Child Safety in the Emirate of Abu Dhabi, United Arab Emirates

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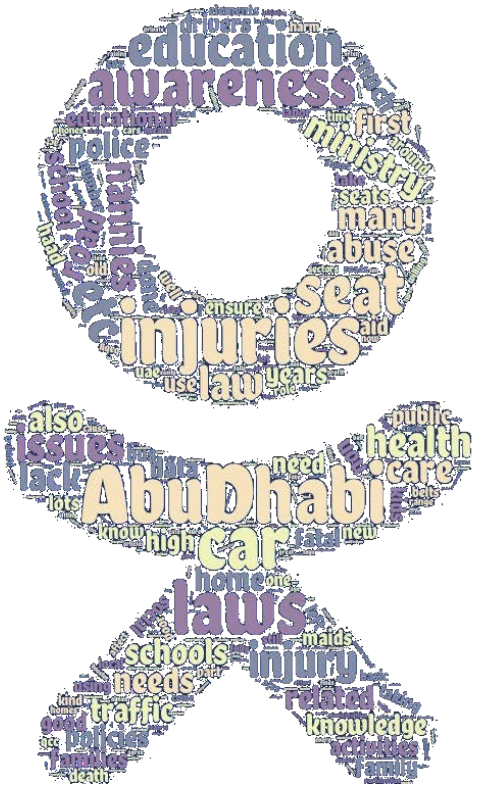
A dissertation submitted in partial fulfilment of the requirements for the degree of

Doctor of Public Health



Discipline of Public Health

School of Health Sciences

Flinders University, South Australia

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ABSTRACT

The safety of children is a matter of growing concern within Abu Dhabi, as increasing numbers of injury cases are being reported. The purpose of this research has been to explore the public health aspects of child safety throughout Abu Dhabi.

One primary way of implementing effective and lasting solutions is through the development of clear policies and practices, which can be critical in addressing most of the issues affecting children and their safety. This study has sought to find evidence-based options for a culturally appropriate solution – one that is tailored to the health needs of the UAE while understanding the perspectives of key stakeholders on feasible interventions. It has been designed to tackle three objectives (i) understand the issues around child safety in Abu Dhabi, (ii) determine whether an educational intervention programme could address child safety issues in Abu Dhabi and (iii) explore the most effective and feasible interventions concerning the problems of child safety in Abu Dhabi, as defined by the stakeholders.

The research design utilised the Delphi method, with qualitative data collected over two rounds through the distribution and return of questionnaires. The data collected, using the Delphi questionnaires, has offered empirical evidence which highlighted public health problems and the experts consulted have in turn suggested the development of a health/safety intervention programme in Abu Dhabi.

Based on the findings, the first recommendation has been to include the provision of appropriate training programmes for caregivers, with the bulk of this aimed directly at parents. The results have further emphasized the role of the government and its agencies – such as the Ministries of Interior, Labour, Education, and Health. The findings of the study reiterate that future child safety initiatives should include a concerted effort to address the issues identified, especially the lack of specialist education for the nannies/caregivers and the parents.

Suggested future research includes conducting a mixed methods study on parental attitudes to the employment of qualified or licensed nannies, with a second future study to investigate the effectiveness of community training, possibly through an interventional study. A third suggestion relates for the need for further understanding of the state of child safety in Abu Dhabi, by collecting data from different forums to help devise appropriate policies. Reflections on lessons learned were also noted.

DECLARATION OF CANDIDATE

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signed,

Khawla Saleh Farah Abdulrahman

21/07/2016

ACKNOWLEDGEMENTS

The completion of this doctoral programme, and subsequently this paper, has been a long journey. It saw high and low stretches and involved many changes in my personal life. I am a far cry from the ambitious young(er) lady that I was when I first sought this degree. In fact, it was only with the help of others that I was able to achieve success while raising two lovely young boys and building a career.

There are countless individuals who have played their part in helping me. However, there were a handful who were instrumental in setting me up for success, genuinely kept me on the right path, kept me sane, and reminded me to be hopeful and, most important, grateful.

For instilling a solid foundation within me, filled with curiosity and perseverance as I was, I thank my parents. Mother, you have been my number one supporter. You have helped me to attend to my family duties while still writing. I thank you for it. I thank you for the late nights, the babysitting, the travel companionship, the financial assistance, the mental support, your vote of confidence in me, but most important, your prayers. Without those prayers, I wouldn't have delivered this manuscript.

Father, this journey would have ended before it began if you hadn't driven me to always want more for myself. I hope this milestone is a visible testament to your efforts in making me the accomplished lady you have wanted – and which I hope I am today. You taught me about hard work, self-respect, persistence, independence and that it was okay to use the word “why.”

For many, the option to continue higher studies ends when they begin full-time work. Through the support and understanding of my line manager, Mr. Mohanna Al Muhairi, I was able to continue. I was anxious and nervous when I presented my proposal, but I will forever be thankful for your support and your encouraging words to persevere.

My next step was enhanced by the gracious support of His Highness Sheikh Nahyan bin Mubarak Al Nahyan. Your trust in me and words of encouragement were the final motivation needed to embark on the journey of my doctoral studies. Thank you.

There were several individuals who were instrumental in ensuring that I completed this paper – and who in retrospect have earned this degree with me. No matter how much pressure piled up, someone would

always push me along. Quite recently, I was pushed through the last chapter and editing pile by the words of Dr. Flemming who kept reiterating: "*A good dissertation is a done dissertation*."

To my dear "Aussie" supervisor, Dr. MacDougall, who graciously introduced me to the world of Tim-Tams and Pie Floaters, I thank you for your immediate welcome, bizarre humour and amazing mentorship: something I will always be grateful for. I would like to thank you, particularly, for your invaluable assistance and insights. Your efforts developed me as a student but more so as a mother. I thank you for supporting me throughout this journey and for putting me back on the right path when I allowed sentiment to muddle my thinking. Rest assured that your teaching, approaches and mentorship have instilled in me skills that have no doubt developed the personality and intellect of this "particular Arab"!

Words alone cannot suffice in thanking my mentor and co-supervisor in this paper, Dr. Cother Hajat. You have been an inspiration to me in many ways. You have pushed me to become a better student, a better employee and a better mother. I thank you whole-heartedly for every painstaking, thoughtful effort you have invested in me.

A special thank you to members of my family, my big brother Ahmed for sticking with me by way of unconditional support when I first pursued higher studies, my sister Umaima and my brother Amer, who helped me by way of babysitting duties, travel duties and even financial assistance when needed. Thank you! I pray I can be just as supportive to you one day, if the need arises. To my Uncle Abbas and my cousins Ahmed and Suliman - you made it home-away-from-home during my stay in Adelaide. Thank you for always rendering me your support and babysitting services.

Last but in no way least, I owe a great deal of gratitude to my husband Amin, who devotedly partnered with me in this journey. Thank you for your love, your support, and your shoulder (to both cry on and to relieve my frustrations.) It has been an eventful journey but nonetheless a completed journey, mostly because of your presence. Thank you!

Finally, this paper is dedicated to my boys, Saleh and Adam. My love for you is what pushes me to enhance child safety in our beloved country. In you, I see the promise of the future. I love you to the moon and back.

LIST OF ACRONYMS

AAMDHREC	Al Ain Medical District Human Research Ethics Committee
CDA	Community Development Authority
CDC	The Centers for Disease Control and Prevention
CHAS	Child Health & Safety – United Arab Emirates
CPC	Center for Child Protection
GDP	Gross Domestic Product
GSEC	General Secretariat of the Executive Council
HAAD	Health Authority – Abu Dhabi
QCC	Quality Conformity Council
SCAD	Statistical Centre – Abu Dhabi
SHF	Salama Bint Hamdan Al Nahyan Foundation
UAE	United Arab Emirates
UK	United Kingdom
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization,
UNIAIDS	United Nation Programme on HIV/AIDS
UNICEF	United Nations Childrens Fund
USA	United States of America
WHO	World Health Organization

CHAPTER 1 - INTRODUCTION

1.0 INTRODUCTION

Injury as per the World Report on Child Injury Prevention by the World Health Organization (WHO) is "the physical damage that results when a human body is suddenly subjected to energy in amounts that exceed the threshold of physiological tolerance". An alternative definition is the result of a lack of one or more vital elements, such as oxygen (Peden, Oyegbite, Ozanne-Smith, Hyder, Branche, Rahman, Rivara, & Bartolomeos 2008). The energy in question can be mechanical, thermal, chemical or radiated. No place is secure from the grave impacts of injuries, and injuries depict health care worries in every nation and continent globally (WHO 2001 cited in Bener, Hyder & Schenk 2007). Many studies and publications depict the high figure of deaths arising from injuries, amounting to above five million yearly and accounting for close to 1 in each 10 deaths globally (Bener, Hyder & Schenk 2007). Injuries relate to people of each group and economic standing. Children, in particular, experience diverse injuries.

The Global Burden of Disease Study (WHO, 2008) reported that injury in 2004 accounted for the highest morbidity which was much higher than cardio vascular diseases. In the United Arab Emirates (UAE), injury is the second leading cause of death for all age groups and is the main cause of death among children aged 0-14 years old (Grivna et al. 2012). The UAE, which is a high-income nation, holds a greater number of child injury deaths than nations with established injury control (Grivna et al. 2011). For instance, injury death for 0-14 year olds as of 2004 was at 10.3% in every 100,000 children (Grivna et al. 2011). This figure was three times higher when compared to 3.8% in the same population for Sweden (Grivna, Barss & El-Sadig 2008 cited in Grivna et al. 2011; Grivna et al. 2013). Between 2000 and 2006, there were 746 deaths related to injuries recorded by the Ministry of Health, which depicts an annual average of 107 (Grivna, Barss & El-Sadig 2008 cited in Grivna et al. 2011; Grivna et al. 2013). Major external causes involved road traffic injuries 63.0 %, falls 10.0% and drowning at 10.0% (Grivna, Barss & El-Sadig 2008). A large percentage of the injuries, 42.0%, took place at home, 39.0% on the streets and 3% at learning institutions (Grivna, Barss & El-Sadig 2008).

Child safety is described by the Centres for Disease Control and Prevention (CDC) as the action parents and caregivers play, which can be a life-saving role in protecting children from injuries. Within Abu Dhabi, child safety has been a growing concern. It can be assumed that the increase in numbers of reported child safety issues have great portents, but indefinite solutions. Accordingly, it is necessary that the development of policies or practices aimed at addressing the issues affecting children in Abu Dhabi should take place. It

would require research to offer background information desirable in instituting such policies. As stated by Choi et al (2005), evidenced based research has the potential of building effective policies. In this regard, this paper examines how this study can be transferred into practice and/or policy relating to child safety in Abu Dhabi.

1.1THE RESEARCHER

I am a UAE national currently working in the capacity of an Occupational and Public Health Manager at a UAE based philanthropic organisation. My educational background encompasses a BSc in Complementary Medicine from Edinburgh Napier University and an MSc in Public Health from Glasgow Caledonian University. Additionally, I have recently completed the Shamsa bint Mohamed Al Nahyan Fellowship in Early Childhood Development which was in partnership with Yale University. Through the project requirement of the fellowship, I sought to understand what could be done to support working mothers to enable them to effectively and productively care for their young whilst also providing them needed resources. This was done through a survey I developed involving 84 mothers from across the UAE. This fellowship gave me a holistic and scientific outlook to several things such as the Importance of parent-child interactions in the first few months after birth, the essential role of relationships with the primary caregivers, attachment and social- emotional development and critical developmental stages, amongst other things.

My initial interest in Public Health grew when I saw a pattern in the lack of awareness within my community in basic public health measures that seemed as standard practice elsewhere. The birth of my son (in 2009) was the pivotal point of my career choice when my elders (for cultural beliefs) refused to allow me to place my child in a car seat once discharged from hospital. To add salt to the wound, no support or guidance was rendered to me by the midwife or hospital staff. My practices and beliefs defied the norm of many and therefore, brought about further challenges. To name a situation, I faced difficulty in explaining why I wanted to feed my child Broccoli (seen as a western vegetable) instead of biscuits and explaining on the importance of caring for baby teeth and not neglecting them. There was an obvious gap and I was eager and keen to help parents and the community understand little is more when it comes to their child(ren). How simple tactics could prevent injuries, promote a better health (physically and mentally) and protect them in the long run.

My professional experience encompasses working for a local philanthropic organisation as a programme coordinator in Science, Technology and Environment (Children). My work revolved around initiating, monitoring, executing and evaluating projects within Science and culture which would ultimately educate and target children within the community. To further assist in the promotion of child safety, I was successful in providing workshops within my current role for parent employees on Emergency response; child safety

and Injury prevention and; First aid for infants and children. Employees and their spouses were invited to attend, and a separate workshop delivered in Tagalog was provided for their children's nannies. A recent secondment opportunity at Sesame workshop in New York (Nov 2013 – Jan 2014) gave me further insight and an opportunity to learn and build on child development strategies and foreshadow work on world child health initiatives.

I am one of twenty one individuals in the UAE who has recently obtained certification with Safe Kids organisation in Car Passenger Safety. This aims at providing parents and caregivers education on the importance of child restraints and hands-on assistance on the proper use of child restraint systems and seat belts. Furthermore, I am a qualified Paediatric First Aid Instructor which additionally assists me when educating parents on safety practices.

Recently, I assisted in the development of CHaS Abu Dhabi (Child Health and Child Safety) which aims at helping parents within the UAE in facilitating and empowering them with the needed tools and resources which can aid in the provision of a healthy and Safe environment for their children. My interest in public health has not only led me to develop and implement training programs to teach parents household safety procedures , but has also encouraged me to research and advocate for family-friendly workplace practices and policies, including extended family leave, breastfeeding breaks, and other supports to promote healthy child and family development and enhance productivity in the work environment. My ambition is to develop initiatives/projects of which would encourage the existing behaviours within the community to divert towards better and healthy outcomes. I would like to assist parents by enabling them the tools, resources and basic understanding of what is needed to help their children thrive and to empower them to create a healthy and safe environment for their children.

1.2 RESEARCH QUESTION

The primary research question of this study is "What are the challenges and opportunities for child safety in Abu Dhabi?". The question was supported by two secondary research questions that considered the development of a possible intervention strategy for child safety problem in Abu Dhabi. These questions were:

- What are the available evidence-based options for a possible and effective solution to the problem?
- What is the understanding of key stakeholders of child safety and their perceptions of feasible interventions to the problem of child safety?

1.3 AIMS and OBJECTIVES

The primary aim of the study is to explore the challenges and opportunities for child safety in Abu Dhabi and propose culturally-relevant and cost-effective interventions. The objectives of the study are as follows:

I. To understand the issues around child safety in Abu Dhabi.

II. To determine whether an educational intervention programme might address child safety issues in Abu Dhabi.

III. To explore the most effective and feasible interventions for the problems of child safety in Abu Dhabi as defined by the stakeholders.

1.4 RESEARCH SETTING – THE UAE

The UAE is a federation of seven emirates formed in 1971 (National Bureau of Statistics, 2010). Prior to its independence, the seven emirates (Abu Dhabi, Dubai, Sharjah, Ajman, Fujairah, Umm al Quwain and Ras Al Khaimah) were known as The Trucial States (National Archives, 2016). Abu Dhabi is the largest of the seven emirates and makes up 87 per cent of the entire country. It lies on the coast of the Arabian Gulf with a coastline stretching 700km and is bordered by Sultanate of Oman to the east, the Kingdom of Saudi Arabia to the south and the emirate of Dubai to the northeast (Government.ae, n.d). Abu Dhabi is the world's eighth-biggest producer of oil having 95 per cent of the nation's oil reserves and about 94 per cent of gas reserves (Government.ae, n.d). The annual statistical report issued by the National Bureau of Statistics, showed that the GDP estimates in 2014 at current prices amounted to 1.46 trillion dirham, with an increase of $ 45 billion dirham for year 2013, so that the growth rate reached up to 3.2 (Ministry of Economy, 2015). According to the estimates of the International Labour Organization (ILO), the rate of participation in labour force in 2013 reached about 80.0% of the total population aged 15 years and above. In terms of the unemployment rate, it declined to about 3.8% in 2013 from the size of the workforce level of 4.0% in 2012, and according to the same estimates the male unemployment rate was 2.8% and the female unemployment rate was 8.8% in 2013 (Ministry of Economy, 2015).

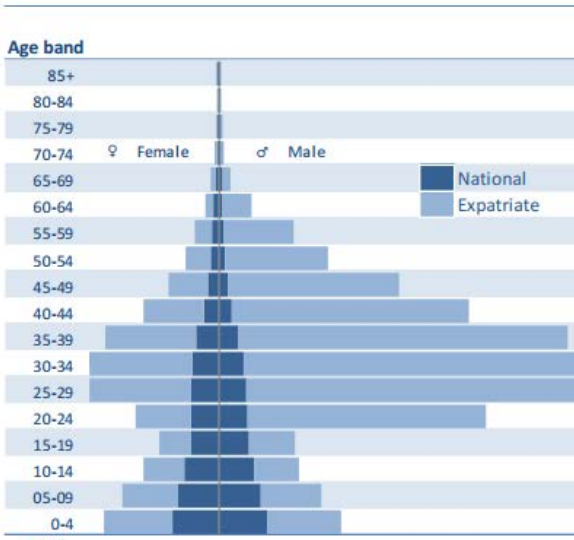
The UAE was reported to encompass major public health problems in four areas, namely cardiovascular disease; injury (including road traffic, child, and occupational injuries); cancers; and respiratory disorders, in that sequence (Loney et al. 2013). These challenges have formed the basis for various health promotion

activities in Abu Dhabi, including campaigns for promoting healthy lifestyles for children and others which are discussed in-depth later in this chapter.

1.4.1Abu Dhabi Population

Abu Dhabi emirate is represented by three regions, the first being Abu Dhabi city, the eastern region is represented by the city of Al Ain and the western region represented by Al Gharbia which consists of seven main cities (Liwa, Madinat Zayed, Ghayathi, Ruwais, Mirfa, Sila and Delma Island). Official estimates from the National Bureau of Statistics (2010) show that the total population estimates of the UAE was 8.2 million, which has grown to 9.3 million as provided by 2013 estimates by CityPopulation.de (2015). The estimates are based on the model of exponential growth for the previous census taking into consideration death, births, and net immigration (National Bureau of Statistics 2010). The resident population of the Abu Dhabi Emirate in 2015 was 2,784,490 people with 536,741 people (19.3%) are Emirati citizens (SCAD, 2016). Of the citizens, 276,374 (51.5%) live in Abu Dhabi Region, and 230,025 (42.9%) in Al Ain Region, leaving 30,342 (5.7%) in Al Gharbia Region. Reported in the 2009 Annual report by, one in every five residents of Abu Dhabi are nationals of the UAE. Expatriates comprise of 80.7% of the total resident population with 1,443,837 people (64.2%) living in the Abu Dhabi Region (SCAD, 2016). Expatriates are overwhelmingly male, predominantly aged between 20 and 40 years old and of South Asian origin with a significant majority being employed in construction and accommodated in labour camps (HAAD, 2009). The total number of females aged 20-39 years was 127,113 (43.4% of all female). The majority are South Asian 41%, followed by non-Emirate Arabs 29%, nationals 24% and other nationality 8%. They are mostly located on Abu Dhabi Island. About 5% are illiterate and 43% are employed (HAAD 2008). In Abu Dhabi, fertility is higher than most developed regions of the world, and mortality remains extremely low. In 2015, Crude Birth Rates and Crude Death Rates were 13.9 births and 1.1 deaths per 1000 population respectively. The introduction of mandatory health insurance in 2007 provided all residents in Abu Dhabi access to high quality care (HAAD, 2009).

The following population pyramid (Figure 1) provides male and female classification for the entire population. We can see that half of the population is comprised of children and adolescents. Large numbers of female citizens in the five year age groups 25 to 29 years and 30 to 34 years (the main child-bearing age groups) were reflected in the large numbers of children 0 to 4 years and 5 to 9 years. The large age groups for citizen children 0 to 4 years and 5 to 9 years indicated a strong population growth of the citizen population through natural increase.



Age band	All	National			Expatriate		
		Male	Female	Total	Male	Female	Total
85+	2'726	985	1165	2'151	239	336	575
80-84	2'831	861	855	1'716	477	639	1'115
75-79	5'700	1'734	1'628	3'362	1'078	1'259	2'338
70-74	8'701	2'178	1'957	4'135	2'390	2'176	4'566
65-69	17'029	3'025	3'137	6'163	6'863	4'003	10'866
60-64	39'120	3'459	4'329	7'788	24'196	7'136	31'332
55-59	84'090	4'224	6'122	10'346	59'756	13'989	73'745
50-54	121'754	5'330	7'138	12'468	87'661	21'625	109'286
45-49	196'958	7'445	9'623	17'068	146'620	33'270	179'891
40-44	278'102	10'402	13'235	23'637	202'826	51'639	254'465
35-39	395'793	16'222	19'708	35'930	281'853	78'010	359'863
30-34	532'361	20'567	23'405	43'972	385'778	102'611	488'388
25-29	538'031	23'005	23'755	46'760	386'122	105'150	491'271
20-24	299'700	24'060	23'836	47'896	204'152	47'652	251'804
15-19	116'692	25'221	24'016	49'237	40'317	27'138	67'455
10-14	133'079	30'064	29'396	59'459	38'060	35'560	73'620
05-09	170'477	36'253	35'092	71'345	51'423	47'710	99'132
0-4	202'789	41'224	39'366	80'591	63'306	58'891	122'198
Total	**3'145'934**	**256'259**	**267'764**	**524'023**	**1'983'115**	**638'796**	**2'621'911**

Figure 1: Population by age, gender and nationality (source: HAAD Annual Report – Abu Dhabi 2015)

The current median age is 30.3 years, for men is 32 years and 25 years for women.

1.5 BACKGROUND OF THE STUDY

Since its formation, the UAE has been paying considerable attention to health services to meet the needs of the Emirates, which has happened through a network of hospitals, health centres, and diagnostic facilities that have effectively expanded access to health care (HAAD 2011; United Nations Development Programme (UNDP) 2015). Part of the development has been in improving child related health care services toward reducing child mortality rate. The results have been attributed to programmes such as provision of high quality level of sustainable primary and secondary health care, reducing incidence of disease and accidents, eliminating contagious and parasitic diseases among children and those going to school, detecting and treating chronic diseases from the early stages, and providing necessary care for children with special needs.

According to the Human Development Index (HDI) which is a composite statistic used to rank countries according to their development levels in three areas —a long and healthy life, knowledge and a decent standard of living (UNDP, 2015) the top three highest scoring countries in 2014 are Norway , Australia and Switzerland. When comparing their under – five child mortality rates presented in UNICEF (2015) and WHO (2016) report to that of the UAE, the UAE registers a higher number of under- five mortality rates compared to other developed nations. When compared to Norway, the UAE reports three times higher and double the amount when compared to Australia. Table 1 lists a more detailed comparison. Despite these figures, it should be noted that over the last 40 years, the UAE has made tremendous gains, enabling the country's score in the HDI to surpass that of some European countries. In 2011, the UAE ranked 30th among 187 countries in the HDI (Human Development Index Scores: UAE and Europe, 1970-2010).

Table 1: Trends in the Human Development Index, 1990-2014

Country	Uncertainty bounds*	2015**
UAE	Lower	6.0
UAE	Median	6.8
UAE	Upper	7.7
Switzerland	Lower	3.4
Switzerland	Median	3.9
Switzerland	Upper	4.6
Norway	Lower	2.2
Norway	Median	2.6
Norway	Upper	3.1
Australia	Lower	3.5
Australia	Median	3.8
Australia	Upper	4.1

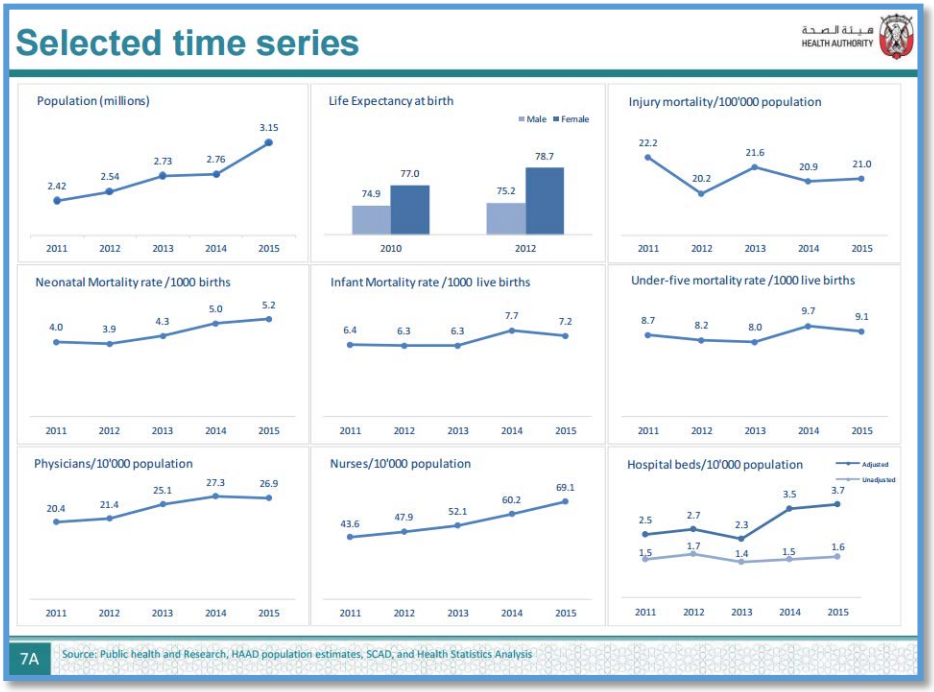
* Lower, Median and Upper refer to the lower bound, median and upper bound of 90% uncertainty intervals.

** Above figures were similarly reported in the (2016) World Health Statistics report.

SOURCE: UNDP (2015) HUMAN DEVELOPMENTS REPORT. TABLE 2: TRENDS IN THE HUMAN DEVELOPMENT INDEX, 1990-2014

HAAD (2011) reported that mortality rates have declined steadily over the past years with a decrease in the under-five mortality rate from 22 to 8.2 per 1'000 live births between 1990 and 2013 across the UAE with infant (under 1) mortality now comparable with other developed countries.

However, the below graph reported in HAAD (2015) shows a slight increase in mortality rates for both infants and the under- five age range between 2011 and 2015; increasing from 8.0 in 2013 to 9.1 in 2015.



SOURCE: HAAD HEALTH STATISTICS 2015 – PUBLISHED IN 2016

Despite the slight increase in the country in infant mortality rate between 2011 and 2015; 6.4 to 7.2 respectively (HAAD 2015), annual data from 1999 to 2010 showed a steady decline over the years as shown in the graph below (HAAD 2011).

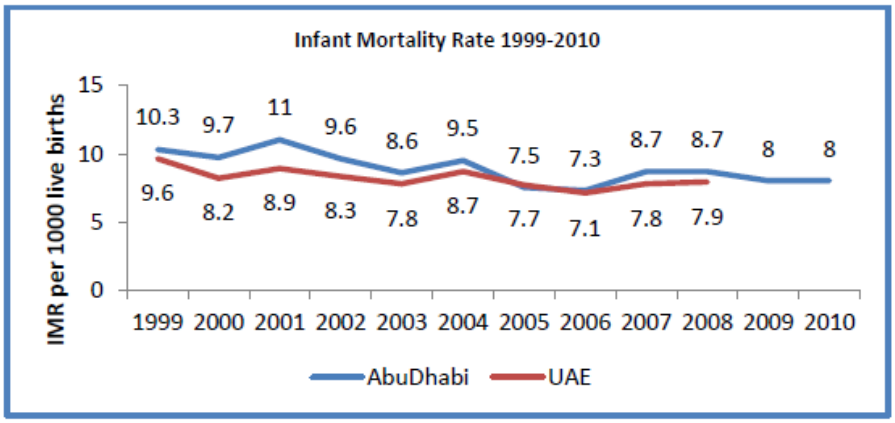


Figure 2: Infant Mortality Rate from 1999 to 2010 (Source: HAAD 2011)

When compared to western nations, the Abu Dhabi infant mortality rate remained considerably higher (8.0) than Australia (4.3) , the United States of America (USA) (6.06) and the United Kingdom (UK) (4.62) but is slightly lower than other Middle Eastern countries such as Qatar (8.3) and Bahrain (8.5) (HAAD. 2011) Child safety remains a growing concern in Abu Dhabi. There is an increasing number of reported incidences of child safety in Abu Dhabi, and this calls for an effective intervention. Despite the increased number of cases involving child safety, there are no limits to when an intervention can be formulated; this is because of indefinite possible solutions to this problem.

One of the primary ways of developing an effective and lasting solution to this problem is through the development of policies and practices, which might be critical in addressing most of the issues affecting children and their safety at their homes. A study by Grivna et al (2012) recommended legislation, regulations, enforcement and education to help create child-friendly environments to ensure child safety as there was no comprehensive system in place. However, in Abu Dhabi, there are different on-going initiatives, which are aimed at safeguarding child safety. HAAD identified that there was a need for health care facilities to partner with them to reduce child mortality through aspects such as promoting early vaccination and encouraging parents to pursue health practices (WHO 2014). Suggestions from HAAD show a need for different stakeholders such as health care facilities, health care professionals, parents and families, to contribute towards reducing child mortality. For example, health care professionals can assist in the formulation of policies that would be relevant to parents such as to help mothers in caring for children, and counselling them on risky behaviours. The public including parents and families can in turn ensure that they seek counsel for health care providers as needed.

Unfortunately, such services have not been harmonized or integrated in order to fall under one umbrella. The UAE has been party to the International Health Regulations enforced in 2007, and has shown commitment to promoting health care services for its nationals. These Regulations require parties to improve on national core capacities in areas of legislation, coordination, surveillance, response, preparedness, risk communication, laboratory, and considering events such as food safety, and chemical safety. While the UAE is party to the regulation, it has shown a need to consolidate its activities at all levels.

The health care sector is administered by the Ministry of Health that oversees the regulation of public health sector, while the health authorities in Abu Dhabi and Dubai are responsible for service delivery (WHO 2014). The focus has however been on providing services to nationals, which means more than half the population may lack sustainable care because they are non-nationals. Nonetheless, the country seems to recognise the need to expand services to consider the immigrant population. The Ministry of Health and Health Authorities have implemented a number of laws, health policies, and strategies for various programmes. However, greater consolidation of policies and strategy is needed because of the structure of the current national health care delivery. For example, the care delivery is based on primary health care that depends mainly expatriate professionals with 80% doctors and 90% nurses.

Possible solutions have been in collaboration with various United Nation (UN) agencies such as UNDP, WHO, UNICEF, UNESCO, UNEP, and UNAIDS that are working with the Ministry of Health and Ministry of Interior in promoting prevention of HIV, and promotion of education and science. The organizations provide guidance and technical assistance in social and economic development, services, education, and health management. However, despite such coordination WHO (2014) noted a lack of coordination for the different partners which is essential for optimal results. The challenge in the UAE seems to be in establishing effective cooperation within the health care sector, which would be useful in the development of policies and promotion of various initiatives.

A lack of collaboration in services presents a major limit to the onward referral of cases involving child safety. Nevertheless, the present state of Abu Dhabi, with regard to child safety can be revolutionized if important steps are undertaken. Such steps might involve various researches, which would be important in presenting valid background information that can be applied by key stakeholders, in order to ensure that there is the development of effective policies, which will address child safety issues. An important aspect of such research is that it is evidence-based. Choi et al. (2005) posits that evidence-based research is highly likely to lead to the development of effective policies. The goal of this research is therefore to come up

with information that will act as evidence, and guide the key stakeholders in the development of policies that will address child safety issues.

Possible solutions to the challenges of child safety in Abu Dhabi through this research will be explored. This is adopted from Carol Bacchi's approach in her book "Analysing policy: What's the problem represented to be?" In this book, Bacchi argues that governments only respond to problems that exist in their country, mainly through policies. Therefore, if one analyses any government policy keenly, it is possible to come up with a possible cause of the problem, which the policy addresses (Bacchi 2009).

In Abu Dhabi, the key stakeholders concerned with the issue of child safety argue that in order to improve the situation of child safety in the city, there is a need for knowledge dissemination on effective child-protection techniques (Dubai Women Establishment 2009). In my opinion, this knowledge should be disseminated to the individuals that are directly concerned with taking care of children at home. Therefore, since in most Abu Dhabi homes it is the nannies who spend most of the time at home caring for children, any policy that is developed toward addressing the issue of child safety must involve the nannies. Since knowledge is at the core of such an intervention, this research will explore and analyse if all nannies and other individuals hired to take care of children in Abu Dhabi should undergo training that will equip them with the knowledge on child rearing and child safety. Such educational training could be inclusive of all the important aspects of child safety at home, child development and first aid. Additionally, it could include strategies on how nannies can apply these core aspects in their practice in order to ensure protection of children while at home.

1.6 RELEVANCE TO PUBLIC HEALTH

Child injuries are classified as unintentional or intentional. Unintentional injuries result for close to 90% of child injuries, being the main cause of mortality amid children (Peden et al. 2008). Child injuries are a developing international public health challenge. Research shows that unintentional injuries at home are a major cause of death and contribute significantly to loss of quality of life in children, with those aged 0 to 4 years suffering the highest rates in terms of falls, poisoning, drowning, poisoning, and burns (van Beelen, Beirens, den Hertog, van Beeck, & Raat 2014). A study conducted by Bener, Hyder, and Schenk (2007) that considered records between January 1995 and December 2004, showed that many child deaths were due to injuries at 29.8%, with road injuries amounting to 68.3%. Injury records by HAAD collaborate that injury is the second leading cause of death in Abu Dhabi following cardiovascular disease, with road injuries representing 60% of all fatal injuries as reported by HAAD (2011b) and 62% as reported by HAAD (2013). Among children, HAAD estimates that road traffic is the sixth leading cause of death among children under

one year, the second among those aged one to four years followed by drowning at number three and other injuries at number seven. Among children aged five to nine, road injuries was the leading cause of death, other injuries at number six and drowning at number 10. Road traffic injuries remained the leading cause of death for children aged 10 to 14 years and 15 to 19 years. Fatal injuries caused by falls is further discussed in the subsequent chapter.

Children spend a considerable amount of time at home and are therefore, exposed to a range of hazards. The Centres for Disease Control and Prevention (CDC) (2015) provided a list of injuries for children aged 0 to 3 years at home and within the community. These included burns, poisoning via inhaling carbon monoxide, maltreatment, lack of safety in travelling, dog bites, poor emergency preparedness, food poisoning, lead poisoning, ineffective recreational activities and equipment at home, and poisoning through substances used within the home such as insect repellent. Other causes are lack of medicine safety, poor storage of baby formula and food, transfer of infections from parents or caretakers to the baby, water related injuries, and general safety in the house.

Child safety should be of primary concern to parents and other caregivers. According to the world report on child safety developed by WHO (2008), about 2000 children and teenagers die daily from preventable injuries, and it is therefore important for all stakeholders to take responsibility toward safeguarding children (Peden et al. 2008). Furthermore, as established by the Convention on the Rights of the Child (UN, 1989) all children have the right to a safe environment and protection from injury and violence. The Convention further tasks institutions, service providers, and relevant authorities to establish standards that promote health and safety for every child. To comply with regional and international convention on the protection of the rights of the child, including the UN convention on the rights of the child, the UAE has enacted a number of new laws in this regard. In 2015, the UAE presented a report to the committee at the Office of the High commissioner for Human Rights (OHCHR) detailing the development of a national strategy that would ensure mother and child wellbeing in line with the convention. The national strategy included participation, development of children and their protection from all forms of violence and mistreatment (WAM, 2015).

Identifying and positioning injuries as a major public health problem is therefore, said to be one of the major achievements of injury professionals over the past 25 years and one that has made the broader health community aware of the need for further research in this area (Segui-Gomez & MacKenzie 2003). The WHO categorises road injuries as the leading cause of death among children aged 0 to 19 years especially among those aged 15 to 19 years (Peden et al. 2008). According to a paper on child injury

prevention by the sixty-fourth World Health Assembly (2011), child injuries are a neglected public health problem with significant consequences in terms of mortality, morbidity, quality of life and social and economic costs.

Apart from mortality, tens of millions of children need hospital care for non-deadly injuries. A majority of them end up with similar disability, frequent with lasting aftermaths. The burden of injury on health care falls unfairly on children. It is greatest amid the marginalized from poorer nations and lesser earnings (Peden et al. 2008). Nations face numerous challenging precedence and injury interventions should be correctly evaluated for their efficiency. Studies progress to shed some light on the extent of the predicament and on the possibility that prevails for saving lives and avoiding injuries (Peden et al. 2008).

The main Convention on Children Rights, approved by close to all administrations, notes that children globally have a freedom to a safe surrounding and to safeguard from injury and brutality (Peden et al. 2008). The Convention additionally notes that the institutions, facilities and services accountable for the safeguard of children ought to obey the rules with founded standards, specifically in the regions of safety and wellbeing. Children are exposed to perils as they progress with their day-to-day lives and are susceptible everywhere to the similar kinds of injury (Peden et al. 2008). Therefore, child injury is a principal public health challenge, which needs immediate attention.

1.7 THE AREA OF SIGNIFICANCE

The problem revolving around child safety in Abu Dhabi is important to Abu Dhabi. In November 2014, the Ministry of Interior noted the importance of developing a policy that would protect children from abuse and neglect for all children living in the UAE (Abu Dhabi Police 2014). Such a policy would provide a framework for adhering to the Convention of Rights of the Child to which the UAE ratified in 1997. While the government is recognising the importance of having an applicable regulation, the country is still lacking in appropriate structures in policy formulation and implementation. When there is lack of a policy on this issue, it means that the society has not been presented with a framework for addressing the problem. By researching on this problem, the study will gather important information, which can be used in the formulation of policies regarding child safety.

This research will attempt to offer possible solutions to a major public health problem in Abu Dhabi by means of providing evidence-based information, which will include possible interventions to child safety issues in Abu Dhabi. The research will highlight factors that contribute to endangerment of children and ensuring that the process of policymaking is well informed and addresses issues taking place in Abu Dhabi.

