE government is cognizant to the importance of quality in early years and aims to set up frameworks to enhance childcare and provision to parents of UAE.

On analysing the parent interview data, it was interesting to note that all the parents interviewed have rated the quality of the pre-school high, mentioning that all curricular skills are equally important to children’s development. Although belonging to different nationalities and cultural backgrounds all parents have mentioned that demographic factors of parent’s education level, working status, nationality or social-economic standing do not affect children’s learning. This contradicts studies conducted which state that parent’s demographics may play a role in children’s growth in learning. All parents have voiced out the importance of quality time and perceived themselves to be giving time to their children on various activities including participation in nursery activities. They praise the nursery for effective communication and involvement with
parents in participatory decision making. They believe such activities help in children’s
development which is in line with Epstein’s parental involvement theory.

All interviewees feel that increase in parental quality time may support and lead to increase in
children’s learning and socialisation. Ironically, there was no increase in actual learning scores of
students even though parents spent more time. There was no correlation found with any of the
parental factors and growth of child learning in both – the ISO set of schools and the Non-ISO set
of schools, indicating that the school programme when of high quality ensures that child growth
and development targets based on school curriculum and learning theories are met. The
Vygotskian view also suggests that ‘waiting for children maturation for satisfactory school
performance is contradictive as it may never happen, instead preschools and early childhood
education should allow the children to go through guided social experiences that will provide
them with the skills they need to use in primary school and beyond’ (Carlton & Winsler, 1999, p.
346). The intriguing aspect of the topic and findings directly linked to society has made the
research valuable. With the aim of utilizing and analysing the results in the work organisation, the
researcher has worked with work with positive zeal and enthusiasm to conduct the research. The
research findings would be shared with the government organisations and various stake holders
in the UAE, to contribute to promotion of social responsibility and effective policy making
thereby benefiting the extended community at large. The table below summarises the objective
perceptions of the interviewees on the key themes that emerged in the interview
Chapter 5: Conclusion

This chapter presents the findings and conclusions drawn from analysis of the collected data using quantitative methods and interviews. In this chapter, the researcher attempts to focus on the findings drawn from the results of the quasi experiments, perceptions of the stakeholders in relation to the issues addressed in the questionnaire and the interviews, by returning to the research questions of the thesis stated in chapter one. Associations are made by linking the research questions of the thesis and the concepts in theoretical framework. These research questions include a considerable spectrum of topics at the forefront of educators and leaders concerns in the UAE and elsewhere.

5.1 Summary of the Study

Various studies point out to the importance of curricular practices and pre-school programs. “Quality of the experiences that children have in preschool has increased; for it has been established that quality preschool experiences support children’s readiness by helping them in developing better language scores and math skills in later life” (Peisner-Feinberg et. al, 2001 as cited in Ackerman & Barnett, 2005, p. 13). This study attempted to investigate the socialization and learning in a preschool in UAE and the influence of ISO certification and parental demographics on the individual child’s learning experiences. Reynolds et al. (1994) and Goodman & Sianesi (2005) state that the early years education and family support factors promote long-term effectiveness in preschool. The results lead to plausible answers to the main question which is framed by the broad aim on quality in pre-schooling and the three questions linking to it.

The quantitative and qualitative data analysis highlighted that socialization and learning has taken place across all the age groups of the ISO certified and non-certified UAE preschools. Moreover, with a thorough research and de-linking the interference factor of common leadership, it was found that the ISO quality school has reported significantly higher growth scores in children than the Non-ISO certified one. This implies the importance of quality frameworks. This can be generalized and has many implications on policy formation at the school and the national level with the reiteration of the fact that quality in early years education does matter for the young child.

It was interesting to note that parental demographic factors did not have much effect on the
learning of the pre-schoolers implying that the pre-schools impart high quality education and skills to these children. Quality teaching at the early years settings compliment and fill in the gap for home learning in a way, as the teachers in good settings provide for the required care and development to the young toddlers. This finding is crucial to a country like UAE where most parents have work visas and full-time jobs. Educational leaders must recognise this and be literate about developing a quality policy for their setting. They need to have basic understanding on implementation and evaluation, else they will be reactive instead of proactive to resolving issues. They need to be educated theoretically and practically on international curricular frameworks. Power permeates education systems. Leaders must understand the power and the responsibility associated with reforms, as educational policies are value laden. (Fowler, 2013).

5.2 Key Findings of the Study

The discussion reported in this final chapter attempts to address the following main research question: Is pre-school learning effective and are quality certifications in pre-schools important?

The following are the sub-research questions:

**RQ 1** - Is there a significant improvement in learning of the children at the preschools in UAE?

**RQ 2** - Is there a significant difference in the learning of children between the ISO quality certifies and non-certified preschools? Is there any impact of leadership of the schools on quality of learning?

**RQ 3** - Do parental demographic factors and quality time spent at home with children impact the pre-schoolers learning?

A. Findings on research question 1

The quantitative data results of the descriptive and inferential statistics report that the difference in the scores of the post-test and the pre-test instrument is significant implying growth in learning of the pre-schoolers. It is evident from the longitudinal trends observed of the growth scores over 5 years that learning skills have been enhanced for the children of the preschool. The same result was seen in seven pre-schools’ and the study showed significant growth scores for the children over an academic year. On further testing, there was a significant difference found between the pre-test scores of existing pre-school children (old students who have
attended the preschools) and new children just enrolled at the school. This may imply that children having preschool experience have higher skills at the start of an academic year compared to new school children at the same age highlighting that preschool learning maybe more effective than home based learning. These significant results imply that there is considerable improvement in young children studying in the UAE preschools. This clearly answers the broad question - Is pre-school education effective?

All the participants in the interview have also expressed that the pre-school’s EYE program followed is very thorough and have complimented the robust system of curricular planning and assessments. They believe that the learning and socialisation is happening at the schools effectively. Children’s readiness for schooling is shaped much earlier than assumed and imparting of skills and care that are introduced after the early years could be too late. This emphasizes that the relations that a child has with his family members, preschools and early care centres are important to future school success. (Rimm-Kaufman & Pianta, 1999; Rimm-Kaufman, Pianta & Cox, 2000 as cited in Pianta & La Paro, 2003). This is in line with Piaget’s and Vygotsky’s theories. Piaget proposed that cognitive development was a gradual restructuring of mental processes by biological growth and experiences from surroundings. Children create an understanding of the world around them. Then, they experience distinctions between what they know and what they find in their surrounding environment. Discovery learning and supporting the developing interests of the child are two primary instructional techniques expounded by Piaget (Atherton, 2011).

B. Findings on research question 2

On carrying out the quasi-experiment between the scores of children in all the 7 schools (ISO and Non-ISO) it was found that there was no significant difference in growth scores of children in ISO quality certified and non-certified schools as a mixed group. However, in the segmented results of class levels, the toddlers and the nursery level students showed higher growth scores in ISO quality certified schools. There was no difference found in the growth scores of the foundation level students of the schools. This may indicate that quality certifications help in processes and quality parameters of learning in young children helping these children in ISO schools to have higher growth scores as compared to Non-ISO school children. Piaget’s constructivist theory proposed that children progress through a succession of stages (Mitchell & Ziegler, 2007). It is a possibility that with the high level of curriculum quality (As discussed in the interviews and perceptions of parents in the survey) the foundation level students across both ISO and Non-ISO schools acquire new skill levels as they progress to the next stage and
hence may have similar growth patterns in learning. Vygotsky further emphasizes that the process of engagement with the adult enables children to refine their thinking or their performance to make it more effective. Vygotsky’s zone of proximal development and stage theory also talk on the effect of time and stages in a child’s life. He explained the ‘recursive loop’ when new learning happens over time and new learning and ideas are formed.

Leaders and care givers have an important role to play in the life of children. On segmentation of results of the mixed group (ISO and Non-ISO), looking at the mean scores of growths across the different schools and their leadership, independent sample ‘t’ tests were performed to see if the leadership style of the school leader influenced the children’s learning. The growth scores of students in BSM E’s Non-ISO school were significantly higher as compared to the scores in BSM J’s Non-ISO school. It was observed that the leadership of BSM E had an influence on the growth scores of the Non-ISO schools thereby leading to increased growth scores of the non-ISO schools as compared to the other Non-ISO schools under BSM J. BSM E in the leading of the ISO schools may have transferred the quality practices in her leadership visits to the non-ISO school and hence enhanced the school effectiveness. This is concurrent to Burn’s leadership theory and the interview answers of leaders of schools under her who believe that she is a transformational leader and skilfully manages change as compared to BSM J who is more managerial. BSM E herself mentions in her interview that ISO quality programs help in school effectiveness and have helped her lead the schools better. Transformational leadership and distributed leadership are concepts suited to early childhood contexts; transformational leaders recognize that people are motivated less by cognitive factors and more by affective factors (Crawford 2003 in Dunlop, 2008). Their approach is empowering as it motivates people to make their own decisions and take responsibility. The study found out the important place transformational leaders have in the EYE field. Further research which investigates leadership practices at preschools is recommended as that was an important finding of this study. Another study can look at a school as a case study that is in transition to becoming ISO certified and a rich data can be gathered on perceptions of stakeholders on the effect on learning quality and leadership. On further analysis of the mean scores of the 7 branches, and after omitting the outliers from the data analysis, tests indicated a significant difference in the growth scores of the children, with higher scores in BSM E’s ISO certified schools. The same result was obtained on checking the longitudinal trends over 3 years. This leads to a strong argument on the effectiveness of school certification. All the interviewees have commented that quality assurance programs are “A good thing to follow, which set guidelines, helps to learn new things and sets high standards”. They believe that the ISO quality certification provides an advantage to quality enhancement “Sets clear guidelines, policies and standards and contributes to the
C. Findings on research question 3

“It is important to understand parent’s views for it has been established that a child’s language development, cognitive skills, social competencies when they start kindergarten are strongly influenced by their parent views” (Currie, 2005 as cited in Abu Taleb, 2013, p. 1887). **It was interesting to note that contradicting to theory (Epstein’s Parental Theory) and large-scale studies conducted, parental factors made little difference to the learning of children in this study.** Epstein’s interpretations are from the perceptions of schools and her research is concerned about actions taking by both schools and teachers to encourage more active parental involvement. Xitao F. and Michael C. (2001). Parents’ demographic factors were only seen to affect children learning with regards to nationality, highlighting the role of culture in an expatriate dominated country like UAE. Diamond et al., (2000, p. 94) state that “Parents’ views about kindergarten readiness vary according to their culture, ethnicity, education and community views about readiness”. Asians have highest mean scores as researched indicating higher skills achievement. This may indicate a cultural impact on children’s learning or this may be because of the school setting as most Asians were enrolled in the ISO certified school. It was also interesting to note that parents have rated all areas of curricular skills equally high and seem to appreciate the progress with high percentages of agreement in the survey questionnaire. This equates to their perception that their children have learnt well in the preschool. It was also noted that parents in ISO schools consider their children to have progressed more in certain skills. They have rated high on skills under WRD (Understanding of the world) and CRV (creative problem solving and numeracy) which are the areas of the EYFS curriculum implying their perceptions of the progress made by the children in these areas specifically. However, it was seen that whilst parents who think that these skills are important, are not spending enough time in related activities like taking children out to museums, aquariums, religious places which involve outdoor physical and intellectual activities. It can be inferred that the preschools have taken the responsibility of these activities and that has ensured the growth in skills as per parents. The preschools have termly field trips and encourage many events and community engagement programs. This finding can help in formulating plans for parent school community events and outings. In the study 67% of parents reported that they have enrolled in preschool to get the child ready for kindergarten. They have also reported that lack of time, conflict with work is the main reason they cannot participate in nursery activities. Another trend was noted among parent from other studies on NEGP where they emphasized importance of academic skills over social skills (Cappelloni, 2011; Abu Taleb, 2013; Lara-
Cinisomo, et al., 2008; Hains, et al., 1989 ;). “Parents often think that pre-academic skills are more necessary for kindergarten readiness when compared to kindergarten teachers” (Olmsted & Lockhart, 1995; Harradine & Clifford, 1996; as cited in Diamond, et al., 2000, p. 94).

