UNIVERSALLY DESIGNED PLAYGROUND NEEDS ASSESSMENT FOR FLAG POLE HILL IN WHITE ROCK LAKE PARK, DALLAS, TEXAS

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There is limited anthropological research on inclusive play and universally designed playgrounds and this study aims to make some contribution in this field. This was a qualitative research study guided by anthropological theory and methods, conducted for For the Love of the Lake (FTLOTL) Foundation. FTLOTL is a non-profit organization located in Dallas, Texas, dedicated to White Rock Lake Park's maintenance. In 2014, FTLOTL became of the view that the park's current playgrounds lacked accessibility for differently-abled children. Therefore, FTLOTL decided to undertake a renovation project of Flag Pole Hill playground to incorporate inclusiveness and diversity in the playground design. The overarching objective of this exploratory, ethnographic needs assessment was to provide insights for an inclusive playground using universal design for families with special needs children. Fourteen parents, each with at least one child having physical, social, or intellectual disabilities in the Dallas/Fort Worth (DFW) Texas metroplex were interviewed. The coded data was synthesized into coherent themes and sub-themes and finally organized into formal research findings. All parents interviewed supported the playground initiative and gave suggestions for physical accessibility along with social inclusion. They expressed their frustrations and apprehensions about the usability of current playgrounds. They also shared their preferences for facilities, features, and equipment to support their children's physical and social needs as well as their own. There was a unanimous agreement that a universally designed playground would have recreational, therapeutic and emotional benefits for participants and would improve the quality of their family lives and build a more closely-knit community.

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CHAPTER 1

INTRODUCTION

Research Overview

There is a dearth of universally designed playgrounds in the Dallas/Fort Worth (DFW) metroplex in Texas. White Rock Lake Park is one of the largest parks in Dallas, encompassing over a thousand acres of land and is without an inclusive playground. This park is one of the most heavily used parks in the Dallas Park system and is the location of many special events and runs. It offers a variety of active and passive activity options and is one of the best places to experience natural areas and wildlife in an urban setting (Dallas Parks and Recreation Department, 2016). For the Love of the Lake (FTLOTL) Foundation is a non-profit organization dedicated to White Rock Lake Park's preservation and enhancement. In 2014 FTLOTL determined that the park's current playground lacked accessibility for differently-abled children. According to FTLOTL, the nearest inclusive playground for children with special needs was over ten miles away through dense traffic, and away from the neighborhood that the Foundation serves. In addition, many of the neighborhoods that might use such a park were low-income and had limited access to transport to such a playground. As per the United States Census of 2010, 12% of the population has some extreme disability that affects at least one function of their daily routine. But these individuals do not live in isolation; they have families; parents, siblings and grandparents who are involved in their everyday activities. Thus in essence, more than "36% of the population (1 in 3 people) is touched by disability" (Boushh et al. 2013: iii).

To mark and celebrate FTLOTL's 20th year anniversary, it committed to the renovation of the playground inaugurated in 1998 at Flag Pole Hill, to incorporate inclusiveness and diversity into the playground design. To ensure that the new playground met the community's

needs, FTLOTL commissioned a needs assessment to understand the target audience and their expectations of an inclusive playground for their community. A well-designed playground incorporating principles of universal design would provide physical and social settings for children with disabilities to become a part of the overall play experience (Goltsman 2001). The overarching objective of the research was to serve families with children with disabilities and provide better recreational facilities for their varied needs.

About the Client

There are 26 non-profit organizations working for White Rock Lake Park's conservation and maintenance, and FTLOTL is one of these organizations. I came to know about this research project through a reference in University of North Texas's Anthropology Department, reached out to the organization and began working on this project in February 2015. My primary contact at FTLOTL was Elisabeth Aikin, Executive Director, who identified the need of such a playground and this research initiative. Interacting with the members of FTLOTL, I learned that most board members were volunteers, working part time at FTLOTL. I also found out that the organization had a flat hierarchy and was sustained by donations and funding from various stakeholders as well as help from dedicated volunteers. The City of Dallas Parks and Recreation Department plays an important role in FTLOTL operations, as FTLOTL's activities must be authorized by The City of Dallas.

FTLOTL received $15,000 in funding from KaBOOM, a well-established national non-profit that either funds playgrounds or gets them completely built. KaBOOM is dedicated to "giving all kids the childhood they deserve, filled with balanced and active play, so they can

thrive" (https://kaboom.org/about_kaboom). FTLOTL also has various fundraising events for this playground on its schedule.