For example, the questionnaire used in the study checks for the understanding of child safety in Abu Dhabi, areas of concern such as common problems related to child safety, their causes, and then asks for suggestions on possible intervention. This study thus offers a comprehensive outlook on child safety in Abu Dhabi including the public perception targeting key stakeholders including parents and guardians, existing knowledge on child safety, and policies. The area of policies is useful in identifying areas that stakeholders perceive as important in obtaining a realistic solution to the challenge. Related findings can be useful in determining areas of focus on how to promote safety in all arenas, with the home being a priority. The background on the study showed that infants are at a high risk of unintentional injuries especially in the age of 0 to 4 years. The assumption is that these children are mainly in the home hence the prioritization. Older children also spend a significant amount of time at home.

An area of importance to this study is the role of caregivers, especially nannies. The results will therefore show how stakeholders feel nannies contribute to child safety and injuries, and ways to enhance their role to prevent harm. An area to explore could be that that nannies may require training to promote better caregiving for young children in areas such as first aid. This would contribute to an addition in policy formulation that recognises educational intervention. The Ministry of Interior in its drive for child safety policy, underscored the need for people working with children in all areas including teachers, physicians, and child caretakers to be aware of signs of abuse and neglect, and their capacity for this can be built through training on child protection and monitoring (Abu Dhabi Police 2014). Therefore, this study will contribute toward this outcome, through investigation on perception about well-trained nannies and their role in child safety. Notably, the study aims at providing a holistic outlook on child safety in Abu Dhabi, hence its capacity to impact policy formulation at a wide area, but considers critically the role of caregivers.

1.8 HEALTH PROMOTION and THE UAE

Internationally, health promotion is based on the Ottawa Charter for Health Promotion. The conference was a response to growing expectations for a new public health movement and entailed focused discussions on the needs in industrialized countries. As defined in the Ottawa charter, “health promotion is the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy life-styles to well-being.” (WHO, 1986). The charter goes on to list the fundamental conditions of good health such as peace, shelter, education, food,

income, stable environment, sustainable resources, and social justice . The Ottawa Conference saw health care as the responsibilities of everyone not just the health care sector. In industrialized nations, health promotion has been able to lead to prevention and management of healthy conditions through promotion of healthy lifestyles. According to UAE Interact (2015), the UAE has achieved high levels of care in its hospitals and other health care related facilities achieving a life expectancy of 76.5 years similar to Europe and North America. However, the country remains to battle lifestyle related problems including heart disease, diabetes, and injuries. Health promotion campaigns such as the Healthy Children campaign, targeted achieving the National Programme for Government Communication (National Program for Government Communication 2015). The aim was to positively transform the lifestyles of individuals and communities through effective communication. Another campaign on health awareness began in January 2015 and ended in December 2015 by the Family Development Foundation Centre. The target was to promote social programmes for improving knowledge, environment, and promote a healthy lifestyle through healthy nutrition, body activities, reduce diseases, take care of psychological health, psychological pressure, and other psychological problems. Additionally, HAAD has launched different health programmes to promote the health and wellbeing of the citizens such as campaigns on cancer prevention, Weqaya, occupational safety, new born screening, healthy eating and a drive safe promotion.

1.9 THEORETICAL FRAMEWORK

The current study proposes the continued need for health promotion through lifestyle changes based on policy formulation. The original LaBonte (1992) model for promoting health served as the basis for the development of the Fran Baum 2008 remodel as “The New Public Health.” This model forms the theoretical framework used to understand the various elements involved in achieving social change toward changing lifestyles. It was also chosen because it brought together a number of approaches to health promotion and different prospects which complimented each other. In the UAE, a study by Bromfield and Mahmoud (2016) was the first to examine behaviour, knowledge and attitudes towards car safety seats among Emirati parents. It presented reason why health campaigns needed enforceable action and legislation to mandate people to follow suggested precautions. However, even more important is the provision of correct information. For example, while the use of car seats follow global standards of child road safety, Emiratis do not traditionally use them and thus require adequate information on reason for using them, and using them correctly. Therefore, proper legislation and public information are important to health promotion. Information is also important in combating cultural limitations. For example, Bromfield and Mahmoud (2016) found that participants felt that if they used car seats, their mothers and grandmothers would think the act was cruel and unsafe for the child. Others mentioned that they would feel embarrassed to use a car seat as it would indicate their lack of trust in the drivers ability (albeit husband, driver, mother etc.) Such

findings highlighted the need to examine behaviour among individuals and groups, knowledge and attitudes, and then establish legislative action that responds to these perceptions.

LaBonte (1992) health model was developed to respond to the cardiovascular disease prevalence and incidence in Canada by identifying the risk factors including socio-economic status of groups and community characteristics based on socio-environment. The study was then based on a protocol organized under Heart Health Inequalities in Canada that brought in data on cardiovascular disease and risk factors for prevalence. The notable attributes about the model is that it adds to the protocol behaviour and medical factors as important considerations for disease incidence alongside socio-environment factors. The elements of behaviour and socio-environment are useful in the current study because they consider how the individuals, communities, and their environment can contribute to risk of a health problem. For example, the challenge of child safety in Abu Dhabi is reflective of public beliefs and attitudes. The model is an effective setting for finding a solution to the problem. Furthermore, it also provides space for defining appropriate action with a well-focused goal, a definition to the problem, strategies for action, and success factors.

1.10 OUTLINE OF DISSERTATION

The dissertation comprises of six chapters, the first being the current (introduction) that presents a background to child safety, and presents the setting for the study within the UAE. Other sections in the chapter include the relevance to public health and the implication to policy formulation explained in the area of significance. The second chapter is the literature review that explores in depth child safety in Abu Dhabi, and delineates the topic within the home set up. The second chapter highlights injuries within the home and the role of caregivers and then identifies the possible impact of education and training on prevention of injuries. It also includes an assessment of quality in research in the problem area, and examines professionals and paraprofessionals in home-based care as well as education as an intervention, policies in Abu Dhabi, and the future of child safety in Abu Dhabi. All literature reviewed cited in this paper ceased in 2015 with the exceptional papers accessed in 2016 for review. The third chapter is methodology outlining the process of data collection including the research design, recruitment of participants, ethical considerations, research transfer, and relevance to public health. It also includes a discussion of the sample size, questionnaire, and analysis. The chapter includes an analysis of the Delphi methodology as the research strategy. The fourth chapter presents the results. The fifth chapter comprises of the discussion which is presented in four parts, namely child safety in Abu Dhabi, educational intervention, policies, and future or child safety. The sections align to the sections of the questionnaire, and also provide a discussion on how the current results add to existing literature and whether they bring in new knowledge. Chapter 6

is the conclusion providing an overview of the research, its findings, limitations, implication for policy formulation and future research, and the generalizability of the findings.

1.11 SUMMARY

This chapter highlights the need for a comprehensive policy on child safety by presenting the challenge of child safety in the region, and as an international public health problem. Organizations such as the WHO and CDC, and government arms such as the Ministry of Interior recognise the importance of addressing child safety issues, and for preventing injuries. The expected outcomes of the current study aim to identify relevant, pertinent and stakeholder-approved recommendations on specific interventions that would also contribute to the formulation of a policy in Abu Dhabi. This would promote child safety with a focus on the home environment.

CHAPTER 2 – LITERATURE REVIEW

2.0 INTRODUCTION

The literature review focused on different aspects relating to child safety, which is a growing public health concern. It will first examine child safety both nationally and internationally as a public health concern, which will include all safety issues pertaining to children including the commonly reported causes of childhood injury of drowning, neglect and abuse, road safety, baby walkers, and heat. Next will be an in-depth review on child safety in the home and ways that home-based childcare initiatives have been effective in ensuring child safety as exemplified in different countries such as the United States of America (USA) or other regions based on availability of information. This will be followed by a review of interventions, policies on child safety, the future of child safety in Abu Dhabi as described in the literature and a discussion on the models used for the promotion of health.

2.1 METHODOLOGY

The scoping review methodology was adopted for this literature review due to its capacity to summarize research findings, identify gaps available in research literature and provide information that can be used for future systematic reviews. A scoping review is a strategic mapping of the key concepts represented in a research area (Landa, Szabo, Brun, Owen, & Fletcher 2011). It brings in quantifiable knowledge from evidence-based studies that provide a useful background to the intended study which is a common approach for reviewing health research (Levac, Colquhoun & O'Brien 2010). An element to note in conducting a scoping review, is that the quality of the findings such as found in a systematic review is not sought, but instead seeks to examine the extent, range, and nature of research activity presented in the area. It provides a possible approach to include a large amount of data, considering that it is difficult to address all the studies available in an area. The scoping review will identify parameters that can be used for systematic reviews including outcomes, comparisons, interventions and target population demographics. Additionally, it will provide a guideline on how to assess the different materials based on the volume, nature, and characteristics of the current topic (Pham, Rajic, Greig, Sargeant, Papadopoulos, & McEwen 2014). This process enabled the examination of the available content based on the value of the topic under discussion which led to the identification of existing gaps in research. The use of scoping review in this literature review included the following five steps:

1. Identifying the research terms targeted for analysis – this included identifying a possible range of search phrases based on the research questions established in the previous chapter.

2. Identifying a wide range of possible literature on the topic – this included identifying many articles about child safety, including periodicals, journal articles, and other internet based sources.
3. Selection – search for child safety generated a large amount of articles but it was possible to separate the most likely for inclusion based on relevance to the study questions
4. Charting the data and collating the results – based on the volume of materials obtained it was difficult to develop an actual chart outlining each source individually. Nonetheless, it was possible to identify the relevance of each article based on the heading and abstracts where available and thus place it in a folder for inclusion into the study.
5. Reporting – the literature review chapter is based on the different sources identified as relevant to child safety.

Levac, Colquhoun & O'Brien (2010) suggested a sixth stage in the process, consultation. However, as the current study led to collecting data by means of consulting with different stakeholders, this stage was not part of the scoping process in the literature review but was carried over to the Delphi method which is described further in chapter 3. The scoping review approach necessitates the formulation of a research question that will guide the inclusion and exclusion of the literature searched (Levac, Colquhoun & O'Brien 2010). The research questions for this study were:

Primary Question:

- What are the challenges and opportunities for child safety in Abu Dhabi?

Secondary Questions:

- What are the available evidence-based options for a possible and effective solution to the problem?
- What is the understanding of key stakeholders of child safety and their perceptions of feasible interventions to the problem of child safety?

The literature identified the extent and range of studies, articles, and books on child safety based on the scoping review approach (Pham et al. 2014). The current chapter highlights the gaps noted in the literature to identify possible direction for future research and to determine whether the current study will add to the existing knowledge or provide new information. In this research, the scoping review is not an end in itself but part of the process to learn about current practices in child safety both internationally and in Abu Dhabi. This will assist in the formulation of an appropriate intervention(s) in reducing child injuries.

The scoping review methodology is distinctive in its ability to allow the inclusion criteria to emerge from the literature search (McColl, 2007). The scoping review methodology lends itself well to the identification of themes that recur throughout the literature and will therefore help to explore the research question.

The findings help define the reasons child safety is a public health problem in Abu Dhabi and the challenges faced in child safety at home. This includes the population and interventions available in resolving the issue.

2.2 LITERATURE SEARCH STRATEGY AND LIMITATIONS

2.2.1 Limitations

The inclusion-exclusion criteria for scoping reviews are based on the relevance of the literature without necessarily taking quality into consideration. This is a limitation of the scoping review methodology. However, the criterion based on relevance to the research question is sufficient in providing a broad base for the review that will aid in the identification of existing gaps in the research literature.

2.2.2 Search Strategy

Five databases were searched, which include Medline, PsychInfo, PubMed, Scopus, and Sociological Abstracts. The search terms for the literature review include child accidents, childproof, prevention, risks, provider outcomes, parental employment and stress, home-based child care quality, anticipated outcomes in home-based child care. The first level search terms included child safety, child safety in Abu Dhabi, incident and prevalence of child injuries, risks to child safety, understanding child safety, definition of child safety, child care providers at home, role of nannies in child safety, role of parents in child safety, and WHO on child safety. The second level search terms included problem of child safety in Abu Dhabi, child safety as a public health problem, and the role of government in child safety. The third level of search included policies on child safety in Abu Dhabi, child safety campaigns, interventions on child safety, training of nannies to care for children, licensing of child care givers, case studies on child safety problems, and role of home-based care in ensuring child safety.

The search also included newspaper articles from Abu Dhabi to provide accounts of cases reported in the country on child abuse and neglect, as well as possible on going campaigns geared at the promotion of child safety by the Higher Committee for Child Protection, the Police, and other relevant agencies/bodies. Search items relevant to the cases included child safety in Abu Dhabi, public health problem of child safety in Abu Dhabi, and Abu Dhabi response to child safety. The search yielded a combination of 577,000 articles, however analysis was completed in order of relevance to the topic.

The presentation of sources is based on the subtopic rather than within the entire child safety topic. Reason being, each section offered insight into a specific issue with each source selected based on its relevance to the topic and subtopic. Where possible, gathered literature used was up to 2015. However, during certain revisions, some literature accessed was from 2016 on certain subject areas. The articles from 2016 were not in the original literature review but were included to follow up particular results. Furthermore, the review included local and international overviews where relevant. In some instances it was important to

identify information specific to Abu Dhabi, the Emirates, and then if necessary provided an international overview, which was done using other countries or regions.

2.3 CHILD SAFETY IN ABU DHABI – A PUBLIC HEALTH PROBLEM?

Child safety remains an important area in Abu Dhabi with the country having ratified the UN Convention on the Rights of the Child and thus has the obligation to ensure the safety of children. The UAE ratified the Convention in 1997 (Abu Dhabi Police 2014). The government faces criticism that it has yet to adequately address the issues of non-discrimination and observing the best interests of the child as defined in the Convention (Gomaa 2012).

An area that exemplifies the child safety challenge in Abu Dhabi is that of traffic related injuries. Abu Dhabi Health Authority (HAAD) reported that road traffic injuries was the leading cause of death among children, being responsible for about 60% of deaths compared to falls at 8%, drowning at 7%, and poisoning at 4% (HAAD 2015). A study conducted by Grivna, Barss, Stanculescu, Eid, and Abu-Zidan (2013) though showing lesser figures still placed traffic injuries as the leading cause of death among persons aged 0-19 years at 40%. This was specific to 193 children and youths sample for the study. These were minors admitted at the surgical wards between 2003 and 2006. The Emirate has been struggling with how to promote safety on the roads having realised through various studies such as through UAE University and HAAD that only one in every five parents place their children in a seat and many do not use them correctly (UAE Road Safety 2014). The reason for the continued lack of car seats among parents was the belief that children were safer in their parents' hands, seated on their lap compared to using car seats, and some parents considered such seats inconvenient. Asad (2012) noted that 28% of children continue to sit on the front seat despite the Ministry of Interior prohibiting such behaviour; further, quoting HAAD statistics noted that 98% of child passengers do not strap in properly, while 96% do not use car seats properly.

Some of the reasons associated with poor use of car seats is parents' perception that a car seat will take up space which is seen as inconvenient (Asad 2012) and the belief that the child is safer on the mother's lap rather than in a car seat (UAE Road Safety 2014). The government through the Department of Transport, HAAD, and Centre for Regulation of Transport by Hire Cars (TransAD) have initiatives on using car seats with the support of non-governmental agencies and/or community based initiatives. An example is the Buckle Up in the Back Campaign which targets students and parents to promote the use of car seats and teaches parents on choosing the correct seat based on the height and measurement of the child (Ruiz 2014, July). The campaigns have included educating the parents through forums such as school-based talks and

through advertisements in cinema, radio ads, and others that bring the pictures on outcomes of accidents that could be prevented if the child used a car seat or belt (Ruiz 2014, March).

Another example was a campaign to introduce car seats in public transport specifically taxis (HAAD 2015). The target of the initiative was to provide parents with a supportive environment and give children a safer journey when using a taxi. The government as reported by HAAD also hopes that the use of car seats or belts from early in life will promote behaviour change, whereby the child may develop a habit of wearing the seat belt that will transfer to adulthood. The inclusion of car seats in taxis may encourage parents on its use for both short and long trips. It is worthwhile to note that the Abu Dhabi Traffic and Patrols Directorate in 2011 lowered the speed on the Abu Dhabi motorway from 160 kph to 140 kph in effort to reduce the number of fatalities and injuries related to traffic accidents (Ismail, 2011). Another recent initiative (November, 2015), HAAD funded the training of 20 personnel in child restraints and seat belts. The training was given by Safe Kids Worldwide, a global organization dedicated to preventing injuries in children. In effort to spread further awareness on the importance of child restraints and their usage, the trainees comprised of individuals that are involved in child safety from different various fields within the city of Abu Dhabi.

According to WHO, road injuries cause about 30% of all injury related deaths among children aged 0-19 years, and is the leading cause of death among children aged 15 to 19 years (Peden et al. 2008). Consideration of road injuries includes those caused by traffic, car, pedestrian walks, motorcycle and bicycle rides. HAAD report shows that traffic related accidents are the most at 44%, followed by pedestrian at 30%, while motorists and bicyclist are 2% each (Thomsen, Joubert, & Huang 2013). It also plays a significant impact on child disability with about 10 million children internationally suffering. Agreeably, due to regional differences the accurate number of child injuries related to road safety may be less compared to the international aspect, however, the global perspective shows the importance of addressing the issue.

The Bromfield and Mahmoud (2016) study indicated that Emirati parents were embarrassed by the use of car safety seats as it would indicate their lack of trust in the driver's ability. It further noted that whilst some parents felt the use of a car seat could be a cause for embarrassment, others cited fatalism and a lack of understanding in the role of a car seat. The various child car seat campaigns have sought to respond to such perceptions by indicating a parent's use of a car seat demonstrates a parent's preparedness in facilitating protective measures for his or her child, citing this as a show of concern rather than weakness (Ruiz 2014, March). The information provided through the national platforms including adverts, brochures, radio messages, and newspapers can act as a source of information on appropriate use of car seats and

safety belts as well as offer information on why it is useful for parents to use these apparatus. The provided statistics on road related injuries offers an indicator on why Abu Dhabi and the UAE in general needs to promote change of behaviour among parents and children.

Continued road accidents have implications for life expectancy and have implied costs. For example, HAAD noted that road accidents reduced average life expectancy by about 16 years, and cost the Emirate about AED 3.55 billion per year (Thomsen et al. 2013). These costs include direct and indirect costs, and impact on quality of life. The indirect costs include loss of production estimated at AED 540 million, and delays in travel at AED 255 million, while direct costs include the ambulance, cost at AED 21 million, medical treatment estimated to amount to AED 165 million, and Long-term care at AED 169 million. The medical costs alone add up to AED 355 million, which is about 10% of the direct costs. The other direct costs are workplace disruption costing AED 18 million, legal costs of insurance claims at AED 3.8 million, and insurance administration at AED 318 million. Others are legal cost of criminal prosecution at AED 2.2 million, unavailability of vehicle at AED 256 million, premature funerals of AED 3.2 million, police and fire services at AED 10 million, non-vehicle property damage of AED 56 million, and vehicle repair of AED 1,440 million. The suffering and pain experienced, which represents the cost of quality of life lost is estimated at AED 289 million. These HAAD costs provide a critical outlook on the loss associated with road accidents that can be reduced through behaviour change.

Another example of how child safety is a public health concern in Abu Dhabi is the use of toys. An interview with doctors in Fujairah suggested that head trauma caused by small objects such as small toys is the third leading cause for children's visit to the emergency room in the UAE (Haza 2015). A study by the Center for Injury Research and Policy in the United States provided a better outlook on toy related injuries reporting that about 3.2 million children between 1990 and 2011 visited the emergency room because of toy related injuries (Bonner 2014). The country passed on the Abu Dhabi Trustmark that regulate toys for new born to children aged 14. According to Ahmad (2013), toys with small and rattling parts, toys with cords, and toy guns presents a health hazard for children such as choking and suffocation, especially if the child may try to swallow the parts, hence the decision to establish safety standards in Abu Dhabi. The regulation allowed suppliers to voluntarily ensure that their toys aligned to the safety standards addressed in the law. While such an effort is useful in curbing the inflow of toys that may be unsafe for children in terms of quality, safety, and health and environmental concerns it leaves out room for negotiation among the suppliers because of voluntary benchmarking. The issue of child safety in terms of toys presents a considerable threat seen in health care through children swallowing a toy or having an accident because of the toys not being age appropriate. It is possible that parents may not understand the concept of providing age appropriate

toys to their children, and what impact they may have on a child's health, safety and development. The country may thus benefit from enforcing a law to ensure compliance among the suppliers from within the UAE and its imports (Al Serkal 2014).

Abu Dhabi has also started an initiative that sought to safeguard the playground and promote the use of appropriate high quality equipment facilitated by the Quality and Conformity Council (QCC). The Council's plan comes from the health concern associated with playground related injuries, for example, in 2014 HAAD reported 1,295 injuries among children aged 0 to 14 years (WAM, 2014). The injuries were in different locations including nurseries, school, kindergartens, malls, beaches, and hotels. The type of injuries also varied; they included cuts, broken bones, blisters, head injuries, friction burns, black eyes, sprains, and split lips. Promoting sale of certified toys or those that pass the requirements of the certification scheme is thus a move toward minimising possible toy related injuries. Understandably, use of toys is an essential part of growth. Toys foster imagination, learning, and creativity, and thus parents, teachers, and other caretakers may want to offer their children the learning opportunities. However, caution is necessary on the purchase of age appropriate toys, and the purchase of relevant safety gear. Guidelines from the HAAD advises that people should avoid purchasing toys that have small parts or rattles with pellets to reduce risk of choking, ensure toys are not broken or un-inflated where applicable, avoid toys made of materials that are easily breakable or flammable and refrain from purchase of toys with sharp edges (Enaya n.d.). Guardians may also teach children to put their toys away or appropriately house them after play to avoid any trips and falls.

The actual number of toy related injuries in Abu Dhabi, the UAE, as well as internationally is elusive. However, the concern over possible injuries caused by toys is evident, which is the case that has prompted a law in Abu Dhabi advising on toys. The guidelines such as those posted by HAAD show the necessity of providing a safe environment in all areas of a child's interaction including at home, school, public places, and the playground. Furthermore, caretakers must ensure that all toys are not only age appropriate but additionally, free of any hazards such as sharp points, breakages, leaks, and/or with parts that can lead to choking.

Another area of concern is falls. The WHO state that the UAE reported the highest incidence of falls in children with about 1923 falls per 100,000 population (Peden et al. 2008). The report showed that in Abu Dhabi, falls represents one of the top ten leading causes of death for children aged 1 to 19 years, which represents a significant burden on health care facilities (Thomsen et al. 2013). Among children aged 1 to 4 years, it is the tenth leading cause of death, number eight among those aged 5 to 9, number six for ages 10

to 14, and tenth for ages 15 to 19 (Thomsen et al. 2013). These were numbers registered by HAAD between 2009 to 2011. Many of these falls occur from balconies and windows of high rise buildings, with an average number of 50 children reported to fall annually (Row 2015).Furthermore, falls lead to disabilities that require life adjustment among the children and those around them. The video "Negligence Kills the Innocent" shot in Abu Dhabi provides a chilling outlook on the concern of falling (Child Safety in Skyscrapers 2013). The video shows a toddler standing on a balcony of a skyscraper. The child lets go of their teddy bear, which drops from the ledge of the building, and it plummets to the ground. The video brings into focus the possibility of the child falling rather than the teddy bear, which would have a devastating, fatal effect. Abu Dhabi is the fastest growing economy in the region. The city of Abu Dhabi is home to many skyscrapers and parents are therefore left challenged on ensuring a safe environment for their children by safely proofing their homes to avoid falls amongst other measures. In 2014, Abu Dhabi Municipality established building codes requiring owners to adhere to safety measures in residential buildings. The safety standards included locks on windows that opened more than 10 centimetres and is 1.5 metres or less from the floor (Carroll 2014). Another condition is reducing the gap in balcony and gallery rails and putting gates on stairways and swimming pool areas. Furthermore, parents can assist by ensuring their floors are dry to avoid any slips, trips and fall, to use non-flip mats in washrooms, placing a baby in a crib or playpen if unable to hold him or her, using and maintaining safe equipment on the playground, and placing babies on areas they cannot fall nor roll off such as tables and coaches (Enaya n. d.).

Child health in Abu Dhabi is a public health issue because of the implications related to short and long term impact of arising injuries. Affected children may suffer poor physical and mental health, prompt change in living status due to injuries, affect their cognitive, educational, physical achievements and cause psychological impairment (Merrick & Latzman 2014). Based on the three examples, falling, road injuries, and toys, child safety is a public health issue in Abu Dhabi.

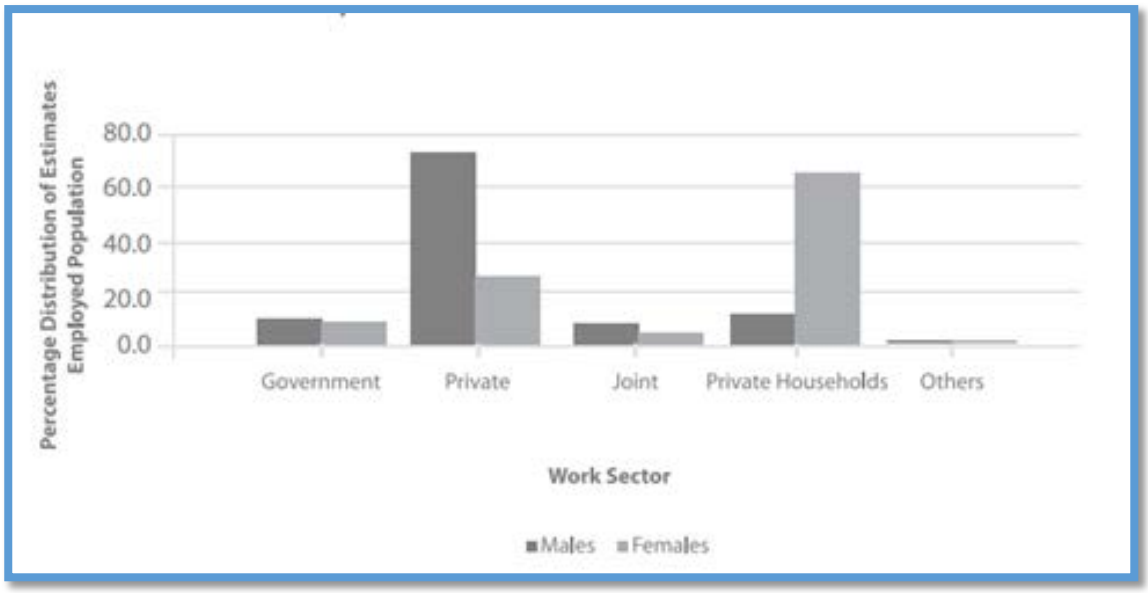
2.4 CHILD SAFETY IN THE HOME

Child injuries at home can be prevented through several ways. These may include child supervision in the home, caution through awareness of the risks that face the child in the home or creating safe physical environments where the child can be safe when exploring their environment. Home safety equipment installation can also ensure that the child is protected from various hazards that s/he may be exposed to. This section aims to present a literature review on the best approaches to ensuring a child's safety in the home and to find out the role played by home-based child care in ensuring child safety. Additionally, gaps in the literature will also be examined.

2.4.1 Definition of Home – Based child care

SCAD (2016) reports that 21.1% of the employed population (non-citizen) within the Emirate of Abu Dhabi work within private households (figure 3). Figures represented by females and males are 64.7% and 10.5% respectively. No citizens were reported as working in Abu Dhabi Emirate within a private household.

Figure 3: Percentage Distribution of Employed Population Estimates (15Years and Over) by Work sector and Gender, 2015



SOURCE: STATISTICS CENTER – ABU DHABI - 2016

Brandon (2005) defines home-based as regular care that is provided by a family member other than the parents or a registered or licensed centre for home-based care. Capizzano, Adams, and Sonenstein (2000) and Tout, Zaslow, Papillo, and Vandivere (2001) include babysitters and nannies as potential candidates for home-based child care. A more general definition is offered by Johnson (2005) who states that primary caregivers, including mothers and fathers can also provide child care alongside nonrelatives and extended relatives. The researchers seem to disagree on whether mothers and fathers can provide home-based child care. This creates conceptual difficulties and implementation measures. Home based care involves a person other than the parent taking care of the child, which can be done by a qualified person with the training and skills to meet the needs of a child such as developmental milestones, assist in balanced eating, play, and other aspects of the child's daily routine. Use of a person without any formal training in child care undermines the quality of assistance provided. Institutions such as the New Jersey Child Care Resource and Referral Agency (2006) stress the need for home-based child care to be provided by registered family child care providers in public health service. This limits the scope of interventions possible for childhood injury prevention at home. While institutions such as these stress regulation in home-based child care, most researchers on home-based child care do not include registration and licensing in their definitions (Capizzano, Adams, and Sonenstein 2000; Tout, Zaslow, Papillo, and Vandivere 2001). Regulation of nonparent home-based care is different for all the states and therefore hinders practice and research. The definition therefore reveals a deficiency in practice and therefore a universal working definition might be

necessary to improve public health practice and research into home-based child care for the prevention of injuries in the home. The definition needs to include regulation or lack thereof in home-based child care.

2.4.2 Effectiveness of Home-Based Effectiveness of Home-Based care in reducing child injuries at home care in reducing child injuries at home

Home-based child care in public health includes services that are geared towards the families expecting children, with toddlers and young children. Some of the issues that home-based child care seeks to address include safe home environments, positive parental practices and child and maternal health (Vimpani, 1998). Various home visiting programmes and community-based initiatives have been adopted for the prevention of child injuries at home.

Bablouzian, Freedman, Wolski and Fried (1997) conducted a pilot study evaluating the efficiency of community-based programmes for child injury prevention. By conducting statistical analysis before and after assessment of child safety precautions within the homes of pregnant women, they found that community-based education initiatives on home safety for children increased the use of restraint systems in vehicle travel, inclusion of emergency medicines in the home and safeguarding drawers and cabinets. This study emphasizes the need for educating caregivers on safeguarding homes. The researchers provided safety equipment to the mothers and therefore issues of costs limit practice in public health due to increase in costs. Within the UAE, National Child Care Standards provide direction on home-based care including the licensing of the providers and ensuring the equipment meet a certain standard (Dubai Women Establishment 2009). The standard is mainly applicable in publicly licensed centres such as child care centres and nurseries and only for those established by nationals not foreign states or organizations. The providers are expected to comply with applicable federal laws in addition to the standards. The requirements include receiving a license for operation, having a building and equipment that are safe and satisfy needs of the children including activities that promote physical, social, and intellectual growth, having qualified personnel and an appropriate ratio of children to providers, and allowing inspection of the establishment. The place need to be secure from all forms of risk for the child, provide appropriate health care, meet child nutritional needs, and work with parents for the wellbeing of the child. These standards are comparable to others in other parts of the world. For example, the New Zealand Ministry of Education (2015) standards of establishing home-based services that include compliance with building act, providing a safe home environment that protects the children from harm, using appropriate equipment that caters to individual and group needs, and ensuring the qualification of providers. The New Zealand approach also recognises the need for cultural competence due to needs of children from different backgrounds.

In Abu Dhabi, the government in 2014 began implementing a standard that requires licensing of home-based care, and that banned illegal baby-sitting and nurseries. As reported by Salama (2010) such nurseries are not answerable to the Department of Children at the Ministry of Social Affairs, and thus difficult to hold accountable. The move toward licensing home-based care is to ensure children receive protection from abuse and injuries, and receive appropriate care including appropriate equipment that foster growth. Children in Abu Dhabi face different forms of possible abuse, including sexual abuse mentioned as the least reported form abuse. Cautioning parents toward employing non-qualified people or using illegal nurseries will help safeguard children from exposure to abuse and injury. Training is also needed to cater to the increase in cultural diversity within Abu Dhabi residents as the expatriate community continues to increase. Furthermore, many parents employ expatriates to care for their children even though there may not be a full and fluent understanding of the language and culture.

A similar study carried out by Bennett and Tandy (1998) conducted postpartum visits on single and breastfeeding mothers and found that educating the mothers on safety measures significantly reduces incidences of child injuries. The researchers conducted a correlational analysis that revealed that care should be extended from the hospital to the home. This study points out the need to concentrate on new born children in accident prevention measures since they are the most vulnerable. Similar findings on the effectiveness of postpartum clinical follow-up were reported by other studies analysed in the literature review (Hanssen et al, 1999 and Hardy et al 1989). These studies point out the need to extent clinical care beyond the hospital. Although the findings from the studies are promising for public health practice, increased costs is a glaring issue that was sidestepped. Home-based care for postpartum parents can increase healthcare costs, which necessitates the involvement of health agencies in such initiatives.

Flynn (1999) points out teenage mothers' children are the most vulnerable to accidents owing to the inexperience of the mothers. His research involved the study of the effectiveness of adolescent parenting programmes in preventing child mortality rates and found that mortality rates were significantly reduced, recording zero mortality rates for the programme and state mortality rates that were half the national averages. Throughout the literature, it is apparent that education is a key component of home-based child care. Barnet, Duggan, Devoe and Burrell (2002) found limitations of the home-based care intervention for teenage mothers. Their research investigated the impact of home-based care on parental mental health of 232 teenagers. Compared to the control group, the research subjects improved parental behaviours but there was no difference in terms of improvement of their mental health compared to the control group. This shows the need for additional intervention measures in home-based care to deal with mental health concerns. However, the study could not be generalized to other social groups since the sample was taken

from predominantly African American neighbourhoods with a low socio-economic status. The low socio-economic status might also have contributed to the failure to improve mental health in the sample studied.

Research that supports the contention that low socio-economic status might have been responsible for the failure in outcomes of the Barnet et al (2002) study is found in the systematic overview of research literature conducted by Ciliska et al., (1996). The researchers conducted a systematic analysis of 108 articles on home visitation research and found that home visitation produced positive outcomes in improving mental health, decreasing substance abuse, depression, anxiety and better mental health for the children. The caregivers' mental health is a crucial consideration in home-based care since it influences the care that the caregiver can afford to the child (Moore 2008).

Culture is also an important consideration in the research literature with regard to home-based child care intervention for the prevention of child injuries at home. Black, Siegel, Abel and Bentley (2001) suggest the incorporation of ethnographic research and ecological theory into intervention measures. Researchers conducted a study on African American mothers to change harmful parental behaviour ingrained by culture by delaying weaning in African American teenage mothers. This cultural practice exposes the child to health problems such as eczema and asthma. There is also the risk of chocking accidents. Mentorship groups were used to provide other means of managing infant behaviours other than offering food and teach the teenage mothers how to respond to infant cues. The researchers found that home-based care should adopt a culturally sensitive approach in changing parental behaviour. Lack of consideration of cultural differences can reduce the effectiveness of intervention efforts. Other researchers have found that individualist western culture makes mothers feel socially isolated; making them susceptible to depression, anxiety and mood disorders that can reduce their capacity to take care of their children (Lyons-Ruth, Connell, Grunebaum, and Botein 1990; Weinberg and Tronick 1994).

Abu Dhabi is increasingly becoming a multicultural society with nannies predominately coming from Asian countries. According to an article by Almazroui (2014) about 94% of Emirati parents employ nannies or maids to look after their children and to provide support in other areas of house hold chores. Many families will have their nannies assist if not independently participate in the child's care. Anecdotally, it is even known that some families require the nannies to sleep in the same room as the child. Therefore, the nanny becomes central to a child's interaction. A challenge noted by Almazroui (2014) is that the domestic staff (nannies/housemaids) are mainly non-Arabic speakers and many may also not speak English fluently, which has an impact on how children develop their communication, social, and emotional skills, which can be hampered by non-effective communication. Therefore, parents need to take an active role in monitoring

the nannies or maids, ensuring that they can promote effective social, behavioural, emotional, and language skills development in the children.

The literature review found that factors that need to be considered in planning home-based child care intervention measures include age of the infant, experience of the mother, cultural differences and psychological well-being. Some of the limitations in public health practice include an increase in costs due to expensive intervention measures. Group attachment intervention for mothers of young infants is a cost-effective intervention strategy that can lead to better mental health for the parent and consequently for the child through fostering secure parent-child attachments, thereby reducing the risk of injuries in the home. Other attachment styles need to be considered in intervention measures.

2.5 QUALITY ASSESSMENT OF HOME-BASED CARE

Child care quality report of 2009 for the UAE provided an outlook on the challenge experienced today in the country. The report noted that the present Emirati family from 1950s due to the change in economic and education status, are employing housemaids and using assisted child rearing (Bennett 2009). This offers an opportunity for the women to pursue other things such as personal development and work outside the home. The implication noted in literature is that infants and young children spend a considerable amount of time in the care of housemaids, who are mainly non-Arabic speakers, and have little training (if any) in child rearing (Almazruoi 2014). Such circumstances create risk situations for the children. Assessing the quality of home-based care for home injury prevention is important in public health research. Child care regulation ensures that service delivery is done at an optimal level that confers the most benefit to the parent and child, and minimizes the risk of injuries at home due to parental negligence and other factors. The literature revealed the following measures that can be used to assess the quality of home-based child care; the education level of the caregiver, group size, child-adult ratio and specialized training. Quality of child care can be assessed in two main categories, the setting of child care and interactions between the caregivers and child (Huntsman 2008). The first category consisting of the setting, considers health, safety, time spent with the caregiver, play time both in and outdoor, play things, and the capability of the caregiver to meet the needs of the child.

2.5.1 Child – Adult Ratio

Research conducted on child-adult ratio is based on establishing the ratio between children observed and the caregivers present in a particular area. The research shows that when the ratio of child to adult was lower it tended to have a higher quality level (Cryer, Tietze, Burchinal et al., 1999; Blau, 2000). Love et al., (2003) has found that they also record better child outcomes in terms of the incidences of injury at home

and while the children are in the surroundings. On the other hand higher child-adult ratios tend to yield lower process quality levels (Burchinal, Howes and Kontos 2002). Some researchers record findings that are contradictory to the contention that lower child-adult ratios lead to higher process and global quality (Dunn, Beach and Kontos 1994). However, the amount of research literature that supports the contention that lower child-adult ratios lead to higher quality measures is overwhelming compared to research that argues against this contention. In the UAE, the National Child Care Standards, set the appropriate child-adult ratio in relation to care as 1:4 for birth to 2 years, and 1:8 for 2 years to four years (Dubai Women Establishment 2009). The ratio is specifically for people tasked with taking care of children.