Pianta et al. (2009, pg. 53) touch base on a demographic study undertaken on pre-schoolers and point out that “Latino children are the least likely of any ethnic-racial group to enrol in preschool or childcare in USA (Espinosa, 2007). There is evidence that this does not reflect a difference in cultural attitudes or preferences but rather a lack of information and unequal access (Barnett & Yarosz, 2007). Demographic variables do play a part on the child’s growth as culture is ingrained in a child’s DNA. The important influence of parental learning and belief systems cannot be ignored. Further studies must be conducted on a larger scale to probe the influence of the multinational environment on the child’s learning in countries like UAE and Singapore who have a huge mix of population. 79% of parents across UAE have reported that ISO quality certifications are important while choosing a preschool. It was also seen that parents of all nationalities spent equal amount of quality time and parents of both types of ISO and Non-ISO schools tend to spend the same amount of time with their children. This study ironically also reported that watching television had no effect on the progress of children in the school curricular areas as perceived by the parents possibly implying the positive influence of school teachers on children skill development. It was noted that parents having a doctoral degree reported spending more quality time. A notable study that examined perception of parents on curricular skills is the NHES 1993 (U.S. Department of Education, 1996, p. 8). The study indicated “a significant difference in parent’s perceptions of skill importance in terms of their level of education; for it has been found that the percentage of parents who considered all school-related items as essential or important have decreased with the increase in education level from less than high school education 55% to college education 29% (West, 1993, p. 3).

This study highlighted that parental quality time with the child did not affect the child’s learning and development. This was not in line with Epstein’s parenting theory and other studies. Parents and academic leaders have reported satisfaction on preschool effectiveness in their interviewees. This may imply that as the preschools have a robust curriculum and teaching methodology, this ensures that the lack of quality time by parents does not affect skill development in children. In 2007, the NHES conducted a survey looking at children’s curricular skills and readiness for the kindergarten. “When parents were asked about what they think was important to prepare their children for kindergarten, a majority just like previous studies still considered academic skills as essential were 62% of parents thought teaching sharing was important, 56 % reported the alphabets, 54% said numbers, 45% stated reading and 41% felt holding the pencil was important to teach” (O’Donnell, 2008, p. 3).
Vygotsky (1930) proposed that “learning guides development; when children interact with others and their environment, this interaction advances their development level” (Berk & Winsler, 1995; Graue, 1993 as cited in Carlton & Winsler, 1999, p. 345). Therefore, “when children in preschool are socially active with their peers, teachers, and family members who often scaffold them through learning experiences, their development level is raised” (Carlton & Winsler, 1999, p. 345). Vygotsky emphasizes that early childhood centers and preschools should help children go through guided social experiences that ensure they receive the skills needed in the primary years and school beyond. “Another theory that is also utilized to understand kindergarten readiness better is Urie Bronfenbrenner’s ecological/interactionist theory which proposes that a child’s development is related to the contextual influences around him” (Weigel & Martin, 2006 as cited in Winter & Kelley, 2008, p. 261). It states that the important aspects that impact children’s learning and growth are their family, early years’ education settings and the community in which they belong. The children and care givers at the school and parents should work together and cooperate to achieve positive outcomes and achievements for children. It considers that, “each child can learn with the appropriate resources and the proper amount of support” (Carlton & Winsler, 1999, p. 346).

The Current research reinforces the critical importance of the early childhood period in the human development cycle. The early years are the foundation stage not only for education, but also of adult well-being, physical and mental health. The family is the natural environment of the child. Normally, it is within the family that the child’s physical, social and learning development first takes place. The socio-emotional development of young children requires warm and stable relationships with nurturing adults (preferably parents) and other children. If both parents are working, qualified preschools can help secure a stable environment for the child during the first critical year of life. Young children from about the age of one year can benefit from caring, high quality programs, run by early childhood professionals.

5.3 Implications of the Study

The study has theoretical, methodological, empirical, policy and practical implications. The theoretical implications of the study have clear relationship to the theoretical framework and the review of the related literature. The systems theory, learning and developmental theories, transformational leadership theory, parental engagement theory and conceptual models such as ISO, TQM, OFSTED, EYES and EPPE were supportive to reach clear understanding and theoretical mapping. The local and global similar previous studies reviewed to situate the current study have been offering relevant state of the art to the research. These theories, models,
and similar studies might as well be relevant for any similar future studies.

The methodological and empirical implications of the study strongly link to the mixed method approach the study used. Particularly the use of test results of several groups over the years to map out the quality improvement during pre- and post ISO certification was helpful to understand the impact ISO certification made, similar approaches might be influential in studies that aim to understand quality improvement achieved through specific interventions. The parental survey was instrumental to understand the influence of parents and their quality time’s impact on the education of the early years students. Interviewing school leaders have been influential to understand the impact of leaders on quality enhancement. The mixed method of research design aided in the authenticity and credibility of the research. As with any research the limitations anticipated must be thought of. Triangulation can pose a difficulty in comparing multiple databases (Creswell, 2008); and the diversity of the interpretations of data should be preserved so that the “voices” of the least empowered are not lost (Merten, 2010). Each method has its own inherent disadvantages as expounded previously. Creswell (2008) comments that quantitative research allows for greater generalizability of its results and research involving different stake holders provides insights about settings or phenomena. This and other similar future studies may consider mixed method to study quality in early years education.

The study has several policy implications. Enhancing quality in early years in the UAE should be addressed at policy forums and debated before relevant policies are developed, implemented, monitored and evaluated. The policy debates on early years quality might address the institutional quality, teachers licensing, enriched curriculum and pedagogic practices and other relevant early years quality standards. The centrepiece for most EYE diversity programs is training. Participants settle down in the organisation better, learn to value individual differences and increase their cross-cultural understanding. The rewards are immense, and the intellectual capital gets built. Pianta et al. (2009) state that professional development approaches enable teachers to allow for direct tracing of paths of inputs to teachers to inputs to children, and ultimately to children’s skill gains. These gains can be considerable-up to half a standard deviation on average. The preschool belongs to the service sector of the UAE’s economy and hence is dependent on the human capital it creates and ably employs. The true resource of a preschool is its qualified and trained workforce. Many other questions come to the surface. Would it be imperative for preschools in UAE to provide regular training to the teachers and teaching assistants so that they are also empowered to produce better learning experiences for the children? (Gloeckler & Niemeyer, 2010). The MOSA guidelines in 2012 stipulate a 30-hour training per annum at a cost of approximately USD 1000
for every employee for the preschool to be qualified higher in its inspection. This has not been very welcome as is an additional cost to the schools with no support from the government, in an already fragile system. If the UAE is to be a powerful knowledge economy, it needs to formulate stringent policies in education, starting with this critical area of the EYE. The human capital argument stresses that there are multiple important skills, both non-cognitive and cognitive, and there are the crucial and sensitive periods in a child’s lifecycle where investments are particularly effective, and that inadequate investments are costly and difficult to remedy at a later stage. (Cunah et al., 2006; Woessmann, 2006, cited in Woldehanna, 2011). Organisations in the UAE are modifying the workplaces to accommodate the varied need of the diverse workforce. Women with young children or those who relocate or start lives with new partners need the maximum support. The ministry has done well to draft a law to support the women government employees with creating work-based nurseries (MOSA, 2012).

The study indicates some practical implications for local and global agencies that are interested in the quality of early years education. In the education sector it is argued that efficiency and equity objectives have a trade-off, and only one is normally achievable at the expense of the other. However, when viewed in the larger scheme of things, they both are mutually reinforcing, and it is more equitable and efficient to invest in this sector very early. Correcting failure can be more inefficient and costly in future, and families may tend to invest less in the early years of the child due to lack of information or financial constraints. It is proven by researchers that early childhood education can produce long term improvements in the social development, hence public investments by the government in this sector is imperative. “The UN Convention on the Rights of the Child (United Nations, 1989) has had a long history of supporting and encouraging interventions aimed at children and families. The human rights argument holds that children have a right to live and develop to their fullest potential” (Woldehanna 2011, p.6). The organisations such as UNESCO and UNICEF strongly encourage investment in the early years’ programs, and champion the cause for child well-being and for children to have healthy environments, and the right to education, to fully develop the human person, and considers this as a basic human right. Strong social, economic and education benefits flow from creating and maintaining national networks of early childhood services. Governments benefit from the investment through more people working, higher taxation returns, more social cohesion at community level, less reliance of families on social security, less criminality, and better quality of intake into the compulsory education system. Kindergarten learning experiences have the potential to alter the trajectory of the child’s development and are the very framework on which rests the towering potential of the preschooler’s lifelong learning. These experiences must be well managed. Ultimately our world’s
future is in their hands.

5.4 Recommendations of the Study

As the young child’s learning and cognitive ability and social behaviour become more malleable compared to adults, the investment in early education gains significance. It is not only the public-sector spending that the government should focus on; there must be media campaigns to educate parents, and help stimulate demands. Private provisions should be encouraged. Incentives can be given to private providers, who work mainly with young children and disadvantaged groups. Inclusion should be encouraged. Of course, regulations must be ably implemented by the private sector. Bottlenecks removed. High quality should be the common aim. Policies should aim at developing and fostering human capital, the important resource for a developing economy.

The question every organisational member needs to ask is, where are we at this moment and where do we need to go from here? Paradigm shifts do not happen easily and besides the vision of the leader, require the contribution of one and all. Educationists have the ethical and moral obligation to see that student’s education is not short changed as we shape their future. Leaders must develop a challenging and attractive vision, together with the employees, tie the vision to a strategy for its achievement, develop the vision, specify and translate it to actions, express confidence, decisiveness and optimism about the vision and its implementation, realize the vision through small planned steps and small successes in the path for its full implementation.