Deliverables

The client, research chair and I, the graduate researcher, agreed that I would provide a summary report of research findings and recommendations along with an oral PowerPoint presentation to the client. I was also to provide a set of survey questions based on the data that emerged from the qualitative study to FTLOTL, for them to conduct the quantitative research [See Appendix A]. The client agreed to provide a stipend to cover the transportation costs I incurred during the research process.

Figure 1, on the following page, is an aerial view of the Flag Pole Hill playground area as shown by Google Earth (app.googleearth.com). It shows the 12,000 (150x80) square feet of the rectangular area of the proposed playground along with the approximate placement of the existing equipment. The current pavilion, parking lot, picnic area and sidewalks can also be seen.

Figure 1 An Aerial View of Flag Pole Hill Playground Area (Google Earth)

Figure 2 is a panoramic view of the current Flag Pole Hill playground area. It shows the play equipment including the slide set, spring bouncers, monkey bars and bucket swings (which are at a distance), on a ground covered with woodchips. Abundant trees, benches and sidewalks can also be seen along with the pavilion in the background.

Figure 2 A Panoramic View of Flag Pole Hill Playground Area

CHAPTER 2

RESEARCH METHODOLOGY

Research Purpose

The goal of this exploratory ethnographic research was to generate ideas for a universally designed playground at Flag Pole Hill in White Rock Lake Park. This was done using an anthropological toolkit to interview parents of children with disabilities about what kind of facilities, features and equipment suited them and their children's physical and social needs. This research study analyzed core or common needs amongst the participants rather than variations between them. This resonates with the work of Christensen and Jeon, who focused on the similarities between differently-abled children and able-bodied children and noted that "the crucial concept to understand is that the similarities between children with disabilities and able-bodied children are far greater than the differences" (Christensen and Jeon 2006: 50). The research findings are planned to be incorporated into a redesigned playground in 2017.

Major Research Questions

- What are the barriers to play in the current playground?
- What kind of equipment is preferred?
- What is the opinion about space utilization and the layout of the playground?
- What are the perceived benefits and risks of inclusion in the play area?
- How can the playground overcome these risks and barriers?
- What other aspects should be addressed in the playground?
- What type of events or activities will draw users to the playground?

Designing the Research

The client had limited experience in research, playground design and the special needs population. Hence to identify research questions, I acquainted myself with the client's organizational structure and operations along with the client's requirements for the playground. To make a comprehensive and well-informed interview guide, I held informal conversations with the board members of FTLOTL. For my final course paper on Anthropology of Non-profit Organization, I decided to study the life narrative of my primary thesis client. I conducted a semi-structured interview with her that helped me to develop an insight into her research ideas, elicit her project expectations and develop a stronger rapport with her. Engaging with FTLOTL activities and events was another way of gaining awareness about the organization. I attended the City of Dallas Parks and Recreation Department Board Meeting with the client and about five to six monthly FTLOTL board meetings. I also attended a few FTLOTL Second Saturday Shoreline Spruce Ups, where on the second Saturday of every month Adopt-A-Shoreline volunteers would clean-up the White Rock Lake area. I presented the research proposal for this study at a White Rock Lake Task Force meeting, a meeting that takes place regularly and is attended by officials from the City of Dallas and representatives from FTLOTL and its 26 other counterparts. All this exposure informed the scope of the research and helped define the research questions.

Initial Proposed Timeline

The timeline that was initially proposed for the completion of this research is tabulated in Table 1. However, it took much longer to complete the project owing to the complex nature of research process.

Table 1 Initial Proposed Timeline

Phase	**Date**
Finalize Proposal	20th February 2015
Prepare and Finalize Interview Guide and Apply for IRB	21st- 28th February 2015
Recruit Research Participants	21st- 28th February 2015
Start Fieldwork/Data Collection (depending on IRB approval)	1st - 10th March 2015
Complete Data Collection and Start Data Analysis	15th – 20th May 2015
Provide FTLOTL with Survey Questionnaire	25th -30th June 2015
Report Revised and Finalized	6th -14th August 2015
Prepare Power Point Presentation and Submit to Committee Chair	22nd - 30th August 2015
Final Presentation to the Client	31st August 2015

Participant Recruitment

Participant recruitment was the most challenging, time consuming and exhausting part of the entire research process. Data collection was completed after two and a half months of rigorous effort. The demographics and size of the sample were decided upon with the client. A purposive sampling technique was adopted to ensure that all respondents lived somewhere around the Flag Pole Hill area and represented families with children with varying disabilities, genders, and ages. With purposive sampling, "you decide the purpose you want informants (or communities) to serve, and you go out and find some" (Bernard 2011: 145). Initially, the sample was to be selected within a ten-mile radius of Flag Pole Hill, but owing to the difficulties with recruitment, the entire the DFW area was eventually included. A flyer was also designed and distributed in order to promote this research and reach out to the parents [See Appendix B]. Professionals and organizations that were contacted to reach out to parents included Richardson Independent School District (RISD) schools and teachers, regional hospitals, clinics, churches, recreation centers, parent groups, occupational and recreational therapists, and social media groups. Out of these groups, few were supportive due to confidentiality policies and the Health

Insurance Portability and Accountability Act (HIPPA). Some organizations shared flyers with families of children with disabilities; however, the responses were limited.