2.5.2 Group Size

According to home-based care regulations, the number of children that a group should have is dependent on the age of the child. The younger the child, the smaller the groups should be. A smaller group size leads to more quality in process (Burchinal, Howes and Kontos, 2002). Group size also predicts other novelties in the quality of the process. Blau (2000) found that those caregivers that took care of one or two children were less successful than those who took care of about five or six. This shows that group size is an important consideration. Five or six appears to be the golden mean in terms of home-based childcare. However, research into group size is mostly combined with other variables such as staff training and qualifications, making it difficult to isolate the different variables and come to precise conclusions about the role played by group size in home-based child care process quality. This gap in group size literature needs to be addressed to maximize the potential of home-based child care to reduced child injuries in the home.

2.5.3 Caregiver's educational level and training

The most important factor to the success of home-based child care in the literature available is the caregiver's educational level and training. Some of the criterion used in the literature to evaluate a caregiver's education and training attainment include formal education such as university degree and high school diploma, specialized educational attainments such as early childhood education qualifications, and on-the-job training (Burchinal, Howes and Kontos 2002; Cryer, Tietze, Burchinal et al. 1999; Blau 2000). Caregiver's training and educational attainment is the most important predictor of home-based childcare in the research literature. Burchinal, Howes and Kontos (2002), state that this variable can be used to predict the quality of child care in both home-based and centre-based child care although in home-based care the influence of this variable is less certain in the literature. A caregiver's formal education is more important in the care of younger children that it is for preschool children. Toddlers and infants appear to receive better from caregivers who have acquired specialized training. This is relevant especially in preventing child injuries in the home since this age group is the most vulnerable to injuries. Public health

research therefore needs to orient towards improving the training of caregivers who take care of toddlers and infants to prevent child injuries. Higher level of formal educational attainment was a predictor of the caregiving style. Caregivers who had attained university qualifications had caregiving styles that were less authoritarian than those with a high school diploma. They were more likely to maintain stimulating, clean yet safe playing environments for the children (Cryer et al. 1999). As mentioned previously, parents in the UAE are increasingly employing nannies that have little or no qualifications to take care of children. However, there has been an increasing trend (offered at the private level) on the provision of Paediatric First Aid and Child Injury Prevention courses to nannies. Other community based workshops such as the one offered by a local philanthropic organisation – Emirates Foundation, has initiated a nation-wide campaign that aims to raise awareness among children and youth, as well as equip parents and caregivers with the right skills and preventive measures that would safeguard children and reduce the rate of serious injuries (WAM 2015).

2.5.4 Identified gaps in quality assessment research

The UAE has had challenges in quality assessment research for child care, but has one notable achievement in child safety, namely returning the camel child jockeys home. UNICEF and the UAE government in 2005 signed an agreement to support helping children that were camel jockeys return home, and the agreement also comprised helping the reintegration of the children into the society (UNICEF 2006). This marked the first programme in which the Gulf region openly acknowledged the problem, of child safety and took steps toward protecting the victims or helping those already involved. However, the UAE lacks notable interventions and achievements, other than the seat belt campaign previously mentioned in this project. The studies analysed on quality assessment of home-based and centre-based childcare lacked information about the physical settings that ensured the least incidents of child injuries. Although the literature states that caregivers with a formal educational level above a university degree provided the safest environments, there was no elaboration on the arrangement of these environments. It is expected that caregivers who adopted less authoritarian caregiving tendencies would have the most convenient physical settings for minimal childhood injuries. Physical environments can also increase feelings of competency in children since they do not have to deal with huddles as they navigate their environments. Research also lacks information on available regulations on the most appropriated and least accident prone environment for home-based childcare. There is little focus on the child's motor development and physical well-being, which is important in reducing child injuries in the home. Physical settings have a strong influence on the child's navigation of his environment, consequently influencing the development of motor skills and physical exercise.

2.5.5 Professionals and paraprofessionals in home-based childcare

Home-based child care utilizes the labour of both professionals and paraprofessionals in the care of children. Paraprofessionals refer to people that do not have the professional license for certain positions but have the training to act as assistants (Vierck & Hodges 2003). These two groups of caregivers express different attitudes with regards to child care. Managers of home-based child care face the challenge of selecting the most appropriate candidates for home-based child care especially since the caregivers are not numerous. Obtaining information about volunteers can be difficult considering the delicate nature of child caring. These limitations increase turnover for home-based child care and therefore there is the challenge of obtaining a committed workforce to take care of children. Studies conducted, have not been able to come up with a definite list of factors that influence professional and paraprofessional turnover rates. One study conducted in Australia by Metzer, Dollard, Rogers and Cordingley (1997) investigated the perception of work life quality among Australian volunteers and paraprofessionals. The researchers found that paraprofessionals felt unfulfilled in their volunteer work if their experiences in volunteering did not meet their expectations. This research highlights one challenge in home-based child care in that paraprofessionals might feel unmotivated when their expectations are not met. This exposes a need to increase the motivation of paraprofessionals and other volunteers in order to make their work experience more rewarding and therefore ensure better outcomes in reducing child injuries in the home. There is a contention between professionals and paraprofessionals in volunteer work since paraprofessionals feel as though they are left out of the team work and they might be undervalued due to their paraprofessional status (Metzer, Dollard, Rogers and Cordingley 1997; Mitchell and Taylor 1997; Bussell and Forbes 2002; Haines et al. 2007).

Wilson and Pimm (1996) states that most consultants might feel compelled to seek out the advice of professionals rather than paraprofessionals regarding child care, increasing the paraprofessional's feelings of being left out of the volunteer work. A balance needs to be struck when dealing with both groups of volunteers to increase teamwork and group cohesion. This will also increase volunteer motivation. This can also reduce the high rates of turnover in home-based childcare volunteer work. According to Mitchell and Taylor (1997), turnover rates can be reduced by improving relations between professionals and paraprofessionals. Public health research can improve volunteer turnover by training volunteers and offering courses that can increase the qualifications of paraprofessionals and therefore reducing the contention between paraprofessionals, professionals and other volunteers (Osborn 2008). The researchers suggest that volunteers and paid staff should be treated equally so that one group does not feel excluded from the teamwork than another. This will also increase service delivery in care giving and thus reduce the incidences of child injuries in the home.

Hiatt, Sampson and Baird (1997) described a model that they have adapted for use with paraprofessionals that they had borrowed from nurse volunteers. The researchers state that paraprofessionals might be more efficient in service delivery than volunteers and professionals since they found that they are better as role models and have more empathy when visiting client's homes. Some of the drawbacks that result from using paraprofessionals in home-based childcare that the researchers found, include limited education and training credentials which are an important consideration in home-based child care, complications arising from working with professionals who might not view them as qualified to handle childcare services, integration issues in the workplace due to different cultures and qualifications and identification with and commitment to the volunteer work. Working with the community is also a significant challenge. These challenges necessitate effective supervision, training and education in teamwork and childcare work sensitivity to differences in the workplace (Metzer, Dollard, Rogers and Cordingley 1997; Mitchell and Taylor 1997; Sweet and Appelbaum 2004; Chapman, Siegel and Cross 1990). The researchers conducted a randomized trial of paraprofessionals and found that they were effective in carrying out their duties despite the possibility of team work and motivation issues. Research needs to be conducted on effectiveness of teamwork efforts in groups with diverse people such as professionals, paraprofessionals and other volunteers in order to find out the factors that influence the success or failure of child care when it is done by diverse teams (Hiatt, Sampson and Baird, 1997).

Poland, Giblin, Waller and Hankin (1992) have conducted research on the influence of volunteer work afforded by paraprofessionals in prenatal care and postnatal care. The paraprofessionals studied in this study were women who had delivered and therefore had knowledge in the prenatal and postnatal care needed by expectant and delivered mothers. The researchers used birth weight as a measure of the effectiveness of the volunteer work of the paraprofessionals. The paraprofessionals were of similar ethnic and educational background as the women they took care of. The study found that the women who the paraprofessionals took care of recorded higher appointments with the prenatal caregivers and their babies had higher birth weights than a comparison group. This study shows that paraprofessionals can be very effective when working in teams. Considering that most home-based child care teams will be diverse in terms of experience and educational attainment, it is important that effective strategies for ensuring efficient teamwork be implemented to ensure that diverse teams are more effective.

Powell and Grantham- McGregor (1989) used paraprofessionals in studying the visitation frequency on effectiveness of childcare at home. The frequency of visitation was measured in terms of monthly and biweekly basis. The group that visited biweekly were more efficient than those that visited the homes on a monthly basis. This research study shows the importance of paraprofessionals in home-based child care

since the professionals are few and therefore cannot manage to make frequent visits to the homes. Many benefits stand to be accrued in home-based childcare in terms of preventing child injuries at home. The limitations and gaps in research addressed in this literature review need to be addressed in order for home-based child care to bring benefits to the public health field. In practice, working in teams should be addressed since the literature shows that diverse teams in terms of differences in education level and backgrounds can lead to reduction in effectiveness and high turnover rates due to reduced motivation.

Within the UAE, paraprofessionals provide care to all age groups including new-born babies to the elderly, but this form of service relates mostly to provision of health related care rather than daily form of child care. Therefore, associated regulation by HAAD is for the provision of home-based health care, leaving out child care. Nonetheless, literature indicates that the Department of Health in the UAE has taken into consideration the matter of child safety. As a result, numerous policies have been passed with the idea to safeguard all children from different forms of abuse. Authorities have made it clear that all institutions in the country are expected to adhere to the Child Protection Law, which provides clear guidelines on how to ensure safety of children (UNICEF 2006). In addition, the formation of various social committees in Abu Dhabi has been done with the purpose to monitor children and report any child protection concerns. Child protection awareness also should be monitored on a regular basis in order to avoid further complications and confusion. The following discussion on policies associated with child safety in Abu Dhabi and the UAE provides an indication on how the government is working toward ensuring better environment for children and the challenges experienced in the process as well as some of the gaps experienced.

2.6 CHILD SAFETY POLICY AND INTERVENTION

2.6.1 Policies on child safety in Abu Dhabi

Different incidents involving children occur daily across the world. Unintentional injuries can cause a permanent disability in some children as well as impacting their carers and families. Despite many years of awareness and action on child safety, numerous incidents still occur and insufficient progress has been made, indicating a systematic problem of inadequate prevention when it comes to child safety protection. The WHO points to research showing that 1.9 children in every 100,000 die yearly from injury or accidental poisoning among higher managerial and professional families, but that rises to 25.4 in every 100,000 children whose parents have never worked or are long-term unemployed (Bosely, 2008). Globally, Dh4.6 per day is defined as the poverty line (Kamali & Bastaki 2011) and internationally, the number of children living in poverty is about 2.2 billion, with 2.9 of these living in developing nations (Masdar Institution 2015). According to the Dubai Economic Council, the poverty line in the UAE is Dh80 a day. However, the UAE has no official published research regarding people living below the poverty line with available information

coming from a survey conducted by a non-governmental agency in 2008. Estimates provided through The National and UAE Interact (2013) suggest that about 22 thousand children under the age of 5 live in poverty (Kamali & Bastaki 2011).

Children are exposed to everyday risks such as falls from heights, drowning, burns, accidents with cars, neglect and different forms of abuse, including domestic violence. Injured children fall within the category of disadvantaged young individuals for whom the state, global organizations and society hold the responsibility to ensure adequate care (Keeping Children Safe, 2006). Each country considers these issues quite seriously, thereby takes proper safety measures by creating laws and standards for the protection of disadvantaged children. One such organization that deals extensively with similar matters is the Ministry of Health and Education. Other governmental and non-governmental organizations contribute to the development of sound policies on child safety, such as the United Nations (UN) and UNICEF, as the United States (US) and the European Union (EU) are among the most active participants in affirming standards and rules in this field (Alkon et al. 2009).

The organizations and institutions that are responsible for the draft of policies on child safety are different for each country. Although they have different names, they are simply characterized by common goals, as it can be seen in the names of the Ministry of Youth for Children, Children's Aid, and Child and Family Services. The majority of these organizations adhere to the principles outlined in the Universal Declaration of Human Rights ("The Universal Declaration of Human Rights" Article 2). The basic aspect of the Declaration is to recognize children in terms of their fulfilment and right for normal development so that they can fully participate in different forms of family and social life. On a global context, on 20 November 1959, the UN member states further enunciated children’s rights by unanimously adopting the Declaration on the Rights of the Child (Blanchfield 2013). The United Nations Children's Fund (UNICEF) is a United Nations' programme headquartered in New York City, providing long-term humanitarian and developmental assistance to children and mothers in developing countries (WHO 2008).

In the context of policies on child safety, the WHO presented its 'World Report on Child Injury Prevention' in 2008, which outlines certain issues relating to the prevention of children from accidents such as burns, falls from height, drowning, road accidents and poisoning (Injuries in the European Union 2013). Injury and violence represent an essential cause of death among children throughout the world, responsible for about 950 000 deaths in children and young people under the age of 18 years each year (UNICEF n.d). Unintentional injuries account for almost 90% of these cases. They are the leading cause of death for children aged 10–19 years. Road traffic injuries alone are the leading cause of death among 15–19-year-

olds and the second leading cause among 10–14-year-olds. In addition to the deaths, tens of millions of children require hospital care for non-fatal injuries. Many are left with some form of disability, often with lifelong consequences (Wekerle 2013). Statistical Annex shows the leading causes of disability-adjusted life years (DALYs) lost for children aged 0 –14 years, with road traffic crashes and falls ranking in the top 15 causes.

Besides global laws for protection of the child any country or state follows its policy. For its part, the EU also is responsible for the introduction of specific policies to prevent damage to the EU citizens and especially children by improving the quality of life, the level of safety in which families live, vehicles, buildings, consumer products and by promoting self-care for preventing injury (Connors & Morris 2015). From a summary of injury statistics for the years 2008-2010, it can be concluded that in the age group of children up to 14, an injury and its disabling consequences have a tremendous impact on the child, the child's family and society at large. For children older than 1 year of age, injuries are the main cause of death ("Injuries in the European Union" 21). The main role in preventive policies is played by the European Child Safety Alliance launched in 2000. Child safety experts from more than 30 countries across Europe tend to work together to reduce the leading causes of death and disabilities in children in every member state in the region. These experts come from diverse fields including medicine, psychology, public health, education, engineering and government to advocate for child injury prevention so as to benefit children and their families.

In this way, Plan International USA Associates is committed to ensure adequate protection to children from different forms of abuse and neglect they may encounter (Plan USA para. 2). The standards of Plan International USA Association apply to all individuals who are in direct or indirect relationship with children (Simmel 2012). All stakeholders associated with the respective US plan are expected to follow strict rules: they aim to familiarize children how to deal with dangerous situations; to teach children how to differentiate and openly discuss their own rights (Bas 2014).

Apart from policies on child safety available globally, it is important to pay adequate attention to existing policies within the UAE, particularly in Abu Dhabi. Policy implications relating to Abu Dhabi are quite different from the ones outlined by global organizations due to significant cultural and social differences. With regard to culture, religion and education of residents of the UAE, the respective authorities have defined distinct policies for child protection and safety (Hourani et al. 2012). In 2008 a federal child protection law was drafted, but never enacted (Al Rowaad Advocates & Legal Consultancy). This law is intended to serve as the framework for a new child protection system in the UAE. However, one of the

disadvantages of such policies promoted in the region is the lack of a notable federal law existing on child protection, implying that children are persistently exposed to mistreatment and abuse (Sankar 2015). A new policy on child protection is under development by the Community Development Authority (CDA) in Dubai. In order to protect children, including their basic rights, the emphasis has been set on providing comprehensive services and advice to families and children who are at a high risk of mistreatment (Al Hosani et al. 2010).

The CDA aims to implement proper laws related to child safety in all the emirates in an attempt to expand the outreach of the respective policy. The CDA places importance on different goals and expectations in enhancing the policy implications in order to become a federal law. The idea is to promote awareness of children's rights, along with the idea to prevent the occurrence of various forms of abuse against children (Macy et al 2012). Most recently, in 2015, authorities in Abu Dhabi took a very important step for road safety of children (Sankar 2015). Seat belts have been made compulsory in school buses in Abu Dhabi as part of new safety regulations introduced by the School Transport Executive Committee. The new regulations make medical examinations and training programmes on safety of children mandatory for bus drivers and escorts.

2.6.2 Intervention in Home-Based Child Safety

The findings of this work confirm that there is a dire need for tangible and concrete interventions to improve child safety and prevent harm. There are different possible interventions that can be applied to arrest the situation in the UAE and keep the children out of danger. An educational intervention is one example of a crucial step the authority in the country can use to achieve better child safety. Additionally, the authorities in the UAE can apply different stringent policies meant to curb the dangers exposed to children. The available interventions need to be introduced to both the children and their guardians.

The government has been pursuing a number of options in addressing the issue of child safety among them the seat belt campaign, which has been supported by HAAD as discussed in the introductory chapter. Another approach has been identifying possible policy movements such as the Wadeema law[1], which is a sweeping legislation to allow for the government to enforce penalties on child protection (Dajani & Amir 2013). The law which was renamed officially as the Childs rights law, was passed by the FNC in January 2014 and issued as Federal law No 3 of 2016 by the President of the UAE, Sheikh Khalifa (Rizvi, Dajani & Al Amir, 2016). It encompassed a number of things including child rights in education, transport, health, food, and cyber-crimes. It brings in protection of children within the different areas of a child's life with school being

[1] The law is due to come into force within three months from April 2016 (Rizvi, Dajani & Al Amir, 2016)

a major area of focus. However, laws that target the home and the family or guardians are unavailable although the government has been advocating for various safety actions including the use of car seats, and child proofing the house. This section considers the use of education as a possible intervention, examining evidence of use in other areas.

Waldfogel (1999) presents details in her report about the programmes introduced to intervene with the child development processes. The essence of the programmes is to help maintain a healthy early childhood development process. The programmes fall under the educational intervention means of keeping children safe. Parents and the other involved guardians are taken through a teaching programme for the importance of maintaining a healthy brain development of the child. They are taught that the brain is a fragile organ and one that develops rapidly within the first five years of the child. Thus, within the initial five years of a child's life, the brain should not be exposed to harmful situations. The act of a mother holding an infant/child in the front seat is dangerous not only in the event of an accident, but from any sudden shakes or hit from surrounding objects. The programme teaches the essence of reducing such exposures to children while they are at their early stage of development. It is also notable that the educational programme also has the facilitators following up with the parents to check whether they are applying the information they were taught or not (Waldfogel, 1999). Furthermore, the facilitators take the opportunity to refresh the educational material with the parents. Once the parents comprehend the importance of treating their children well, they end up promoting their safety and reducing the children's exposure to danger.

According to Kraizer (2013) negligence is a contributing factor to the dangers facing children. Her article is an educational material teaching about signs people can use to identify the dangers facing their children. It is an essential piece relating to the educational intervention meant to keep children safe. She points out that ignorance is harmful to children, and the parents should observe the critical indicators to determine if their children are in danger or not. She further teaches that poor health can be observed by looking at the child's physical status and that ignoring clear signs exposes children to cases of injury or death. Parents are taught the different observations they need to make to ensure that their children are safe. Kraizer (2013) continues to inform that infants are prone to danger, and they express it when they are uncomfortable. For example, they can cry uncontrollably or keep quiet and not show any signs of happiness or sadness. The educational piece urges parents to take note of the mentioned signs and avoid ignoring them since the children may be on the verge of sustaining an injury.

Gomma's (2012) reports on children having rights. Article 1 of the UAE constitution states that "family *is the basis of society which shall be responsible for protecting childhood and motherhood.*" Article 14 goes on to state that "*equality, social justice, ensuring safety and security and equality of opportunity for all citizens shall be the pillars of the society."* Thus, the government is keen on protecting the children's rights from harm. Parents attitude recently reported in a survey conducted by a national newspaper called "*Car seats key to children's safety in the UAE*" (National Editorial, 2014), reveals that it is clear that parents' attitude towards the use of the appropriate measures is negative. The parents do not want to take the initiative to protect their children when they can, despite their children's continuous exposure to danger. The article further indicates a doctor's sentiment where it states that some parents feel that holding their children is safer than placing them on a car seat. The feeling may be acceptable in the society, but research findings show that such children are being placed within potent vulnerability. Preventative measures are greatly needed to help protect the young. Gomaa (2012) goes on to describe in her report that a policy is essential in the country and if not followed, drastic measures such as arresting the parents should be taken to protect the children from the looming danger.

Injuries and deaths of children in the UAE are not only experienced on the road, but also at home and in the schools. It is possible to place different policies to guide the environmental conditions surrounding the children (Grivna et al, 2014). For example, research reveals that a policy can be used to ban the use of baby walkers, which endangers the children. The literature shows that the implementation of different policies at home and other areas of interest to children is helpful (Gomma 2012). For instance, it is essential for children to wear helmets and other appropriate protective gear when riding bicycles. Parents and guardians need to apply and maintain such protective policies for the sake of the children. Data reveals that child injuries and demise in the UAE has been noted in three major places: the road environment, home, and leisure surroundings. It is the policy implementers' work in association with the children's guardians to keep the young ones safe and avoid cases of injuries or deaths. Data further reveals that injuries from accidents, on the road and other environments, are the major causes of death among children in the UAE (Grivna et al, 2008). The ignorance displayed by the parents and guardians is a contributing factor to the danger facing the children. In addition, the lack of proper knowledge about the dangers and the appropriate means to avoid them are also factors causing the injuries and deaths of the UAE children. Educational interventions are seen as proper measures to encourage safety among the children in the UAE. Several channels could be applied to see to it that the safety education is shared with the public. The aim is to make it known to the public that the children are in danger and furnish the public with adequate knowledge about the means of keeping the young ones safe. There are some local/regional specific issues related to child safety. For example, swimming pools in the recreation centres or homes are areas of danger to the

children. Teaching parents that it is dangerous to leave their children unattended in such areas is helpful in curbing the injuries and demises (Hyder et al. 354)

Safety within a country is the responsibility of every citizen, including children. An article presented by the department of transport focuses on education as the crucial aspect of reducing the dangers exposed to children in the UAE. The article speaks of introducing educational material to schools with the aim of teaching all students the importance of watching out for safety on the roads. The exercise is meant to create a society with responsible road users, both pedestrians, and drivers. Another initiative is a new conformity scheme that was launched by the emirate's quality infrastructure regulator, the QCC, to enforce all transportation personnel to undergo a five-stage process (training, testing, accreditation, licensing and continued monitoring) to ensure they are qualified for their role as bus drivers.

An article published on the Queensland Government's website indicates the high concern of securing the children while in different environments (2014). The details of the article are clear that parents are fully responsible for the safety of their young ones. It also recognizes that families are a strong bond among its members, and their influence is great on their children. The community is also cited in the article as a significant source of influence to children and their safety. For example, the community services offered in the society should keep the children safe and away from danger. Health services in the community need to serve children in a way that none faces the dangers of any diseases (Child Welfare Information Gateway, 2011).

In light of the above discoveries, the article projects three levels of children interventions that could be applied in various nations, including the UAE, with the aim of promoting child safety. The primary prevention services are the initial interventions discussed in the article with the goal of expounding on the children's safety. In the primary prevention section, it is clear that they are the services provided to everyone in the community. Proper health services serve to keep everyone, including children, in good condition. The services meant to keep children healthy are categorized as paediatric, which many nations, including the UAE, need to recognize (Schene, 1998). In doing so, the children's safety is enhanced through effective health programmes.

Administering a secondary prevention services includes targeting children in the society within families that have risk factors bound to affect the young ones. Some families are known to expose their children to different risks that affect them negatively, for example, where members are drug abusers. In such a case, the family members abusing the drugs can have uncontrollable violence towards their children or expose

the young ones to the harmful substances. Additionally, they can influence the children to start abusing the harmful substances when an opportunity arises. Taking the children away from such dysfunctional homes is one of the secondary intervention programmes meant to promote the young ones' safety. It would also be helpful to take the parents to rehabilitation centres to curb their abusive nature (Holzer et al. 2015). The essence of the secondary intervention services is to teach parents their roles in taking care of their children. Once they are unable to meet their duties in keeping their children safe, they face the consequences.

A tertiary service is intensive and specialist prevention services have also been identified as crucial intervention programmes that can be applied in different societal settings. The aim of the programmes is to ensure that the children in the community are functioning in safe environments and under the proper care of their guardians. The intensive and specialist prevention services are tactics applied in situations where the levels of risks to the children are extremely high. It is notable that they involve the engagement of the child protection system. The concerned authoritative department can find it necessary to provide extreme protection to the children against the risk factors. As such, they place the young ones under the child protection system that includes proper foster homes.

An article from the Circle of Security International is clear about seminars being a crucial step in educating people about child safety in the society. Many parents are aware that their children's safety in various environments is their responsibility. However, some lack the knowledge of promoting safety for the young ones (Findlater et al, 1999). Categorically, the parents are unaware of the dangers they expose their children to while in various environments. For example, in the UAE, parents place their children on the lap while sitting in the front passenger seat. Such an exposure is wrong and can harm the children without the parents' knowledge. Seminars are an educational tool meant to feed the parents with the knowledge meant to help them take care of their children and reduce the risk factors they face. In addition, the seminars are channels of providing the parents with visual representations of cases of risk factors. Such exposures provide the parents and guardians with the reality about the dangers facing the children. Imparting such knowledge to the parents and other guardians will help them identify the risk factors that can harm the children.

Non-government organizations are also a part of the safety that children require in the society, for instance, in the UAE. Information collected from the NSW Interagency reveals that the non-government organizations can play a vital role in keeping children safe in the community (NSW Interagency 2015). They can do so by providing useful interventions meant to propagate safety among the children from a young

age to teenagers. For instance, they can offer free early child health services. The intention is to reach out to as many children as possible in the society. Some parents may be having the resources required to cater for their children's health, but the lack of access to the fitness programs may hinder them from exposing their young ones to a good life. Mentioned earlier, Emirates Foundation is philanthropic organisation based in Abu Dhabi. In late 2015, they launched a national child safety campaign, designed to safeguard children across the UAE through a comprehensive programme of awareness raising and training activities on the measures processes and good practices for injury prevention and management. The initiative, which plans to train 3,000 children, will also target training 3,000 parents, guardians and caretakers (Zaatari, 2015).

Other programmes that non-government organizations in the UAE can advocate for include forming efficient playgroups. The essence is to engage the children in activities that can promote their wellbeing while playing. Moreover, the literature reveals that children have the capability of comprehending risks and probable means of averting them. The non-government organizations have special education programmes dedicated to teaching children the means intended to keep them safe. Equipping children with knowledge about the risks they are exposed to and the proper means of promoting safety around them is a part of the non-government institutions.

This section explored policies on child safety in the global context and in Abu Dhabi. In the specific landscape of the UAE, it has been indicated that there are many challenges on the path of development to civilization. The main idea of policies on child safety is to inform and enlighten people (Rauscher et al. 2010). One can argue that difficulties are caused by the multicultural environment of Abu Dhabi in which it is still possible to apply/set a universal policy (e.g. child seatbelts are mandatory). However, there is unwillingness to set it according to cultural expectations, considering the principles and values available in different cultures and languages. In opposition, the situation on child safety policy is better in developed countries because of the availability of different organizations for child protection. In conclusion, irrespective of the context in which child safety policies are formulated, the main idea is to safeguard the safety of children under any condition.

2.7 FUTURE OF CHILD SAFETY IN ABU DHABI

The government and other partners such as the police, HAAD and other non-profit organisations, have initiated campaigns in effort to create awareness on child safety practices and promote health. However, their main focus so far has been on road safety amongst child nutrition in schools. The Salamat Bint Hamdan Al Nahyan Foundation (SHF) have also begun creating a series of awareness sessions/workshops around child development with the aim of enhancing and strengthening parent-child relationships and

communication. This is with the aim of lessening forms of abuse (spanking, yelling) and neglect. Where this is a top priority in the country, stakeholders must begin to consider child safety within the home. There are many concerns within a home and if addressed, it would save lives physically, mentally and emotionally. Those mentioned in the media as great challenges are falls from height. Another concern is that many parents including mothers are becoming working mothers and thus employing nannies or other caregivers into their homes to take care of their children. . The National – a local based newspaper – within two months (namely March and April 2015), covered about 30 stories on the challenges of child safety in Abu Dhabi. The stories included children suffering at the hands of housemaids employed to work with them. Many of the nannies are non-Arabic and even non English speakers considering those two languages are the primary languages of communication in Abu Dhabi. The emerging reason is that many of the caregivers hired are quite realistically not qualified to care for children.

2.8 MODELS AS APPROACHES TO PROMOTING HEALTH

Promoting health is an activity that the relevant stakeholders have embraced to help encourage wellbeing among the community. The following section provides an analysis on the theoretical framework of application that is later discussed, and is based on the health model developed by LaBonte Model (1992) and Fran Baum's Remodel (2008) as a viable source of information for promoting health to its community. The section will also include a description of the model and its functions, a description of social dimensions of influence and what each signifies, and how the theory supports the medical promotion of positive health and wellbeing activities to society. The findings suggest that the original LaBonte Model has been improved for the better as it seeks to respond to the complex and ever-changing nature of the health care system today.

2.8.1 Original LaBonte Model

The original LaBonte Model emphasized that there are three major channels of health promotion that are commonly found in societies, both historic and current. However, outcomes can be influenced by the means in which the model is approached. There are two general approaches that have been used when integrating the LaBonte Model. First, some users have tried to apply the model from a left to right strategy that begins with the medical approach, moves to the behavioural approach, and then ends with the socio-environmental policy approach. This method has been shown to be far less impactful when compared to the strategy that moves in the opposite direction. However, a much more beneficial strategy to optimize the health promotional strategies realized by the public, it is recommended to move in the model from the right to the left. The crucial recommendation for optimizing the model and its impact on developing the best health promotions is to begin with the right column and then move left to behavioural interventions and then implementing medical interventions. The overarching goal of this directional movement is to

begin with socio-environmental or policy, and then move towards behavioural and then socio-environmental because this approach maximizes the potential for the behavioural and socio-environmental methods to be effective.

It is crucial to note that how the model is approached has great influence on the outcome of the strategy. First, it is important to answer the question, “which side to start from?” when applying the model. While it is possible to start from the left side and move from the left to the right, it is also possible to approach the model from the right side and then move from the right to the left. For example, if the user starts on the left side, which begins with the medical approach to health promotion and then moves into the behavioural and socio-environmental columns. However, if selecting a medical approach to health promotion, it is very unlikely that movement can be made successfully to a behavioural approach or a socio-environmental or a policy-driven approach. However, if the emphasis and strategy is directed from the right, by which the beginning consideration is emphasized from the socio-environmental or policy side, it can be much easier for the behavioural and medical interventions to work. Conversely, if the medical side is selected, there can be difficulties in then moving successfully from the medical approach to the behavioural of socio-environmental or policy approach. A theoretical example can highlight how the model can be more successful one direction and far less successful when moving the opposite direction.

The initial development of the LaBonte Model was in response to the increasing prevalence of heart disease among the population. A framework for health promotion was developed to encourage a better medical and social response to the phenomenon. Three major health channels were identified as prominent for the model in terms of impacting the community. The three channels, however, are also correlated with chronological developments of health promotion activities commonly realized by societies throughout the world. First, health promotion started as a medically informed social activity. Secondly, as societies developed, LaBonte notes the emergence of behavioural influences on health promotion. Third, socio-environmental tendencies begin to emerge in the 1980s that focus on community health and wellbeing as opposed to emphasizing individualized medical strategies for promoting health and wellbeing.

The Labonte Model is organized according to a three-dimensional matrix with crucial indicators that show similarities and differences among the medical, behavioural, and socio-environmental factors. The key differences among the medical, behavioural, and socio-environmental strategies at promoting health include how each basis defines health, how problems are defined, the main strategies, and the success criteria. Each approach defines health slightly differently. For example, the medical community will define problems differently when compared to community organizations. Problems are identified through the medical approach such as commonly found in disease categories such as heart disease, cancer, and

diabetes. However, problems are defined differently through the socio-environmental lens as the community is commonly included in the definition. Examples of socio-environmental problems include poverty, poor working conditions, and poor social support networking. These factors have great influence on how health promotion activities are executed.

Labonte (1994) developed a theoretical framework for considering the three primary design strategies for health promotion activities. The first approach is the medical approach, which emphasizes returning people that have an ailment back to health. The second approach is the behavioural method that seeks to promote healthy lifestyle activities. Unlike the medical approach, the behavioural approach targets underlying behaviours that are factors in the presenting illnesses. The third method is the socio-environmental approach, which is focused on the totality of health care experiences and the best-practices that help to maintain wellbeing. This approach also includes health factors that are directly connected to people and their wellbeing that includes genetics, environment, behaviours, self-esteem, and social connectedness. It must be noted that the Labonte Model is not rejecting the value of behavioural and medical strategies; however, it does highlight that health promotion strategies are more influential when implemented along with a broader framework that is offered through a blend of all three strategies.

2.8.2 Fran Baum Model

Fran Baum introduced modifications to the LaBonte Model that has remodelled the strategies of health promotion. Fran Baum (2008) coined this approach as the "New Public Health" Model. According to Tulchinsky & Varavikova (2010) "The New Public Health is a contemporary application of a broad range of evidence-based scientific, technological, and management systems implementing measures to improve the health of individuals and populations. Its main objectives are the political and practical application of lessons learned from past successes and failures in disease control and the promotion of preventive measures to combat existing, evolving and re-emerging health threats and risks." As the world becomes increasingly complex, the model seeks to address the future health problems that will be faced in the international community. The overarching goal of this method is to forecast threats that will emerge in the future as the world grows more complex so that standards can be raised and resources can be allocated to advance health promotion best-practices.

A hallmark of the New Public Health Model is constant change and attempts to hit a moving health care outcomes target (Robertson & Minkler 1994). It is expected that the field of public health will grow in strength as individuals, communities, and entire countries seek to overcome threats commonly found in health care systems. This transition can be realized upon scrutinizing the transition of large public health entities such as the Centers for Disease Control (CDC). In fact, the Centers for Disease Control renamed the

organization to the Centers for Disease Control and Prevention (CDC 2016). In identifying the need to make a transition of improvement in the public health promotion activities, the CDC has stated that "Until recently, both public health and clinical medicine generally focused on specific diseases or conditions such as cancer, heart disease, disabilities, or birth defects. In the case of public health, this framework was established, in part, because of funding considerations: it was easier to convince decision makers of the need for resources to combat specific diseases than for resources to promote wellness through the various stages of life." This communication reflects the progresses currently being made in terms of health promotion from the traditional LaBonte Model to the increasingly prevalent Fran Baum 2008 New Public Health remodel. There is little doubt that the future of health promotion can be found in the New Public Health model as it relies upon holistic strategies to encourage health and wellbeing among the population.

In closing, the original Labonte Model for promoting health served as the basis for the development of the Fran Baum 2008 remodel as "The New Public Health." The transition from a medically-based focus to a socially-dynamic and preventative focus has been chronologically outlined as progress in the field. Secondly, it is critical to note that the movement from the right to the left in the model is critical in terms of optimizing how each method can be effective. By starting on the right with the socio-environmental approach, it makes it much easier to then leverage the benefits of the behavioural and medical approaches. If the user starts on the left side, which begins with the medical approach to health promotion and then moves into the behavioural and socio-environmental columns. If selecting a medical approach to health promotion, it is very unlikely that movement can be made successfully to a behavioural approach or a socio-environmental or a policy-driven approach. However, if the emphasis and strategy is directed from the right, by which the beginning consideration is emphasized from the socio-environmental or policy side, it can be much easier for the behavioural and medical interventions to work. Conversely, if the medical side is selected, there can be difficulties in then moving successfully from the medical approach to the behavioural of socio-environmental or policy approach. The New Public Health model is powerful for promoting health and wellbeing to the population as it takes into consideration the nature of the health care system as being complex, dynamic, and ever-changing. This has drastic and far-reaching implications for health care practitioners interested in promotional activities as it serves as a viable informing theory for implementing best-practices in the field.

2.9 CONCLUSION

The literature provides evidence on the current challenges of child safety in Abu Dhabi with the main issues related to the low literacy of health and safety practices amongst parents and caregivers. Other issues include buildings which are not child secure. The country has been developing awareness campaigns and training sessions in various areas to enhance child safety practice with many focusing on encouraging people to use safety seats in their cars. However, an evidenced gap is promoting safety within the home. There is a notable lack of literature on home safety for young children with the available mainly being from news and press releases. The current study offers empirical evidence on gaps in child safety in Abu Dhabi identifying areas of concern for different stakeholders including parents and their opinion on areas that need improvement. The expectation is that this information will be useful for policy intervention in the country. An area of focus is developing education and training based programmes such as for people left with the children including nannies to ensure they have the skills to facilitate safe childcare. Furthermore, the target is for the government to enforce policies that encourage parents and caretakers to recognise the significance of maintaining safety within the home. The current study will provide elements to support the importance of achieving the formulation of such a needed policy in Abu Dhabi.

CHAPTER 3 - METHODOLOGY

3.0 INTRODUCTION

This chapter gives an outline of the research methods that were followed in the study. It provides a description of the research design that was chosen and the reasons for this choice. This chapter will also include a discussion on the epistemological approach to research and will then on move to provide information on the participants and their recruitment. The instrument that was used for data collection is also described and the procedures that were followed to carry out the data analysis. Lastly, the ethical issues that were followed in the process are also discussed.