Studies state that a child’s competency is to be considered as an important indicator of his or her preparedness (Mieseil, 1999, cited in Kaufman, 2009). When of high quality, EYE programs help to develop children’s knowledge and socio-emotional attitudes (such as trust, self-confidence, curiosity and teamwork) and skills that are critical for contemporary knowledge societies.
Skills have now become the global currency of 21st century economies. Experts point out that this currency ‘depreciates’ in value if not used or harnessed well. (Gulf News, 2012). Curricular studies in EYE are important to be considered especially as UAE lacks an EYE curriculum. This can also aid in forming better transition practices between preschool and kindergarten. Guersey & Ochshorn (2011) state that early childhood centres that used observation tools, mentoring and training, graduated children whose language, literacy and socio-emotional skills were enhanced as compared to children in centres that did not use such programs. Pianta et al. (2009) state that of all the features of early years programs the adult-child ratio is the most consistent predictor of both the quality of the teacher’s instruction as well as of child outcomes for infants, toddlers and pre-schoolers (Blau 1999; NICHD ECCRN, 2000, 2002, 2004; Phillipsen et.al. 1997). Educators know about the far-reaching advantages of guidelines, observation tools and continuous professional development for teachers. OFSTED (UK) has taken note of this and has most principles covered in its framework. Other countries should follow the lead.

Learning organisations are where people continually expand their capacity to create the results they truly desire; where new ideas are constantly nurtured; where collective aspirations are set free and where people are continually learning how to learn together. The fact that groups can lead, the importance of group cohesiveness in a school comes to mind. A shared dream is at the heart of each ‘great group’. In a school the common goal should be the effective development of the child. Robbins & Judge (2009) define a learning organisation as an organisation that has developed the continuous capacity to adapt and change. They further go on to provide an example of organisational development at Wal-Mart which has introduced a new voluntary program called the Personal Sustainability Project that seeks to improve employee well-being and organisational effectiveness. Global organisations study behaviour regularly. They adopt new age solutions. Corporate Social Responsibility and ‘Going Green’ are the new terms sought after by most organisations. We must give back to society, and organisations like organisms have realized that. Schools have to step up as evolving organisations and involve ‘process consultants’ to delve deep into unchartered territories and improvise systems and introduce positive organisational change. Schools as organisations should be nested learning communities, and must aim at continuous improvement (Fink &
To manage well a dynamic school setting, and to consistently provide the best quality, it is imperative to keep enhancing and improvising. A Quality assurance program provides settings with recognition of the progress that has been made against a set of agreed standards, leading to gaining an accredited level or stage. It is important that schools keep evolving and adhere to strict norms to enhance quality. It is far more revolutionary that schools consider themselves as learning organisations and take bold steps to embrace change and adhere to international quality standards. MOSA (2011) has issued standards for nurseries, however they have yet to be enforced. A study by KHDA (2011) titled Early Education in Dubai, cites the many challenges in the nursery sector and singles out the need for quality assurance system, funding and federal support as key considerations. It recommends that public and parent awareness be increased, frameworks be prepared, adequate finance and support be imparted by the local and federal bodies (Gulf News, 2011). The survey results for this study point out that the majority (79%) percent of parents believe that ISO certifications are important.

By understanding the low participation rate by nurseries and low quality of basic preschool education, the government can drive some learning’s and lessons from the empirical analysis of research. Governments must be aware that early childhood education is an important and critical window of opportunity that will help break intergenerational transmission of poverty (Siraj-Blatchford, 2009 cited in Woldehanna, 2011). Enhanced education quality must be the ultimate aim for all stakeholders. ISO practices can be learnt and modelled on to make an education quality framework. ISO practices incorporate corporate quality. HR practices form the major component of a school’s management framework. The teacher teaching the child is ultimately responsible. The teacher must be supported with effective systems. Robust performance management systems incorporating self-appraisals, 360-degree feedback, key performance indicators (KPI’s) linked to the targeted goals of the employee should be measured in a timely manner. Reward programs should be chalked out. These should be in line with the organisation’s objectives. These tools will aid in the preschool development and will serve as ammunition to the leaders. This is where quality framework fit in. Although the cost of implementation and maintenance is high, the benefits far out way the dis advantages. Effective change management can help alleviate these pitfalls. It is also recommended that schools have an open culture incorporating participatory budgeting and participatory reform where everyone has an equal voice in policy making, implementation and outcomes. Regular team meetings should be mandatory. This can cut down ‘red-tapism’ and bureaucracy to a certain extent and quality programs can be formulated at school and country level.
5.5 Limitations of the Study

Time was a significant limitation for this study as the researcher has aimed to undertake a longitudinal trend study making it the first of its kind in the region. Limitations are the factors that create the boundaries, expectations, reservations, and qualifications inherent in every study (Castetter & Heisler, 1977, cited in Creswell, 2003), in this case factors that are national, regional, disciplinary, and cultural. Researcher bias may be a limitation in this study.

The intra cultural differences between the differing expatriate populations of UAE could also be a hindrance in further generalization. For the qualitative aspect of the study, though representativeness was achieved from the different stakeholder levels for the preschool, twelve participants were interviewed necessitating a purposive convenience sampling strategy and limiting the use of other purposive sampling techniques like extreme cases sampling strategies. The limitation here was that participants in the sample consisted of available parents willing to be interviewed, it is possible, therefore, and that the volunteer’s opinions could have differed in some way from those who did not volunteer to participate. This may have limitations in the overall holistic picture of factors related to recruitment and retention. The relatively small number of parents who participated in the interviews was also a limiting factor, and was a result of their demanding work schedules. Finally, proper time planning, implementation and budget considerations had to be made and provided for.

There are human elements that are difficult to measure or standardize. The variables of principal and teacher motivation, teaching quality, etc. are only assumed to be constant when making Comparisons between both the branches, to measure the learning. However, this is very subjective. While both the schools have similar facilities, the Mankhool branch is bigger. Could ‘bigger be better’? There could be other demographic factors not researched in this study such as the educational qualification of the parent, presence of a sibling or a nanny at home, time spent by the parent, etc. which all subtly affect the learning outcomes. All these variables and their inequality could have played a major impact in contaminating the result. There are always assumptions and limitations in conducting any research. Ongoing research eliminating various factors can lead to enhanced credibility in EYE research.

Further limitations of self-bias could also have crept in during the research, as the researcher has pre-conceived notions about her work place, and may have indirectly influenced the analysis. The external validity issues such as the play of existing cultural factors of the school, or past behavioural ideologies of the researcher, sampling issues and interference of multiple
treatments cannot be ruled out. Conscious safeguarding and peer de-briefing have alleviated these to a certain extent (Mertens 2010). Reynolds et al. (1996) state that in the past decade, research on the early year’s programs has shifted from evaluating whether they are affective to studying why these intervention programs are effective. Further research can be conducted in other preschools with differing settings, curricula and nationalities of children.

The results of the qualitative study on parent and staff feedback between both branches are very similar due to the effective standardization of the schools by the top management, highlighting the importance of enhanced systemization of processes and policies followed by the preschool under study. However, it is to be noted that other parameters of staff count and children head count, culture, demographics, size of school, facilities in both schools, previous child experiences, socio-economic and parental factors, are assumed to remain constant. Also, the multi directional nature of learning by the children and their teachers, peers and parents is not considered. These factors could tamper with the research. The study looking at the ISO quality certification effect on the learning of pre-schoolers and hence quality of schooling is also unique as there is minimal literature on it. Few studies have been conducted for higher education looking at accreditation but there is not much if any on pre-schooling. References therefore have been made to general studies on quality parameters in preschools and studies on curriculum and parent influence. The results of this study may be generalizable to preschools in UAE and possibly similar developing countries. Higher education sector can also benefit from these findings and study context. The study results and general patterns and issues would be shared with regional preschools, ministries given the similar contexts in which they operate.

5.6 Scope for Further Studies

Based on the findings and limitations in the current study, several future studies are suggested. Research on early years in the UAE in general is evolving, there is much potential for several future studies to develop, particularly in areas such as quality in early years, which has been the focus of this study. It might be interesting for several early years institutions to engage in in house short research that may help to improve the best practices. Drawing lessons from early years studies from other similar countries might be an opportunity to situate future studies on quality in early years in the UAE. Some future studies may develop quality benchmarks for early years education in the UAE. Studies that may explore parental influence and leaders’ impact on early years quality might be undertaken at large scale with large samples might be beneficial, yet they may need research funding from the state and other research funding bodies. Studies that may further explore the best possibilities to certify early years institutions may
bring quality advancement on early years education in the UAE. Further studies can be carried out on training practices at EYE centres as the teachers must have a different skill set to achieve the young children’s learning out comes. Studies can also be considered exploring the views of working parents on EYE in UAE.

Investing in young children is one of the wisest investment decisions that communities and governments can make. The countries that do this do not do it because they have surplus resources but because they believe in the fruitful results achieved by early childhood education. It might be good that studies are undertaken to explore the possibilities to increase public and state support to early years educational institutions. They appreciate the advantages it brings to children, communities and nations. Governments instead of spending large amounts on the social services for older and destitute people can invest reasonable parts of it on children who will be abler in future. The UAE can achieve great results by building public preschools for the Emirati population to instil lifelong skills, and social culture. Further studies may explore the possibilities to subsidise nurseries through various systems, such as early years health, well-being and educational supports. Except in some areas of quality monitoring and technical support, the government has limited intervention in this important area of education. Whilst MOE is working on implementing quality standards, and through inspections, there is much left to do in terms of research and government spending in this sector. Many future studies may seek to improve the state intervention and regulatory agencies continuous quality inspection and establishing quality support mechanism.

5.7 Concluding Note

This research has been conducted at a time when several developments in UAE education policy and further reforms are planned by the Ministry of Education along with other regional educational councils (Abu Dhabi, Dubai and Sharjah). The results of this research will significantly assist policy makers and decision makers in setting out more appropriate strategic views for the near and far future in education in the UAE. In other words, the findings of this research will provide the central government of the UAE and other regional governments with practical reform procedures, and a deeper understanding of the current nature of the EYE sector. The research will also enable the Ministry of Education along with other regional educational councils to review its current policy of inspecting nurseries. It will also enable the ministry to improve its training programmes for current principals to promote improved leadership effectiveness.
This research will provide EYE stakeholders with substantial knowledge (including implications) in relation to the application of research findings of the importance of preschooling, quality certifications in in early years and in holistic education improvement in preschooers. The researcher strongly believes in the importance of reforming education using a ‘bottom up approach’, as stated by Scheerens (2000). This is especially so because no similar research has been conducted in the UAE, according to the best knowledge of the researcher. The expected paradigm shifts towards preschool awareness in the UAE, as encouraged by this research, may support investment in EYE, policy formations, parental awareness and future research. This is especially so because no similar research has been conducted in the UAE, according to the best knowledge of the researcher. This EYE research has confirmed that EYE is an important phase in a child’s life. Ensuring quality in EYE is a big task for policy makers and countries. Early childhood education is a child’s fundamental right. The child should be placed at the centre and duties and obligations of the different levels of society and stakeholders should be defined to create a child’s rights framework. This should guide the development of policies, plan and legislations. The early childhood sector must not get a compartmentalized treatment when formulating priority policies for healthcare and community development. All the relevant sectors must contribute synergistically to the growth of the nation and the development of the child. This is beautifully stated by Professor Woodhead (Woodhead 2009 cited in Woldehanna 2011, p.6):

“Young children are no longer viewed mainly as passive recipients of services, beneficiaries of protective measures, nor objects of social experiments; rather they are seen as subjects who should be listened to and who contribute to world change’
REFERENCES


behaviours, and engagement in kindergarten. Early Childhood Research Quarterly, 24(3), pp.337-349...