The current study utilises the Delphi method which refers to an approach of data collection that allows a researcher to obtain information from respondents within their own domains of expertise (Hsu & Sandford 2007). Simultaneously, it allowed the respondents involved to express their views whilst maintaining their anonymity. The respondents are a group of individuals that are known experts in a subject matter involving child safety. They have been recruited in effort to obtain their professional opinion(s) about child safety in Abu Dhabi and to identify possible solutions. The Delphi method enabled a network of communication to explore the feelings and attitudes of the professionals without exposing them to a debate. In the current chapter, the Delphi approach to research is explored in depth, identifying the benefits associated with the method, its use in a qualitative study, and the data collection tool. An overview of the two Rounds of data collection used is provided, along with the sample and the research questions addressed. A pertinent part of the chapter is an exploration of the two questionnaires used, for both Round 1 and the development of the questionnaire for Round 2 based on the responses received in the first Round. Included is the data collection approach which entails the sampling process in reference to the Delphi method, the two questionnaires, and the process of data analysis.

3.1 RESEARCH QUESTION

The primary research question of this study is “What are the challenges and opportunities for child safety in Abu Dhabi?”. The question was supported by two secondary research questions

- What are the available evidence-based options for a possible and effective solution to the problem?
- What is the understanding of key stakeholders of child safety and their perceptions of feasible interventions to the problem of child safety?

In Abu Dhabi, the key stakeholders concerned with the issue of child safety argue that in order to improve the situation of child safety in the city, there is a need for knowledge dissemination on effective child-

protection techniques (Gomaa 2012). This knowledge should be disseminated to the individuals that are directly concerned with taking care of children, especially those at home. Media reports in The *National* stipulate that parents in the Emirates are increasingly leaving their children with nannies, with as many as 94% of Emirati parents having care givers and an unspecified number of expatriate parents also having nannies (Almazroui 2014). The report continued to indicate that parents are spending about 50 minutes a day in extreme case with their children because of other commitments with work, friends, and other social activities. In other cases, as noted by Almazroui (2014) nannies take care of children for about 30 to 70 hours every week on average in the UAE. Therefore, any policy that is developed toward addressing the issue of child safety must consider the involvement of nannies. The current study examined the understanding of various experts in education, healthcare, government, and security enforcement to determine their appreciation of the existing framework on child safety in Abu Dhabi. They also highlight the need for establishing policies based on the gaps found in practice.

The research topic presented for this study together with research questions highlighted above can serve as a starting point for addressing the issue of child safety in Abu Dhabi when viewed from various perspectives.

3.2 AIMS & OBJECTIVES

The primary aim of the study is to explore the challenges and opportunities for child safety in Abu Dhabi (UAE) and propose culturally-relevant and cost-effective interventions. The objectives of the study are as follows:

I. To understand the issues around child safety in Abu Dhabi.
II. To determine whether an educational intervention programme might address child safety issues in Abu Dhabi.
III. To explore the most effective and feasible interventions for the problems of child safety in Abu Dhabi as defined by the stakeholders.

Parents are primarily responsible for providing and ensuring a safe home environment to the best of their ability. However, a recent local survey addressed the effects of hired nannies in their role of looking after children in the absence of the parents (999 Magazine, 2014). In the UAE, nannies are not trained nor are they registered caregivers by a regulated body or ministry. As mentioned in the literature review, Almazroui (2014) found that parents in Abu Dhabi often employed people that were labelled not qualified to take care of children. As stated, this is an element that increased risks for child injury, neglect, and abuse (Almazroui 2014). It is therefore paramount to identify possible solutions as recommended by experts that can be

useful in facilitating better security for the children. For example, it was noted in the literature review that education of nannies can be a possible avenue. The current study will identify whether the respondents will identify such a possibility in addressing child safety issues. Seeking information from experts will offer an opportunity to understand those elements that professionals consider important to safeguarding children. The approach to data collection ensures that I have an opportunity to gather information from professionals that interact with children and are thus likely to have information about factors affecting children on a daily basis, and appropriate resolutions.

3.3 EPISTEMOLOGICAL APPROACH TO RESEARCH

Epistemology is a philosophical underpinning in research that refers to an "individual lens, created through our worldview that we use to understand knowledge in the world" (Egbert & Sanden 2013, p. 17). A notable element in this definition is the aspect of an individual lens that presupposes that every individual has a unique way in which one understands the world. Where two individuals may view one action, that action can be perceived differently by each individual. For instance, an individual may consider spanking a child as a form of child abuse, while another would view it as a measure of discipline. The differences in perception may come from variations in experiences and elements that influence behaviour. Egbert and Sanden (2013) explain the difference using the analogy of a pair of glasses, in which if one is wearing green glasses, he/she will see the world as green, but another wearing purple glasses will see it in the purple colour. The two persons are looking at the same thing, but with slightly different manifestations.

The aspect that makes epistemology an appropriate choice for this study is the appreciation of individual beliefs and understanding that define the unique conceptual framework through which we accumulate knowledge and understand it. The conceptual frameworks are informed by our socioeconomic circumstances, culture, family background, childhood experiences, education encounters, professional experiences, and personal interactions (Jessor, Colby, & Sweder, 1996). The different individual variables interact to form individual perception of the world that is unique. The choice of epistemology further comes from its reflection of how an individual understand a situation/environment. For instance, as mentioned by Scotland (2012) knowledge is subjective, and this subjectivity is evident in how a person creates, acquires, and transfers knowledge. In using epistemology for this study, it becomes possible to appreciate the differences in the views of the participants, and the way such perspectives will influence how they consider and interpret their experiences relating to child safety. Such an understanding will therefore direct the research in a number of ways. Such as it encourages the definition of specific terms such as child safety, thus ensuring that each participant stipulates clearly his or her understanding of the basic concept under

which the research was conducted. Such a description makes it possible to interpret the findings as accorded by the participant and not the researcher.

Fundamentally, epistemology refers to the points of views that suggest whether an instance is factual or based on mere guesses (European Hospital and Healthcare Federation, 2012). In this context, it is notable to present the epistemology as a constructivism in view of the succeeding justifications. First of all, as a constructivism, the epistemology can be termed a physical, social, evolutionary and information processing genre of constructionism (Zuckerman & FAAHC, 2006). In this regard, it is important to express that the type of the constructivism to be adopted depends on the school of thought applied. For instance, Fran Baum proposes for the inculcation of the critical theory whereby controversies or new positions on a subject matter are involved by incorporating the members of the given community (National Institute of Science Communication, 2011). In this particular instance, the naming of the epistemology is directly influenced by the responses given by the participants. In point of face, this ideology does not inculcate the use of experts. This is confirmed by the position that ordinary people are involved in all activities that involve naming the particular epistemology. On the same note, it is desirable to underscore that naming it to constructivism as the method of choice is relevant in lieu of the fact that it takes a group of people to construct and reconstruct an ideology (Valesquez, 2013). Accordingly, it is not possible for one or two persons to either credit or discredit an ideology. In fact, this point of view is supported by the fact that factual instances need the contemplation and thorough evaluations of informed minds (White & Griffith, 2010). All in all, in reference to the above, it is rather clear that the epistemology has to be named as a constructivism.

A critical element of the research is ensuring that the study sustains objectivity throughout, which becomes possible when the researcher is able to focus on the participants rather than on self-understanding (Darlaston-Jones 2007). As explained by de Gialdino (2009) through epistemological reflection, one begins to appreciate that knowledge is not universal but created from individual activities and experiences, and these experiences will affect how each person responds to the issue under study. The focus of the current research is consideration of the problem of child safety in Abu Dhabi, using an evidence-based approach to find effective solutions. The understanding of problems and solutions come from the perceptions of key stakeholders based on their understanding and their involvement on the issues surrounding child safety in Abu Dhabi. The Delphi approach as discussed subsequently gives an approach useful in ways of understanding and explaining how the experts have acquired the knowledge. The approach will provide initial information in Round one and then clarifications in Round two promoting a completeness of the data collected and experiences that will be referred to in the study.

3.4 BACKGROUND – DELPHI METHOD

It is essential for any research to adopt a methodology that is suitable to answer the research question. In this case, the research utilized the Delphi Method as a method for collecting data. This is because the research focuses on an important policy issue in the city of Abu Dhabi and the Delphi Method serves as an important and reliable way of exploring different ideas or information, which is important in key decision making. The information in this method is collected from a group of experts through the use of questionnaires, which are given at different time intervals (Keeney, et al. 2010). Using the information gathered from the group of experts, it becomes possible to form a group judgment. In case it is impossible to get scientific knowledge, the people involved in decision making utilize their own intuition or opinion from experts. In this research, the researcher will rely on the Delphi method to come up with the results.

This research considered anonymity, statistical analysis, and controlled feedback which are some of the major aspects which characterize the Delphi Method (Keeney, et al., 2010). In order to ensure anonymity of respondents, the research did not involve the conventional committee action. Instead, the respondents received their questionnaires in their respective locations which were sent to them through their emails. Once the questionnaires were filled, they were forwarded back to the researcher through the email. This method ensured that the respondents did not meet and that the researcher had no physical contact with the respondents. This promoted anonymity as required by the Delphi Method. The provision of a variety of statistical analysis techniques to interpret the data is a practice which further reduces the potential of group pressure for conformity (Dalkey, 1972 cited in Hsu & Sandford, 2007). It would in essence mean that each participant would not undergo any pressure to conform to another participants responses that may originate from obedience to social norms, customs, organizational culture, or standing within a profession and allow for an objective summarization of the collected data (Hsu & Sandford, 2007). Finally, controlled feedback is described by Dalkey (1972 cited in Hsu & Sandford, 2007) as the process of allowing for a well organised summary of prior iterations thus allowing participants to become more problem-solving and to offer insightful opinions.

The application of a Delphi Study involves first designing the questionnaire, but it differs from traditional research in the next stage which is selection of a group of experts with the qualification to respond to the questions (Okoli & Pawlowski 2004). Other forms of studies using a questionnaire generally require the researcher to identify a population that best fits the hypothesis. The Delphi approach is specific in requirement of a group of professionals. The second unique aspect of the Delphi approach is the application of the questionnaire. The researcher administers the tool and analyses the initial results and then designs another questionnaire based on the responses of the first and then re-administers it asking the respondents

to revise their original responses or to answer other questions that arose from the feedback received in the first survey. Notably, the questions presented in the second questionnaire are toward achieving a level of consensus among the participants.

When Florence Nightingale decided to undertake a study on the impacts of the various different treatments on death rates of various military hospitals in Crimea in the early 1900s, she looked for evidence on a treatment that worked better than others did (Pawson, 2006). This method showed that the construction of a policy being steered by evidence is a practicable approach (Choi et al, 2005). The strength of seeking evidence to underpin policies stems from the fact that most areas of human activities cannot be improved without data, analysis and evidence (Orton et al, 2005). Therefore, utilising the Delphi method to collect evidence from an array of experts would provide creativity and reliability when exploring issues with the intent of making informed decisions.

By carrying out the research using the Delphi method, several issues relating to child safety in Abu Dhabi will be raised. For example, it is possible that the most serious issues that present danger to the safety of children in Abu Dhabi will be underscored. As a result, the research will have worked to identify where the problems of child safety in Abu Dhabi resides. Conducting research in this context is equivalent to performing diagnostics of a problem (Orton et al, 2005). After identification of the problems, the research questions then comes into play. The first question of the topic relates to the identification of some of the evidenced based options for a possible and effective solution. Here, the research aims to underscore the practical solutions that exist and that can be used to help in addressing the issue of child safety in Abu Dhabi. The second research question of the study is about the thoughts of children stakeholders concerning what can be done to address the issues of children safety in Abu Dhabi. This probing view of the research question is helpful in that it encourages the generation of diverse opinions on what is responsible for child safety issues in Abu Dhabi.

By integrating the research topic, the Delphi method and the research questions, it is patent that the process of knowledge creation together with distillation of information on Abu Dhabi a child safety issue is achieved (Denzin & Lincoln, 2013). In other words, the research topic and its various elements serve as resource of obtaining information about Abu Dhabi child safety issues (Pettriccew et al, 2004). From the study findings, the solutions that can impact positively in enhancing child safety in Abu Dhabi will also be demonstrated. This means that the products of the study can be put into recommendations or practice (Choi et al, 2005). This feature shows that if the study generates sufficient evidences on factors that enhance child safety in Abu Dhabi, the likelihood of the findings becoming part of the policy is higher.

3.5 RESEARCH DESIGN – METHODS AND TECHNIQUES

As mentioned previously in chapter 2, Levac, Colquhoun & O'Brien (2010) suggested consultation as a sixth stage in the scoping process. The Delphi method in a sense is not only a part of the last process of the scoping review but in fact extends it. A quantitative technique is typically used within the Delphi method (Row & Wright 1999 cited in Skulmoski & Hartman 2007) however, data analysis can involve both qualitative and quantitative data (HSU & Sandford 2007).

The data concerned with this research was mainly qualitative in nature and was collected through a distribution of the questionnaires based on the Delphi Method. The following procedure was utilized from start to the end of the research process:

- The development of the first-Round of questionnaires
- A selection of experts was made as described previously.
- Questionnaires were disseminated to the respondents as part of the first Round of questionnaires.
- Responses were received and analysed.
- The development of the second- Round of questionnaires and tested for errors.
- Questionnaires were disseminated to the respondents as part of the second-Round of questionnaires.
- Responses were received and analysed.
- A report was prepared based on the findings from the first and second Round of questionnaire responses.

The researcher utilized qualitative data for the main reason that the research aimed at capturing answers, which are subjective in nature. According to Silverman (2010), it is paramount that the researcher understands the difference between qualitative and quantitative data before choosing a research methodology.

Qualitative data is concerned with issues that are subjective in nature. These include aspects such as attitude, experiences, and behaviour (Silverman 2010). In order to gather such information, a researcher is required to make use of methods such as focus groups and interviews. The aim is to ensure that the researcher gets in-depth opinions and feelings on the research topic from the respondents. For this method, the sample size is usually smaller than in quantitative research. This is because experiences, attitudes, and opinions are core to this method, and gathering this might consume a considerably long time because the contact between the researcher and respondents lasts longer.

Therefore, quantitative and qualitative research employs different approaches to capture data. However, the effectiveness of either of the methods is dependent on the level of skills, experiences and training of the involved researcher. It is also not possible to rule out one method as more important than the other. This is because the appropriateness of each method depends on the nature of research to be conducted. The current study fits the qualitative approach because the researcher collects open-ended questions seeking to identify the meaning participants ascribe to the issue under study. The quantitative approach uses measurements to qualify claims or obtain statistical data that can be used to explain the "what" of an issue, but the qualitative approach explains the "how" and "why" bringing in exploratory information. The advantage is that the method provides more details about the issue than would otherwise be obtained helping to create deeper understanding of the issue under consideration. As a Delphi study the data obtained is also richer because of the multiple iterations and the revised feedback. The researcher does a follow up in the second questionnaire ensuring that the data is adequate for answering the research question.

3.5.1 Data Collection Method

The method of data collection in the research, which has been chosen by the researcher, is questionnaires. All stages of data collection, including the choice of instruments, must satisfy all the set conditions in the Delphi Method as the chosen method of research plan. Questionnaires are commonly used in various research processes. A questionnaire is set of questions, which are presented in a formal way to help a researcher in obtaining information from the respondents. A major advantage of using questionnaires is their ability to collect data in a standardized manner, which makes the process of data analysis easier and coherent. The predetermined approach of the questionnaire means that the researcher already has in mind the required information to respond to the established objectives. It is however important for one to keep an open mind to ensure that he or she will accept the outcome irrespective of it aligning to expectations and assumptions that one had at the beginning of the study.

Multiple choice and unstructured questions were used in the questionnaire. The unstructured questions are open-ended; therefore, the respondents will be able to answer them in their own words without any directions from the researcher. The major advantage of unstructured questions is that they allow the respondents to present their opinions and feelings in a detailed and free manner. Therefore, unstructured questions are suitable for this research because the research aims at obtaining in-depth opinions and feelings of the respondents (Brace 2008). The advantage to using open-ended questions is that one has the possibility of discovering responses that people give spontaneously and thus help avoid researcher biasness

that may arise from suggested responses (Ballou 2011). Further, it offers the participants the chance to provide factual information because they do not try to fit in their feelings within a provided list. A benefit of using such questions for this research is that the responses could be used to later expand the list for Round 2 based on any gaps noted in the responses or need for clarifications. Notably, the researcher can also use an open-ended question to expand on the list of pre-listed options by asking "Other, please explain", which ensures that the respondents have the freedom to include anything that was not on the list. These questions also expand on the limited nature of questionnaires. The questionnaire as a data collection tool is mainly popular in quantitative research as a way to test respondent knowledge on pre-established list. However, one must put into considerations the limitations. These include the possibility of having missing answers, incomplete responses, misunderstanding of terminologies, and illegible writing (Ballou 2011). The approach taken in this study however minimises some of these errors. For example, the questionnaire administration is electronic thus minimising the question of illegible writing. The expectation about terminology is that the participants as professionals or experts will not have challenges in understanding the language used. Additionally, questions that require numerical responses such as age are closed to minimise on incomplete responses. The questions are also simple asking for only one aspect to minimise on respondents feeling tired and thus failing to answer.

The second group of questions used is close-ended referring to the inclusion of questions that limit respondents to a set of alternatives provided (Reja et al. 2003). The limitation with this approach is possible researcher biasness, in which because the researcher decides on the pre-listing he or she can provide those responses that best align to his or her beliefs. To counter this element, the questionnaire included the option of providing other alternatives where appropriate or in case they felt the list did not effectively represent their perception. The entire close-ended questions had this option. A major disadvantage of the unstructured questions is that they may contribute to errors in data recording, as well as data coding. In turn, there may be complexity of the data analysis process. In exploratory research, the benefits of unstructured questions outweigh their disadvantages (Hollaway & Wheeler 2013). A note to the close-ended questions is that they required only one possible answer. For example, in part one of the Round One questionnaire, participants were asked how frequently they dealt with problems related to child safety issues in their work, with possible responses being daily, weekly, monthly, every couple of months, and annually. They could also provide another alternative, but only one response was acceptable.

One feature of close-ended questions used in the questionnaires was rating, with a scale of one to ten, with one showing most important and 10 least importance. The participants were presented with common problems related to child safety in Abu Dhabi and asked to prioritise based on the presented scale. The

problems included neglect by parents, mother and father, lack of awareness or education on safety habits, lack of training on safety issues, hiring non-qualified caregivers, lack of knowledge on basic emergency response procedures and first aid, unsafe homes, and use of unsafe equipment. The last part of the question was to list examples of the equipment, and to indicate any other common issue.

3.6 RECRUITMENT APPROACH AND PARTIAPANTS

3.6.1 Recruitment Approach

The Delphi approach allows the researcher to know the participants or to have some knowledge of who they are to be able to send back the questionnaire in the second Round, but anonymity should remain between the participants (Okoli & Pawloski 2004). It is not important for the respondents to know one another and maintaining a degree of anonymity can be useful in encouraging openness in responding to the questions. In order to qualify as a respondent, the individual would have to be a senior employee, or holding a managerial position in the organization within the organizations they are working for as an expert in relation to the issue concerning child safety. According to Skulmoski and Hartman (2007), individuals are considered eligible in a Delphi study if they have somewhat related backgrounds and experiences concerning the target issue. The reason that a Delphi study specifically requires the participation of experts is that it investigates issues of high uncertainty, and thus the general population may not have sufficient knowledge to respond to the questions presented. For example, the current study is policy related which means that the information presented must be relevant to policy formulation and change. It is therefore important to obtain such information form experts that are able to comprehend the seriousness of the problem, have knowledge about the existing policies and their shortcomings, and can thus offer insight into the possible areas of intervention. Note that the group sought is not representative of the general population but specific to the sought information. For example, the current study recruitment was for professions that have been dealing with children in different capacities such as in health care, at school, within the police force, and the government. Each of these four categories are expected to have interactions with children, and seen cases of child neglect, abuse, and injury that can show the need for policy intervention. Further, these professionals can offer insight into how the current policy is failing.

The goal of the Delphi Study was to gain consensus among the experts as to what was needed to help prevent child injuries and further encourage and promote child safety in the Abu Dhabi. To that end, the second Round in the Delphi Study were in the form of open ended questions derived from the data collected and analysed in Round one of the study. The actual items in the second Round consisted of statements and lists derived from the initial data collected, coded and categorized.

3.6.2 Participants

The researcher focused on a small sample consisting of 20 experts drawn from both the private and public sectors. The chosen experts were drawn from various organisations and agencies in Abu Dhabi who understood the issues surrounding child safety in Abu Dhabi, hold a senior position and simultaneously are involved through a stakeholder. The majority of the experts work and reside in Abu Dhabi except for one who worked for an international organisation but has focused on child safety issues within Abu Dhabi. The chosen experts included respondents from the following organizations:

The governmental organizations included:

- Health Authority Abu Dhabi (HAAD),
- Ministry of Health,
- Local Government Public Health Academic Entity: UAE University,
- Abu Dhabi Educational Council
- Abu Dhabi Police: Child Protection Centre (CPC)
- Ministry of Labour
- Department of Transport
- UAE MILITARY : Public health Division

The non-governmental organizations included:

- Safe Kids Organisation
- Clinician Leaders: paediatricians.
- UNICEF

3.7 ETHICAL CONSIDERATIONS

The nature of ethical issues in qualitative research varies depending on the type of research. In this case, the major ethical conflict would have been how the researcher accessed the study group and the implications it could have on the participants. In order to ensure that research ethics is upheld, the researcher informed all the participants of the purpose of the research. In addition, the researcher assured the respondents that their anonymity will be highly upheld. In this case, the identities, personal information, and names of the respondents will not be disclosed (Miller et al., 2012). Furthermore, ethical approvals were sought and gained from the University's ethical committee, in addition to a local committee (Al Ain Medical District Human Research Ethics Committee - AAMDHREC) which review all human subjects research projects conducted in the city. Secondly, the confidentiality of respondents was guaranteed. Finally, there was autonomy for participants. All these aspects are paramount in the research process

because it ensured that there is trust and rapport between the researcher and respondents. This also encouraged the participants to provide quality data.

3.8 RESEARCH TRANSFER

Denzin and Lincoln (2013) state that there are three aspects of a research, namely; a research topic, a research question and the methods used. Generated knowledge from a research can be utilized by putting them into practice, or recommending them for practice (Choi et al. 2005). With this research, the study findings will mainly involve the possible solutions and improvement practices to various child safety issues in Abu Dhabi across different groups. Most importantly, if the research generates findings that are highly evidence-based, the chances of transfer of the findings into policy will be high. The results will be useful to the Ministry of Interior, firstly in identifying factors that experts in different work areas consider as important to facilitating child safety in Abu Dhabi, and secondly; the results will additionally assist in identifying areas that are found challenging with its possible interventions. The results could additionally inform regulatory bodies such as the Health Authority – Abu Dhabi, the Department of Transport and the Ministry of Labour on rules and regulations pertaining to a child's safety. This could range from addressing policies around the usage of mandatory appropriate car child restraints on the road, to addressing the qualifications non family home caregivers should possess. As identified in the literature review, Abu Dhabi has a poor policy application regarding child safety and therefore, it may be useful to have the research outcome assist in identifying policy solutions where needed. Furthermore, the information could also be useful to parents as a way of understanding the knowledge associated with safeguarding their children even when they are away at work and when employing caregivers. Another group that might find the information useful are non-governmental organizations such as Safe Kids because it will highlight the perceptions of different experts about problem areas, and probable solutions.

3.8.1 Potential limitations of transferability

While evidences generated in research studies have the potentials of being transferred into policies, the transferability also has some potential limitations that can stop the process (Whitehead et al, 2004). One of the limitations that can prevent transferability of evidences into policies regards the relations between researchers and policy makers (Choi et al. 2005). The want of respect and trust between scientists conducting research and the policy makers is always an issue when attempting to transfer the products of a research into policy (Choi et al. 2005). This is because scientists do not favour people outside the scientific community to regulate and interpret their data while policy makers invariably view scientists as arrogant. Another potential limitation to the transferability is that what may be considered as evidence by scientists may not qualify as an evidence on the part of policy makers (Whitehead et al. 2004). This is to say that

scientists and policy makers tend to have diametric perceptions on what qualifies as evidence to be put in policies.

3.8.2 The necessary steps to be taken

In order for the evidence generated in the research to be transferred into a policy or practice promoting child safety, certain key steps will be taken to enhance that likelihood. For starters, the study will be conducted in liaison with Abu Dhabi government bodies, namely the Abu Dhabi Health Authority (HAAD), the Child protection Centre (CPC) and policy makers. This implies establishing mutual and understanding relationships with the government and policy makers (Choi et al. 2005). Furthermore, the study may discover the need to involve other governmental stakeholders such as the Executive Council and/or the Ministry of Labour depending on the outcome. The study will also seek the assistance of intellectual brokerage between the different stakeholders in child safety so that there will be a common understanding in fundamental issues of the research (Orton et al. 2005). A further precaution, permissions will be required for any interested person or organization to gain access into the study to help prevent potential misuse of information derived.

3.9 RELEVANCE TO PUBLIC HEALTH

Child injuries are a developing international public health challenge. Therefore, identifying and positioning injuries as a major public health problem is said to be one of the major achievements of injury professionals over the past 25 years and one that has made the broader health community aware of the need for further research in this area (Segui-Gomez & MacKenzie 2003). According to a paper on Child injury prevention by the sixty-fourth world health assembly (2011), child injuries are a neglected public health problem with significant consequences in terms of mortality, morbidity, quality of life and social and economic costs.

The main Convention on Children Rights, approved by close to all administrations, notes that children globally have a freedom to a safe surrounding and to safeguard from injury and brutality (WHO 2008). The Convention additionally notes that the institutions, facilities and services accountable for the safeguard of children ought to obey the rules with founded standards, specifically in the regions of safety and wellbeing. Children are exposed to perils as they progress with their day to day lives and are susceptible everywhere to the similar kinds of injury (WHO 2008). Therefore, child injury is a principal public health challenge, which needs immediate attention.

3.10 TIME-SCALES

The research was conducted over a period of four months. The dissemination of the first Round of questionnaires took place in March 2015 and ten completed responses were received by early April. Data

was then collected and analysed followed by a revision of the questionnaires. The second Round of questionnaires was then distributed in early May and five responses were received two weeks later. The first Round took subsequently the longest to complete as difficulty was faced in recruiting participants. A flow diagram illustrating the different stages of the Delphi study with participation rates is further described in Figure 5 – Section 4.1

3.11 DATA COLLECTION

3.11.1 Sample Size

Delphi studies have been conducted with groups ranging from 10 to 30 experts or more. In an early study on the Delphi method, it was shown that reliability of group responses increases with group size (Dalkey et al., 1972). However, reliability increases only slightly with groups of over 30 experts (Dalkey, 1969). Thus, it was proposed to use 20 – 30 experts in the study, depending on the results of the expert identification process. In the end, 20 experts were identified as potential participants in the Delphi study and invitations were issued to the 20 individuals via email. However as earlier reported, 10 responses were received in the first Round and 5 in the second Round, with two Rounds completed.

3.11.2 Questionnaire

The study had two questionnaires; the first was Round one questionnaire with four parts presenting a total of 17 questions, and then Round two questionnaire presenting a total of 10 questions.

3.11.3 Designing the Questionnaire: Round One

The first Round questionnaire had both open and close-ended questions. The open-ended questions are useful for questions that the researcher needs the participants to provide more information or that may require diverse responses (Reja, Manfreda, Hlebec, & Vehovar 2003). As a qualitative approach, it was pertinent that the researcher provides the participants with the opportunity to discuss their feelings and attitude toward issues addressed in each open question. For example, the question on how responded defined the present state of child safety in Abu Dhabi meant that the experts could easily present cases of child neglect, abuse, or give examples where necessary and provide in-depth definition of the issue.

The questionnaire in the first Round had four parts after the preliminary questions, which asked about age, area of residence, marital status, profession and position, and whether the participants had children. The section named Part 1 was on child safety in Abu Dhabi. The focus was on seeking the participants understanding of child safety and if they had at any point experienced any issues related to child safety within Abu Dhabi. It further sought insight into the number of times the participants as experts dealt with

child safety cases, a prioritization of common problems, the main causes of these problems, and the persons mainly responsible for them in Abu Dhabi.

The second part was on educational intervention. Notably, showing the need for intervention is a core objective of this study, and education or training is expected to play an important part in facilitating child safety in Abu Dhabi. The questions included in this regard tested the participant's feelings on the need of intervention on child safety in Abu Dhabi, the forums for delivery, facilitating knowledge about child safety, and the way they felt should be done to prevent problems related with the problem in the future. Respondents also noted whether they felt that educational intervention was an important intervention and the reasons for such a view.

Part three reflected on policies on child safety in Abu Dhabi with questions on problems that need prioritization on areas such as road safety, nannies, baby walkers, home safety, understanding child development and with the option of listing and rating further problems not mentioned. Each item had an accompanying explanation to ensure that the participants were well aware of what the researcher meant by the question. For example, against road safety was the explanation of legalising car seats, while nannies needed to be trained on several issues including First Aid and child injury prevention. The section included questions on whether Abu Dhabi had any policies addressing the identified problems and their success or lack of success in promoting child safety.

The fourth part was about the future of child safety in Abu Dhabi that tested the contribution of experts, individuals, and the government to promoting a safe childhood. Related questions were on what the participants felt were their individual contribution to promoting child safety in Abu Dhabi, their perception on whether child safety was a collective or individual responsibility for specific agencies and people, and if the government has been able to effectively address the challenge. It also sought information on what more was needed in Abu Dhabi to achieve child safety.

Completion of the four parts of the questionnaire would provide critical information about what experts felt would be important in achieving child safety. Based on the Delphi Method, this provides controlled opinion on the issue in which the professionals provide guided and gradual information as opposed to providing them with a platform to defend their ideas (Okoli & Pawlowski 2004). This can be achieved through a series of questionnaires, which meant that the researcher could confirm the information presented in the first Round in another questionnaire. The preparation of the second questionnaire reflected the information presented in the data for the first Round.

When using the Delphi Method it was apparent that one needed to have adequate time between the two Rounds to analyse adequately the information collected in the first questionnaire, identify any areas that needed clarification and those with satisfactory information. This factor explains the two months allocated between the first and second administration of the questionnaires.

3.11.4 Round two

The Round two questionnaire had 10 questions combining both open and close-ended attributes. Starting questions sought perception on whether participants felt there was need for improving on the already existing child safety measures. This is a follow up to the questions of whether Abu Dhabi had adequate policies to address child safety problems and if the government was doing enough. Participants that felt a need for improvement were requested to provide at least two recommendations based on what they wanted, while those that felt Abu Dhabi had enough measures to indicate the two they thought were exemplary. The questionnaire then further explored on the need and understanding of an educational intervention. The reason was that during the first round it was evident many felt that parents played a crucial role in facilitating safety but sometimes were limited by lack of understanding about the elements involving the issue. Training the parents would thus increase their effectiveness as champions of child safety. Noted in Round one, 70% of the respondents felt road safety was the top concern, and thus Round two asked about the person responsible for pushing forward compliance on road safety. In the background to the study it was evident that road safety was an important area in Abu Dhabi with the government engaging in campaigns that would encourage people to embrace the use of car seats. Challenges however continued to exist about the acceptability of this method. For example, people have been given free car seats, but still the usage remains minimal suggesting poor adaptation. The follow up questionnaire thus considered the person or agency that should have the task of ensuring compliance.

The questionnaire also had Likert Scale based questions in which participants were to agree with presented sentences. The choices were four, namely I agree very much, I agree, I do not agree, and Unsure. These sentences were on respondents' belief on whether parents were to blame for lack of child safety. The test included preparation on parenthood, provision of information on child safety, lack of a safety culture, and parent poor understanding of child development. The questionnaire further clarified on issues that participants felt were the most important dangers to child safety. The new list included falling from high rise buildings, road safety in relation to car seats and use of buses, home related injuries such as burns, food safety, and use of baby walkers.

In Round one 90% believed an educational intervention is needed and thus Round 2 asked participants on what types of educational interventions they agreed with. This was administered through the usage of Likert Scale based questions in which participants chose to agree very much, agree or not agree with the types of educational interventions listed. Following questions probed further to understand what participants suggested can be done to educate parents who are unaware of safety practices and if educational intervention may be more effective if combined with other aspects; such as enforced legislation, regulation and environmental changes. A further question also explored to understand if they believed safety devices could assist in improving child safety.

3.11.5 Characteristics of the questionnaires

As mentioned previously, in general the questionnaires consisted of multiple choices and unstructured questions. An effective method of quantifying qualitative data to help extract subjective information is by using a measuring tool such as a Likert Item. The Likert Item is a statement used in questionnaires where respondents indicate their level of agreement or disagreement with it (Harry N. Boone & Boone, 2012) usually using five categories (e.g., strongly agree, agree, neutral, disagree, strongly disagree). This is known as the 5-point scale (Dimitrov 2012). This method measures people's attitudes, opinions or perceptions by choosing a possible response to the statement that would be coded numerically by values defined for that specific study (Encyclopedia of Epidemiology, 2008). Larger scales (e.g,. seven levels of agreement/disagreement) offer more choices to participants, however it has been suggested that it is not favourable at times when people do not want to appear extreme in their view. Moreover, it may not be easy for subjects to discriminate between categories that are only subtly different (Encyclopaedia of Epidemiology, 2008).

Within Round 2 of the questionnaire, the 4-point scale was used. This is known as the forced choice as it omits the neutral option to neither agree nor disagree and avoids the so called tendency bias that occurs when the respondents tend to avoid choosing from the extreme categories (Dimitrov 2012). Furthermore, it also assisted in ensuring participants indicated either a positive or negative statement whilst expressing how extreme (Boone & Boone 2012). Whereas a later question in the second round used a 3-point Likert as this question was a follow up to findings from Round 1 that indicated an educational intervention was needed. The findings at this stage needed to indicate the level of agreement as favourable or against but a third measurable scale was added to understand how favourable the item in question was. It is important to note that, where a 4-point or 6-point Likert scales are increasingly common, rating scales with just three levels (e.g., poor, satisfactory, good) may not afford sufficient discrimination (Encyclopaedia of Epidemiology, 2008) .

All participants had access to email, allowing Round 1 questionnaire to be administered via email. In order to maintain the anonymity of respondents, email communication was sent out individually each time to each expert. Participants were advised that all individual answers would remain confidential and would not be linked to individuals. However in Round 2, the researcher opted to send out the questionnaires via a link on SurveyMonkey. SurveyMonkey is an online tool that assists in survey design, dissemination and analysis. It proved useful to use in the second Round as it placed the questionnaires in a user friendly format which participants would access via a link and additionally, it allowed for simpler retrieval of data into the analysis software NVIVO.

3.12 DATA ANALYSIS

The process of data analysis involved thematic coding using the NVIVO (Version 10) software. The responses to the questionnaire were all imported into the NVIVO software, which is a tool that enable the researcher to effectively and efficiently analyse qualitative data because it can easily record, sort, match, and link information. The approach is beneficial for qualitative data, which tends to be more complex compared to quantitative data. When using open-ended questions, one generates a larger amount of responses compare to when using close-ended questions only. For the current study, the data generated was somewhat large but mainly in the first Round. The NVIVO tool was thus useful in discourse analysis and for thematic networking. The goal of using NVIVO was to ensure grouping of similar opinion as themes.

The data was categorised first into the four main areas of focus noted in the first Round, and then using line by line analysis at the initial stage. This form of analysis was useful in creating familiarisation with the data. Initially, 60 codes were generated based on the questions and the differences in the responses. The second stage was to link these codes based on the relationship in the responses, in which one looked at whether the opinion presented was repeated among others. Those that appeared as common among three or more participants was then selected for further consideration. Some of these responses will appear in the data presentation as explanations to what the participants felt or examples. Finally, the codes were joined into four themes namely understanding of child safety, current issues facing child safety in Abu Dhabi, policy considerations and intervention, and the future of child safety in Abu Dhabi. Initially, the policy expectations and intervention were considered as different elements but based on the realisation that the elements presented in one affected the understanding of the other, the two issues were presented as one code.

3.13 OUTCOME AND SIGNIFICANCE

The study involved a group of experts from both the public and private sectors, which will ensure that the data will include both the perspective of both sides. The benefit of this is that it will provide insight into the existing problem as understood by experts, identifying loopholes that may not be self-evident. The suggestions of improving child safety will be likely more comprehensive by incorporating suggestions from people that interact with children on a daily basis and that have experience with challenges in child safety. Furthermore, the experts are likely to be among the people involved in the implementation of arising policy reforms in child care. Their expectations will be highlighted, as to how they want the platform to change, factors that they consider instrumental to achieving better safety status for the children in Abu Dhabi.

In summary, the uses of researches as backgrounds of developing policies are laudable given that the resulting polices are evidenced based. Nevertheless, the transfer of research into policies or other practices is usually difficulty not least because of the distrust between researchers and policy makers. Therefore, measures should be taken to integrate key stakeholders if the findings of studies are to be transferred into policies. The following data analysis provides the findings of the two Rounds, and provides a discussion that connects the current results to literature providing an indication of how the findings can contribute to policy formulation in Abu Dhabi. The target is to show the issues that experts feel are important for inclusion in policy development and make suggestions for adoption.