English, F. W. (1979) *Curriculum Mapping*. Washington, DC: Association for Supervision and Curriculum Development...


Feigenbaum, A.V., 1961. *Total quality control: engineering and management, the technical and managerial field for improving product quality, including its reliability, and for reducing operating cost and losses* (No. TS156. Q3 F45).


Gandhi, V.K., 2012. *An Investigative Study into the Socialization and Learning of Children at a Preschool in Dubai, UAE and the Parental Demographic Factors that may Contribute to it* (Doctoral dissertation, The British University in Dubai (BUID)).


Jesse, D., 1996. Increasing parental involvement: A key to student achievement. TITLE What's Noteworthy on Learners, Learning, Schooling. INSTITUTION Mid-Continent Regional Educational Lab., Aurora, p.22.


Senior, B. and Fleming, J., 2006. *Organisational change*. Pearson Education...


Travers, M. (2001) ‘Qualitative research through case studies.’ Introducing Qualitative Methods,


UAE Ministry of Economy. (2014) *The Annual Economic Report*. Report number: 22. [Online] Available at: http://www.economy.gov.ae/EconomicalReportsArchive_Ar/%D8%A7%D9%84%D8%AA%D9%82%D8%B1%D9%8A%D8%B1%20%D9%84%D8%A5%D9%82%D8%A%D8%B5%D8%A7%D8%AF%D9%8A%20%D9%84%D8%B9%D8%A7%D9%85%2014%20English.pdf (Accessed: Dec 2015).


UNICEF. 2003. *The millennium development goals: They are about children*. UNICEF.


APPENDIX 1: Consent Form

NAME OF RESEARCHER: Vandana Gandhi

Graduate student in the Doctoral program of Educational Management and Leadership, British University in Dubai

CONTACT TELEPHONE NUMBER: 0097150-6243187 EMAIL ADDRESS: 120111@buid.ac.ae

DATE: 1. July. 2015

PROJECT TITLE:

Investigating the factors that may contribute to the learning of children at ISO quality certified and non-certified preschools in the United Arab Emirates

BRIEF OUTLINE OF PROJECT (100-250 words; this may be attached separately. You may prefer to use the abstract from the original bid):

The purpose of this study will be to examine the quality of learning in pre-schools and to understand the differences in children learning between ISO quality certified and non-certified pre-schools, thereby exploring the importance of quality certifications in preschools in the UAE. The study which is based on the learning theories from Piaget and Vygotsky explored global and local literature that assert the importance of quality pre-schooling. The review on ISO certifications research across the world indicate the linkages to quality in settings.

The methodology that will be used in this study will be predominantly quantitative with a quasi-experimental design (children’s scores in ISO and Non-ISO preschools) using the pre-test and post-test instrument to measure learning in the pre-schools. This is a longitudinal study that looks at the trends of the growth in learning at the preschool and the learning outcomes of ISO quality certified and non-certified preschools. A survey will be conducted to gain the perceptions of parents and the quality time they spend with children at home. Finally, interviews will be conducted with school leaders and parents of the preschools to understand their perception on leadership and quality in learning.

MAIN ETHICAL CONSIDERATION(S) OF THE PROJECT (e.g. working with vulnerable adults; children with disabilities; photographs of participants; material that could give offence etc.): N/A
DURATION OF PROPOSED PROJECT (please provide dates as month/year): 30th May 2014- 5th July 2014

DATE YOU WISH TO START DATA COLLECTION: 30th May 2014

Please provide details on the following aspects of the research:

1. What are your intended methods of recruitment, data collection and analysis?

The sampling of school sites, with assessment records of children will be sourced through purposeful sampling methods. All data will be rechecked with school consent.

Parents from the school will be selected for surveys and interviews post due permissions as per intact group sampling and purposeful sampling.

The research project will be explained to the school and interviewees and the participants will be invited to participate in the study. A summary of the interview will be documented as soon as the interview finishes including the cues observed and any thoughts that will lead to further investigations. After conducting an interview, which will be audiotaped, it will be fully transcribed.

2. How will you make sure that all participants understand the process in which they are to be engaged and that they provide their voluntary and informed consent? If the study involves working with children or other vulnerable groups, how have you considered their rights and protection?

Preschool access letters and survey letters and consent forms will be explained to the participants and the volunteer nature of their participation will be highlighted. Anonymity will be optional. The researcher will explain the rights, the risks, benefits, and the option to stop the interview at any time. The participant will sign the consent form prior to any data being collected.

3. How will you make sure that participants clearly understand their right to withdraw from the study?

The volunteer nature of their participation will be highlighted and the option to stop the interview at any time will be clearly explained to the participant.

4. Please describe how will you ensure the confidentiality and anonymity of participants. Where this is not guaranteed, please justify your approach.
The participants’ identity will remain anonymous if so required with the exception of the data collector, who will keep the identity confidential. The audio files will be coded so that no identifying information is visible on them. The audio files will only be heard for research purposes by the researcher. The audiotapes, field notes and any other data will be stored in a secure cabinet with the researcher.

5. Describe any possible detrimental effects of the study and your strategies for dealing with them.

The participants may feel uneasy about answering question that they have not had time to reflect upon or on issues that they haven’t thought about before and are not of their interest. The participants may be unsure about how to answer questions and this may cause them discomfort.

6. How will you ensure the safe and appropriate storage and handling of data?

The audio files, Fieldnotes and any other data will be stored in a secured cabinet in the researcher’s home and will be destroyed at the end of the research period. Interviewees will be sent back the transcription to ensure there is comfort.

7. If during the course of the research you are made aware of harmful or illegal behavior, how do you intend to handle disclosure or nondisclosure of such?

Information (you may wish to refer to the BERA Revised Ethical Guidelines for Educational Research, 2004; paragraphs 27 & 28, p.8 for more information about this issue)?

Disclosure to appropriate authority will be made only in the case of an intention or continuation of an illegal behaviour from the side of the participant in which this behaviour is likely to be seriously harmful to the participant and to others.

8. If the research design demands some degree of subterfuge or undisclosed research activity, how have you justified this?

N.A.

9. How do you intend to disseminate your research findings to participants?

The research abstract will be sent to the participant via email and handed out in person before interviews and they will be provided with further information shall they ask.
Declaration by the researcher

I have read the University’s Code of Conduct for Research and the information contained herein is, to the best of my knowledge and belief, accurate.

I am satisfied that I have attempted to identify all risks related to the research that may arise in conducting this research and acknowledge my obligations as researcher and the rights of participants. I am satisfied that members of staff (including myself) working on the project have the appropriate qualifications, experience and facilities to conduct the research set out in the attached document and that I, as researcher take full responsibility for the ethical conduct of the research in accordance with the Faculty of Education Ethical Guidelines, and any other condition laid down by the BUiD Ethics Committee.

Print name: Vandana Gandhi:

Date: 1st June 2014

Declaration by the Chair of the School of Education Ethics Committee (only to be completed if making a formal submission for approval)

The Committee confirms that this project fits within the University’s Code of Conduct for Research and I approve the proposal on behalf of BUID’s Ethics Committee.

Print name: (Chair of the Ethics Committee)

Signature: Date:

APPENDIX 2: Preschool Access Letter

Dear Principal,

My name is Vandana Kumar Gandhi and I’m a Doctor of Education student in the British University in Dubai. Currently, I’m doing my dissertation that is titled
Investigating the factors that may contribute to the learning of children at ISO quality certified and non-certified preschools in the United Arab Emirates

I would appreciate your cooperation and assistance to take part in a survey designed to support the study. The internet-based questionnaire has three sections. The first section includes questions about demographics. The second section includes kindergarten readiness skills where parents have to rate them according to their importance and child’s level of progress and the third section inquiries about home activities that parents do with their children. It takes about 15-25 minutes to fill the questionnaire. Kindly be informed that all the data obtained from this study will be used for the purposes of research only. Confidentiality and anonymity will be maintained for your clients and any data reported cannot be traced back to your clients.

This study might help you in your organization in reaching out to kindergartens and building better community connections that could make you better informed about the requirements of building a sound foundation for the children in your setting.

I would be more than glad to share the results with you once they are published. If you have any further inquiries about the study don’t hesitate to contact me on my mobile 0506243187 or email: 120111@student.buid.ac.ae

Thank you for your time and support.
Best Regards,
Vandana Kumar Gandhi

APPENDIX 3: Parent invitation letter

Dear Parent,

My Name is Vandana Kumar Gandhi; I’m a student in the British University in Dubai (BUiD) doing my dissertation for my Doctoral degree in Education.
I’m conducting this study to investigate your perceptions about your child’s progress in various skills. This study is crucial because you are the most knowledgeable person about your child’s development, skills and your perceptions are vital for your child’s success in his school life. This study would help in informing our practice in early years settings and could be the cornerstone for building a better collaboration between you and your child’s teacher and setting.

I would really appreciate it if you would fill out the internet-based questionnaire by accessing the link below. This internet-based questionnaire has three sections. The first section includes questions about demographics. The second section includes kindergarten readiness skills where you must rate them according to their importance and the third section inquiries about home activities that you do with your child. It takes about 15- 25 minutes to fill the questionnaire. Rest assured that all the information you provide will be used for research purposes only and the study has been reviewed by the BUID Ethical committee. Any information you provide will be treated with confidentiality and anonymity and the data reported cannot be traced back to you.

The study results will be published in my dissertation as part of fulfilling my course’s requirement. If you face any difficulty or is unsure about the questions; please feel free to contact me on my email 120111@student.buid.ac.ae or telephone 0506243187.

I hope that you will be willing to participate and I thank you in advance for your time. Please don’t hesitate to contact me if you wish to discuss the study’s result.