CHAPTER 4 - RESULTS

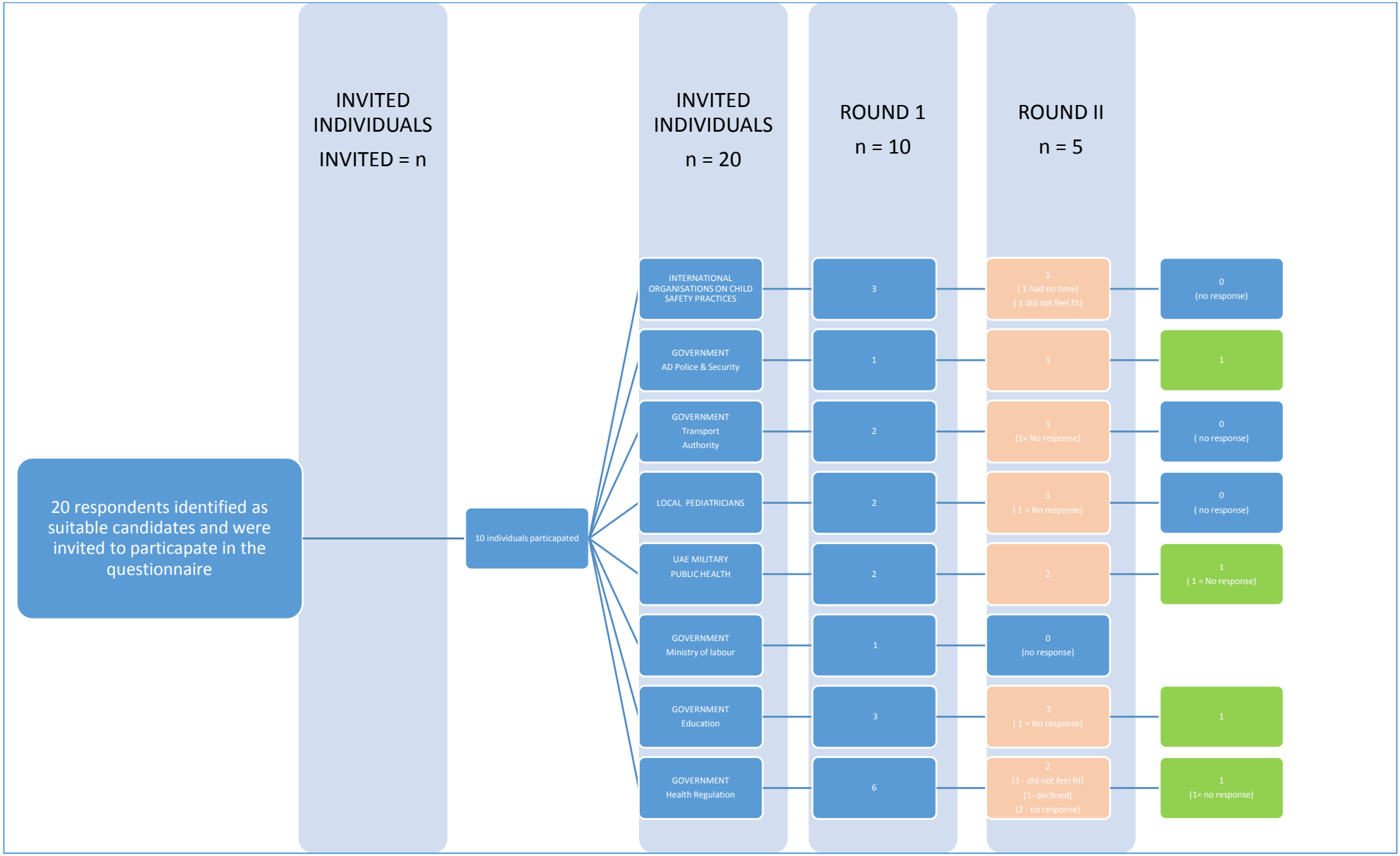
4.0 INTRODUCTION

The two Rounds of data collection provided information on existing issues relating to child safety in Abu Dhabi which gave insight to important risks that need to be considered during policy development. The results are presented in five parts; the first is on the preliminary section of the first Round questionnaire which covered demographic elements; followed by results in four parts to include child safety in Abu Dhabi, educational intervention, policies on child safety, and the future of child safety in Abu Dhabi. These align to the sections used in the questionnaire, however, under each category are sub-themes generated in NVIVO. The data presentation and analysis used both narrative and tabular format, with the tables presented information better understood in graphical form such as those on close-ended questions, while the narrative is essential for explaining the findings.

4.1 RESULTS

Invitations to participate in the research were initially sent out to twenty participants who were asked to return their responses within two weeks. Four participants responded within the two week time frame with one reminder being sent after one week had passed. Thereafter, to maximise response rates, weekly reminders were sent to the remaining participants for a period of two further weeks which allowed for six additional participants to send in their questionnaires. Therefore, a total of ten participants responded to the questionnaires in Round 1 and thereafter, five of the same participants responded in Round 2. Consequently, those who refused to participate in Round 1 were not included in the invite to Round 2. For a detailed account on drop-outs and non-responses, please refer to Figure 4 on the following page.

Figure 4 Flow Diagram illustrating the different stages of the Delphi Study with participation rates



As indicated in the table 2 below, the first Round captured the participants' demographic elements. This included their gender, place of residence, professional role, marital status, age and if they had children respectively.

Table 2 - Demographic elements of participants

Gender of Participants	**No.**	**Observation**
Male	6	The majority of the participants were male.
Female	4	
Total	10	
Location of Participants	**No.**	**Observation**
Abu Dhabi city	7	As shown in the table, many of the participants came from Abu Dhabi city with one residing internationally.
Al Ain city	2	
International	1	
Total	10	
Professional Role of participants	**No.**	**Observation**
Health (e.g. Paediatrician, Health official)	5	The professional distribution indicated that many of the participants came from the health care sector working as paediatricians or health care officials followed by education including teachers and facilitators.
Education (e.g. Teacher, facilitator)	3	
Government	1	
Police/Security	1	
Total	10	
Status	**No.**	**Observation**
Single	2	Half of the participants were married, two were single , two divorced and one was separated.
Married	5	
Divorced	2	
Separated	1	
Total	10	
Age of participants	**No.**	**Observation**
30-39	1	The highest number of the participants were five in the third category of within an age group between 50 and 59 years, followed by four for those aged between 40 to 49 years and one aged between 30 to 39 years.
40-49	4	
50-59	5	
Total	10	
Participants who have children	**No.**	**Observation**
Yes	5	Half of the participants had children. Two had six children, one had five, and another had one child. The age of the children differed, but majority (12 children) were teenagers and above. Three of these were above 20 years, while nine were aged between 12 years and 18 years. Four were aged between 7 years to 10 years. Two of the children were aged 2 years and less than a year.
No	5	
Total	10	

4.2 PART 1: CHILD SAFETY

4.2.1 Understanding of Child protection

A synthesis of the results reveals that a consensus exists regarding the value of providing safety in each area of child's life. One participant (P03) captures this sentiment by defining child safety as the safety of children on the roads, homes, schools, playgrounds and public places whilst taking into consideration their safety in cars, when walking or cycling on roads, and even going on to mention the inclusion of ensuring a childs safety from falls, burns, drowning, poisoning and suffocation. This means that a childs safety as a practice must also include the risk assessment of common activities such as walking near roadways or when riding a bicycle. The conceptualization of child safety among the participants was similar in that the issues and best practices was a collective social responsibility placed upon all stakeholders that are responsible for helping to ensure children are safe in all aspects of their active lives.

When asked to conceptualize child safety, three major themes emerged among the participants. First, it was understood that child safety is a collective responsibility among adults to promote and protect children from all injuries and neglect, including social deprivation. Secondly, adults have the responsibility to protect children from a variety of threats that include food dangers, domestic abuse, and roadway dangers. Thirdly, the purpose of child safety practices is to ensure that children are as safe as possible in order to prevent accidents, which are considered to be the leading cause of death among children. An emphasis was placed on adults as members of society with the best influence upon child safety issues as well as implementing best-practices to reduce the threat of accidents by influencing children's external environment when active. This means that adults can access the knowledge and skills to influence how children interact with their environment when active at home, school, or on the playground.

Specific threats were also communicated as primary sources for anxiety among parental participants. Those threats included falling down stairs, drowning in a pool, infant suffocation, consuming household poisons, or getting burned on the stove. One participant noted the value of direct and ongoing adult supervision for children at all times. This suggests that a major contributing factor in childhood accidents is when there is a lapse in adult supervision of children. Second to the importance of direct and ongoing adult supervision is the belief among participants that adults can modify children's environment to promote safety and prevent accidents and injuries. In that sense, there is a consensus that many accidents are preventable with two actions: adults practicing direct and uninterrupted supervision of children, and modifying the child's environment to reduce risk factors such as locking-up dangerous cleaning chemicals while also increasing safety devices such as padding on playground equipment.

4.2.2 Evidence of child safety issues

Nine of the participants had at least dealt with child safety issues within their work; five participants dealing with it on a weekly basis, two on a daily basis, one on a monthly basis and the ninth participant deals with it once every couple of months. The presented evidence was that across the different professions, stakeholders had evidence of different cases of child abuse and neglect. One of the participants (P08) stated that they did not directly deal with child safety issues, however, they further noted that there was evidence of such issues through different platforms such as the media. The group consensus amongst the participants implied 100% agreement on to what extent the challenges were regarding a child safety in Abu Dhabi.

The study further examined the participants' perspective on factors that highly placed children at risk in the society as they presented information about risk factors that they had seen in Abu Dhabi. The majority of the participants (7) stated that vehicles and the roads presented the highest risk. Participants indicated that they dealt with cases of child safety when parents or other adults, failed to use child restraints. In some instances, it was witnessed that parents would allow the child to use the front passenger seat or sit on the lap of the driver, whether the vehicle was stationary or in motion. Two participants were especially detailed about the factors that affected child safety. One participant (P07) noted that in their present role within the police/security, various cases of child safety were evident among unsecured buildings where children were killed or seriously injured because of falls from the balconies of their buildings. Another example mentioned was on road injuries arising from the failure of parents placing their children in safety seats. The participant goes on to note their knowledge on a variety of cases in child abuse ranging from sexual abuse, physical abuse, and child emotional neglect. Another participant (P05) added to the issue of neglect through an example of a child that died on a school bus where she was left sleeping.

The issue of road related safety seemed to be of considerable importance to the participants. For example, one participant (P06) noted several cases seen on the media about poor supervision and the neglect of children that potentially led to injuries on the road. A mentioned case was of a school bus driver and supervisor focusing on personal needs (eg talking on the phone) and not providing adequate supervision to the children. Another case is of a father driving with a child sitting on his lap and of another father who was found to have left his child in the car (which was in ignition mode) while they ran an errand. In this instance, the child was found in the front seat playing with the steering wheel. The participants noted that the challenge Abu Dhabi faces regarding child safety is mainly due to the lack of supervision, poor responsibility, lack of awareness and training among the parents and caregivers.

4.2.3 Factors that contribute to child safety problems

The experts felt that different factors contributed significantly to the evidenced weakness in child safety. For example, half of the participants indicated that a lack of awareness and training among parents and caregivers was a considerable problem. One participant (P07) noted that people had poor preparation to parenthood, a poor understanding of the needs of children, poor awareness of child safety issues, too much dependence on housemaids, poor implementation of safety measures and that parents were found to spoil children rather than spend quality time with them. Another participant (P05) cited parental neglect as a reason. However, this participant further indicated that the parental neglect is in reference to an increase in the number of parents who are becoming part of the workforce and are therefore, leaving their children with nannies or other child care services (including nurseries). As noted by four other participants, parents are becoming dependent on unqualified caregivers. The following table *(table 3)* provides the ratings for the most common causes of problems within child safety in Abu Dhabi as identified by the participants:

Table 3: Common problems of child safety

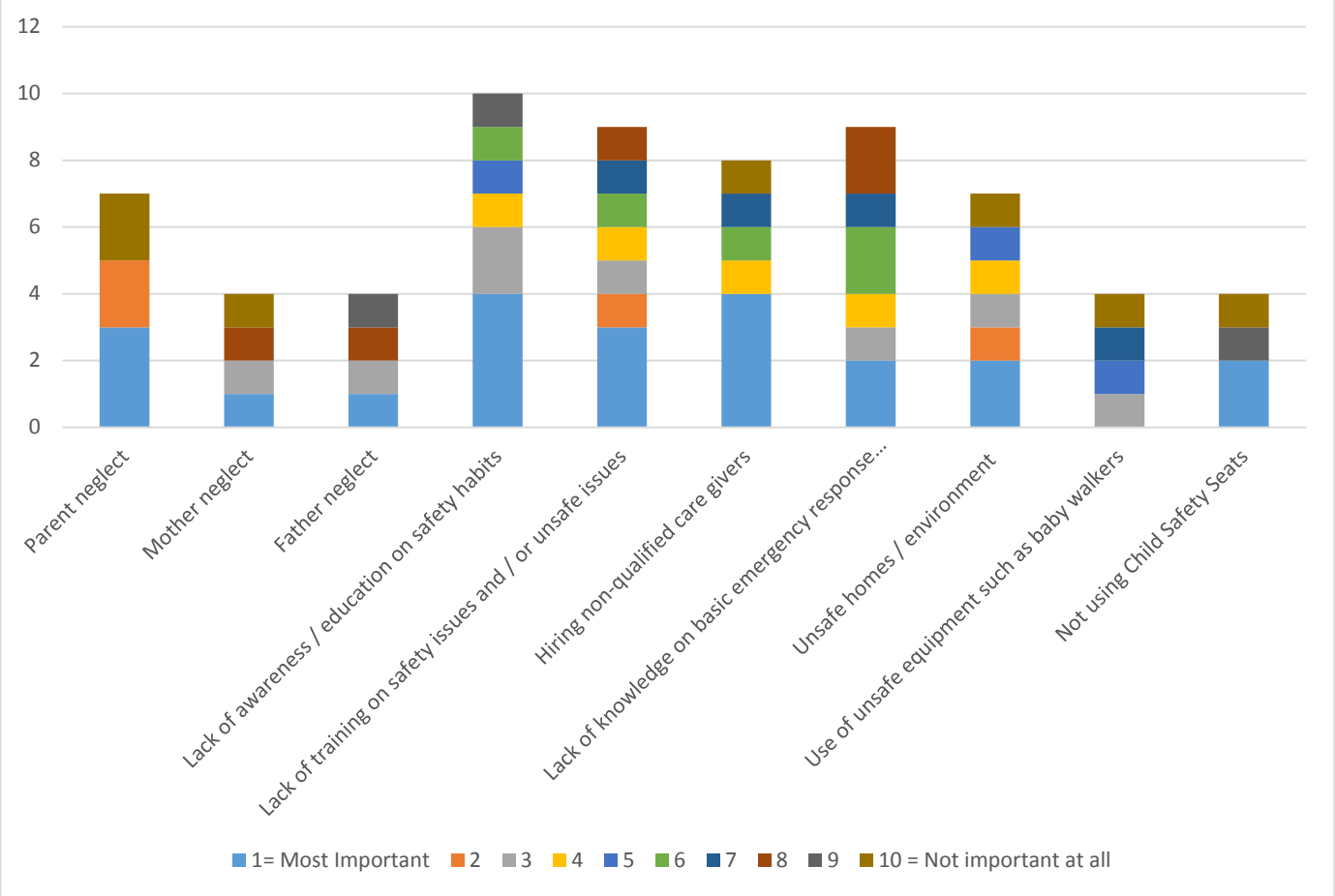


Table 4: Participants responses to what they think are the main cause(s) of the common problems related to child safety in Abu Dhabi

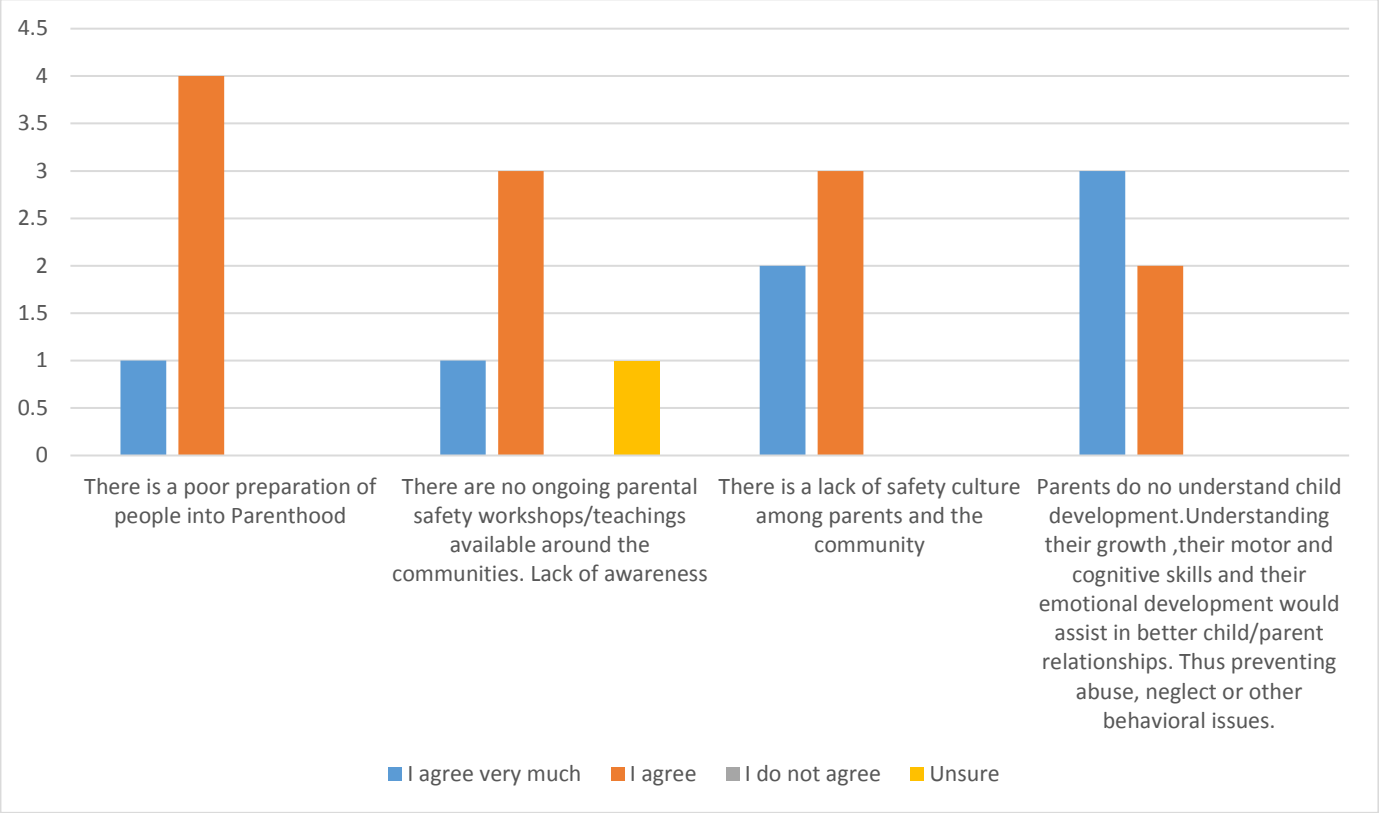
Lack of awareness and training and **parents** neglects.
Lack of education for **housemaids** **Housemaids** who are overworked and do not feel connected/are distracted with phones etc. Lack of education for parents **Lack** of maternity leave or supported crèche at work
Not using child car safety seat Not using helmet **Lack** of education and knowledge on different safety measures **Lack** of laws and standards
Poor preparation for **parenthood** Poor understanding of the needs of children Too much dependence on **housemaids** and other workers (including nurseries and teachers) Not enough awareness of child safety issues Poor implementation of safety measures due to a fatalistic attitude Spoiling of children with material gifts rather than spending quality time playing
Parental neglect. As both parents are working and many kids are left within the hands of **baby sitters** at home.
What does data say? what does existing data say?
General **lack** of a safety culture and safety attitude in Abu Dhabi residents and child care givers (including **parents** and **nannies**) **Lack** of awareness for safety issues, and **lack** of knowledge that most childhood injuries are fully preventable (including preventative measures) Culture and tradition (e.g. holding babies in mother's arms while driving, non-willingness to use seat belts and motorcycle helmets etc.) Common believe that injuries are 'Allah's will' and inevitable fate
Not coordinated effort in prevention activities

The highest rated common problems are seen to be as hiring non-qualified care givers and the lack of awareness/education on safety habits scoring both at 4 and 4 respectively. When asked further on the common causes for these problems, a majority (5) participants mention lack of awareness/training for nannies and parents. As earlier mentioned, one participant (P05) goes on to say parental neglect is a cause

and describes it as both parents who work and resort to leaving their children with baby sitters at home. The aspect of parental neglect, showed that participants felt both parents had some level of responsibility, as 3 rated the issue at most important (ranking 1= most important) and 2 rated it at level two. The same rating did not appear at specific parent groups such as mother or father neglect. However, a subsequent question that looked at the people responsible for most of the problems comparing parents, mothers, fathers, and nannies highlighted that parents were to blame. The findings showed that majority of the participants (8) believed that parents were the primary people responsible for the different problems associated with child safety in Abu Dhabi. The ninth participant felt that those responsible should be parents and nannies, while one specifically indicated that the responsible party are the unqualified caregivers.

In the second Round of the questionnaires, based on four agreement levels (I agree very much, I agree, I do not agree, and Unsure) the role of parents as a cause to child safety problems emerged firmly as a response as shown in the table below.

Table 5: Statements on role of parents in causing child safety problems



The findings showed that the participants felt parents were behind the problems pertaining to child safety and that this stemmed from surrounding circumstances such as the lack of education and awareness on the issue. The lack of programmes to help parents learn about their children was a significant factor noted by 4 out of 5 participants in the second Round of questionnaires.

4.2.4 Prioritising child safety

The general agreement in the findings was that child safety was an issue of considerable importance in Abu Dhabi that required prioritising both in law and in implementation. Where the participants acknowledged that Abu Dhabi had presented some child safety initiatives, they have also stated that there is yet more action needed to promote better child safety and to bridge the evident gap which they state is associated with different aspects. An example given was the Wadema law (explained in greater detail in Chapter 5 - Discussion) issued at leadership level to protect children. Other gaps mentioned were in the available laws such as on the use of child restraints, helmets, child resistance packages, and legislation on house standards. It was apparent that the experts considered the area of child safety legislation highly diverse to include security at community establishments including schools, student transportation, safety at buses, and ensuring safe school and play grounds.

Another gap noted by a participant, was that there was poor connection between various sectors concerned with child safety within Abu Dhabi as well as in other Emirates. A further participant (P02) noted that although Abu Dhabi was trying to create awareness about issues that deal with child safety, problems existed mainly in the implementation of the laws and additionally, in the lack of the public understanding on the importance of achieving it. For example, parents failed to recognise the implications of leaving their children in the care of unqualified nannies or persons without appropriate experience. First aid for infants and children, emergency response, child injury prevention and early child development are all necessary qualifications for the management of children. A participant (P09) suggested ensuring the availability of such parent oriented programmes such as parent education and/or children safety by creating relationships with the enforcement sectors. Other participants supported the same concept indicating their views on the lack of awareness and training as a primary contribution to neglect and abuse as parents and caregivers did not have adequate knowledge on safety measures.

The different issues associated with child safety showed that the problem has a complex interaction between different issues. A notable aspect is education and awareness. The findings identified the lack of training among parents and caretakers as a significant contributing factor to problems in child safety. Parents came across as having the greatest impact on child safety, with their action contributing largely to issues of neglect and abuse. For example, it was noted that parents left their children with untrained personnel exposing them to risk in the home. Furthermore, sometimes those left with the children were not attentive. As described by one of the participants, the nannies were found to sometimes be engaged with their phones rather than being attentive to the children. Therefore, emerging from both Rounds of

the study, it is evident that the understanding of child safety is paramount in facilitating appropriate measures.

4.2.5 Conclusion

The findings showed that the participants as experts in the issues of child safety had a good understanding of the matter, defining it within the evidence they had seen of neglect and abuse. Such an understanding lays a foundation for focusing on the gaps in policy development, and the actions that need to be driven to promote child safety in Abu Dhabi. The study identified the various problems seen in child safety including the employment of unqualified nannies, and the challenges associated with road safety. The section clearly identified road safety as one of the most significant issues followed by the qualifications of caretakers, although both issues mentioned stemmed from parental neglect. This leads to the question of what would be the most appropriate approach to facilitating child safety. The study examined the possibility of an educational intervention and its inclusion within policy.

4.3 PART 2: EDUCATIONAL INTERVENTION

Evidence from the study showed that participants felt that lack of education for nannies (mentioned as housemaids) and the lack of education for parents was an important cause factor in the problems related to child safety in Abu Dhabi. The gap in knowledge could partly be due to the challenge that the UAE has experienced fast-paced economic, industrial and demographic growth over the past few decades. Consequently, the environment (particularly the hazards) has changed since parents were children and therefore, may lack awareness on common household and outdoor hazards. Based on such an outlook participants contributed to the identification of whether an intervention was necessary in Abu Dhabi and if so, the areas that were required and ways to achieve them.

4.4 STATE OF CHILD SAFETY IN ABU DHABI

All participants (10) agreed that an educational intervention on child safety was an important component to addressing child safety problems in Abu Dhabi. The participants identified some of the areas that needed intervention but not that all areas of child safety needed modification. The following were listed as needed interventional strategies; educational campaigns, enforcing regulations, and to learn from others; past incidences and from best practice. One participant (P07) went on to provide the following explanation,

> "*Yes, parents and families in Abu Dhabi need to be given more awareness about the risks and dangers that exist within society to children. They need to have their roles and responsibilities,*

ethical, moral and legal made clear. Parents, both mothers and fathers, need to be shown that they can prevent many of the accidents and incidents that cause harm to children."

Participant (P06) noted that there was a needed intervention to facilitate the development of appropriate laws, and to ensure products associated with children met regulatory standards. It would also include developing and enforcing educational strategies using a language that can be publicly transmitted and strategies to recognize the needs and benefits of every person regardless of their educational background. From the responses, an emerging pattern was the need for an intervention should be accompanied by enforcement. The responsible agencies should establish a combination of regulations, environmental changes, and enforced legislation. This is to include the provision of support in life saving devices such as child safety seats (Child restraints), helmets, and smoke alarms for the families that may find it difficult to obtain such equipment(s).

Participants in Round 2 of the data collection confirmed the need for improvement in the measures that already exist in child safety. The five participants identified several recommendations for improvement. The first was on implementing policies on car safety to include young children, introducing heavier fines for people driving children without a safety belt or seat and by enforcing the already existing laws and policies. Another recommendation was on the provision of campaigns around house safety especially for those living in high rise buildings and creating parental awareness through mandatory workshops. Other recommendations were training nannies on the safety practices and child development, developing multi-agency national strategy for addressing child safety, and focusing on school wide practices on early childhood targeting safety. These recommendations give an insight into the existing gaps found in Abu Dhabi in addition to what is needed to improve child safety practices.

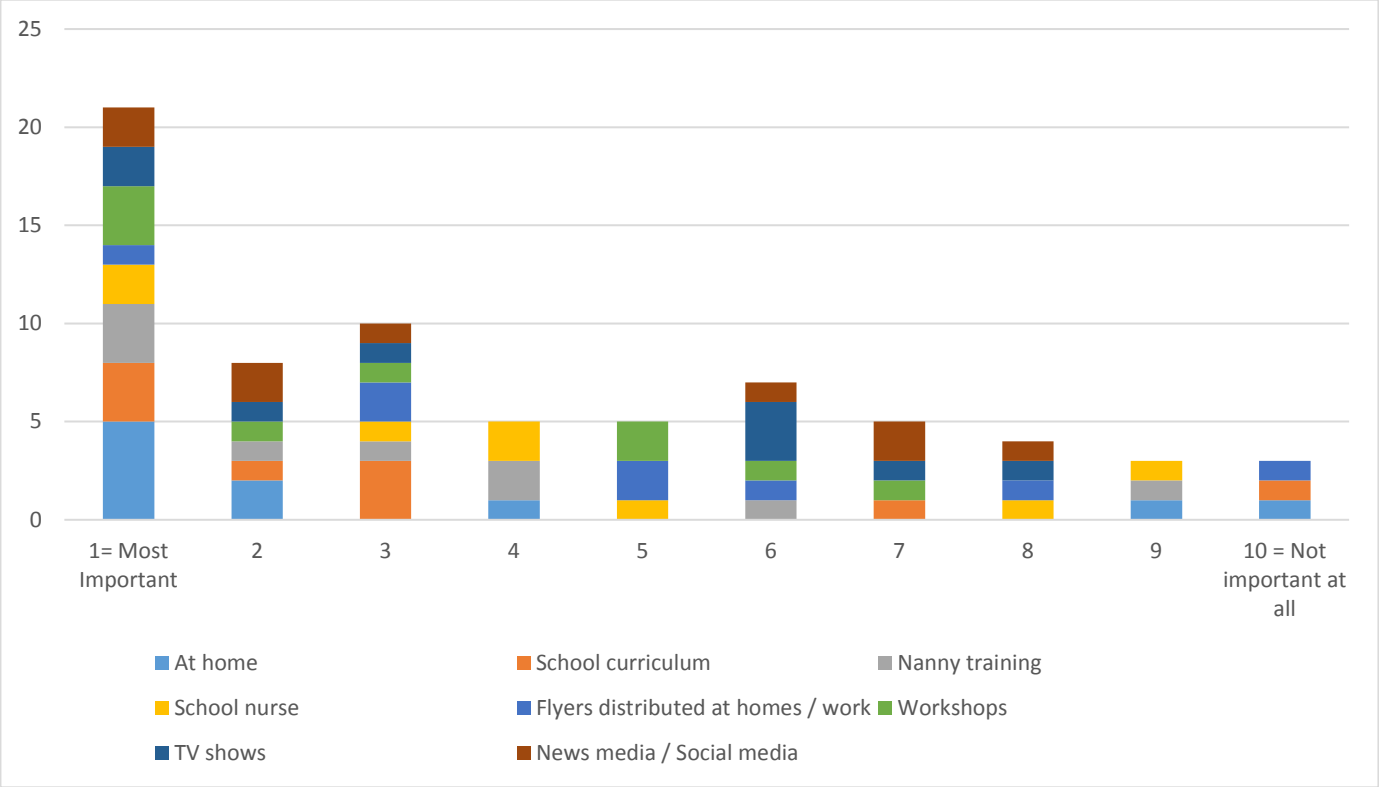
4.5 PURSUING KNOWLEDGE SAFETY IN ABU DHABI

The study showed that there was a need for promoting knowledge about child safety in Abu Dhabi. Each of the participants provided a central outlook on what they considered significant in promoting knowledge in the principles of child safety. Common attributes found in the responses included participating in community forums through which parents could learn about child safety in the home and on the road. Other aspects would be through campaigns on safety measures such as in using car seats and proofing the environment for children. As supported by one participant (P02), the government can be instrumental in the process of promoting campaigns and educational programmes for parents without cost and in government and community related websites/initiatives, such as CHaS, HAAD, and the Abu Dhabi police. The campaigns need to extend to others working with children including nannies, drivers, and teachers

teaching them the responsibilities associated with caring for children. The local media was also identified as a possible avenue for parents and caregivers to learn about child safety issues and preventative measures. Such channels would include newspapers, television shows, and radio. Participant (P04) introduced a novel idea of children also receiving training on basic safety through the nurseries and schools they attended, which could include lessons on bicycle, car and pool safety. As pointed out by participant (P06), the appropriateness of the approach to promoting knowledge should also reflect appropriate information delivery, data, and comprise of materials that can easily be understood by the audience including parents and caregivers.

The study identified a number of ways to disseminate information. This could be done in different forums including at home, school, nanny training, through the school nurse, distribution of flyers, workshop, television and through the news media although the level of importance of how these forums can promote knowledge differed. The following table identified the different ratings on the level of contribution.

Table 6: Best Forum for delivering intervention



The findings indicated that the home was the best forum for educating people about child safety, followed by the school curriculum, nanny training, workshops, and television shows. One participant provided a deeper explanation on what needed to be done on delivering intervention, stating families living in residential high towers in Abu Dhabi should be aware of better protection strategies for their children

against accidents of falling from balconies and high windows. This can be done by installing safety devices, by improving safety specifications on children products and furthermore, ensure all sold toys meet the specifications of the international criteria in health and safety.

4.6 TRAINING AWARENESS

Table 7: What individuals should be educated on the principles of child safety?

All stakeholders (parents, teachers, care giver)
Parents Nannies Children themselves through age appropriate materials and games Drivers Other car givers – teachers – health care providers
All important elements on child safety: 1. Knowledge 2. Regulation 3. How to deal with 4. Responsibilities 5. Feedback 6. Addressing issues
All members of society should have some awareness of the issues related to child safety but especially those who have continuous close contact with children which would include: parents, family members, nannies, drivers, teachers, etc.
Parents, nannies, school bus monitors, teachers and school administrators, day care employees.
Parents/family members Law Enforcement Government Healthcare professionals Teachers/Educators Childcare providers
Parents. Maids. **Kids**. Teachers. Health professional. Police. Traffic planners. Architects . Principles of Schools. School Bus drivers etc.
• **Children**! • Drivers • Parents and caregivers (nannies) • Teachers and kindergarten staff • Physicians and nurses at healthcare facilities
ANY CAREGIVER
Mothers and other family members / maids / anyone who is in a position of care (teachers etc)

The study highlighted different groups that should receive training and education on child safety, with seven of the participants noting that parents should receive adequate training, one noting all care givers and one noting 'mothers and other family member'. The list generated from all the responses provided a comprehensive outlook on all caregivers and stakeholders needing education. For example, the participants identified individuals such as parents, nannies drivers, teachers and kindergarten staff, police and traffic planners, health care providers such as nurses and physicians, and any other person identifiable as a care giver. One participant (P04) noted that children should also receive the safety education. Another

(P07) noted that all members of the society should receive some awareness of the issues surrounding child safety especially those that have a close contact with children including their parents, other family members, and caregivers.

Arising in the study was the importance of training and information transfer for people dealing with children including parents, and care givers such as nannies, teachers, and drivers. The participants pointed out that people can obtain information from such areas as the internet, news portals including the newspapers and television networks, or educational programmes. One participant (P04) provided a considerable list of places that people can find the relevant information stating that,

> "*Parents and care-givers should read and watch local media, including newspapers, tv shows, radio etc. that frequently address child safety issues and preventative measures. They can further attend in-depth seminars and courses, e.g. first aid training for nannies and care-givers. Local healthcare facilities are able to give advice, including child injury prevention centres, e.g. at Mafraq hospital and Corniche hospital. Sometimes governmental entities, e.g. HAAD and AD Police are conducting awareness and educational campaigns. The Internet provides many useful resources as well. Furthermore there are books and magazines. Children should receive a basic knowledge in nurseries and schools, e.g. bicycle training, swimming lessons."*

Too add, participant (P09) noted that the following elements needed to be included within a child safety training programme, knowledge, regulation, dealing on child safety, responsibilities, feedback, and ways to address any arising issues.

In the second Round, all participants identified the continued need for an educational intervention through government facilitated community and media awareness campaigns. Furthermore, they agreed on engaging children within safety programmes within their school setting. The question also examined the need for caregiver targeted workshops, and mandatory licensing of child caregivers who work in homes (ie nannies). The level of agreement was at 40% demonstrating that the participants noted its importance but not as high as providing community awareness.

4.7 PART 3: POLICIES ON CHILD SAFETY IN ABU DHABI

The two Rounds of data collection identified that the participant's belief was that new policies were needed to promote better child safety in Abu Dhabi. Gathered data on policy enforcement shows important gaps that should be addressed.

4.8 AREAS REQUIRING CHILD SAFETY INTERVENTION

The findings showed that the most important aspect in policy development is ensuring child safety on the roads, which was elected as very important by six of the participants, and the others maintained a level of importance up to the fourth rating. The second aspect was observing safety in the homes identified by 4 of the participants as important although one of the responses indicated to being neutral showing a considerable level of importance. The third element was training for nannies on areas such as first aid and child injury prevention which were elected as very important by three of the participants while the others maintained 2, 3 and 4 in the rating. The rating also checked for baby walkers, and understanding child development but these elements did not emerge as having a significant impact with some participants choosing not to rate them, and one participant giving a rating of 8 on baby walkers indicating that the aspect was seen as less important. The participants did not provide alternative areas that they felt needed addressing in child safety in Abu Dhabi. Furthermore, when asked about areas requiring safety intervention in the second Round, the participants rated road safety as being of the most important with two areas identified, road safety in terms of children having car seats or sitting and in children traveling via the school bus. Another area rated as important was safety at home considering the reduction of burns, drowning, and falls. Other items such as use of baby walkers, and food safety did not receive high rating. However, when considered alone, falling from heights had a 2.5 average rating of importance with considerations addressing the issue of safety in high rise buildings.

4.9 EVIDENCE- BASED INTERVENTION

The participants offered insight into available evidence for possible and effective solutions to the problems identified. These included ensuring the usage of proper child safety equipment including car seats, helmets, and providing lessons on appropriate use of such. Participants also noted the need to bring in credible data on child abuse and neglect for both historical and current information. Another suggestion was for strict laws and campaigns, as suggested by one of the participants (P02),

> *"Government campaigns and much stricter laws with heavier fines or prison for not buckling in a child/ manslaughter charge for drivers if a child dies in a car because they weren't in a seat belt or appropriate seat."*

Participant (P04) also noted the possibilities of ensuring safety awareness is created through the school curriculum with certified licenses for teachers providing health and safety awareness. One participant provided an indication of the elements that exist in line with solutions including enforceable laws, positive law enforcement, data for community participation in activities of safety, policies targeting compliance, regulation of products, education, and awareness through the media. Noted in this question was, rather

than participants identifying ongoing solutions, they mainly pointed out what needed to be addressed. This created the impression that there was a lack in putting forth identifiable solutions considering that the responses were coming from experts or professionals in the area of child safety. Nonetheless, it emerged that there were going responses found in awareness and campaigns. The participants however related such interventions to other regions where they have been more successful. For example, participant (P07) noted that

> *"The issue of safety in buildings regulations has been shown, especially in the USA, to dramatically reduce the number of instances of child injury or death as a result of falling from balconies and stairs and the number of children being drowned in swimming pools etc. There is also significant statistical evidence that the enforcement of seat belts and child car seat regulations can reduce the seriousness of injuries caused to children when vehicles are involved in road traffic collisions."*

An area of concern in the policies available as pointed out is people not being aware of them. As noted in the literature review and background, Abu Dhabi had in place some mechanisms such as the use of child seats on the roads, but the issue of awareness seemed to be highly lacking as well as adequate enforcement. For example, the participant (P07) noted that

> "*Abu Dhabi has some good laws relating to child safety but the problem is with implementation and enforcement. The Municipality have recently also added new requirements to building regulations aimed at providing greater safety for children.*"

An interesting aspect noted in the findings was outdated traffic safety and child protection laws. The implication on the question of evidence of the policies was poor application leading to poor knowledge.

The participants also indicated that for intervention to be effective, Abu Dhabi needed to combine it with environmental changes, with 100% of the participants in second Round stating yes to the combination. This seemed to indicate that enforcement of legislation was not enough, but instead encouraged the concerned bodies to bring in a comprehensive framework that considered the people responsible and the environmental aspects such as road safety, and home proofing for children. The second Round identified the agencies that should be responsible for ensuring safety, with specific consideration of road safety. These included the Abu Dhabi police and the Ministry of Interior that ranked as the highest, and then involvement with the school for redesigning the means of transport to be safer for school children.

Other interventions required to help in the safety of children are installing safety devices at home. These include installing fire extinguishers, fire alarms, safety child gates at the stair cases, covered electrical outlets and safety pool gates. All the participants in the second Round agreed to the importance of such installations as a way to reduce injuries. Other suggestions included the installation of CCTV cameras, which

should be known rather than hidden so that the nannies can be aware they are being watched, in addition to placing locks on cupboards to child proof medicine cabinets and the cabinets housing household cleaning products.

4.10 ONGOING INERVENTION AND NEW LAWS

The participants noted the need for new laws regarding Child Rights and policies on Prevention of Child Abuses and Harm Policy. Participant (P05) noted that the

> *"Government has recently drafted a new child protection policy, which protects children, investigates abuses against their rights, and provides government services to families and children believed to be in danger."*

This provides an indicator for what the government has been doing to promote better safety for children. The next section is on the future of child safety in Abu Dhabi that identifies the stakeholders that should be involved in the promotion of child safety.

4.11 PART 4: FUTURE OF CHILD SAFETY IN ABU DHABI

The research sought the perception of the participants about the future of child safety in Abu Dhabi. This included the contribution of persons and agencies involved in child safety, responsibility of individuals or organizations, role of the government and guidelines in the employment of nannies by having them licensed.

4.12 INDIVIDUAL AND GROUP RESPONSIBILITY ON CHILD SAFETY

The study showed that individuals had a personal responsibility towards promoting child safety as noted by seven of the respondents. The participants noted ways through which a person can play a role. These included providing mentorship and training, conducting research and educational activities, counselling, and talking to people during informal gatherings such as family congregations and personal parties. The topics shared in such gatherings can include child safety at home and on the road as well as food safety. Other participants noted the role people can play based on their employment such as the provision of advocacy programmes and advising the responsible agencies. For example, one participant noted that his role involved offering advice to the police and Ministry of Interior on the development of policies and procedures aimed at enhancing child protection and child safety across the UAE. The participant was also involved in creating awareness and training initiatives that he felt had a direct impact on child safety. A unique idea noted in promoting child safety was the use of technology especially online mechanisms, which could address child abuse, threats posed by adults, and other risks including the use of toys. Another

participant working for the government noted the importance of school transport regulations. Buses meeting the specifications needed for technical safety would further reassure in the safety of children. A participant working in the education sector echoed the preceding sentiment by noting people can play a part in ensuring safety at home and in transportation, following established guidelines in the child/adult ratio in the classroom, and developing strong relationships with all stakeholders in the school community.

Coming across from both Round 1 and 2 was the potential role of different agencies to take part in child safety intervention. The findings in the first Round indicated that there are a range of organizations and government authorities responsible for child safety in Abu Dhabi. One participant noted that Abu Dhabi should have an executive body tasked with child safety in the country and that would examine and make recommendations on the strategies, campaigns, laws, regulations, enforcement and the engineering of solutions. The possible agencies identified included HAAD, Abu Dhabi police, the Ministries of Interior, Education, and Health, traffic safety, municipalities and city planners, community advocates, consumer safety agencies, societies, Abu Dhabi Tourism & Culture Authority (ADTCA) and Red Crescent. Parents, families, and all caregivers were also identified as responsible groups.

In the second Round, it emerged that the Ministry of Interior and the Police should be at the forefront of addressing the challenges related to child safety. Furthermore, it was apparent that the participants considered child safety as a collective responsibility for all stakeholders, but the parents needed to play the most significant role having been accused of child neglect and leaving their children with unqualified caregivers. The future of child safety in Abu Dhabi seems to revolve around the ability of the government to promote awareness and education for the community and all the stakeholders involved including parents and the different caretakers. The participants were asked if they felt the current government efforts were effective and if they had been able to address child safety or if more was needed. The perceptions received were mixed, with some indicating yes (3), others yes (2), and the majority (6) indicating partially. The observation was that the government had some initiatives in place but these were not sufficient for addressing the challenge. Participant (P07) noted the following:

> *".. as a young country (43 years) , the UAE had come a long way in addressing many social issues including the twin issues of child protection and child safety. A number of laws have been created, policies have been put in place and a number of organizations now have child safety measures identified as part of their key performance indicators. This is not to say that all has been done or that there is not still things to do."*

The participant also went on to mention that he/she was aware that the government and leaders in the UAE had made child protection and child safety measures a priority in the continued development of the country's infrastructure. Another participant suggested the need for more laws, studies, and research on community and culture effect as a way for the government to address child safety. Overall, the participants were in agreement that the government was aware of child safety issues.

4.13 PROPOSALS FOR THE FUTURE

The experts were optimistic in the future of child safety in Abu Dhabi, but noted that it depended on the full participation of all stakeholders. The 8 participants who responded to the question felt that the future was bright and secure, specifically if the government implemented high levels of leadership, and brought in further stricter laws including fines.

Other suggestions for a positive future included training nannies and having a coordinated effort. One participant offered a detailed outlook on the possible achievements in the future and the way they will be reached. Participant (P04) noted that

> *"Child safety will only improve if all concerned stakeholders are working closely together and jointly towards the common goal, leaving behind territorial thinking and behavior, and following a clear strategy and action plan, with timeliness, action items, and accountabilities. The strategy and action plan has to be agreed upon by all concerned stakeholders, approved and endorsed by the government (GSEC), and a budget and adequate staffing and administration support needs to be provided. On the other side, those directly responsible for the safety of children, including parents, caregivers, teachers, nurses, and children themselves will need to be more educated, more perceptive and more willing to accept and learn from facts and professional advice, and more willing to change unsafe attitudes and behaviors. A change in the safety culture of the community is needed which will take time and will need significant efforts in order to happen."*

Therefore, the future of child safety in Abu Dhabi will go beyond cooperation. It will instead require identification of achievable strategies with duties allocated to the appropriate agencies or individuals. The government will be a central player in this achievement by approving and endorsing the developed strategies. Another issue tested about the future was the training of care givers specifically the nannies. A majority of the participants (8) agreed with the need for training and licensing nannies. The feeling was however that this should extend to all persons that provide assistance in the home, with the concerned recruitment agencies providing such trainings and regular awareness sessions. The agencies should also have regulations that require them to fully train any person that will come into constant contact with

children as part of their job description. Additionally, they should also have minimum requirements that they want their employees to have to understand their responsibilities in child care. First aid and child injury prevention would be among the courses taught as well as how to seek for assistance if a child is ill or injured, personal hygiene, food safety, chemical awareness, and child management. It was also noted that a professional organization should provide the education based on agreed standards. This contraindicates an earlier suggestion of having one unified executive body that would manage all aspects of child safety instead of relying on the several recruitment agencies to ensure regulation and licensing.

A participant noted that nannies are very important in child care because many mothers are working, and therefore training them would empower them in ensuring child safety. The concern was that most of the nannies do not have adequate education and lack awareness on safety measures. Providing training would thus improve child safety in the community. While noting the need for training nannies, two participants noted that parents especially mothers should also receive training and education because they play an important role in child safety. One participant noted that the mothers can share the knowledge with their nannies at home.

The respondents unanimously (100%) agreed that nannies, if possible, should hold a license to care for children in Abu Dhabi. The reason is that this would have a better impact on child safety. A participant suggested that for non-Emiratis (expats) the license should be part of their visa requirements, whilst for Emiratis (nationals) they can receive the training through government funded organizations and foundations. Another participant noted that this can be a qualification criteria established through the Abu Dhabi Quality and Conformity Council (QCC), and the Council can endorse or approve training institutes as part of Abu Dhabi Government. Involvement of the QCC would facilitate quality based standards in child care.

A majority felt that the licensing should be done by the Ministry of Labour, but the regulation can be done by other agencies such as the Ministry of Interior through its Child Protection Centre, with the training done under the direction of the Ministry of Social Affairs or the Ministry of Labour. It may also involve professional organizations such as SafeKids, Hospital Injury Prevention Centres, Trauma Centres, and First Aid providers. The suggestion seemed to be that training should be well coordinated, with the most appropriate bodies selected based on the ability to provide training. An element noted in Round II is the potential benefit of training parents. The five participants agreed that as parents were ultimately responsible for the safety of their children, then they should also receive training. The future of child safety

will include parental awareness on the issue, which will involve greater community engagement including the rural areas, law enforcement, and public awareness. Parents that seem to be unaware of safety practices can receive related training during their visitation to baby wellness clinics, through parenting classes during pregnancy, or parental awareness centres. The lessons offered need to have practical parenting instruction.

4.14 CONCLUSION

The outcome on the future of child safety in Abu Dhabi highlights mainly the potential behind training and awareness campaigns. However, as noted in the first Round parents remain as the primary caregivers and thus have the main responsibility of ensuring that their children are safe. This would include parental awareness about the people they leave with their children, such as making considerations about whether they have the appropriate training to oversee child safety.

The next section ties in the current findings to the existing literature on child safety in Abu Dhabi. It further notes if this study has been able to identify and highlight the importance of this issue and if it would inform on a possible regulatory framework for Abu Dhabi. The discussion relays identified gaps in the literature review and problem statement, showing various responses based on the current findings.

CHAPTER 5 – DISCUSSION

5.0 INTRODUCTION

The purpose of the study was to provide evidence-based directions toward developing effective policies that are transferable from knowledge to action. This was done by means of understanding the present concerns pertaining to a child's safety within Abu Dhabi, understanding the key stakeholders and their perception on feasible interventions.

The study responded to four study objectives, namely the issues around child safety in Abu Dhabi, to determine whether an educational intervention programme might address child safety issues in Abu Dhabi, to explore the most effective and feasible interventions for the problems of child safety in Abu Dhabi and to understand the most feasible and effective interventions as defined by the stakeholders. The stakeholders refers to the participants who work in various sectors that deal with children and thus have information/experience about child safety. This included individuals working in health care, education, government, and police or security sector. This discussion chapter shows how the study responded to the above objectives and supported or rejected the hypothesis.

5.1 DISCUSSION OF LITERATURE AROUND THE FINDINGS

Child injury in Abu Dhabi emerged as an area of concern because of the implications on morbidity and mortality. Injuries represent the second leading cause of death in the UAE for different population and the leading cause of death for children (Grivna et al. 2012; Grivna et al. 2011; Grivna et al. 2008). Additionally, the UAE reported the highest number of falls within Asia with 1923 per 100,000 children, which represented the 12th leading cause of death in the county among children aged 5 to 9, and 15 to 19 years (Peden et al. 2008). Based on the prevalence and incidence of child injuries, the country needs an intervention with the capability of addressing the risk factors. The current study sought to offer such an intervention by proposing the use of education and training to help caregivers understand the risk factors associated with child safety. The intention was to equip the caregivers with skills needed to prevent injury and to be able to promote healthy and safe practices were possible. Education would have provided guidelines and the skillset on how to deal with injuries such as teaching paediatric first aid. The suggestion stemmed from the recognition that caregiver education would be a success factor in home based care. Literature on caregiver education and training suggested that those with formal education such as university degree, high school diploma, and specialized education in early childhood and on the job training

would have better outcomes in child care (Burchinal et al. 2002; Blau 2000; Cryer et al. 1999). Education was a success factor in both home based care and centre based care.

The literature review examined the possibility of working with professional caregivers in home based care suggesting that the second group felt unfulfilled in their capacity compared to professionals, and sometimes the paraprofessionals feel undervalued because of their professional status (Metzer et al. 1997; Mitchell & Taylor 1997; Bussell & Forbes 2002; Haines et al. 2007). Considering that both professionals, paraprofessionals, and people with no child related training have an opportunity to be employed in home care, it is important to put into consideration ways to motivate all the groups and when necessary offer knowledge. The suggested gap shows the need to provide such education to paraprofessionals and others to increase their capacity to deal with children (Osborn 2008). A firm belief was then substantiated for public health intervention to enhance and provide caregiver education to promote safety for toddlers and infants. The reason was that young children left in the care of trained professionals had better home-based care outcomes (Cryer et al. 1999). The evidence suggested that this group of caregivers was more likely to maintain a stimulating, clean, and safe playing environment for children. The underlying recommendation in this research was therefore to suggest the establishment of a training programme for nannies and other caregivers to offer them the knowledge required to cater to the needs of the children and to safeguard them from possible injuries in the home.

5.2 UNDERSTANDING THE PROBLEM OF CHILD SAFETY IN ABU DHABI

A public health concern exists both internationally and locally about the problem of child safety (Peden et al. 2008). The literature review clearly established this challenge by identifying children exposed to different forms of injury at home, schools, and in their outdoor environments such as the playground and on the road (Bener et al. 2007; Givna et al. 2012). However, it is important to first understand what child safety is, and the way different stakeholders define the issue. Such an understanding will be helpful in establishing the gaps that will assist policy makers when addressing/campaigning on child safety.

Literature classifies child safety in terms of potential injuries at different areas, meaning that safety is the opposite of injury (Gomaa 2012). The term appears within public health discourse as a way to promote a safe living environment for children, and for encouraging parents and guardians to ensure that they protect their children form harmful exposures. Existing literature urges those around minors to be observant of child safety issues manifested through the condition of the child such as the appearance of their skin, mental status, and response to the environment (Waldfogel 2008). The suggestion is that children are

exposed to different areas that could affect their safety, and thus those around them must take the initiative to oversee their protection.

The understanding of child safety in Abu Dhabi based on the participants' outlook falls within the categorisation identified in literature with child safety defined as ensuring child protection in all areas of their lives. The characteristic of injury was a strong indicator in the definitions provided for child safety. The participants' felt that child safety equated to protecting children within their lived experience. This meant safeguarding their environment in all areas such as the playground, at home and in the school.

However, the current study extends available knowledge by underscoring the areas of neglect and abuse. Existing information from organizations such as WHO and the Abu Dhabi Police Department have been focusing mainly on injury when defining child safety. This study identifies a broader definition incorporating neglect and abuse, rather than just focusing on injury as mentioned in literature (Peden et al. 2008). Current findings nonetheless promoted the view that child safety extended to addressing potential dangers presented through neglect, social deprivation, domestic abuse, food safety, and road use. The participants' perspectives was that a child's safety represented the prevention of both intentional and unintentional harm to children that could potentially lead to death. Another prominent area presented in the current research was the need for collaborative action. Among the participants' , child safety extended to the ability of different groups including parents, neighbours, caretakers, schools, the police, and different government and non-governmental agencies coming together for the protection of the children. Facilitating child safety would need the different stakeholders to come together to establish parameters for good practice, prevention and promotion.

Understanding child safety is an important public health issue because it encompasses the foundation of the child. This means that it signifies the stability of children from their foundation ensuring that their circumstances when growing up are consistent with the provision of safe and effective care. It extends to ensuring that children and teenagers will have the best possible outcomes. The literature review and the current study present a unified perspective on the importance of understanding child safety, because it reflects knowledge associated promoting child welfare and protection from harm. An idea arising in both literature and this research is that safeguarding children is the responsibility of every person that comes in to contact with children including the bus driver, teachers, nannies, and any other caretaker. Although the current study continually identified the critical role of parents in facilitating child safety, it also clearly highlighted the role of other stakeholders.

Identified in the literature was the need to have proper understanding of the risk factors that may cause child injuries and potential death in the Emirates and Abu Dhabi (Hyder et al. n.d.). Such an understanding would facilitate identification of the appropriate means to avoid these causes. Understanding what entails child safety is the key to defining effective measures, and ensuring that guardians and caretakers are able to avoid the dangerous situations facing children (Grivna et al. 2012). Within the public health sphere it is useful to consider the importance of communicating such information to the public as a way to resolve the problem. The literature review provided an outlook on the problem of child safety in Abu Dhabi, such as through stories found in a UAE local paper called *The National*. The news has reported on several different aspects of child injuries of which one is the home. The home is especially an important area as it is considered a safe haven for children, but it currently represents one of the risky environments for children (Peden et al. 2008). Literature notes that despite the home widely seen as a safe haven for children, a majority of injuries take place there (Grivna et al, 2011). In Abu Dhabi, children are at risk of considerable injury at home such as through falls from height. The Abu Dhabi population is increasingly living in high rise buildings with balconies that present a potential threat to children as seen in a video called Negligence Kills the Innocent. The problem, failure in adequately baby proofing the house to include the stairs and balconies.

This research provided insight into the prevalence of child safety. It was evident from the study that child injury was a regular occurrence as a majority of the participants regularly dealt with child safety issues either daily or weekly; 5 weekly and 2 daily. Furthermore, through a previous study, it was found that the media – such as the National, was found to have reported on average of 126 stories between 2008 and 2013 which suggest that child safety is an issue of considerable magnitude in Abu Dhabi. Support for lack of safety extends to schools, especially the school transport system. The participants at several instances mentioned the issue of school buses, first as evidence of poor supervision, in which those in charge of driving the children exhibit irresponsible behaviour such as use of the phone. Second, streamlining the school transport was mentioned as an important response area. Poor parental supervision was also identified consistently in the current research. For example, parents left their children unattended at parking lots or parks, while others failed to adequately assess the competency levels of the caregivers whilst away at work. The issue of parenting arose as an important factor in child safety, as noted in Table 3 (Section 4.2.3) on causes of child safety problems parental neglect was a primary area contributing to child insecurity. The participants supported this view in Table 5 by noting that parental incompetence came from lack of awareness about child safety, and failure to understand child development such as their growth milestones, motor and cognitive skills, and emotional development. This created a loophole for abuse,

neglect, injury because the parents do not have the knowledge that could help them prevent behaviours that lead to harm.

A similarity amid media and literature, is that parents are stated as the accountable party responsible for ensuring child injuries are minimized. For instance, media notes that parents ought to bear in mind laying down carpets that have non-slip mats underneath (Nereim, 2012) would hinder falls that may result in fatality or with serious injury. Another example, parents have been noted to leave their children to move around the house without realizing the peril caused by small children accessing the stairs (Nereim, 2012). The newspaper articles have greatly discussed the issue of neglect by parents who are expected to be on the lookout in ensuring that children are within a safe environment at all times. It is necessary to make sure that parents lookout for what games children play, the manner in which they behave while outside the home and what effectual strategies have been put in place to ensure that child injury is reduced among other things. Furthermore, literature adds a discussion on parent neglect being a major cause of child injuries.

Grivna, Barss & El-Sadig (2008) state that, when injury and fatality happen, all too often authorities blame parents, rather than coming up with a methodical search for changeable perils in the built surrounding. Many child injuries are predicted and preventable, but to predict and prevent it would require professionals in injury surveillance and research (Grivna, Barss & El-Sadig, 2008). Therefore, in setting priorities, it is necessary to comprehend the most frequent external causes of injury, equipment, and environment risk factors for the diverse subgroups of children (Grivna, Barss & El-Sadig, 2008). Amid older children and young adults, injury sequences were impacted by exposure to exterior surrounding, like playing in streets and differing regions, at learning institutions or farms. It is noted that families in UAE seem to be huge, with close to eight children, enhancing hardship of supervision by parents and care providers (Grivna et al, 2011). Though parents are being blamed for child injury, literature notes that there are other parties involved in resulting child injuries of which is discussed later in the paper.

The implication of the definition of child safety as provided in this study and explored in literature is the understanding that child safety encompasses a wide range of activities. It brings to the attention of all stakeholders that achieving child safety will require the concerted effort of everyone in the community. The current study identified the different stakeholders that need to come together to address the issue. The participants noted that addressing child safety will require the concerted efforts of the government, its agencies, non-governmental organizations, caregivers including nannies and teachers, and parents.

Their cooperation should be emphasized if Abu Dhabi is to achieve its goals in child safety. The reason for seeking the understanding of a stakeholder in child safety in Abu Dhabi was to establish a framework that would inform intervention of the issue. The assumption is that it is important for stakeholders to have accurate knowledge of what the concept entails if they are to provide recommendations for addressing the problem. It further ensures that the suggestions provided align to the challenge.

The definition of child safety based on the current research and that of previous literature shows a befitting outlook on what the concept means. The reason for drawing this conclusion is that previous literature as noted explains the concept based on injury, and the current study pursues a similar perceptive reflecting injury, neglect, and abuse. The understanding provides adequate basis for the current exploration because it offers the necessary attributes needed to establish an intervention. For example, the suggestions presented will be toward reducing risks associated with injury, and sensitization to avoid neglect and abuse. As shown in the literature review, the UAE has the highest number of life threatening accidents involving children especially at home compared to that of other developed nations (Young 2013). Such a prevalence puts an emphasis on the need to resolve the surrounding issues, which was the underlying element addressed in the next research objective. The current findings shows that professionals working in Abu Dhabi have a good understanding of child safety, which comes from their experiences of neglect and abuse or evidence found in other platforms such as the media.

As the current study and previous literature identified the understanding of child safety in Abu Dhabi and internationally, it emerged that children continue to be at risk of injury despite such an understanding. It thus creates a need for expanding knowledge about child safety to include more people such as parents. The same understanding of child safety identified in the current enquiry can facilitate the conceptualisation of the issue. The next part addresses the possibility of introducing education as a way to promote understanding of child safety. The target is to safeguard the welfare of children by ensuring that the community understands the meaning of child safety and therefore, puts into place the mechanisms needed to ensure they are safe from injury at home, schools, on the road, and in the surrounding environment. In this case the community represents a large group that includes parents, caregivers such as nannies, supervisors on the school transport system, teachers, health care professionals, and other persons that are part of child care team.

The understanding of child safety as found in the current study needed to include a prioritisation of child safety, which meant that stakeholders need to recognise the place of child safety in the society. This study showed that child safety was a diverse area comprising of a broad array of stakeholders, in which

comprehensive safety measures would include the entire community meaning the schools, student transportation, safety in playgrounds, the home, and in every area of child interaction. The different sectors concerned with child safety would need to come together to formulate a comprehensive perspective about the issue sealing any gaps. Arising in this study was a gap in the understanding the importance of child safety among different groups with the parents taking the lead. Achieving a comprehensive outlook on child safety would include educating parents on the importance of ensuring their children are safe, and in leaving them with people that are capable of assuring their safety, such as nannies.

Emerging from this study was that a child's safety and the prevention of injuries would come about if all concerned persons understood what it meant and the ways to achieve safety. In the literature review it was noted that better outcomes were achieved in public health when injury professionals placed child safety in the broader health community awareness, identifying its challenges and making it known in the community (Segui-Gomez & MacKenzie 2003; World Health Assembly 2011). Community awareness would involve providing members with the appropriate information to facilitate emergency response such as first aid knowledge, and prevention of child injury.

Abu Dhabi can achieve a higher understanding of child safety through bringing in different stakeholders, sealing the gap about the understanding of child safety and prioritising those elements that need community focus. The reasoning is that if people have a better understanding of child safety they can easily identify the mechanisms needed to safeguard child and protect them. Understanding child safety suggests competence in prioritising emergency response, injury prevention, and adding child development necessities. It would also create an understanding of the complex interactions found in child safety such as education and awareness. It was noted that a lack of training among the different stakeholders created a loophole that exposed children to risk. Creating a better understanding of child safety would make the issue of paramount importance to every stakeholder. The subsequent section proposes the use of education intervention as a way to achieve better understanding of child care among different groups including parents and caregivers. It identifies the groups that would benefit from the training and the implications on achieving a safer childhood for all children in Abu Dhabi.

5.3 EFFECTIVENESS OF EDUCATIONAL INTERVENTION PROGRAMME IN ADDRESSING CHILD SAFETY ISSUES IN ABU DHABI

The central target in conducting the current study was to identify an effective intervention that can enhance child safety in Abu Dhabi. The primary approach to finding a sustainable and hopefully a lasting

solution to a problem is through the identification of interventions that can promote policy development (Bacchi 2009; Nereim 2012). Thus, it is expected that the current study will contribute in finding lasting solutions which would enhance child safety in Abu Dhabi. The UAE as a signatory to the Convention on the Rights of the Child still lacks a comprehensive framework for addressing child safety; hence, the need for empirical based studies that can offer insight into possible interventions that can be used to respond to the problem. The challenge noted in Abu Dhabi during preliminary background investigation was that Abu Dhabi had made various services directed at safeguarding children but there was need for a more comprehensive national system, and harmonization of the existing intervention. The targeted intervention should be capable of addressing the loopholes identified, such as neglect of children by parents, and ineffective child care by nannies. This study found that stakeholders felt that the nation needed to prioritise on intervention both at policy and implementation levels with the government enhancing on the existing laws and identifying newer and appropriate approaches. The participants noted gaps in the current interventions in areas such as implementing safety gears in cars and homes as well as in the community and environment. The study clearly showed that intervention should be encompassing combining homes, community, and the environment. This meant that safeguarding children should not be only at the home domain, but should be found in schools, the school transport system, playgrounds, and community centres.

The perception given off from the study indicated that the gaps found within Abu Dhabi and other Emirates came from poor connections between the different sectors concerned with child safety. It is therefore, important for the different sectors to work together and form a comprehensive intervention. It was further suggested that it would not be enough for the government and associated bodies to identify an independent working framework, but to also acquire support from other sectors for an effective outcome. This would support the stakeholders opinion on the importance of providing safety aspects (through materials, personnel etc) across different quarters such as the home and the outdoor environment. Such collective approach would work better than to work only on independent areas.

The current study offered insight into the stakeholder perspective about those responsible for child care, and the areas on which intervention needs to focus. The results as discussed in the previous section showed that the parents were mainly responsible, but it also identified the role of caregivers including nannies. The researcher sought at the beginning of the study to show the need for an education intervention especially for nannies as the people who oversee the welfare of children in the absence of the parents (Abu Dhabi Police 2014). Within many homes in Abu Dhabi, the nanny was the person responsible for children most of the time, but there was a question of safety based on whether they had the knowledge to facilitate child

safety. The researcher was thus examining the possibility of offering educational intervention to nannies and other stakeholders.

The focus of the intervention is promoting child safety at home. The literature review showed that home based care was an important part of growth and can be provided by different people including parents, other family members, licensed providers, and babysitters and nannies (Brandon 2005; Capozzano et al. 2000; Tout et al. 2001). The persons providing care need to have the capacity to look after children, meaning they need to have the mental, physical, and developmental capacity required in providing health home based care (Moore 2008. Niccols 2008). Found in the current research was that caregivers sometimes tended to forget the children or become inattentive as they did everyday tasks. Such inattention gave children the opportunity to engage in threatening activities that could lead to injuries.

An unexpected finding was the suggestion that parents as a group needed the intervention because they were the primary caregivers. The reason for parents receiving greater focus was that as identified by the experts, child injuries and neglect showed a higher likelihood to be based on parental neglect. Despite the unexpected finding, educating the children through their school setting was another idea among the stakeholders of which will be discussed later.

The literature review had suggested the efficacy of educational intervention suggesting that such programmes would be useful in maintaining a healthy childhood development process (Waldfogel 2008). For example, Waldfogel (2008) had suggested a programme that could provide parents and other caregivers with education on how to maintain healthy brain development for children within the first five years and to avoid dangerous situations. The educational gaps noted in research were visible in parent and caregiver behaviour such as holding a child on their lap while driving regardless of the potential impact if the car was to be involved in an accident. The adults also sometimes placed the child in the front seat where they are too young for a seatbelt and too dangerous to place in a car seat especially with the airbag facility switched on. The need for educational intervention thus emerged from the evidence of reckless behaviour that placed children at risk. The current study identified similar recklessness with children exposed to risks in school buses, at the parking lot, when driving with parents, and at home. Although the suggested intervention is for a home environment, it creates the opportunity to learn about other areas similarly in need of such intervention.

Available literature reports that caregivers need to be able to recognise signs of neglect and child abuse amongst children, and have the capacity to respond appropriately (Abu Dhabi Police 2015). This study highlighted the use of training and awareness as an appropriate response. For example the experts noted that training and information transfer would help people dealing with children within and outside the home to identify the ways to achieve better safety outcomes. One notable aspect of the analysis was the perception that training should not be selective but encompass every person that has a constant contact with children including nannies, teachers, school bus drivers, and parents. This would create a better focus on how to address child safety issues because every person concerned would be part of the response team.

An arising concern noted in the research was where people should obtain relevant information about child welfare. The findings highlighted a number of places including the media, and having courses that taught child safety and preventative measures. Something to note in the establishment of educational programs for whichever targeted group, is the need for relevance to the group. For example, parents can obtain lessons when they take their children for baby wellness clinic, or during ante-natal classes. The parents can also be persuaded through the media to attend workshops and seminars about child safety. The important element is ensuring that the approach identified can reach the target group and that it can actually provide the needed information for that specific group.

The arising recommendation from this perspective is for concerned experts to critically assess the approaches suggested as ways to provide needed education. The reason is that while one approach may be appropriate for one group, it may be difficult and ineffective to transfer the same to other learners. For example, the lessons targeted for parents can have a more comprehensive outlook because these are the people that have constant contact with the children from birth. Therefore, parents need lessons that encompass all the areas of a child existence. They need to understand how to ensure a child is safe at home, safe on the playground, within high rise buildings, at school, public meeting places such as malls, and in every other area in a child's environment. The nanny education may not encompass as much detail because the caregivers may not be involved in every part of the child's existence but it will incorporate the areas that the nanny interacts with the children such as at home, playground, swimming pool, and others.

The current study contributes to the existing knowledge about creating awareness by enlarging the target group. The findings suggested that the education and training aspect need to extend to the community through government facilitated programmes in the media. As shown in the literature review, Abu Dhabi has rolled out several campaigns about child safety in the media, on topics such as child car restraints (car

seats) as a mean to create awareness on road safety. It was however noted that the successfulness of the campaigns is lacking, creating a need for increased training and awareness. The recommendation is for the government to identify those areas that need increased campaigns and call on stakeholders to formulate the most effective programmes. This would include professionals in child care such as paediatricians, teachers, social workers, and the police as well as parents when appropriate. Government sponsored programmes need to be well thought out and capable of addressing the most pressing needs. The campaign on car safety seats provides an example of a programme with good focus, but as shown in this study Abu Dhabi has other areas that need a concerted effort on child safety such as in the home. The question stakeholders and the government require to address is the sufficiency of the information currently available, appropriateness for the target audience, and whether it encompasses all the persons that need such training. The benefit of involving the government is that it can be instrumental in offering training at no cost such as through government related websites such as ChaS, HAAD, and Abu Dhabi Police. The sites can have comprehensive lessons on issues that parents and other caregivers should watch out for within the house, school, and community.

Another consideration arising in the study is the need for having appropriate topics. Examples are creating awareness in the available and upcoming regulation and policy in child welfare, educating caregivers on the meaning of responsibility and ways to ensure one adheres to it. The present campaigns in Abu Dhabi have been about proactive responses on the lack of safety for children (Abu Dhabi Police 2015). However, education and training needs to go beyond being proactive to identify and respond to gaps in education. Ministries such as the Ministry of Interior can be involved in conducting surveys that help understand education needs in the community, and then formulate training plans based on these requirements.

An unexpected finding in this study mentioned earlier, was the issue of engaging children in safety programmes. Where this is possible, it would still leave out those not in school which are primarily the most vulnerable, aged 0 - 5. Children attending full time schooling can participate in safety awareness programmes in their schools or through child appropriate programmes. The recommendation would be for the Education and Interior Ministries to come together to identify age appropriate programmes and put within them the content on safety. For example, children shows can teach children about the importance of wearing a car safety belt when traveling, lessons on how to cross the road, and safety in the house. Children can have such lessons within their school curriculum or lessons given through a specific intervention provided through television shows, or on social media and workshops, or places where children gather such as areas of worship. One important consideration in this suggestion is ensuring age

appropriateness in the educational content given to avoid any children misunderstanding the material. For such, involving the Ministry of Education (MoE) and the Abu Educational Council (ADEC) would be helpful when creating age appropriate content. The issue of education intervention has a considerably wide focus as shown in the current study. It can incorporate a large part of the society based on the different groups that need training. Further, the areas of awareness are numerous including first aid and child development. Education emerged in this study as a positive element of promoting knowledge about child safety, but it is important for the different parties concerned to identify appropriate ways of passing information based on the target group. This means that the most appropriate approach for teachers, may not have the same effects on the parents, and likewise parent training may lack the same meaning for nannies. Therefore, education needs to consider the groups involved, the most appropriate information, and the delivery approach.

The current study identified the possibility of nanny education, which would be a comprehensive curriculum designed and approved by appropriate bodies such as the General Secretariat of the Executive Council (GSEC) to ensure that they have adequate information. Training of nannies was perceived as a method that would ensure caretakers were proficient enough to prevent harm and abuse. The study noted that the curriculum should have a clear strategy and action plan, with an achievable time plan. The need for having organizations and agencies that can oversee the implementation of such plans was identified. Recommended from the study was to have agencies that can assess and train the nannies, but this should be based on agreed standards. This raises another issue where the government can take part, in identifying organizations that can be tasked with training nannies and in the development of an appropriate curriculum. The government can delegate authorities such as the Ministry of Education and/or GSEC to addresses the minimum requirements needed for the employees of the UAE. It can thus take on an active role in facilitating the qualification of nannies by developing standards of training and certification.

The participants argue that those working as nannies are not only not qualified but speak a different language which posits a language barrier as well. The UAEs national language is Arabic with the English language being spoken by a vast majority of the population. Nannies hired are mainly from South Asian countries (Sri Lanka, the Philippines, India, Bangladesh, Indonesia) and quite recently UAE immigration have allowed the role of nannies to be undertaken by nationals from African countries (Kenya and Uganda). It would be useful for the tasked ministry to work with other agencies to ensure that parents actually employ qualified nannies. Establishing the training of nannies is a positive approach to child safety, but it should have in place mechanisms for implementation and acceptance in the society. A possible concern

could be that qualified nannies may be more expensive and thus parents may not really embrace the idea. Licensing nannies should be for both the Emiratis and non-nationals, and if such requirement was established as a national legal framework then its implementation would be possible. Recommended in this study was for government funded organizations to oversee the training to give the nationals an opportunity for learning. The Abu Dhabi Quality and Conformity Council, Ministry of Labour, Ministry of Social Affairs, Ministry of Interior and Ministry of Education can participate in the training forums. They can include other agencies such as Hospital Injury Prevention Centres, and first aid providers for a comprehensive curriculum development for the nannies.

The respondents mainly identified the need for training parents. However, as noted in the findings, parents are increasingly leaving their children with other caregivers such as nannies. Therefore, it would be beneficial to ensure that these caregivers have the right level of skills. In all the education programmes, the government should be at the forefront in identifying the agencies that should be involved and vetting their capabilities. Ultimately, the role played by different ministries will have a strong impact on the outcome in training.

While the study identified the appropriate nature of education intervention, it arose that there are other possible interventions that can be used to achieve better outcomes for child safety. The following section addresses other effective and feasible interventions that can be implemented in Abu Dhabi.

5.4 OTHER EFFECTIVE AND FEASIBLE INTERVENTIONS TO ADDRESS THE PROBLEM

The literature review showed the magnitude of child injuries noting that approximately about 950,000 children die based on injury and violence, with 90% of the cases being unintentional (UNICEF n.d ; Wekerle 2013), and many others suffer from preventable injuries including burns, falls, drowning, road accidents, and poisoning (Injuries in the European Union). These statistics offer insight into the need to identify appropriate models of dealing with these problems. It is important for different stakeholders to come up with measures that can help safeguard children from both intentional and unintentional harm. The previous section identified the role of education as an intervention that brings in the required knowledge to parents and caregivers. However, proper child welfare will require a comprehensive outlook that incorporates different interventions that together can bring in a bigger impact compared to one approach. The findings to the current research provided probable approaches that can bring an effective and feasible intervention.

One possibility noted in the research was developing a legal framework that addresses the different aspects of child safety. In the literature review it arose that Abu Dhabi lacked an enforceable policy framework capable of protecting children thus leaving them exposed to mistreatment and abuse (Sankar 2015). The UAE presents a unique opportunity in understanding child safety policy because of the culture, religion, and education of the nationals that diminish the transferability of laws from other areas (Hourani et al. 2012). Abu Dhabi has made some headway in formulation of laws such as the 2008 federal law drafted for child protection (Al Rowaad Advocates & Legal Consultancy N.D). However, the law remains unenforced because of barriers related to cases of family violence. Another recent law is by the Community Development Authority in Dubai that targets protecting the basic rights of children, and providing comprehensive services to families and children at risk of mistreatment (Al Hosani et al. 2010; Macy & Freed 2012). The law by Community Development Authority has been toward preventing the occurrence of various forms of child abuse. Recent policy reform in Abu Dhabi has been towards road safety with the requirement of compulsory use of seat belts in school buses as enforced by the School Transport Executive Committee (Sankar 2015). Furthermore, the bus drivers and escorts are expected to have medical examinations and training programmes. Abu Dhabi is working toward adhering to the Child Protection Law.

However, the current study showed that stakeholders did not feel that the current policy framework was enough to address the challenges present in the UAE and Abu Dhabi and identified the need for new laws on prevention of child abuse and harm. The participants recognised that the government had in place recently drafted policies that could protect children and promote the investigation of abuse or children rights, or to obtain services for children and families that need it. Recognised laws included house coding standards, the safety seats, and fire detector. The area noted in the current study was development and enactment of policies on road safety, which was one of the most important areas for the respondents. The issue of road safety kept arising in both rounds of the data collection identifying that the respondent considered its implication on child injury and harm. Abu Dhabi was struggling with encouraging people to respect the use of car seats or safety belts as noted in the literature review through stories posted in *The National.* The challenge has been to change the attitude of nationals about the use of car seats.