APPENDIX 4: Pre-test/ Post-test Survey
**Name:** Asher  
**Date:** 15th May, 2011  
**Class:** Busy Bees

<table>
<thead>
<tr>
<th>COLOURS</th>
<th>STARTING</th>
<th>END OF TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pink</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Red</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Yellow</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Green</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Blue</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Orange</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Purple</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Brown</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>White</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Black</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Grey</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Silver</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Gold</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NUMBERS</th>
<th>COUNTING</th>
<th>STARTING</th>
<th>END OF TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>1</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>2</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>3</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>4</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>5</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>6</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>7</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>8</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>9</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>10</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>11</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>12</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SHAPES</th>
<th>NAME</th>
<th>STARTING</th>
<th>END OF TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triangle</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Star</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diamond</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Square</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Circle</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rectangle</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi Circle</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oval</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crescent</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pentagon</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hexagon</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Octagon</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Personal, Social & Emotional**

- Dresses & undresses without much help?
  ✔️
- Can share with others?
  ✔️
- Separates from main carer without crying?
  ✔️
- Is aware of own toilet/hygiene needs?
  ✔️
- Ability to concentrate for an extended period of time?
  ✔️
- Expresses basic feelings / needs?
  ✔️
- Listens to a story?
  ✔️
- Can name toys & objects in the room?
  ✔️
- Tunes in with songs & rhymes?
  ✔️

**Physical Development**

- Uses a spoon & fork skillfully?
  ✔️
- Can hop on one foot?
  ✔️
- Can thread 6 or more beads?
  ✔️
- Can travel forward and backwards avoiding obstacles?
  ✔️
- Can stack 5 or more blocks?
  ✔️
- Can jump off & land confidently from a height of 50cm or more?
  ✔️
- Can cut a straight line accurately with scissors?
  ✔️
- Can walk up/down stairs with alternating foot placement?
  ✔️
- Can walk alongside a straight line?
  ✔️
- Can stand & maintain balance on 1 leg for 8 seconds or more?
  ✔️

**Overall:** out of 100 identified points

- On starting with the Nursery was able to achieve: 49
- On finishing with the Nursery was able to achieve: 49
APPENDIX 5: Survey questionnaire
1. What is your gender?
   - Female
   - Male

2. What is your Relationship with the child enrolled?

3. Your Nationality is...

   Other (please specify)

4. Marital Status

5. What is the highest level of education you have completed?

6. What is the highest level of education your spouse has completed?

7. Are you employed?

8. Is your spouse employed?
9. If employed, what is the nature of employment?

10. What is the nature of your spouse’s employment?

11. What are your working hours?

12. What are your spouse’s working hours, if employed?

13. What is your approximate average monthly household income?
   - Between AED 10000-25000
   - Between AED 26000-50000
   - More than AED 50000

14. How many children, by age, currently live in your household?
   - Less than 01 year old
   - 01 to 04 years old
   - 04 to 06 years old
   - More than 06 years old

15. How many adults live in your family?
   - 0-2
   - 03-04
   - 05 or more

2
16. What is your mother tongue/first language?  

17. In what language do you speak with your child at home?  

18. What is the birth-date of a child enrolled with us?  

19. Who looked after the child, before joining our Nursery?  

   ○ Self  
   ○ Spouse  
   ○ Grandparents  
   ○ Housemaid  
   ○ Other (please specify)  

20. What was the main reason behind enrolling your child in the Nursery?  

   ○ No one to take care of him/her at home  
   ○ To prepare him/her for kindergarten  
   ○ S/he would be able to play with children his/her age  
   ○ Recommended by a relative or a friend  
   ○ Other (please specify)
21. What was the most important reason behind choosing our Nursery for your child?

- Convenient Location
- Convenient hours of operation
- Recommendation of a relative or a friend
- Reputation of the Nursery
- Quality of the Nursery
- Access to additional supports
- Availability of Professional staff/educators
- Other (please specify)

22. How important to you was ISO Quality Certificate while choosing a Pre-school for your child?

- not at all important
- not very important
- somewhat important
- very important
- essential

Research Purpose

Do you feel that your child has made progress in the following aspects after being enrolled in the nursery?

23. He/she can walk and run with balance

- Strongly Disagree
- Somewhat Disagree
- Neither Agree Nor Disagree
- Somewhat Agree
- Strongly Agree
24. He/she can kick a ball and climb the stairs
   ○ Strongly Disagree
   ○ Somewhat Disagree
   ○ Neither Agree Nor Disagree
   ○ Somewhat Agree
   ○ Strongly Agree

25. He/she can use pencil, crayons and paint brushes
   ○ Strongly Disagree
   ○ Somewhat Disagree
   ○ Neither Agree Nor Disagree
   ○ Somewhat Agree
   ○ Strongly Agree

26. He/she can colour within the lines
   ○ Strongly Disagree
   ○ Somewhat Disagree
   ○ Neither Agree Nor Disagree
   ○ Somewhat Agree
   ○ Strongly Agree

27. He/she can feed himself with a spoon or fork
   ○ Strongly Disagree
   ○ Somewhat Disagree
   ○ Neither Agree Nor Disagree
   ○ Somewhat Agree
   ○ Strongly Agree
28. He/she can dress himself up
- Strongly Disagree
- Somewhat Disagree
- Neither Agree Nor Disagree
- Somewhat Agree
- Strongly Agree

29. He/she can wash his hands unaided
- Strongly Disagree
- Somewhat Disagree
- Neither Agree Nor Disagree
- Somewhat Agree
- Strongly Agree

30. He/she can use the toilet independently
- Strongly Disagree
- Somewhat Disagree
- Neither Agree Nor Disagree
- Somewhat Agree
- Strongly Agree

31. He/she follows two-step directions
- Strongly Disagree
- Somewhat Disagree
- Neither Agree Nor Disagree
- Somewhat Agree
- Strongly Agree
32. He/she can communicate in English
   ○ Strongly Disagree
   ○ Somewhat Disagree
   ○ Neither Agree Nor Disagree
   ○ Somewhat Agree
   ○ Strongly Agree

33. He/she identifies common sounds and/or distinguishes different voices
   ○ Strongly Disagree
   ○ Somewhat Disagree
   ○ Neither Agree Nor Disagree
   ○ Somewhat Agree
   ○ Strongly Agree

34. He/she can identify colours and shapes
   ○ Strongly Disagree
   ○ Somewhat Disagree
   ○ Neither Agree Nor Disagree
   ○ Somewhat Agree
   ○ Strongly Agree

35. He/she can sort objects into categories
   ○ Strongly Disagree
   ○ Somewhat Disagree
   ○ Neither Agree Nor Disagree
   ○ Somewhat Agree
   ○ Strongly Agree
36. He/she knows the alphabets

- Strongly Disagree
- Somewhat Disagree
- Neither Agree Nor Disagree
- Somewhat Agree
- Strongly Agree

37. He/she can write his/her name

- Strongly Disagree
- Somewhat Disagree
- Neither Agree Nor Disagree
- Somewhat Agree
- Strongly Agree

38. He/she can scribble

- Strongly Disagree
- Somewhat Disagree
- Neither Agree Nor Disagree
- Somewhat Agree
- Strongly Agree

39. He/she shows interest in books

- Strongly Disagree
- Somewhat Disagree
- Neither Agree Nor Disagree
- Somewhat Agree
- Strongly Agree
40. He/she can sing nursery rhymes
- Strongly Disagree
- Somewhat Disagree
- Neither Agree Nor Disagree
- Somewhat Agree
- Strongly Agree

41. He/she can retell a story
- Strongly Disagree
- Somewhat Disagree
- Neither Agree Nor Disagree
- Somewhat Agree
- Strongly Agree

42. He/she can count up to 20
- Strongly Disagree
- Somewhat Disagree
- Neither Agree Nor Disagree
- Somewhat Agree
- Strongly Agree

43. He/she finishes a given task
- Strongly Disagree
- Somewhat Disagree
- Neither Agree Nor Disagree
- Somewhat Agree
- Strongly Agree
44. He/she is eager and curious when presented with new activities
   - Strongly Disagree
   - Somewhat Disagree
   - Neither Agree Nor Disagree
   - Somewhat Agree
   - Strongly Agree

45. He/she can imagine and invent ideas
   - Strongly Disagree
   - Somewhat Disagree
   - Neither Agree Nor Disagree
   - Somewhat Agree
   - Strongly Agree

46. He/she separates easily from the parent
   - Strongly Disagree
   - Somewhat Disagree
   - Neither Agree Nor Disagree
   - Somewhat Agree
   - Strongly Agree

47. He/she can ask questions
   - Strongly Disagree
   - Somewhat Disagree
   - Neither Agree Nor Disagree
   - Somewhat Agree
   - Strongly Agree

### Research Purpose

| PARENT-CHILD HOME ACTIVITIES & BONDING | 10 |
48. For how many hours is the television on in your home each day?

- Never
- 1-2 hours
- 3-4 hours
- 5-6 hours
- more than 6 hours

49. For how many hours does your child watch television each day?

- None
- 1 to 2 hours
- 3 to 4 hours
- 5 to 6 hours
- 6 hours or more

50. Is the television kept in where child sleeps?

- Yes
- No

51. Who feeds the child at home?

- Mother
- Father
- Grandparent
- Housemaid
- Other (please specify)

Research Purpose

PARENT-CHILD HOME ACTIVITIES & BONDING

In the past week, have you engaged your child in the following activities?
52. Read a book to your child
   - Never
   - Once
   - Twice
   - Three or more times
   - Everyday

53. Told him/her a story
   - Never
   - Once
   - Twice
   - Three or more times
   - Everyday

54. Taught him/her letters, numbers or words
   - Never
   - Once
   - Twice
   - Three or more times
   - Everyday

55. Taught him/her a Nursery rhyme or played one
   - Never
   - Once
   - Twice
   - Three or more times
   - Everyday
56. Did art and crafts activities
   - Never
   - Once
   - Twice
   - Three or more times
   - Everyday

57. Played with toys or games indoors
   - Never
   - Once
   - Twice
   - Three or more times
   - Everyday

58. Played games or sports outdoors
   - Never
   - Once
   - Twice
   - Three or more times
   - Everyday

59. Took your child with you to the grocery store
   - Never
   - Once
   - Twice
   - Three or more times
   - Everyday
60. Your child helped you with household chores
   - Never
   - Once
   - Twice
   - Three or more times
   - Everyday

61. Had dinner together with the family
   - Never
   - Once
   - Twice
   - Three or more times
   - Everyday

**Research Purpose**

PARENT-CHILD HOME ACTIVITIES & BONDING

In the past month how often have you done the below activity with your child?

62. Visited a library
   - Never
   - Once
   - Twice
   - Three or more times
   - Everyday

63. Went to a live show/ concert/ play
   - Never
   - Once
   - Twice
   - Three or more times
   - Everyday
64. Attended an athletic or sporting event outside of school
   ○ Never
   ○ Once
   ○ Twice
   ○ Three or more times
   ○ Everyday

65. Visited a museum or historic site
   ○ Never
   ○ Once
   ○ Twice
   ○ Three or more times
   ○ Everyday

66. Visited a zoo/ an aquarium
   ○ Never
   ○ Once
   ○ Twice
   ○ Three or more times
   ○ Everyday

67. Visited a religious place
   ○ Never
   ○ Once
   ○ Twice
   ○ Three or more times
   ○ Everyday
68. Talked to your child about your family
   - Never
   - Once
   - Twice
   - Three or more times
   - Everyday

Research Purpose

**PARENT-SCHOOL RELATION**

*In the coming year, how often do you hope to engage in the following...*

69. Communicate with your child’s teacher about what your child is learning in school
   - Never
   - 1-2 times Every month
   - Every week
   - More than once a week

70. Communicate with your child’s teacher about your child’s behaviour
   - Never
   - 1-2 times Every month
   - Every week
   - More than once a week

71. Volunteer in your child’s classroom
   - Never
   - 1-2 times Every month
   - Every week
   - More than once a week
72. Attend special events/meetings at the school and help/participate in the activities
   ○ Never
   ○ 1-2 times Every month
   ○ Every week
   ○ More than once a week

73. Receive information about your child’s progress from the teacher
   ○ Never
   ○ 1-2 times Every month
   ○ Every week
   ○ More than once a week

74. What do you see as the biggest hindrance in your involvement in school activities?
   ○ Lack of time/ conflict with work
   ○ Lack of information about activities
   ○ Lack of conducive environment in the school
   ○ Health issues/ disability
   ○ Other, please specify

Other (please specify)
I am Vandana Gandhi and I am studying for a Doctorate in Education at the British University in Dubai (BUID). The title of the study is:

**Investigating the factors that may contribute to the learning of children at ISO quality certified and non-certified preschools in the United Arab Emirates**

This research is supervised by Dr Solomon David at BUID (solomon.david@buid.ac.ae).

You are being invited to take part in this study. Before you decide whether you would like to take part it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully and discuss it with me if you wish.

The purpose of the study is to investigate the factors affecting learning and socialization in preschools and the importance of quality certification and parental involvement along with the perceptions of the principals and deputies on the school leaders. The study will consider the UAE context and compare it with the international research.

Your school has been selected as one of preschools under research. I am seeking to collect data on your opinions, knowledge, beliefs and experiences as a senior administrator. Your responses will join those of respondents in other schools to establish an overall picture that will help the study.

In addition, I will be asking you as a school leader about your experiences of leadership development.

You can decide if you wish to take part. If you decide to take part, you are still free to withdraw at any time and do not need to provide a reason. Not being involved in the study will have no consequences for you as a leader of the preschool.

There will be an interview by my proxy Ms. ____________________________ for approximately half an hour to establish your thoughts. The format of the interview will be semi-structured and the session will be recorded by an audio recorder.

All information which is collected during the course of the research will be kept strictly confidential. You will be identified by position only (for instance, principal school A) and a pseudonym will be assigned for your school.

The data collected in this study will be used as part of a PhD study. This study has been approved by the university. If you wish, you can receive a summary of the results of this study and the research findings. A copy of the thesis will be available online from the British University in Dubai.

Name of Researcher: Vandana Gandhi
Name of Interviewer:
I confirm that I have read and understand the Plain Language Statement for the above study and have had the opportunity to ask questions.

I understand that my participation is voluntary and that I am free to withdraw at any time, or to withdraw any data previously supplied, without giving any reason.

I understand that all information about me will be treated in strict confidence and that I will not be named in any written work arising from this study.

I understand that any audiotaped material taken during the course of my interview will be used solely for research purposes and will be destroyed on completion of the research.

I agree / do not agree (delete as applicable) to take part in the above study.

<table>
<thead>
<tr>
<th>Name:</th>
<th>Date:</th>
<th>Signature:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APPENDIX 7: Interview Guide (Leader)
1) What do you feel about the Early year program for the children at the preschool? Would you believe that learning and socialization is happening at the preschools effectively?

2) How do you feel about quality certifications and particularly ISO quality certification for your preschool?

3) Do you feel such quality assurance programs like ISO contribute to enhanced school effectiveness and therefore enhanced learning and socialization in the pre-schoolers?

4) How do you see your role as a leader at your school? Describe your style?

5) Are you happy with your school’s progress and learning outcomes of the children whilst leading your school?

6) How do you see the role of parents in child development at school?

7) What do you think on the role of parents and time spent at home with the children?

8) When you approach your leader regarding any problem, what is his/her approach to solving your problem? (15. Decision and Change - The Leader as Policy maker)

9) Does your leader involve you in decision making? How? (15. Decision and Change - The Leader as Policy maker)

10) Do you get enough opportunities for training and personal development? (7. Reform Leadership)

11) How are you rewarded for your hard work and creativity? (16. Towards a General Theory)

12) How has your leader transformed your school to improve school conditions? (Reform Leadership)
13) How has your leader motivated you, individually? (9. Heroes and Ideologies)
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

14) Does your leader appreciate your ideas and questions? Does she have capacity to innovate? (10. Opinion Leadership)
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

15) How does your leader approach challenges with high standards? (8. Revolutionary Leadership)
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

16) Comment on how your leader communicates about future goals (5. The Crucibles of Political Leadership)
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

17) Would you call your leader inspirational/a role model? (9. Heroes and Ideologies)
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

18) Has your leader helped you in self-actualization? (6. Intellectual Leadership)
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

19) How does your leader promote a positive learning environment? (4. The Social Sources of Leadership)
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

20) How does your leader manage the instructional program at school? Is she an expert
instructor with excellent pedagogical knowledge? Does she empower the team on it?

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

21) Does your leader perceive his/her role as administrative? Is she authoritarian? Does she have a rigid approach? (14. Executive Leadership)

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

22) Does your leader have technical experience and is qualified as a school leader? (6. Intellectual Leadership)

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

Do you believe your leader shows?

Individualized Consideration – the degree to which the leader attends to each follower's needs, acts as a mentor or coach to the follower and listens to the follower's concerns and needs. Y/N

Intellectual Stimulation – the degree to which the leader challenges assumptions, takes risks and solicits followers' ideas. They nurture and develop people who think independently. Y/N

Inspirational Motivation – the degree to which the leader articulates a vision that is appealing and inspiring to followers. Leaders with inspirational motivation challenge followers with high standards, communicate optimism about future goals, and provide meaning for the task at hand. Y/N

Idealized Influence – Provides a role model for high ethical behavior, instills pride, gains respect and trust. Y/N

APPENDIX 8: Interview Guide (Parents)

1) Why did you enrol your child for pre-schooling?
2) Would you believe that learning and socialization is happening at the preschool effectively? What do you feel about the Early year program for the children at the preschool?

3) How would you rate the curriculum and the specific areas for learning and development?

4) Are you happy with your school’s progress and learning outcomes of the children? What area of learning do you wish to see more and why?

5) How do you feel about quality certifications and particularly ISO quality certification for your preschool?

6) Do you feel quality assurance programs like ISO contribute to enhanced school effectiveness and therefore enhanced learning and socialization in the preschoolers?

7) How do you see your role as a parent in the area of child development at school?

8) What do you think on the role of parents and time spent at home with the children?
9) How many hours does your child watch TV at home per week?
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

10) And on the weekends?
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

11) Do you watch TV with your child?
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

12) What does your child watch on TV?
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

13) Does your child use the computer/iPad/mobile for apps or other gadgets at home? Which one?

Yes    No

14) What does your child watch/do with these gadgets?
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

15) How often do you meet your teacher to discuss your child’s progress, other than regular parent-teacher conferences? (1. Parenting)
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

16) How would you rate the importance of social skills, academic skills and physical development? Do you believe that any area should be given priority in learning over the other? Why?
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

17) How many times have you participated in nursery events with your child? How does the nursery encourage you to do so?
18) Are you aware of any volunteering programs held by your school, if yes, do you take part in them? How motivated are you to volunteer and collaborate with the school when needed? (3. Volunteering)

19) What did you understand about the event and area of learning?

20) How was your experience about observing your child learning in a group at school events?

21) Has your child been exposed to home learning with a care taker such a relative or nanny prior to preschool?  
   Was the language spoken English, or mother tongue?  
   Do you still have such a home provision? How would you rate its effectiveness?

22) What difference did you find in home based learning and preschool learning? Are preschools important and how do you feel they contribute to your child’s learning?

23) Do you believe that parental age, level of education, income or cultural attributes play a role on the learning of children? Please explain how?

24) How do you reinforce learning at home?

25) What feedback does your child give on school?
26) How do you spend time with your child at home?

___________________________________________________________________________
___________________________________________________________________________

27) How do you spend time with your child outside, during weekends, and during holidays?

___________________________________________________________________________
___________________________________________________________________________

28) How often do you go outside with your child when school is on vacation and where?

___________________________________________________________________________
___________________________________________________________________________

29) How often do you go outside with your child when school is running during the academic year?

___________________________________________________________________________
___________________________________________________________________________

30) Do you involve your child in household chores? (parenting)

___________________________________________________________________________
___________________________________________________________________________

31) Do you help your child with home learning sheets sent by the school? (4. Home learning)

___________________________________________________________________________
___________________________________________________________________________

32) Do you send your child for summer learning programs to improve their skills? (4. Learning at Home)

___________________________________________________________________________
___________________________________________________________________________

33) How often do you read to your child?

___________________________________________________________________________
___________________________________________________________________________

34) Do you feel like your school listens to you and appreciates your feedback and input when it comes to making important decisions that affect your child? (5. Decision Making)

___________________________________________________________________________
___________________________________________________________________________

35) Does your child participate in outside events that involve the community, like art, music, dance, recycling, and drama, play dates etc.? (6. Community)
APPENDIX 9: Sample interview Transcript (Leader)

1) What do you feel about the Early year program for the children at the preschool? Would you believe that learning and socialization is happening at the preschools effectively?

We follow the EYFS British Curriculum, it’s very thorough, productive, shows progress, and it’s very individualized. The big thing that I like is, following the ethos to follow the learning through playing, so that how the children how learn the most, it got to be that they are happy to learn and that shows the progress from each individual child and it’s amazing. I do feel like it’s a great forum to be following.

Do you believe that learning and socialization particularly is happening in preschool effectively?

Everything that we do like following the EYFS like we say. Learning through playing is a very real life, it’s very much we are teaching the main core things around the socialization the big main skills that the children are being able to develop and prepare them to ready to big school and set them on the right path on the right learning journey.
2) How do you feel about quality certifications and particularly ISO quality certification for your preschool?

I’ve been involved in ISO numerous times we do got ISO Inspections and Audits to ensure we are following things through to different branches, it sets clear guidelines, it’s very structured its helps us learn new things. It gives us guidelines to make sure everything is consistent across all the branches and they keep the standard high, highlight the areas to develop, it’s very structured which is a good thing to follow.