The findings to this research contribute to existing knowledge by identifying the different areas that need policy intervention. The participants noted the importance of not just ensuring road safety for school buses, but also encouraging parents to ensure safety at home through elements that would reduce the rate of burns, drowning, and falls. This could be achieved through application of heftier penalties for parents that

contravened the applied law. For example, parents that failed to put their children in car seats or use safety belts could be fined, while the same applied for caretakers. Another area in policy formulation is establishment of nanny licensing. The current research contributes to the policy discourse by identifying the possibility of both training nannies taking care of children as well as for giving them licenses to practice. It was noted that other professionals have licenses allowing them to take care of children. Similarly people left with children should have them to ensure that they have the capabilities needed such as first aid skills, personal hygiene, food safety, chemical awareness, and child management as well as prevention of injuries and seeking assistance when a child is unwell.

An area noted in the study in policy formulation is in relation to nannies. The findings highlighted the establishment of minimum requirements for child care, with different approved agencies facilitating training and licensing. A suggestion arising from this finding is the need for establishing this in policy as a way to ensure people actually employ qualified personnel. The implementation of such an intervention will require additional research to understand the perception of parents in having a law that force them to employ qualified personnel and then policy formulation could reflect the findings. The reason for this suggestion is to ensure that the policy does not introduce a trend where people fear employing certain people based on the legal implications. It would also ensure that employers will encourage their nannies to receive the necessary training.

In addition to the issue of policy, the current study contributes to previous knowledge by showing the importance of evidence-based intervention. It came across from the current study that Abu Dhabi needed to use actual statistics and data to underline the challenges facing the country in child safety and to identify useful interventions. The findings showed that Abu Dhabi needed to consolidate the available evidence to be able to establish effective solutions. The data should reflect child abuse and neglect having both current and historical trends to show how the problem is changing and help in identification of the course of action. The evidence may also include statistics in the way the effectiveness of the identified solutions. The suggestion is for the government and associated agencies to seek information that can help identify the factors surrounding the success or failure of different strategies put in place to facilitate the intervention for child safety.

The current study noted different interventions needed for the future of child safety in Abu Dhabi. These reflect the need for policy change and collaboration as identified in the discussion. The next section consolidates the findings on the most feasible and effective interventions as defined by stakeholders.

5.5 THE MOST FEASIBLE AND EFFECTIVE INTERVENTIONS AS DEFINED BY STAKEHOLDERS

The discussion on understanding the problem of child safety in Abu Dhabi, determining whether the educational intervention would be effective in Abu Dhabi for addressing child safety, and exploring the most effective and feasible interventions for the problems, showed the possible actions within Abu Dhabi. This section shows what the stakeholders felt would be the best course of action based on current responses to the problem and suggested future interventions. The study asked about the future of child safety to identify the interventions that stakeholders perceived as the most effective. The findings showed three important factors for achieving sound child safety interventions, namely individual responsibility, collaboration between different stakeholders, and high level of leadership by the government.

The current study adds to the available literature by showing that individuals need to take a responsibility to sustain child safety, especially the parents. The participants identified the need for individuals to receive training and mentorship as a way to facilitate their role in child safety. The parents and other caregivers would receive pertinent skills from counselling enabling them to take care of the children and to support them in various activities. In addition to individual responsibility is the role of various organizations and government agencies. The current study highlighted the need for the Ministry of Interior to collaborate with others in developing advocacy programmes and advising responsible agencies on how to enhance child protection and child safety in the UAE. Collaboration would mean that organizations would examine the existing laws on child safety and make recommendations on appropriate action. They can make suggestions on strategies, campaigns, laws, and regulations, as well as ways to facilitate enforcement. A recommendation on agency collaboration is to bring together community organizations, government based firms, legal companies, and other societies dealing with child safety. Such collaboration can also be useful in establishing a flow of data to government sites that can be used to later facilitate formulation of policies and other interventions.

The advancement of child safety in the UAE will require a strong input from the government especially in ministries such as the Interior, Health, and Education. The government can organize for training and workshops, collaboration on online sites, and development and implementation of relevant policies. Paramount to establishing effective intervention will be the role played by the government. The current study recognised the importance of the government being at the forefront of securing the future of

children. The government should provide high level leadership facilitated through laws that ensure individuals are more responsible over their children, and that brings together the stakeholders.

The role of the government extends to the endorsement of training for parents, caregivers, teachers, nurses, and bus supervisors to ensure that they receive the support and knowledge that they need to adequately ensure that children live within a safe environment. The education would also promote change in attitudes and behaviour among adults with a goal to ensure safe childhood. The government can also promote better advocacy within the community because of probable influence in the way the community interprets child safety. Leadership will also require ability to identify achievable strategies with duties allocated to the appropriate agencies based on their capacities to meet the needs of the community or the set goals of the interventions. The current study highlighted the need for the government to become the central player in developing and facilitating the implementation of child safety policies.

The government can further take a leading role in ensuring that training of nannies is efficient and that it includes the required lessons such as chemical awareness, food safety, personal hygiene, and child management. The previous two sections noted the importance of nanny training and showed the different course contents that should be included to ensure that their learning achieves the required benefits. The training was also suggested to be accompanied by licensing if possible for nationals and non-Emiratis, which would provide a quality control for the trainees and the trainers. Effective training and licensing systems will require the government to establish the protocols that the leaders should address and identify the organizations that should be involved in the process. The current study suggested that the future of child safety in the UAE and Abu Dhabi will be established through effective training, and bringing together the different stakeholders with the government leading the efforts. The highlighted findings responds to the two research questions posed in chapter one, and gives directions on the possible future for Abu Dhabi and the entire UAE. The conclusion ties together the different parts of this section highlighting the most notable findings.

5.6 THEORETICAL FRAMEWORK

The theoretical framework of application of which the discussion has led to, will be based on the health models earlier discussed in the literature review. LaBonte (1992) model highlighted the health inequalities faced by the population and assisted in strategizing planning health care actions for community organizations and health authorities. LaBonte (1992) noted the importance of empowerment in health promotion as a way to help people have more control over their health and achieve better outcomes. The role of health promotion and empowerment makes the model meaningful for this discussion because it

recognises the role of communities, health care practitioners, and other stakeholders that can play in bringing about change in various health related circumstances.

The applicability of the health model to the UAE and specifically Abu Dhabi will need to adopt a framework suitable to the community as a whole and to the specific aspects of the Emirati population. Abu Dhabi possesses a rich history and cultural identity with cultural and religious practices playing a considerable role. This identity can form a basis for promoting communal change. HAAD recognises this attribute and has produced a policy on cultural sensitivity and awareness in healthcare facilities. This indicates that it has been recognised that the local culture plays a significant role in the community beliefs, attitudes and behaviours that must be addressed in order to achieve positive health outcomes.

As noted in the introduction chapter, the UAE is a culturally diverse community comprising of seven emirates. With manpower demands increasing to sustain and meet the needs of the UAE economy, the UAE has seen an influx of migration workers. Therefore, the community continues to change and adapt. According to Loney et al. (2013) in the last four decades the UAE has had a substantial population increase. With the population structure changing, so did public health with principal areas of focus being cardiovascular disease, injury, cancer, and respiratory disease. The rating came from data extraction and synthesis done for the period 2000 to 2008. The second category of injury is relevant to this discussion because it included child injuries. Overall, injuries were noted to have a strong indicator for morbidity, disability, mortality, and economic loss in the UAE and the second leading cause of death for all age groups with an average of 1,120 deaths annually, and a leading cause of death for children less than 15 years (Loney et al. 2013). Bener, Hyder, and Schenk (2007) found that between 1995 and 2004, injuries was the leading cause of death for children with road traffic related injuries being most frequent for child below 15 years. Considering the implication of injuries on the younger population it is important to identify solutions that can help the society deal with child injuries by means of prevention and protection.

The diversity of the UAE presents a unique learning opportunity in public health because of the different challenges presented in meeting the needs of the nationals (the Emiratis), and the immigrant populations (the Expats). However, the UAE stands at a point where the immigrant population is more than the Emiratis, and in Abu Dhabi over half of the population is expatriate (Loney et al. 2013). However, it is significant to note that health care providers in the UAE have been obliged to give first priority to nationals and in some cases/facilities, provide services to only nationals. The region will therefore need to find an approach that will meet the needs of both groups, which should be addressed within policy development.

In their work on the role of culture in health communication, Kreuter and McClure (2004) noted that culture has become widely acknowledged as having an important role in public health because of its capability to influence behaviour and health. A way to ensure that policy formulation is reflective of culture; it would need to include understanding the concept. Culture can be equated to different things including ethnicity and race, lifestyle, a label for a cluster of people, socioeconomic characteristics, national identity, and socially marginal groups (Kreuter & McClure 2004). The common attribute in the labels is that it is shared among a group with definitive behaviour and values. The Emiratis share common attributes including religious beliefs, traditions and a socioeconomic background defined by growing wealth, and education.
The policy design for addressing the challenges noted in child safety will need to effectively address the cultural factors that surround Abu Dhabi which will require a comprehensive outlook at the way people think and react to circumstances. The UAE is composed of a multinational population, with varying educational backgrounds, religious beliefs, and cultural practices, which would pose a challenge for population-based public health strategies (Loney et al. 2013). Therefore, the development of a health promotion strategy would need to sternly consider cultural factors. However, two different strategies may need to be developed, namely to address the Emirati nationals directly and the other to address a blend of cultures and beliefs. Nevertheless, it was noted that the respondents did not differentiate between expats and nationals in their responses.

A policy document by HAAD (2012) specifically highlighted the need for realising cultural sensitivity and competence because if the UAE and Abu Dhabi health care system to recognise the wide range of cultural and religious backgrounds including norms, religious values, socioeconomic status, beliefs, language, gender, disability, and traditions. The reason is that both Emiratis and non-Emiratis are seeking services from the same system. Cultural sensitivity refers to "*being aware that cultural differences and similarities exist and have an effect on values, learning, and behaviour. Components of cultural sensitivity includes valuing and recognizing the importance of one's own cultures, value diversity, realizing that cultural diversity will affect an individual's communication and participation in education in various ways. A willingness to adapt one's communication and behaviours and to be compatible with another cultural norm. A willingness to learn about traditions and characteristics of other cultures*."

Culture is a notable characteristic in policy formulation because it directly or indirectly influences the way people prioritise health related issues including decisions, behaviours, and accept or adopt messages related to healthier lifestyle (Kreuter & McClure 2004). For example, it was evident through this study that people are somewhat hesitant in adapting established preventative measures and in adopting new

information. Responses received sighted that the belief was that children sat on ones lap is safer than placing them in a car seat or even wearing a seat belt. Therefore, dealing with culture also leads to dealing with communal thinking and encouraging people to change their current behaviour to adopt safer actions. The health model offers insight into how to bring in actionable change. Between 1986 and 1992, 2,500 community health practitioners in Canada, New Zealand and Australia conducted training workshops that asked and answered the question "How could professionals, under the rubric of health promotion, engage in new practice styles that reduce or inequitable social conditions?" (LaBonte, 1994). This led to the development of the LaBonte model (cited in Baum, 2008) which considers the dynamics of a community. This would act beneficial in the development of an Abu Dhabi Child Safety model that would meet and fit in with the culture as front and central. It would focus on cultural aspects in addition to lifestyle and environmental factors. Furthermore, it could aid as an initial indication of possible strategies for way forward.

The LaBonte (1992) model had three key columns namely medical, behavioural, and socio-environmental attributes respectively. It included the definition of health within these attributes, a definition of problems, strategies for action, and success criteria. These categories provided pointers into important areas that should be included in finding a lasting solution. For example, under behavioural attributes, it would be important to consider risky behaviours that contributed to the increase of the problem, ways to prompt behaviour change such as by using mass media campaigns, and measuring behaviour change. Socio-environmental characteristics combines personal and community relationships that affect the living environment and that influence the way people act such as poverty, working conditions, and living situation as well as psychosocial risks including lack of social support. Resolution of such problems would include finding a way to engage the entire community through action and empowerment, and it can include political action and advocacy, with results being evident through achieving greater control or decreased inequalities.

Based on the findings of the Abu Dhabi child safety scenario the table was modified to two columns to compare the risky environment and the risky people. The reason for the modification was due to the findings presenting the issue of child safety as a collective problem rather than an individual one. Furthermore, since culture was identified as an important attribute, cultural factors were added to the modified table.

It was highlighted in the findings how different agencies needed to collectively work together and encompass more synergy. To address the possible identified behavioural changes of individuals towards child safety, it would first entail addressing communal thinking. One example noted in the findings were the parents, who were found to not want to use car seats because it disturbed their social image. Changing the way a society looks at the issue would place pressure on the individual to change. Kreuter and McClure (2004) noted that considering public health issues as a collective one might enhance receptivity, acceptance and salience of health information and programmes. Therefore, bringing in the community and cultural factors into the discussion provides an opportunity to influence society, and in turn the individual thus promoting healthy behaviours and outcomes.

The subsequent table is a modified table of the original LaBonte model, designed to compare risky people and the risky environment whilst listing possible strategies.

Health Model for Achieving Child Safety in Abu Dhabi		
	Behaviour of Groups/Individual (risky people)	**Social Environmental (risky environment)**
Focus	Promote holistic child protection at home	Promote holistic child safety within the community
Definition of Child Safety	Understanding child safety is a collective responsibility that seeks to protect children from intentional and unintentional injuries in their surrounding - Every person within the home and the community need to realise that they have a role to play when facilitating child safety	Lack of community control in child safety - The community has different stakeholders that can come in to contribute to the formulation of plans to achieve better child safety outside the home - The community includes the policy makers, law enforcement, educators, health care providers, social services and welfare, different government agencies, and non-government agencies
	Parents current role in undermining child safety - Parents have a more encompassing role in child safety as the people that interact with a child on a long-term basis, especially in early childhood - They have a responsibility toward understanding that every decision they make toward observing child safety affect the outcome of their child	
Strategies	Community training through media campaigns, workshops and seminars - The media offers an opportunity to reach people within their areas of comfort such as homes and offices - The message need to be culturally relevant to both the Emiratis and the non-nationals because both groups have an interaction with children	Promote knowledge transfer through community based campaigns in the media, and policy development - Policy formulation will be a beginning point in information transfer because it can mandate training such as for caretakers - Policy also provides direction on appropriate information and ways of delivery - Suggested licensing will come from transfer of knowledge and practice - Collective action is necessary to achieve change
	Training parents, nannies, and other caregivers - Parental training need to take a fore front position as the primary caregivers and to facilitate transfer of information	

	- Information need to be relevant to the different groups and within their area of operation	
Success Criteria	Understanding different areas that undermine child safety and acting according – such as by using car seats, employing qualified caretakers, and baby proofing the house	Social training to overcome loopholes in knowledge - Formulation of a curriculum that shows collective action - Proper and on-going licensing for Emirati workers and non-nationals - Availability of information on child safety such as through government portals
	Collaboration among agencies - Governmental agencies and non-governmental agencies will need to work together - Parents will need to reflect on the people they bring in to care for the children and their qualifications to handle daily needs and even emergencies	
Cultural Factors	Collaboration between different agencies to train people on implications of a culture that has been complacent	Role of the government - The government has a considerable position to ensure that information is available to all people
	Families/Communities accepting the child safety strategies which would take them out of their comfort zone.	

Figure 5: Health Model for Achieving child safety in Abu Dhabi

5.7 POLICY ACTION BASED ON THE HEALTH MODEL

The goal of child safety in Abu Dhabi needs to have a comprehensive and encompassing outlook. The findings highlighted that the current policy did not provide adequate framework for responding to the challenge. Recent action has been toward ensuring safety on the roads through compulsory use of seat belts, which as shown in the literature review has been poorly adopted (Sankar 2015). It therefore emerges that the government needs to develop a comprehensive approach. The health model table provides two such goals, one dedicated to people and another to the environment. However, the underlying focus is the same, which is to offers protection for children in all areas including the home, school, playground, the road, areas of worship, social gathering places such as malls, buildings, and other areas. The suggestion is to consider the different areas that children may visit and put in place safeguards.

Within the category of risky behaviour among individuals and people actions to consider are how parents, caregivers, and others such as teachers may place a child at risk. The findings clearly showed that within the home, parents and caregivers such as nannies are responsible for child safety but many are failing. For example, homes have poor child proofing, and nannies and parents lack the training or information required to safeguard children. The social environment also has implications for child safety, through the lifestyle promoted in the society and through characteristics such as education, work conditions, and institutions of interaction. The current findings noted that many mothers in Abu Dhabi are joining the workforce and thus contributing to the need for nannies that in turn increases child safety risk. Another social issue is the concentration on expatriate workforce that has highly increased the number of non-Emirati caretakers. The increase in the need for nannies and other caretakers was noted as one of the factors that need considerable policy intervention such as through training to ensure that the caregivers have the appropriate skills. The suggestion extended to putting nanny training and licensing as part of policy formulation.

The current findings suggest that as parents focus more on the workforce, they retain the responsibility of ensuring that their children have the right caretaker, a person with the knowledge to watch over a child such as child development milestones, first aid skills, and food safety. Further, as suggested under the appropriate strategies, the government has a role to play in ensuring qualification of the caretakers such as through licensing. Currently, the community and specifically the government have little control over child safety as evident in the lack of effective policies and response to problems of injury, negligence, and abuse. The control can come from first understanding what entails child safety. As noted in the health model and found in the study findings, child safety is the collective responsibility of the entire society. This means that parents have a critical role to play as well as other stakeholders including school professionals, health care providers, and law enforcement.

The central point in the change process is ensuring that people from different sectors are willing to work together with the government taking in a central role through its different agencies. One of the success factors in the model outlined above is cooperation among non-governmental organizations, governmental agencies, the community, and individuals in the definition of child safety and finding lasting solutions. Different agencies will need to consider their role in child safety and take the appropriate position. For example, some may come in to facilitate training for nannies, while the government through the Ministry of Interior will be instrumental in promoting policy formulation and implementation.

Arising continually in the current findings is the perception that the government has not done enough to ensure child safety, which has been evident in poor legislation formulation and implementation as well as lack of health campaigns with a lasting impact. Therefore, the government will need to be a leader in finding a solution for child safety based on the current issues such as those raised in this study, such as neglect by parents, road related safety, and employment of unqualified nannies. In the introduction chapter it was highlighted that Abu Dhabi had different health promotion activities such as those facilitated by the HAAD, but a gap remained in effective measures that specifically targeted child safety. The Emirates were operating at quality standards of health care in different areas through development of facilities and services that showed comparable international standards, but it is yet to achieve notable child safety. The current study shows that health promotion will be important for achieving child safety in Abu Dhabi, and as suggested in the model this can be achieved through public campaigns posted on the media or government portal. The development of a work plan for child safety will need to include a well thought out plan on health promotion that brings in the perception of the people, advantages and limitations of culture, and ways to ensure that people accepted the message passed along.

Culture as identified in the modified health model will play an important role when developing policy for child safety. Since Abu Dhabi holds a diversity of residents, being Emiratis and from various other countries and cultures, it may be necessary to consider how to reconcile culture to policy. This means ensuring that the policy does not place some groups at a disadvantage but clearly applies within the dominant culture and considers the minority groups. An advantage in Abu Dhabi is that culture and religion intersect ensuring that policy related to Emiratis will reflect their beliefs and values. Working with public services and other agencies whose work is directly related to the community will be useful in establishing the factors, values, and beliefs that should be part of policy formulation and implementation. This again highlights the need for cooperation among different agencies.

5.8 CONCLUSION

The purpose of the study was to respond to the questions on understanding within Abu Dhabi; the issues around child safety, whether an educational intervention programme might address child safety issues and the most effective and feasible interventions for the problems of child safety as defined by the stakeholders. The current study provided outcomes from two rounds of a survey involving professionals in Abu Dhabi. The results comprised of 10 participants in the first round and five in the

second round. The results showed that the participants had a good understanding of the meaning of child safety. The concept comprised child protection and ensuring that children lived in a safe environment in all aspects of their lives. The findings showed that child safety was an encompassing aspect of a child's life that involved all their surroundings including playgrounds, school, public places, and home. The study brought about the role of parents in ensuring child safety. The parents emerged as the group most responsible for child safety. Instances of child safety problems seemed to revolve around poor parenting, such as when parents left their children with unreliable caregivers and unqualified caretakers. Some parents also harmed their children intentionally or unintentionally. Parents were highlighted by 70% of the respondents in Round 1 as being the primary facilitators of child safety, and thus should receive the needed training and awareness to carry out this role.

The findings highlighted the concern surrounding the law and its implementation in Abu Dhabi regarding child safety. It came across that Abu Dhabi had in place different laws that targeted child safety, with the most commonly cited law being the use of safety belts and car seats. The study nonetheless showed a considerable gap in the implementation of the law. Sixty per cent (60%) of participants felt that Abu Dhabi had an existing gap in the implementation of child safety laws associated with poor connectivity between relevant agencies, lack of awareness, and poor training of relevant stakeholders.

The findings promoted the need for policy intervention, both in formulation of relevant policies in child safety and in implementation. Suggestions for policy and regulation included facilitation of training for parents and nannies, and licensing of nannies to ensure they have the required capabilities to take care of children. The study suggested that different government and non-governmental agencies can come together to identify a syllabus that can be used for training caregivers on child safety. It can include skills such as food safety, personal hygiene, chemical safety, and child management. The target of policy formulation is creation a safe environment at home and outside.

A central point of the study is finding out the efficacy of educational intervention in facilitating child safety in Abu Dhabi. The findings led to the recognition that awareness of child safety problems was lacking in Abu Dhabi among parents and caregivers. Training can thus provide the knowledge required to provide children with a safe surrounding at all times. The study suggested the need to train the parents first because if they understood the needs of child safety they could put in place the mechanisms needed at home to facilitate a safe environment. For example, they can provide safety

measures in the house including child proofing the house, ensure use of seat belts when travelling, and require that their caregivers have child safety relevant skills. An unexpected finding in the study was the focus on the role of parents and the need for education as the current study placed the blame on parents. It is therefore important to facilitate parents training, which can be achieved through community awareness sessions and workshops, posting information on government sites, training parents when they take children for baby wellness clinic, or when mothers attend antenatal check-ups. Noted in the study was that it was beneficial to train parents because such information trickled down to the caregivers, such as with mothers training the nannies on how to ensure the child remained safe when in the house.

The government came across as an important player in facilitating educational intervention and policy formulation. The study showed that the government can establish the protocols needed for training, promote the identification and implementation of safety measures, and connect the different agencies that need to collaborate on the issue. The study noted that currently the government showed poor intervention in implementation of the existing policies. It is therefore important to place an emphasis on government taking control of the policy and implementation gap. The role of collaboration of different agencies was also highly relevant to achieving child safety in Abu Dhabi and the UAE. A gap noted in implementation was lack of cooperation between relevant bodies such as the Ministry of Interior, Education, and Health. It is necessary for the agencies both governmental and non-governmental organizations to come together to identify the role each can play.

The current study adds to the existing body of knowledge on child safety by confirming that the issue is a public health problem that can be addressed through policy. It showed that children remain at risk in different areas from abuse and neglect, and injury. Policy implementation can be a step toward promoting better safety because it identifies the gaps and responds to them. The effectiveness of policy will however depend on the role played by the government and its agencies, the community, non-governmental organizations, and individuals. Training and creation of awareness is a step toward identification and implementation of relevant policies.

The study offered empirical evidence that highlights the public health problem and that shows an effective response. The study responded sufficiently to the research question, what are some of the available evidence-based options for a possible and effective solution to the problem, by showing the possible development and enforcement of policies on child safety, and highlighting the use of training

for parents and caregivers. It further clearly respondent to the question of what is the understanding of key stakeholders of child safety by showing that different experts felt child safety was about maintaining a collective responsibility toward protecting children from all kinds of injuries and neglect, and that it encompassed every area of a child's existence. The findings also responded to the sub-question on their perceptions of feasible interventions to the problem of child safety by identifying educational training for nannies and parents, and extending it to policy formulation.

The discussion led to a modified health model based on the LaBonte (1992) concept developed for Canada. The structure highlights two categories to be observed when promoting child safety in Abu Dhabi, namely behaviour of individuals and groups, and the social environment as a way of recognising both the role played by people and the environment in child safety. The model also highlights the area of focus on child safety noting that it should be holistic targeting the home, community, and environment. The definition of child safety needs to reflect the different areas that brings risk to children and bring in the role of collaborative action in which everyone has a role in protecting children including parents, nannies, teachers, bus supervisors, playground operators, the police, and any agency that deals with children. The different elements identified in the modified model are useful for health promotion in Abu Dhabi because they identify the areas pertinent to child safety as identified in the study, and various strategies that would be instrumental in achieving a solution.

Throughout the discussion, various suggestions were discussed on ways to promote the execution of the identified interventions. The next chapter expands on these recommendations placing them in context of Abu Dhabi and the UAE to ensure that the study is able to achieve its significance in the Emirates. As mentioned in the introduction chapter, the findings will be significant in providing information needed for recognising possible interventions in child safety issues in Abu Dhabi. The study offers evidence-based information that the stakeholders and particularly the government can use to promote child safety. The expectation is that the study provides informative data on child safety that will lead to a better understanding of the surrounding issues. This has for example been achieved through the identification of the role played by parents in undermining child safety. Another significant issue was in identifying the areas considered as critical to achieving child safety, which continually emerged as road safety. Policy on home safety was highly lacking and so was the associated information undermining the availability of information about the current interventions at home. The study also identified the gaps existing in policy making and implementation, and suggests how to promote better regulatory frameworks for child safety. The next chapter discusses the implications of

the current findings to the discourse of child safety in Abu Dhabi and exploring whether the information can bring in any change to the problem. The chapter also identifies the transferability of the data to promote application across the country.

CHAPTER 6 - CONCLUSION

6.0 INTRODUCTION

This chapter provides a review of the entire study by identifying the purpose, objectives, and assumptions that facilitated the research. It provides a response to the theoretical framework and a review of the data collection process and its findings. This is followed by an analysis of the implications of the results leading to suggestions and recommendations for practice and research. Additionally, the chapter highlights the applicability of the results through research transferability and ends with a reflection of the study.

The purpose of this research was to explore the challenges and opportunities for child safety in Abu Dhabi and proposing culturally-relevant and cost-effective interventions by looking at the issue from a public health perspective. It responded to three objectives, namely, to understand the issues around child safety in Abu Dhabi, to determine whether an educational intervention programme might address child safety issues in Abu Dhabi and to explore the most effective and feasible interventions for the problems of child safety in Abu Dhabi as define by the stakeholders.

At present, any caregiver hired to care for children in the home are not required to hold any pre-qualifications or training on child management issues. Therefore, there was a belief that those lacking the appropriate skills, education and expertise in child management issues would simultaneously increase the possibility of children being exposed to harm and hazards. The suggestion came from recognising that an educational intervention would prepare the caregivers with the information and skills needed to ensure and promote child safety. Such skills would equip them to protect, better prepare them in case of an emergency and promote safe and healthy best practices. The focus began with the home as it is the primary area of interaction for children. The home in usual circumstances would represent a safe haven for children. However, the current study recognised that children are exposed to various risks in the home such as burns, falls, drowning, and at times abuse (or inappropriate behaviour) from the caregivers. Education was a means to create awareness on what possibilities could occur that would bring about harm to the child.

Background study indicated a growing concern in child safety within Abu Dhabi as various reports indicated that the Emirate had been experiencing an increase in the number of reported child safety issues. However, where the government had several control actions in place, it was still not affectively

addressing the issue at hand as an existing gap lay within both policy formulation and implementation. The current study leaned towards identifying policy solutions regarding child safety and making suggestions that would be beneficial when developing regulatory frameworks in Abu Dhabi. The expectation was that the findings of the research can be transferred into policy and / or practice relating to child safety in Abu Dhabi with a focus on facilitating home safety.

The media frequently report on life-threatening accidents involving children at home which is without doubt a public health challenge as such injuries could affect the quality of life for the children and their families; and/or lead to death. Some of the identified concerns included burns, poisoning via inhaling carbon monoxide, maltreatment, road/travel safety, dog bites, poor emergency preparedness, food poisoning, lead poisoning, ineffective recreational activities and equipment at home, and poisoning through substances used within the home such as insect repellent. Further identified concerns were the lack of medicine safety, poor storage of baby formula and food, food safety, transfer of infections from parents or caretakers to the baby, water related injuries, and general safety in the house. A further concern noted from the study, was that despite the increasing incidences there was a lack of established guidelines on effective interventions. The current study found empirical evidence that can be used toward formulation of a solution. One to start resolving the issue is to offer evidence based interventions because these would come from information supplied by key stakeholders and thus useful in the formulation of effective policies and practices. The identified solutions would thus be covering a wide spectrum of possible problems.

The data collection approach was conducted through the Delphi Method. The reason for choosing the Delphi Method was that the approach specifically promoted the participation of experts who were informative of the issues under study. The participants were not representatives of the general population but specific to the sought information. It required experts that are able to comprehend the seriousness of the problem, have knowledge about the existing policies/interventions and their shortcomings, and can thus offer insight into the possible areas of intervention. Specifically, the study required the recruitment of professionals dealing with children in different capacities and have therefore included individuals working within government bodies such as the education system, health care, and law enforcement. The individuals needed to be directly involved in child safety issues and may have witnessed cases of child abuse, neglect and/or injury. While the general population may have offered insight into the challenges they experienced in child safety, it would have been

challenging to recover appropriate data for policy in addition to current gaps in the available interventions, and the problems evident in Abu Dhabi about child safety.

The final recruited study participants were ten in the first Round of the questionnaire applied, and five in the second Round. The data collected was qualitative, which was needed to offer experiences, attitudes, and opinions about the issue under study. Qualitative data was identified as in-depth and empirical in nature and thus capable of offering substantial information about the attitudes of the professionals regarding the issue of child safety. The focus was on obtaining the perspective of the experts from the different sectors that dealt with children on a regular basis for reasons mentioned previously. The tool used in the study was an unstructured questionnaire applied in Round 1 with a second unstructured questionnaire developed for Round 2 as a follow-up which helped the participants respond in greater clarity to the questions asked in the first Round. The findings of the two Rounds are summarised in the subsequent section.

6.1 REVIEW OF RESEARCH FINDINGS

The data collected effectively responded to the research questions and assumption by showing that Abu Dhabi would benefit from introducing an educational training programme for nannies and individuals hired to care for children. The study extended the training to parents as the primary caretakers of children, and as the people responsible for the different outcomes for the children. The following discussion identifies the pertinent information noted in the study.

- The understanding of child safety was that it was a concept referring to the collective responsibility aimed at promoting and protecting the children from injuries, neglect and abuse. The findings highlighted the need for collective action by individuals and agencies working together to facilitate child safety. The understanding also showed that child safety considered both intentional and unintentional injuries experienced by children of all age groups up to 18 years old.
- The study highlighted road safety as the most significant problem facing child safety in Abu Dhabi. Road safety was a diverse issue involving parents, caregivers and the school. The participants pointed out reckless behaviour among parents that endangered the children such as placing them on the lap while driving or failing to use appropriate child restraints (i.e seatbelts and car seats). The parents also left their children unattended in the parking lots or near the road. Caregivers were highlighted as those responsible in failing to provide adequate

supervision for the children and refraining from occupying themselves in other duties, leaving the children to entertain themselves. The school bus supervisors were especially responsible for road safety.

- The study noted that of all involved carers, parents were held the most responsible for child safety problems. The parents had poor preparation to parenthood, a poor understanding of the needs of children, poor awareness of child safety issues, poor implementation of safety measures, and spoiling children rather than spending quality time with them.
- It was apparent that the participants felt that Abu Dhabi should prioritize on child safety issues in both law and implementation, which required the collaboration of political leaders, the community, parents, schools, and other government bodies such as HAAD.
- The results showed a lack of sufficient legal framework in addressing child safety issues. The participants noted the existence of some laws such as the Wadeema law, which was the first law in the UAE that targeted the protection of all children. This was a law incorporating protection against violence, but its effectiveness was limited due to poor political commitment. The law was also not very diverse and thus suggested to include security at community establishments including schools, student transportation, safety at buses, and ensuring safe school and play grounds.
- The study showed the complex nature of understanding child safety and formulating relevant laws. For example, it identified the lack of cooperation between agencies, lack of awareness among parents, the contribution of schools, and the poor identification of laws. Resolving child safety issues will also require resolving the different issues surrounding the problem.
- The findings showed the need for accompanying policy formulation to enforcement. It was evident that many believed that the policy was not well formulated or enforced. The study suggested possible areas to consider. The responsible agencies should establish a combination of regulations, environmental changes, and enforced legislation. People should also receive support in life saving devices such as child safety seats, helmets, and smoke alarms for those families that may find it difficult to obtain such equipment without support.
- The need for pursuing knowledge emerged as critical, supporting the indication that educational intervention can be essential in supporting child safety. The government can be instrumental in the process of promoting campaigns and educational programmes for parents at no cost in government related websites such as HAAD and the Abu Dhabi police and by supporting community initiatives such as CHAS. The campaigns need to extend to others working with children such as nannies, drivers, and teachers whilst teaching them the

responsibilities associated with caring for children. The local media was also identified as a possible avenue for parents and caregivers to learn about child safety issues and preventative measures. Such channels would include newspapers, television shows, and radio.

- Training needs should be addressed for parents, community members and caregivers. The provision of information can occur in different ways such as at home, school, nanny training, through the school nurse, distribution of flyers, workshop, television and through the news media although the level of importance of how these forums can promote knowledge differed.

The findings provide a basis for the suggestions provided in the section on implications and recommendations where provision of education for the different groups is analysed and relevant suggestions made later in this chapter. Notably, the study showed that child safety was an important area of consideration in Abu Dhabi. It was however evident that more research would be needed especially in the role played by parents in protecting the children and in promoting the implementation of emerging policy formulation.

6.2 RESPONSE TO THE THEORETICAL FRAMEWORK

The study was guided by the LaBonte health model that identified the various elements that prompted social change and lifestyle change. The findings led to the modification of the model with two relevant issues identified, namely behaviour of groups and the social environment. These two factors arose as pertinent issues that affects child safety in Abu Dhabi. For example, it was evident that achieving child safety in Abu Dhabi would require parents to change their perception and behaviour. Mainly, the parents actions served as risk factors for leaving children with unqualified carers, failing to use seat belts, and living in unsecure housing. The findings showed that while it was true that the entire society needed to consider child safety and make appropriate changes, the parents held the bulk of that change. For example, it was upon parents to ensure that their nannies had appropriate training in looking after a child such as in first aid and nutrition, and understood the developmental milestones a child needed to achieve. Coming across from the study is that parents would need training to ensure they better understood child safety and their role in it. This could be carried out through media, and using culturally appropriate messages. The messages would also need to pass on to other caregivers through parental training who would then train the nannies, or through providing specified information to various groups.

The health model was useful in the current study as it provided guidelines on elements that implementation groups and policy makers would need to identify to be to achieve the targeted child security in Abu Dhabi. It was noted from the model that it promoted recognition of individual, group, and social factors that impacted health behaviour, thus leading to the conclusion that behaviour change requires a holistic approach. Such an approach denotes focusing on the three groups to achieve a well-defined outcome.

Using this approach, the study led to an implementable behaviour change strategy relevant to Abu Dhabi based on the individual/group, and social factors. The goal of the intervention was to promote holistic child protection at home and in the community. A useful element in the community identification was specification of the stakeholders, who included law enforcement, educators, policy makers, health care providers, social services and welfare, government agencies, and non-governmental agencies. It was evident that for Abu Dhabi to achieve notable levels of child safety it was important to bring these groups together and come up with a holistic intervention.

The intervention would comprise of two distinct aspects, namely policy formulation and community training. The purpose of the current study was to underlie how understanding child safety can promote better policy formulation. The findings effectively achieved this by highlighting areas that needed policy intervention. These would include mandatory training for caretakers, and licensing. However, achievement of these policies would need to be interlaced with implementation frameworks that identified the most appropriate information for the community, parents, and caregivers. This would require working together with different collaborators in curriculum development, and then in training. The success of the intervention will be highly dependent on the willingness of the different groups to work together. The lack of adequate child care policies in Abu Dhabi seems to highly reflect the lack of cooperation among agencies and further on poor identification of the needed frameworks. It is therefore essential that the government, non-governmental agencies, and individuals work together in developing the policy documents as well as in implementation.

6.3 DEVELOPMENT OF CHILD SAFETY IN ABU DHABI

The study suggests that the development of a health/safety intervention in Abu Dhabi should include the provision of appropriate training to caregivers with the bulk of it directly being for parents. The training would inform on the important role a parent plays in a child's life that may not be relinquished to a caregiver. It was said that parents need to be encouraged in their position as parents/caregivers

and not relying on the care of hired caregivers. Media promotions and other such forums that pass on messages on parental training can be useful.

Another priority would be in promoting the role of the government in child safety. The study raised the important note that the government was not very active in developing child safety policies, and in cases where such policies existed their implementation was not standardised. The government is in a position to make sure that parents adhered to set rules such as the application of fines for parents who do not use appropriate child car restraints/car seats. Furthermore, the administration can play a role in ensuring both nationals and non-nationals effectively responded to concerns of child safety.

6.4 LIMTATIONS OF THE STUDY

A limitation in the study was the small number of participants making the sample which means that the information cannot be generalised to a larger population. The sample however provided enough details to respond to the question and was specific to Abu Dhabi. It was additionally, interesting to note that the majority of the participants stated that the parents were in actual need of training because they were the ones mainly to blame for any form of child injury, neglect and abuse. Furthermore, training the parents would enable further opportunities for nannies to get training upon employment. Despite the findings being outside of what the researcher expected, the findings were reported truthfully and fully to maintain research integrity.

6.5 IMPLICATIONS AND RECOMMENDATIONS

The following two sections provide the implications and suggestions arising from the findings and the recommendations for practice.

6.5.1 Implications

The Emirates is a signatory to the Convention of Rights of the Child to which it ratified in 1997. In almost two decades the UAE is yet to establish appropriate structures in response to the problem. A notable challenge seen in the Emirates is the lack of policy on the issue of child safety, which inadvertently suggests a lack of framework to address the issue. The current study provided information from stakeholders that can be used to formulate some of the policy guidelines in finding a solution to the problem. The information gathered offers insight into the possible application of education intervention as an evidence based intervention in Abu Dhabi.