3) Do you feel such quality assurance programs like ISO contribute to enhanced school effectiveness and therefore enhanced learning and socialization in the preschoolers?

Like I said, the guidelines and structure, it ensures that we do keep the standard high, when you are working with the branch say of ten teachers, they make sure that everyone has correct paperwork and keep that as the same standard, so you are not having standards drop, across any of them, now if the standards are dropping, the learning we offer to children is dropping, that’s not going to work and it’s not going to bring the best out for the children. It’s a benchmark, it’s something for us to focus on to aim towards, and to keep it consistent across, to ensure all children are equal.

4) How do you see your role as a leader at your school? Describe your style?

I am very relaxed kind of open person I’m a very young at hearts bubbly outgoing person. In my branch I don’t see hierarchy in the sense we are all BON one team I’d like to think the staff see me as serious as well as, so yes t’s an open-door policy but we are all on a level peg and we keep our selves when it necessary yes authority comes in but its approaching things in a right way. But when you got a relaxed, open manner it’s a lot of two-way team work which is a team together. So yeah, I am one of the team

How do you see yourself as a leader to the school?
Obviously ultimately decisions come to me and that is the important that having the final say on decisions and ensuring that things are maintained and implemented. If there is no one to take that final decision no one has that guidance that answer who to go to and I am a friend, I’m the one to go to, I am a counsellor, I’m there for everything I am the main point of contact, having that friendship and It’s a friendly team

5) Are you happy with your school’s progress and learning outcomes of the children whilst leading your school?

Yes, when I first to start to take the role as principal which is 3 and half years (lost track of time) we started about hundred children when I took over role, number has been increased hugely last year we were on to 10 near 40 20 it is rapidly increased and has steadily stage up there for the past year. And the standard that we offer and that’s quite clear obviously the number shows the quality because people would not be registering if they were not happy, by quality awards the data analysis that we are doing every year that’s shows the answers they do which shows the progress and it shows the standards and that’s the evident with the number of children that we have.

6) How do you see the role of parents in child development at school?

Huge, very important, team work is the most important we can do everything to empower the educate the children in the nursery setting, but if a child is going home and having a different approach, that is going to totally confuse them so it’s about working together, it’s a team having the same standard same outcomes same approaches it is a team work.

7) What do you think on the role of parents and time spent at home with the children?

it is important, obviously parents are parents, they are the most important person to that child, and we are just educators but the parents are throughout their whole life, but parents are often get quite blinkered in how much time they got to spend on education back home, now in such a young age in nursery setting we are offering the learning through play, parents very much thinks that if a child done with the piece of paper and the pen the right way to do it, and they going to do that when they are at home, it’s all about learning experiences of going out to the mall, going out on holiday, experiencing being in the world
as a family units and that is hugely important to any child development so its ensuring educating parents to have that balance.

8) When you approach your leader regarding any problem, what is his/her approach to solving your problem? (15. Decision and Change - The Leader as Policy maker)

My leader and my direct manager as Business Support Manager Emma Addy, she visits the nursery quite frequently, and very much more on standard of the branch, we have set high standard and we are very established branch, having reduced visits recently over the past year or two, but there is always a point of contact, she is always there to listen, she is always to research and find solution, and to give feedback, there may be times we find difficult to get hold to that people at the moment but she’s always there. Emma will always get back to you at some point with whether it is the solution or different solution. Or different approach to something, it’s all about being there as a support.

**Question: Does your leader involve you in decision making? How? (15. Decision and Change - The Leader as Policy maker)**

Principal attend weekly management meeting, so there’s a lot of discussions and dissection making across the branches, branch wide and get discussed in management meetings but when comes down to individual branches when Emma visits the branch having discussion I want to change something, Emma has idea again it’s a partnership it’s a team work. I will always approach Emma with new Ideas, it is about finding if it’s going to work or not, how about we do in a different way, but if Emma it comes to me, “Ok let’s introduce this” it is thrashed out and that’s what we discussed. Or it might not work the same here, so let’s do it in different way of, its finding the work for the branch, it is always individualize as much as we much try consistent across branches, things can work differently, different demographic areas, things like that, so she always take on board, because I have been there in day 1, I know the branch better than anybody, so I know what it will work and what won’t, so she does on board feedback, and not say one little thing go one way or another, it’s about finding the right solution
9) Do you get enough opportunities for training and personal development? (7. Reform Leadership)

When started I joined BON fours and half year ago I’m doing as a teacher, I’m actually joined as a teacher so the first year was a teacher, the branch is often in January the first one is a teacher the branch was opened in January term so I did two terms teacher I was then promoted as teacher deputy and followed it was around a term I believe (Thinking back) I was joint teacher and deputy at that time. Emma was the principal of the Silicon branch, she went off in an unexpected emergency medical leave, so I was then kind of acting principal as well, and when Emma returned she was promoted, so because I’d been doing the role, so I have always had that support with professionally developing myself, so yeah I have been the principal for 3 years and I’m the primary example of you can develop yourself, if you have that end goal and yeah the opportunities are there if you want it’s about what is for each individual. I’ve always had that passion and drive to push myself further, and she’s there to help.

10) How are you rewarded for your hard work and creativity? (16. Towards a General Theory)

There a lot of what we do at BON, in myself obviously I’m included equally as an employee so we have a lot of staff appreciation, we have monthly employee of the month, when we do our corporate wide events there are rewards given, we got bonus day, if you worked extra you got bonus days so that you could get a bonus payments in salary for special occasion event like being involved in, we do competition across branches as well, it brings a healthy competition across branches as well, or could be example a pizza party for the branch, there are lot we encouraged and like I said I’m part of that, as I see myself, there are lots of different ways that staff are rewarded for the hard work.

11) How has your leader transformed your school to improve school conditions? (Reform Leadership)

Am it’s been lots of new innovations across we opened the branch, it was the brand new self-branch, it was not a villa it’s a residential so it was purpose built for the nursery, so we were heavily involved so lots of improvement came, we expanded the nursery, I was heavily involved in that. Emma and I worked together on areas that we
felt what would be the best to introduce what classroom and how is going to set all up it’s been a team work so it’s not all down to the leader, heavy involvement by myself. Ideas and it’s about supporting, seeking approval a lot comes generally come from myself to what I see day to day, suggestions come from inspection so Emma would do it termly BSM inspections, so she may suggest the new and that, let me look at working how can we progress that forward together.

12) How has your leader motivated you, individually? (9. Heroes and Ideologies)

Like I said the growth and development I have shown over the 4 and half year, yeah …as I said I developed, the career progression has been supported and I have been offered the opportunity in supported, guided every stage form teacher, deputy principal, previous academic year, I was BSM in training that’s my next carrier progression, but my personal circumstances had changed so I actually step back on that due to personal reasons but it is something that whether it comes to the future, it has been discussed in the agreement option in the future.

Would you say she is almost a role model, somebody you admire?

Emma and I have very much cloned each other we have the same approaches. I’ve also a role model, because you are in a work environment you are always come across to different people who worked differently, but Emma and I are very much the same approach to things, the same ethos. When silicon opened it was principal teacher deputy worked together, so we started that branch together and developed a lot and yeah so I do see her and obviously she progressed just like I progress and kind of followed quite similar career path together.

13) Does your leader appreciate your ideas and questions? Does she have capacity to innovate? (10. Opinion Leadership)

Yes, she does and innovates on a regular basis.

14) How does your leader approach challenges with high standards? (8. Revolutionary Leadership)
Emma always has a high standards inside as we all do, we always aiming for high and the best that just proved in that BON has how many branches we have, has high standards, has the amount of awards that we have, we always have the same bench marks that we all aim to, and her approached to any challenges, like I said, having that outlook, she is very relaxed in her approach to different situations in having the bench mark, the high standards, we always make sure that we find that right solution and she does have an approachable manner, and relaxed.

15) Comment on how your leader communicates about future goals (5. The Crucibles of Political Leadership)

Again management meeting is a kind of where that links together having weekly or fortnightly branch visits, that Emma does. It is all communicated, everything that we do, even to when BOC, came around it is discussed in management meetings. Our end goal is about being open and very open and honest team together, so a lot of that comes from the management meetings, and obviously meeting minutes from those, everything is communicated.

Maybe going back to formal appraisals, you do with Emma and your leader and your KPI’s would you say that is communication of the future goals as inspiration

It is personally I would say that’s a lot more done to my personal my own future goal that’s why we discussed personal progress and future development areas to work on that’s come to appraisals

16) Would you call your leader inspirational/a role model? (9. Heroes and Ideologies)

Yes. We already talked about that, we are very similar. We do. Yeah

17) Has your leader helped you in self-actualization? (6. Intellectual Leadership)

Yeah I think it all comes down to the progression I made, Emma will see what where my strength and weaknesses are and helped developed any support each of those individually I am very, supportive outgoing, I am always wanting to be there, helping
others, anything I create I’m happy to offer out to the principal that’s is where my development as BSM that is part of that role is supporting and guiding another branch which is I’ve helped all in the past year so, it is finding my strength, where I want to help and offer, support guidance to others.

18) How does your leader promote a positive learning environment? (4. The Social Sources of Leadership)

All of BON, we are very happy encouraging environment, lots of support, the atmosphere that we have together is its, about making sure, everyone’s happy and listen to, and interacts fairly and making sure that if there are any grievances that people is their point of contact and its making sure that you are not holding things in, which can then bring the mood down. Yes, Emma is always there to help, support that.

Taking that example, how does she lift that into a positive learning environment? Where somebody, perhaps is being a bit negative?

It depends on the situation, of what that is, obviously what that is, if someone is upset about something, it’s being there to listen and its being there as a sounding board. And it’s all about making sure we can listen and find an approach that’s going to help and change their mind set, because everyone has a different opinion on something but it’s always making something sure that we, it’s all about listening and if people know we are listening then their feeling involved that there is happy environment where everyone is involved, so it’s been very good, being able to listen.

20) How does your leader manage the instructional program at school? Is she an expert instructor with excellent pedagogical knowledge? Does she empower the team on it?

We have like I mentioned early the data feedback that we give yearly, there are spreadsheets on everything that we do, for example, training tallies, child initial end assessment to monitor their progress, risk assessment data. Staff appraisal data, everything we do is always analyzed and that is about monitoring the progress.

Yeah, Emma is heavily involved in a lot of behind the scene things that happened in head office, and helps to offer that out in clear understandable way to the branches, when you are
working with people with different level and understanding and different nationalities so can get lost in translation. We can talk in jargon at times when you are involved in the strategy side of thing, and it’s about she finds that way, and making sure that it’s clearly understood.

How do you say she empowers the curriculum?

The KPI’s is a huge tool that we used, in inspection, having the bench mark making sure that all again has I high standard and empowering the team that making sure that involved and making sure the high standard. KPI’s is all about, giving people responsibility, and people fell that they have their own responsibility its quite clear in the guidelines on what they due to do what their expectations are its obviously going to help them to develop self-personal development as well All together KPI’s is a huge tool that we use.