The study was to highlight factors that contribute to the neglect of children and abuse, or that cause endangerment, ensuring that the process of policymaking is well informed and addresses issues taking

place in Abu Dhabi. The questions presented to the participants thus checked for stakeholder understanding of child safety in Abu Dhabi, looked at areas of concern such as common problems related to child safety, their causes, and then asked for suggestions on possible intervention to form insight into the possible future of the issue. The study was to provide a comprehensive outlook on child safety in Abu Dhabi including the public perception targeting key stakeholders. Those included in the study included persons working in different sectors including education, police force, the government, and health care. These are people with knowledge of cases of reported child safety issues in the country, and based on their interaction with children and families exposed to possible neglect, abuse, and injury can offer insight into the effectiveness of existing knowledge on child safety and policies, and the need for change.

The findings showed that stakeholders believed that Abu Dhabi did not have a sufficient framework for addressing the existing problems. The results showed that Abu Dhabi had made some headway in formulating policies and campaigns useful in responding to the problem such in ensuring safety in school buses, and the road safety initiative. However, a considerable gap remained overall in the establishment of sufficient policy and interventions. The findings to this study thus provided insight into possible areas of intervention that can be implemented in securing the future of child safety in Abu Dhabi. The study clearly noted the possible benefit of an education intervention, but its application would require considering a number of suggestions that would increase its effectiveness.
The first suggestion is on the comprehensive nature of the formulated framework. Emerging from the study is the need to promote education, training, and awareness in the entire community of Abu Dhabi emirate to include nationals and non-nationals. This would be to ensure that people understood the problem of child safety, what it entailed and the available resolutions. The community includes also the professionals and non-professionals. The education would provide all the persons involved with the information needed to understand how to look out for potential dangers to children and addressing them immediately. The reason for suggesting that education and creating awareness should be for an entire community, is to ensure all the different areas in which a child may interact in (schools, shopping malls, playgrounds, on the road) are encompassed within the resolution framework. Involving the community will ensure that children safety issues are addressed in different forums and in various places thus increasing child safety.

Parents also need to be at the forefront of receiving knowledge on child safety. The participating stakeholders clearly identified that the current problems in child safety in Abu Dhabi could mainly be

blamed on the parents because of their practices such as leaving children with unqualified personnel, failing to child proof their house, and failure to observe safety measures when with the children at the playground or when traveling. Educating parents is thus important to ensuring that they begin observing child safety measures. Furthermore, when the parents are aware of the child safety problem they become more vigilant and ensure those left to take care of the children have the knowledge needed to ensure safety. The findings showed that parental education will be critical to achieving the comprehensive framework needed in Abu Dhabi.

Another group identified in the study to be targeted for education intervention are caregivers, specifically the nannies. The study identified that the nannies are important in Abu Dhabi especially as mothers are increasingly going to work leaving their children with nannies. Therefore, it was suggested that these caregivers should receive an education on identifying risks for children and ensuring that they kept them safe. Nannies require a large spectrum of knowledge including information on first aid skills, personal hygiene, food safety, chemical awareness, child management, prevention of injuries, and obtaining assistance when a child is unwell. The findings clearly indicated that it was important for caregivers to receive the different skills to increase their effectiveness as caregivers.

Another consideration that can be made in skills for nannies is the language. The study noted that some of the nannies were non-Arabic speakers raising the concern of how they communicated with the children under their care considering Arabic is the primary language as many of the children are young, 0 to 4 years and a possible assumption is that they may have yet to learn and be fluent in a second language such as English. Therefore, nannies may receive training in Arabic for the non-Arabic speakers or have such skills as part of the requirements established in policy in the qualifications of the nannies. Those that understand the primary speech language can also benefit from learning communication skills that teach them how to interact effectively with the children of different ages. The background on the study showed that infants are at a high risk of unintentional injuries especially in the age of 0 to 4 years. The assumption is that these children are mainly in the home hence the prioritization. Older children also spend a significant amount of time at home. The nannies are among the people that spend much time with the children at home, and thus can benefit from training in skills that encompass children of the different age groups.

Other caregivers that can benefit from educational intervention are school bus supervisors. The study identified road safety as the highest problem in the issues considered as challenging. Part of the

challenge was associated with parents, and another part with school bus supervision. The persons that travel with children can benefit from the intervention by learning the importance of watching the children during transit. It was noted in the study that sometimes the supervisors left the children without direction and they tend to run out of control. The lessons suggested would include how to maintain control of the children and thus observe safety measures.

The current study showed that the future of child safety in Abu Dhabi will reflect the capability of providing relevant information to people with constant contact with the children such as parents and caregivers with relevant information about safety. The suggestion arising from the findings is the need for the government to establish training and education in Abu Dhabi. Ongoing education has been in campaigns for promoting road safety in the country with focus on use of safety belts and car seats. The campaign provides evidence that the government has the capacity to put in place education interventions that can be useful in educating the community on child safety issues. Such information can be presented through the media and government sites to ensure accessibility of the data to all interested parties. The media can also encourage the people to look for such information in the government websites or other organizations. The parents can receive more information through training facilitated in health care system in addition to the media. The nannies can receive information from licensing institutions as suggested in the study. The following recommendations identify the areas noted in the study in promoting policy formulation and implementation.

6.5.2 Recommendations

The first recommendation is on the identification of agencies and institutions that the government can recruit in the training of nannies. The current study noted that training nannies can be facilitated through organizations licensed to provide such information by means of an accredited curriculum. The Ministry of Education was noted to be among the government agencies that will play an important role in working with other organisation to formulate the relevant curriculum and in establishing an implementation protocol for its implementation. The effectiveness of the nanny training programme will highly depend on the capability of the agencies involved in coming together. Collaboration between agencies is important to achieving a better child safety outcome in Abu Dhabi.

The second recommendation is on the inclusion of nanny licensing within policy. This recommendation will also depend on the involvement of the government and the forward thinking of the Ministry of Interior. Noted in the study was a suggestion that nannies can be licensed thus confirming they are

trained in child care and possibly other skills such as child management, first aid, food safety, hygiene, and as well possess the capability to ensure the children are safe from poisoning, drowning, and falling. As noted in the implications section, the knowledge can include communication skills thereby enhancing their understanding of the child. However, the possible positive impact of this recommendation will depend on establishing how to identify whether the parents approve of employing qualified nannies, and to be able to identify they are actually implementing this approach. This leads to the recommendation for future research.

The third suggestion is on understanding the state of child safety in Abu Dhabi. The current identified the need for intervention and the gaps such as creating awareness and educational campaigns, enforcing regulations, and learning from others, past incidences, and from best practice. It emerged that policy makers need to use actual data collected from different forums including current and historical data to understand the state of child safety in the UAE and Abu Dhabi. The data will provide a good indicator in the gaps and the areas of confidence. The suggestion is that appropriate laws need to be based on empirical evidence. The government through its statistical departments is able to facilitate such as information, by gathering annual data on cases of child abuse, neglect, injury, and mistreatment and noting the action taken against the perpetrators. It can also show the percentage to which the perpetrators are caught. The data can help identify the need for stringent measures when dealing with child safety issues, and help formulate the relevant policy.

6.6 SUGGESTIONS FOR FUTURE RESEARCH

The suggested future research is to conduct a mixed methods study on parents' attitude on the employment of qualified or licensed nannies. The study suggestion for mixed methods research is to obtain both a statistical significance for the results and in-depth analysis to respond to the question. The study can begin by looking for international insight into areas where nannies are receiving such training and licensing, the challenges faced by such nations, and the positive impact of having such a programme. Lack of international data would suggest that Abu Dhabi would be a pioneer in such a model and thus a learning platform for other nations both in the Emirates and Gulf region as well as internationally. The literature review showed the presence of professional and paraprofessional caregivers although such are mainly outside the home. Nonetheless, their presence suggests the possibility of applying this within the home by having professional caregivers.

A part of the research would be to understand the willingness of parents to pay for the professional caregivers against the paraprofessional and those without any training. The assumption is that the caregivers without training would have a lower salary and thus could be preferable because of the economic preference. However, some parents could be willing to pay more for the assurance that their children will be safer, and well looked after. The study would show the statistical significance in the parents' willingness to have the higher paid but qualified caregivers. The qualitative part of the research would be to investigate the comparison of the parents in the work of the trained nannies and those without training and their perception regarding the need for licensing. Ultimately, the training model would be for promoting child welfare and it would be useful to note whether the parents understood the importance of having a trained caregiver.

A second future study would be to investigate the effectiveness of community training through possibly an interventional study. The suggestion is to have a quantitative study that asked different people in the community their perception about receiving training on child safety through different forums such as seminars and workshops, government internet sites, and media campaigns. This would lead to the identification of the most probable approach that could promote better outcomes without creating information fatigue, which means bombarding the community with much information leading to becoming tired of all the warnings and failing to heed them. This would be an open research with all the citizens having equal chances of qualifying for the study.

6.7 RESEARCH TRANSFER

As noted in the methodology chapter, the expectation was that the current study could serve as a beginning point in addressing the issue of child safety in Abu Dhabi because it would offer insight into the issues affecting child safety, offer evidence on possible and feasible solutions based on the perspectives of the participants, and to offer comprehensive answers that can bring in an effective intervention. By carrying out the study using the Delphi Method it was expected that the research would raise several issues such as the danger to children. The purpose was to offer a diagnostics to the problem. The findings were able to provide the required insight into the problem of child safety in Abu Dhabi and offer possible solutions with a focus on educational intervention. The identified response can be applicable to both Abu Dhabi and to the wider UAE. The reason is that the results showed the perspective of the participants based on what was happening in Abu Dhabi, the interventions that were on-going in the UAE, and also an international perspective when applicable. The international perspective was identified in the literature review, although the focus of the findings was on the

situation in Abu Dhabi. The information obtained creates a distillation of information on Abu Dhabi by pointing out the understanding of child safety among the stakeholders, and moving toward providing a solution that can positively enhance safety. This gives recommendations for practice.

The results can be transferred to policy formulation and defining interventions for the challenge discussed. The emerging knowledge is that the government, individuals, and other agencies or stakeholders need to come together to implement emerging policy movement. The implication is that achieving adequate child safety in Abu Dhabi requires cooperation between different agencies. The beginning point in the use of the current findings will be for various ministries to work together. The Ministry of Interior was constantly identified as a relevant stakeholder in child safety and formulation of policies. Therefore, the current findings need to be availed to the Ministry of Interior through the appropriate channels, which would include sending a letter to the research department notifying them of the study and availability of the findings. The target of the study was to obtain information that the government can use. The identified government arm in this study was the Ministry of Interior hence the suggestion for passing the findings. The Ministry can receive the findings by request as a way to increase to the available empirical information on child safety in Abu Dhabi and the UAE.

The Ministry would have the liberty of implementing the information including facilitating future research on the issue as required to obtain a larger scale of findings from other stakeholders in different departments and to obtain greater insight into child safety and arising gaps. It is advisable for the Ministry of Interior to work with others such as the Ministries of Health and Education. The collaboration between the Ministries would be an indication that the government was ready to work on the problem of child safety. The ministries can also engage different stakeholders to ensure the identified intervention is comprehensive and based on available. It was noted in the study that Abu Dhabi is lacking in research-based interventions. The current study is among the initial studies in the issue in Abu Dhabi and in combination with others can provide the required evidence-based interventions. The transferability of these findings is thus in the identification of how to move the results into the government arena to ensure inclusion in policy formulation.

6.8 REFLECTION

The entire study process provided a unique learning experience in different elements. The first was on the application of the Delphi method of research. The approach proved useful in obtaining different sets of data that served to augment and amplify the information provided. It was interesting to follow

people's pattern of thought based on their responses and understand how their profession influenced their perception of child safety, and to understand the contribution they would offer the society if given the opportunity.

Another lesson learned was on the application of a health model to interpret the results of the study. At the identification of the LaBonte health model, it was notable that it had more variables based on its application to the original study on cardiovascular diseases. It was however a useful experience to learn how to change the model to fit in with the current study, how to limit the applicable variables while still remaining relevant. At the end, the model had two important risk factors designed to fit in with the community under study, and that offered the right direction on application of the results.

An important lesson learned was to never assume the solution to the problem which could hinder actual results. This study led to the identification of how important it was to remain objective to be able to effectively process and analyse the results. Child safety can be an emotionally based topic since many are parents and stories of children suffering can have its affect. However, if the findings are useful towards policy making and creating social impact, then this topic must be rigorously engaged in without emotional disgruntlement. This was an important lesson especially for future studies.

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Appendix A – Ethical Approval from Al Ain Medical Human Research Ethics Committee

UAEU College of Medicine and Health Sciences

جامعة الإمارات العربية المتحدة
United Arab Emirates University

23rd February 2015 Ref: DT/ bb /15-07

Khawla Saleh
Dr. of Public Health Candidate
Flinders University
Australia

Dear Dr. Khawla,

Re: Al Ain Medical District Human Research Ethics Committee - Protocol No. 15/07- Argument about potential/feasibility/likelihood of the planned research having an impact on policy and/ or practice.

Thank you very much for submitting your application to the Ethics Committee.

Your submitted documents were reviewed by the committee and I am pleased to provide you ethical approval of your project.

May I reiterate, should there be any ethical concern arising from the study in due course the Committee should be informed.

Annual reports plus a terminal report are necessary and the Committee would appreciate receiving copies of abstracts and publications should they arise.

I wish to take this opportunity to wish you success with this important study.

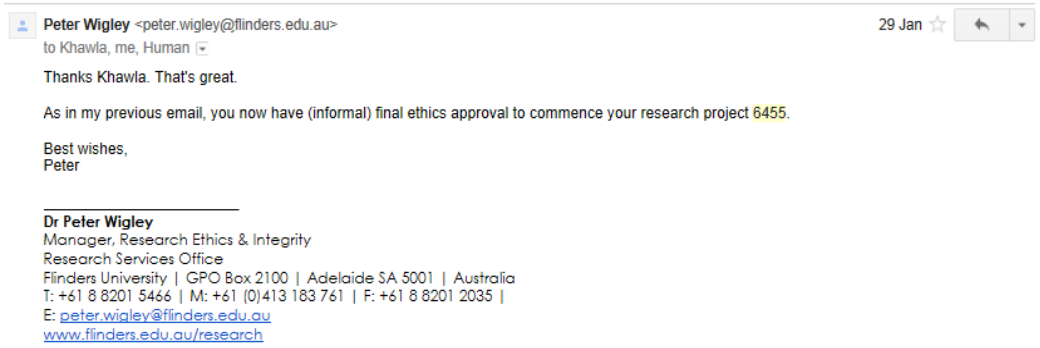
This Ethics Committee is an approved organization of Federal Wide Assurance (FWA) and compliant with ICH/GCP standards.

With kind regards,

Yours sincerely,

Prof. Dennis Templeton
Chair, Al Ain Medical District Human Research Ethics Committee

Appendix B – Ethical Approval from the Social and Behavioural Research Ethics Committee – Flinders University



Peter Wigley <peter.wigley@flinders.edu.au> 29 Jan

to Khawla, me, Human

Thanks Khawla. That's great.

As in my previous email, you now have (informal) final ethics approval to commence your research project 6455.

Best wishes,
Peter

Dr Peter Wigley
Manager, Research Ethics & Integrity
Research Services Office
Flinders University | GPO Box 2100 | Adelaide SA 5001 | Australia
T: +61 8 8201 5466 | M: +61 (0)413 183 761 | F: +61 8 8201 2035 |
E: peter.wigley@flinders.edu.au
www.flinders.edu.au/research

From: Human Research Ethics <human.researchethics@flinders.edu.au>

Sent: Monday, February 2, 2015 9:55 AM

To: 'abdu0189@flinders.edu.au'; Colin MacDougall; 'chajat@uaeu.ac.ae'

Subject: 6455 final ethics approval notice (2 February 2015)

Dear Khawla Saleh,

The Chair of the Social and Behavioural Research Ethics Committee (SBREC) at Flinders University considered your response to conditional approval out of session and your project has now been granted final ethics approval. This means that you now have approval to commence your research. Your ethics final approval notice can be found below.

FINAL APPROVAL NOTICE

Project No.:	**6455**
Project Title:	Argument about the potential / feasibility / likelihood of the planned research having an impact on policy and/or practice
Principal Researcher:	Mrs Khawla Saleh Abdulrahman
Email:	abdu0189@flinders.edu.au

Approval Date:	29 January 2015	Ethics Approval Expiry Date:	**31 December 2019**

The above proposed project has been **approved** on the basis of the information contained in the application, its attachments and the information subsequently provided with the addition of the following comment:

Additional information required following commencement of research:

1. Provision of a copy of the ethics approval notice from the United Arab Emirates (UAE) University, Al Ain Medical District Committee *on receipt*. Please note that data collection should not commence until the researcher has received the relevant ethics committee approvals (item G1 and Conditional approval response – 8).

RESPONSIBILITIES OF RESEARCHERS AND SUPERVISORS

1. Participant Documentation

Please note that it is the responsibility of researchers and supervisors, in the case of student projects, to ensure that:

☐ all participant documents are checked for spelling, grammatical, numbering and formatting errors. The Committee does not accept any responsibility for the above mentioned errors.

☐ the Flinders University logo is included on all participant documentation (e.g., letters of Introduction, information Sheets, consent forms, debriefing information and questionnaires – with the exception of purchased research tools) and the current Flinders University letterhead is included in

the header of all letters of introduction. The Flinders University international logo/letterhead should be used and documentation should contain international dialling codes for all telephone and fax numbers listed for all research to be conducted overseas.

☐ the SBREC contact details, listed below, are included in the footer of all letters of introduction and information sheets.

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project Number 'INSERT PROJECT No. here following approval'). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on 8201 3116, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au.

2. Annual Progress / Final Reports

In order to comply with the monitoring requirements of the *National Statement on Ethical Conduct in Human Research (March 2007)* an annual progress report must be submitted each year on the **29 January** (approval anniversary date) for the duration of the ethics approval using the annual / final report pro forma available from Annual / Final Reports SBREC web page. *Please retain this notice for reference when completing annual progress or final reports.*

If the project is completed *before* ethics approval has expired please ensure a final report is submitted immediately. If ethics approval for your project expires please submit either (1) a final report; or (2) an extension of time request and an annual report.

Student Projects

The SBREC recommends that current ethics approval is maintained until a student's thesis has been submitted, reviewed and approved. This is to protect the student in the event that reviewers recommend some changes that may include the collection of additional participant data.

Your first report is due on **29 January 2016** or on completion of the project, whichever is the earliest.

3. Modifications to Project

Modifications to the project must not proceed until approval has been obtained from the Ethics Committee. Such matters include:

- proposed changes to the research protocol;
- proposed changes to participant recruitment methods;
- amendments to participant documentation and/or research tools;
- change of project title;
- extension of ethics approval expiry date; and
- changes to the research team (addition, removals, supervisor changes).

To notify the Committee of any proposed modifications to the project please submit a Modification Request Form to the Executive Officer. Download the form from the website every time a new modification request is submitted to ensure that the most recent form is used. Please note that extension of time requests should be submitted prior to the Ethics Approval Expiry Date listed on this notice.

Change of Contact Details

Please ensure that you notify the Committee if either your mailing or email address changes to ensure that correspondence relating to this project can be sent to you. A modification request is not required to change your contact details.

4. Adverse Events and/or Complaints

Researchers should advise the Executive Officer of the Ethics Committee on 08 8201-3116 or human.researchethics@flinders.edu.au immediately if:

- any complaints regarding the research are received;
- a serious or unexpected adverse event occurs that effects participants;
- an unforseen event occurs that may affect the ethical acceptability of the project.

Kind regards

Andrea

Mrs Andrea Fiegert and Ms Rae Tyler

Ethics Officers and Executive Officer, Social and Behavioural Research Ethics Committee

Andrea - Telephone: +61 8 8201-3116 | Monday, Tuesday, Wednesday and Thursday morning

Rae – Telephone: +61 8 8201-7938 | ½ day Wednesday, Thursday and Friday

Email: human.researchethics@flinders.edu.au

Web: Social and Behavioural Research Ethics Committee (SBREC)

Manager, Research Ethics and Integrity – Dr Peter Wigley

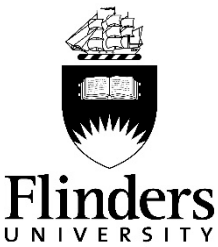
Telephone: +61 8 8201-5466 | email: peter.wigley@flinders.edu.au

Research Services Office |Union Building Basement

Flinders University

Sturt Road, Bedford Park | South Australia | 5042

Appendix C – Consent Form



CONSENT FORM FOR PARTICIPATION IN RESEARCH

(by Questionnaires)

Child Safety in Abu Dhabi

I …….

being over the age of 18 years hereby consent to participate as requested in the Letter of Introduction for the research project on 'A Framework for intervention of child safety issues in Abu Dhabi'.

1. I have read the information provided.
2. Details of procedures and any risks have been explained to my satisfaction.
3. I am aware that I should retain a copy of the Information Sheet and Consent Form for future reference.

4. I understand that:

- I may not directly benefit from taking part in this research.
- I am free to withdraw from the project at any time and am free to decline to answer particular questions.
- While the information gained in this study will be published as explained, I will not be identified, and individual information will remain confidential.
- Whether I participate or not, or withdraw after participating, will have no effect on any treatment or service that is being provided to me.

Participant's signature……Date……...

I certify that I have explained the study to the volunteer and consider that she/he understands what is involved and freely consents to participation.

Researcher's name…….....

Researcher's signature……..Date……

6. I, the participant whose signature appears below, have read the researcher's report and agree to the publication of my information as reported.

Participant's signature……Date……...

Appendix D - Letter of Introduction

Faculty of Health Sciences
2nd Level, Health Sciences Building
Registry Road,
BEDFORD PARK SA 5042
GPO Box 2100
Adelaide SA 5001
Tel: 08 7221 8412
Fax: 08 7221 8424
ABDU0189@flinders.edu.au

LETTER OF INTRODUCTION

Dear Participant,

This letter is to introduce Khawla Saleh who is a student in the Discipline of Public Health which is part of the Medical School of the Faculty of Medicine, Nursing and Health Sciences at Flinders University. She will produce her student card, which carries a photograph, as proof of identity.

She is undertaking research leading to the production of a thesis or other publications on the subject of Child Safety in the UAE.

She would be most grateful if you would volunteer to assist in this project, by completing a questionnaire which covers certain aspects of this topic.

Be assured that any information provided will be treated in the strictest confidence and none of the participants will be individually identifiable in the resulting thesis, report or other publications. You are, of course, entirely free to discontinue your participation at any time or to decline to answer particular questions.

Any enquiries you may have concerning this project should be directed to me at the address given above or by telephone on (050 542 02 01/ 050 613 2441), or e-mail (abdu0189@flinders.edu.ae)

Thank you for your attention and assistance.

Yours sincerely

Colin MacDougall PhD

Associate Professor of Public Health

& Southgate Institute for Health, Society and Equity

School of Medicine

Flinders University

and

Principal Fellow (Honorary)

Brockhoff Child Health & Wellbeing Program

The McCaughey Centre

Melbourne School of Population Health

University of Melbourne

Tel: +61 8 7221 8412

Fax:+61 8 7221 8424

Mobile: 0437 9111 39

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee. For more information regarding ethical approval of the project the Secretary of the Committee can be contacted by telephone on 8201 5962, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au

Appendix E - Information sheet

Ms. Khawla Saleh
Discipline of Public Health
School of Medicine
Faculty of Health Sciences
Level 02,
Health Sciences Building
Registry Road
Flinders University
Bedford Park SA 5001
GPO Box 2100

Tel: +61 4 326479 41
UAE: +971 50 613 2441/542 02 01
Abdu0189@flinders.edu.au

INFORMATION SHEET

Title: 'Child Safety in Abu Dhabi'

Investigators:

Khawla Saleh

Discipline of Public Health

Faculty of Medicine, Nursing and Health Sciences

Flinders University

Ph (AUS): 04 326 479 41

Ph (UAE): 050 542 02 01

Description of the study:

This study is part of the project entitled '*A framework for intervention of child safety issues in Abu Dhabi'.* This project will investigate issues pertaining to child safety in Abu Dhabi and possible interventions for prevention. This project is supported by Flinders University Faculty of Medicine, Nursing and Health Sciences.

Purpose of the study:

The research aims at

- Determining whether an educational intervention programme might address child safety issues in Abu Dhabi, and
- Seeks to explore the most effective and feasible interventions for the problems of child safety in Abu Dhabi.

What will I be asked to do?

You are invited to give your thoughts and opinion through a questionnaire which you can fill out at your own space. The questionnaire could take anything from 30 to 45 minutes to complete.

What benefit will I gain from being involved in this study?

The sharing of your experiences will help improve the planning and delivery of future programs and additionally, potentially can be used in the formulation of policies regarding child safety.

Will I be identifiable by being involved in this study?

We do not need your name and you will be anonymous. Your comments will not be linked directly to you and all information will be stored on a password protected computer of which only the investigator can access.

Are there any risks or discomforts if I am involved?

There are no risks or discomforts if involved. Should you feel you may experience any, please raise them with the investigator.

How do I agree to participate?

Participation is voluntary. You may answer 'no comment' or refuse to answer any questions and you are free to withdraw from the research at any time without effect or consequences. A consent form accompanies this information sheet. If you agree to participate please read and sign the form and send it back to the investigator at <Abdu0189@flinders.edu.au>.

How will I receive feedback?

Outcomes from the project will be summarised and given to you by the investigator if you would like to see them.

Thank you for taking the time to read this information sheet and we hope that you will accept our invitation to be involved.

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project number INSERT PROJECT No. here following approval). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on 8201 3116, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au

Appendix F – Round I Questionnaire

Questionnaire

A framework for intervention of child safety issues in Abu Dhabi

1.0 Present City of Residence

2.0 Date of Birth: (Month) (Year)

3.0 Sex (Please tick): Female ( ) Male ()

4.0 Marital Status (check only one):

- Married
- Single
- Separated
- Divorced
- Widowed

5.0 Do you have any children currently living at home with you? (Please tick)

- Yes
- No (Please go to Q6)

(5i) If yes, How many:

(5ii) What are their ages:

Child 1:	Child 2:	Child 3:	Child 4:
Child 5:	Child 6:	Child 7:	Child 8:

6.0 Your Professional Role:

 Health (e.g. Pediatrician, Health Official)

 Government

 Finance

 Education (e.g. Teacher, Facilitator)

 Police/Security

7.0 ur Position:

 Chief Officer (e.g. CEO)

 Director

 Managerial Position/Section Head

 Senior Officer/Executive

 Officer/Executive

 Professor

 Associate Professor

 Chairman

 Specialist/Expert

 Owner/Manager

 Deputy Director

 Managing Director

 Other _____

PART 1: Child Safety in Abu Dhabi

(P1:1)

What is your understanding of child safety?

_____

_____

_____

_____

_____

_____

(P1:2)

1.0 Have you ever witnessed or experienced an issue relating to child safety in Abu Dhabi?

1.0 No

2.0 Yes (Please explain further)

_____

_____

_____

_____

_____

b) How frequently do you deal with problems related to child safety issues in your work?

- **Every Day**
- **At least once a week**
- **Once a month**
- **Once every couple of months**
- **Once a year**
- **Other _____**

(P1:3) How can you define the present state of child safety in Abu Dhabi?

_____

_____

_____

_____

_____

(P1:4) What do you think are the common problems related to child safety in Abu Dhabi?

(Please prioritize with ***1 = Most Important*** and ***10 = Not Important at all***)

- ☐ **Parent Neglect**
- ☐ **Mother Neglect**
- ☐ **Father Neglect**
- ☐ **Lack of awareness/education on safety habits**
  (water temperature varies from babies to adults)
- ☐ **Lack of Training on safety issues and/or unsafe issues**
- ☐ **Hiring non-qualified care givers.**
- ☐ **Lack of knowledge on basic Emergency response procedures and First Aid**
- ☐ **Unsafe homes/environments**
- ☐ **Use of Unsafe equipment (ie Baby Walkers)**
- ☐ **Please list equipment example _____**
- ☐ **Other**

  _____

(P1:5) What do you think are the main cause(s) of the common problems related to child safety in Abu Dhabi?

(Please prioritize with ***1 = Most Important***)

_____

_____

_____

_____

_____

_____

(P1:6) Who do you think are the people responsible for most of the common problems related to child safety in Abu Dhabi homes?

1.0 Parents

2.0 Mothers

3.0 Fathers

4.0 Nannies

5.0 Other (please list)_____

PART 2: Educational Intervention

(P2:1)

a). Explain whether the state of child safety in Abu Dhabi needs an intervention or not

_____

_____

_____

_____

_____

_____

_____

(ai) If yes, what is the best forum for delivering the intervention?

(Please prioritize with ***1 = Most Important*** and ***10 = Not Important at all***)

1.0 At Home

1.0 School Curriculum

2.0 Nanny Training

3.0 School Nurse

4.0 Flyers distributed at Homes/Work

5.0 Workshops

6.0 TV Show

7.0 News Media/Social Media

8.0 Other _____

9.0 Other _____

(aii) If no, what do you think should be done to prevent child safety related problems in the future?

_____

_____

_____

_____

(P2: 2)

a). How can one be knowledgeable in the principles of child safety?

_____

_____

_____

_____

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_____

(P2:3)

a). Do you consider educational intervention as an important intervention to child safety problems in Abu Dhabi?

_____

_____

_____

_____

_____

_____

b) If yes, what individuals should be educated on the principles of child safety?

_____

_____

_____

_____

_____

_____

PART 3: Policies on Child Safety in Abu Dhabi

(P3:1)

a). What do you think are the key child safety problems/issues that should be prioritized in Abu Dhabi? (Please number from 1 onwards with **1 = very important** to **10 = least important**)

 Road Safety – legalizing child car seats from the day the child is born.

 Baby Walkers – They should be banned

 Nannies who care for the children need to be trained on several issues

(e.g. First Aid, Child Injury prevention)

 Safety in the Homes (e.g. education on Water temperature control, drowning Prevention.)

 Understanding Child Development. This could help in better communication and understanding child behavior. Preventing abuse and neglect

 other (please rate) _____

 other (please rate) _____

 other (please rate) _____

 other (please rate) _____

 other (please rate) _____

b) What are some of the available evidence-based options for possible and effective solutions to the problems?

_____

_____

_____

_____

_____

_____

(P3:2)

a). Are there any policies in Abu Dhabi, which are used to address these problems?

_____

_____

_____

_____

_____

_____

b) If yes, have these succeeded in promoting child safety in Abu Dhabi?

_____

_____

_____

_____

_____

_____

c) If no, what are some of the policies options you consider could address these problems?

_____

_____

_____

_____

_____

_____

PART 4: Future of Child Safety in Abu Dhabi

(P4: 1)

As a child safety stakeholder, what is your contribution to the promotion of child safety in Abu Dhabi?

_____

_____

_____

_____

_____

_____

(P4: 2) Do you consider child safety in Abu Dhabi a collective responsibility or a responsibility of specific individuals and bodies?

6.0 Collective Responsibility

6.1 Which individuals or bodies should collectively be responsible?

_____

_____

7.0 **Responsibility of a specific individual OR body.**

7.1 **Please name**

_____

(P4: 3)

Has the government addressed child safety in Abu Dhabi appropriately?

_____

_____

_____

_____

_____

_____

(P4: 4)

What do you think is the future of child safety in Abu Dhabi?

_____

_____

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_____

(P4: 5)

What is your opinion about Nanny/Helper Agencies facilitating their recruits by training (and licensing) the nannies on First Aid for infants and Children & Child Injury prevention strategies?

_____

_____

_____

_____

_____

_____

(P4: 4)

As a teacher holds a license to teach children, should nannies hold a license to care for children in Abu Dhabi?

7.2 No – Please comment below

7.3 If Yes, who do you think should provide such training and licensure – please comment below_____

Appendix G – Round II Questionnaire

* 1. Do you believe that there is room for improvement on the already existing child safety measures?

- Yes (Go to Question 2)
- No (Go to Question 3)
- Other (please specify)

* 2. If 'yes' to question 1, state at least two recommendations that you will want to see considered as far as child safety in Abu Dhabi is concerned.

a.)

b.)

* 3. If 'no' to question 1, state at least two child safety measures you have observed in Abu Dhabi that you believe are exemplary?

a.)

b.)

* 4. 70% of the responses received state that Road safety is the top concern. This is to include:

a) Children not strapped in school buses and other vehicles

b) Parents allowing young children to sit in the front seat or even in their laps whilst driving

Who do you think we need to approach next to push forward further compliance on what is acceptable regarding children on the road (bus or car).

* 5. An overwhelming response was received stating that Parents are the top problem when concerned with Child Safety. Do you agree with the following statements:
(Please choose one - either I AGREE VERY MUCH or I AGREE or I DO NOT AGREE or UNSURE for each statement)

	I agree very much	I agree	I do not agree	Unsure
There is a poor preparation of people into Parenthood	There is a poor preparation of people into Parenthood I agree very much menu	There is a poor preparation of people into Parenthood I agree menu	There is a poor preparation of people into Parenthood I do not agree menu	There is a poor preparation of people into Parenthood Unsure menu
There are no ongoing parental safety workshops/teachings available aRound the communities. Lack of awareness	There are no ongoing parental safety workshops/teachings available aRound the communities. Lack of awareness I agree very much menu	There are no ongoing parental safety workshops/teachings available aRound the communities. Lack of awareness I agree menu	There are no ongoing parental safety workshops/teachings available aRound the communities. Lack of awareness I do not agree menu	There are no ongoing parental safety workshops/teachings available aRound the communities. Lack of awareness Unsure menu
There is a lack of safety culture among parents and the community	There is a lack of safety culture among parents and the community I agree very much menu	There is a lack of safety culture among parents and the community I agree menu	There is a lack of safety culture among parents and the community I do not agree menu	There is a lack of safety culture among parents and the community Unsure menu

	I agree very much	I agree	I do not agree	Unsure
Parents do not understand child development. Understanding their growth, their motor and cognitive skills and their emotional development would assist in better child/parent relationships. Thus preventing abuse, neglect or other behavioural issues.	Parents do not understand child development. Understanding their growth, their motor and cognitive skills and their emotional development would assist in better child/parent relationships. Thus preventing abuse, neglect or other behavioural issues. I agree very much menu	Parents do not understand child development. Understanding their growth, their motor and cognitive skills and their emotional development would assist in better child/parent relationships. Thus preventing abuse, neglect or other behavioural issues. I agree menu	Parents do not understand child development. Understanding their growth, their motor and cognitive skills and their emotional development would assist in better child/parent relationships. Thus preventing abuse, neglect or other behavioural issues. I do not agree menu	Parents do not understand child development. Understanding their growth, their motor and cognitive skills and their emotional development would assist in better child/parent relationships. Thus preventing abuse, neglect or other behavioural issues. Unsure menu

Other (please specify)

* 6. Please rank the below (1= Most Important) according to what you know (and/or believe) to be the most important dangers jeopardizing the safety of our children, that as as a nation we must address.

Falling From Height: Addressing safety in High rise buildings

Road Safety: Children not restrained in their seats and/or sitting in the front seats (sometimes with driver)

Road Safety: Children riding school buses

At Home Injuries: To include burns, drowns, falls

Food Safety (i.e preparation, storage etc)

The use of Babywalkers

* 7. It has been stated that an educational intervention is needed.

(For each educational intervention you believe or know will help enhance a child's safety, please choose one for each statement - either I AGREE VERY MUCH or I AGREE or I DO NOT AGREE)

	I agree very much	I agree	I do not agree
Community Awareness (Government) Campaigns (through Media)	Community Awareness (Government) Campaigns (through Media) I agree very much menu	Community Awareness (Government) Campaigns (through Media) I agree menu	Community Awareness (Government) Campaigns (through Media) I do not agree menu
The provision of Life saving devices (such as car seats, smoke alarms, fire extinguishers)	The provision of Life saving devices (such as car seats, smoke alarms, fire extinguishers) I agree very much menu	The provision of Life saving devices (such as car seats, smoke alarms, fire extinguishers) I agree menu	The provision of Life saving devices (such as car seats, smoke alarms, fire extinguishers) I do not agree menu
Parent targeted workshops	Parent targeted workshops I agree very much menu	Parent targeted workshops I agree menu	Parent targeted workshops I do not agree menu

	I agree very much	I agree	I do not agree
Care-Giver targeted workshops (eg first aid, child injury prevention etc)	Care-Giver targeted workshops (eg first aid, child injury prevention etc) I agree very much menu	Care-Giver targeted workshops (eg first aid, child injury prevention etc) I agree menu	Care-Giver targeted workshops (eg first aid, child injury prevention etc) I do not agree menu
Mandatory licensing of Child Care-givers (especially those to work in homes)	Mandatory licensing of Child Care-givers (especially those to work in homes) I agree very much menu	Mandatory licensing of Child Care-givers (especially those to work in homes) I agree menu	Mandatory licensing of Child Care-givers (especially those to work in homes) I do not agree menu
Encouraging Children to practice safety by introducing it in school curriculums	Encouraging Children to practice safety by introducing it in school curriculums I agree very much menu	Encouraging Children to practice safety by introducing it in school curriculums Iagree menu	Encouraging Children to practice safety by introducing it in school curriculums I do not agree menu

* 8. 100% of the responses received cite that they believe parents are the ultimate ones responsible for their child's safety.

Question: What about the parents who are unaware about safety practices or the resources available to them. What do you suggest we do to reach and educate them?

* 9. Do you think safety devices installed (where needed) at home (by a professional) will help improve child safety?

	Yes	No
Fire extinguisher	Fire extinguisher Yes	Fire extinguisher No
Fire Alarm	Fire Alarm Yes	Fire Alarm No
Safety Child Gates (at stair cases)	Safety Child Gates (at stair cases)	Safety Child Gates (at stair cases)
	Yes	No
Covered electrical outlets	Covered electrical outlets Yes	Covered electrical outlets No
Safety Pool Gates	Safety Pool Gates Yes	Safety Pool Gates No

Other (please specify)

* 10. Is educational intervention going to be more effective if it is combined with other aspects such as environmental changes, regulations and enforced legislation?

- Yes
- No
- No idea
- Other (please specify)