21) Does your leader perceive his/her role as administrator? Is she authoritarian? Does she have a rigid approach? (14. Executive Leadership)

(Very Tricky One) There is a lot of paper work and admin side of it. Absolutely. In all roles, and its changing developing more and more on that and that continuous, and it’s about making sure it’s consistent. But maybe, fifty / fifty I think is hard to say whether if its admin, there is a lot of practical side because it is much of you can do in paper works and it’s not being done in practice so if I am not in the branch and checking it in practice being in that person, it’s not going to work, so I would say fifty / fifty.

Would you say she is authoritarian?

When she needs to be. It’s like I said we do work very well together, we are very similar, we have quite very similar approached, in that friendly relaxed manner, Emma is very familiar with our branch she is being there from the day one as well but when it needs to be she will be quite authorities, and we all respect that.

Would you say she has a rigid approach?

No. Emma is very flexible I would not class her as a rigid approached, she’s very flexible in her approach as a leader.

22) Does your leader have technical experience and is qualified as a school leader? (6. Intellectual Leadership)
I know that Emma has been in BON in a long time, she’s one of the longest member of the staff I don’t know maybe eight, nine, could be wrong ten I’m not sure, how long have been she’s in BON it’s been a long time so obviously the experience anyway through BON we all learn day in and day out and BON is quite different to other nursery, so the experience she has in BON ways of doing it cannot fault she knows better than anybody and when she joined BON many years ago. I know she did develop herself further and do CACHE 3 and PGCE online while working full time so she has that knowledge as well from the qualification side. So Yeah I don’t see that does anyone is better for it, definitely.

Do you believe your leader shows?

**Individualized Consideration** – the degree to which the leader attends to each follower's needs, acts as a mentor or coach to the follower and listens to the follower's concerns and needs. 
Y/N

Yes.

**Intellectual Stimulation** – the degree to which the leader challenges assumptions, takes risks and solicits followers' ideas... They nurture and develop people who think independently. Y/N

Yes, does.

**Inspirational Motivation** – the degree to which the leader articulates a vision that is appealing and inspiring to followers. Leaders with inspirational motivation challenge followers with high Standards, communicate optimism about future goals, and provide meaning for the task at hand. Y/N

Yes.

**Idealized Influence** – Provides a role model for high ethical behavior, instills pride, gains respect and trust. Y/N

Yes, definitely.
APPENDIX 10: Sample interview Transcript (Parent)

Hi, my name is ….

Why did you enroll your child for preschool?

Couple of reasons, one I was returning back to work, and I felt that the nursery will accommodate my working hours, but also I feel that it is also important for children when they reach a certain age, to start attending nursery. As this will be going to fair them when they start the big school.

Thank you..(amm)

1) Would you believe that learning and socialization is happening in preschool effectively?
What do you feel about early year program here at the school?

Yes, I do, my child socialises…my child socializing is very important to me. This is another reason why he attended the preschool, he is also building his knowledge in numbers, letters colours and shapes.
Lovely…

2) How would you rate the curriculum and specific areas for Learning and Development?

I feel that it is good, they follow the British curriculum here, which we would be following if when we go back in the UK, (ahh) and I feel that he is learning at the same rate as my other children did, when we are actually living in the UK.

Excellent…

3) Are you happy with your school progress and learning outcomes of the children? What areas of learning, do you wish to see more of? And why?

Yes. I am very happy, as my child is happy, and I don’t feel that, there are any areas of learning that need to be improve on.

That’s good news …that’s life… (amm)

4) How do you feel about Quality Certifications and particularly ISO Quality Certifications for the school?
I think that it is great, I don’t know too much about it, but as long as it does not impact too much on the teacher’s time, then I am happy.

5) Do you feel quality assurance program like ISO contributes to enhance the school effectiveness and therefore enhance the learning of the socialization at the preschool?

(amm), as I said I don’t know too such about ISO, but I think the main factor is having a warm friendly, and qualified teacher.

6) How do you see your role as a parent in the area of child Development?
I feel that parent, is still the most important people in the child’s life and we should be working together, with the nursery as one, then hopefully we will be following the same guidelines.

7) What do you think the role of the parents in times spent at home with children?
I think that it is really important, that we spent time with our children. It is important to talk to them regardless of their age, and especially reading stories we do this a lot in bed time.

8) How many hours does your child watch TV at home a week?
Maybe a round ten hours for the whole week.

9) And on the weakened?
Yeah that’s, included in the ten hours.

10) Do you watch TV with your child?
Yep, sometimes I do, and talking about what is happening on the program at that time.

11) And what do they watch on TV?
Peppa Pig is his favorite, Rory the racing car, (amm) he loves Dinosaurs and shark programs too.

12) Does your child use a computer, IPod or mobile apps, so other gadgets at home?
Yes. He does.
13) Which one they use? Specifically, he uses?

No, he tends to go on to the google, also we looked dinosaur programs and he loves the nursery rhymes songs, so he is following on from what, you’ve been looking at the nursery, SO Your Daddy’s finger and things like that.

That’s why he watched through the Ipod?
Yes, Yeah

14) How often you meet your teacher to discuss your child progress, either than regular teacher conferences?

I see her during dropped off, and pick up.

And how often do you attend the teacher parent conferences.?
A, Once a term

15) How would you rate the importance of Social skills, Academic skills, and Physical development do you believe that any of these areas, should be given priority over the other?

I think they are all extremely important for different reasons, but the most important to me are social and Physical skills, they can build on their academic skills, when they move on to the big schools

16) How many times have you participated in nursery events with your child? How does the nursery encourage you to do so? And how often are the events?

I’ve been able to attend, all of them so far. I’ve got a flexible working hours, and the nursery would always give a parents of plenty of notice. (amm) there’s numerous events that take place during the course of the year, we can have, a winter concerts, sports days, classroom events, when you are invited in and take part in craft activities so they are quite there in which is good.

And you find easy enough to attend and you are aware of all happening?
Yep... Like I said …I’ve got flexible work hours, it is easy for me to be able to come,

17) Are you aware of any volunteering program held by your school? If yes do you take part on them? How motivated are you to volunteer and collaborate with the school if needed?

No, not currently aware of any programs, but there is a possibility that I could (amm) helped out, if the school needed me, yes.
18) What did you understand about the events and areas of learning?

(amm) it all had the various of areas of learning, depending on the activity (amm) and I feel that, they’ve covered all seven areas of learning throughout the academic year.

19) How was your experienced about observing your child learning in a group in school events?

I’ve always feel it extremely proud of him, as he always tries his best...

He really does...

20) Has your child been exposed to home learning with a care taker such as a relative or nanny prior to preschool?

No, only myself and my husband.

Okay (amm) I know you’ve got three children two are older to one have you had a nanny in the past?

Yah, we did, we don’t have it anymore, but we had one previously.

What was the language spoken, English or Mother Tongue?

We only spoke, or speak English in the house, and I always wanted our housekeeper to speak English to the children as well.

So you don’t have any of such provisions at home at the moment?

No.no but we still had that nanny and I could have left Freddy at home with her, but I did not want to, I wanted too to have him in the nursery so he will mix things with the children and building on his social development.

So when the time you had the nanny? How would you rate the effectiveness? How did it work as a family unit together?

(amm) she was not there (amm) to help, to build on the developmental skills as such, I did not want her to be there to be sitting down, and reading to him and things like that. That was not her role that was for me to do.
21) What difference did you find in home based learning and preschool learning? Are preschools important and how do you feel they contribute to your child’s learning?

Yes, it’s completely different, because it’s obviously it’s just you and yourself, (umm) you and your child at home, I should say (umm) where in nursery it’s again it’s a social side, it’s important for freeds, to mix with other the children at her similar age

Yeah. Lovely.

23) Do you believe that parental age, level of education, income or cultural attributes play a role on the learning of children? Pl explain how?

No. I really don’t, as long as the parents have common sense, and they are loving and caring, the other things are just an adding bonus.

Yep

24) How do you reinforce learning at home?

Mostly verbally (amm) to be honest, making fun play a lots of game. His favorite is I spy, and we play counting games, adding and subtracting things like that. So he does not actually realize his learning his just having fun.

25) What feedback does your child give on school? To be taught much at home, what they do in a day to day basis.

Yep he loves it. He always very positive about his teacher, about his teaching assistants (amm) he is always very, very bubbly and we make a point from…he will sit down for dinner and we will have talked about what we’ve been doing that day what are they favorite part of the day was, or anything that they did not like things like that.

26) How do you spend time with your child at home?
I would read books. We play with his dinosaurs, build Lego structures, we do puzzles, enjoying playing with his little kitchen and also his favourite is playdough. Same at the nursery. Yeah... we all love it

27) How do you spend time with your child outside, during weekends, and during holidays?

(ahh) we go to the pool or park, obviously depending on the time of the year and the weather and socializing friends.

Do you have lovely trips on holiday?
Yes, certainly.

28) How often do you go outside with your child when school is on holiday and where do you go? During those holidays as I’ve just mentioned, I know you had such a lovely trip?
Yes.
(Amm) as long as the weather is good and not too hot we will go to the beach, but we tend to go to the pool at any time of the year. We go to the park, cinema and as I said we love going on holiday as a family (amm) trying different places, but also we go back to UK and catch with family and friends there as well. Yes, that is important.

29) How often do you go outside with your child when school is running during the academic year?
Every weekend we’ll go to the pool and to the park.

He loves swimming do they?
Yes, and he just learnt how to swim properly on his last holiday.

30) Do you involve your child in household chores? (parenting)

Not us much as it should. (amm) But yeah sometimes. I’ll try to get him to make him his own bed and tidy up his toys things like that but, I need to try and promote it more.
We do

31) Do you help your child with home learning sheets sent by the school? (4. Home learning)

Yeah I do, they are just for fun, so I... they are not compulsory for us to do it

32) Do you send your child for summer learning programs to improve their skills? (4. Learning at Home)
No. we don’t actually I think it’s a good opportunity to spend quality time with his brother and sister
Yeah and friends and family.

33) How often do you read to your child?
Every night before bed
Do you have favourite stories?
Dinosaurs and sharks, he knows them of by heart.

34) Do you feel like your school listens to you and appreciates your feedback and input when it comes to making important decisions that affect your child? (5. Decision Making)
Yeah I do feel, that the nursery listens and I feel that it is important that we work together as a team. Absolutely...

35) Does your child participate in outside events that involve the community, like art, music, dance, recycling, and drama, play dates etc.? (6. Community)
Yep, he plays with his friends and he is actually about to start attending group golf lessons as well
Very nice good opportunity in Dubai as well
Exactly.
Thank you so much for your time Emma, thank you for going out through with me.
You are very welcome, thank you.