As the target audience was related to a vulnerable population, intercept interviews in clinics and hospitals were not allowed. Attempts at intercepting interviews on playgrounds and in recreation centers were not successful, as some parents outright refused to talk to me, while others courteously declined. A mother who politely refused an interview request at a recreation center rationally explained her situation:

> Sweetie, I have two jobs and then I deal with two children who have special needs. I cannot even recall the last time when I slept properly. I would really love to help you but I don't have an hour to spare.

There were also instances when parents initially committed for an interview and then later never replied. While I was pursuing possible leads for the interviews online, the online community, various individuals and groups on social media and other organizations showed a lot of support. They could not contribute much to the recruitment process but tried creating awareness for the research in their capacity. The snowballing sampling technique turned out to be quite fruitful, as existing interviewees referred other parents, school teachers and therapists whom they thought would be good sources. Being referred at a personal level for interviews, especially by my professor, UNT alumni, occupational therapists, school teachers, and FTLOTL board members was effective in ultimately completing the recruitment process. Parents who participated in the research, seemed satisfied by what they were asked during the interviews and appeared to be convinced of the research's credibility by the end of interview sessions.

Meeting Ethical Standards

An application for conducting this research was submitted to the UNT Institutional Review Board (IRB) in early March of 2015 and was approved in April 2015.

When potential research participants were approached, a brief introduction of the researcher and the research project highlighting the benefits of their participation were provided. If potential participants agreed to participate, information regarding the study was verbally provided to them before beginning the interview, and it was clarified that their participation was voluntary and they could withdraw from the interview at any time without any obligation. Participants signed informed consent forms before being interviewed, either in person or via email, depending on the medium through which the interview was conducted. As promised to the research participants, their anonymity was maintained throughout the study, and personal identifiers were removed from their interview transcriptions.

Profile of Research Participants

The sample included fourteen participants in total: thirteen parents and one grandparent. The grandparent's interview was not transcribed verbatim, as her grandchild was 15 years old and did not perfectly match the sample profile. Nevertheless, she provided very useful input regarding challenges her grandson faced while he was growing up. Each of the thirteen parents interviewed had at least one child with either a physical, social, or intellectual disability within the ages of 2 and 13 years. Owing to the rigorous and challenging recruitment process, parents from the entire DFW metroplex were considered. Fortunately, in due course, nine out of the fourteen participants were located within the ten-mile radius of Flag Pole Hill.

Table 2 shows the details of the research participants' profile.

Table 2 Profile of Research Participants

No.	Age (years)	Gender	Disability	Ethnicity	Able-bodied Siblings	Distance to Flag Pole Hill (miles)	Interview medium	Parent interviewed	Interview Duration (minutes)
1.	4.5	Male	Down Syndrome and Autism	Caucasian	none/ only child	1.5	in person	Father	28
2.	5	Female	Down Syndrome	Caucasian	8 years old sister	2	in person	Mother	32
3.	8	Male	Nonverbal Autism	Half Hispanic Half Caucasian	twin sister	5	in person	Father	54
4.	7	Female	Hemiparesis, Speech delays, Visual field cut, Wears an AFO	Caucasian	5 and 7 years old sisters	8	on the phone	Mother	32
5.	12	Male	Cerebral Palsy, Epilepsy	Hispanic	none/ only child	20	in person	Mother	36
6.	12	Female	Blind, Nonverbal Autism	Caucasian	twin brother	40	on the phone	Mother	25
7.	4	Female	Nonverbal Autism	Caucasian	2 years old sister	45 (in Denton)	in person	Father	32
8.	13	Male	Down Syndrome, Seizures, can't walk, had a stroke	Half Caucasian Half African American	9 years old brother	3	on the phone	Mother	50
9.	4	Female	Encephalopathy	Caucasian	8 years old sister	45 (in Denton)	on the phone	Mother	50
10.	8	Male	Hydrocephalus	African American	27 years old sister	4	on the phone	Mother	33
11.	7	Male	Chronic Lung Disease	African American	mother was expecting second child	3	on the phone	Mother	26
12.	2.5, 4.5	Male	Autism Spectrum Disorder	Caucasian	both children were autistic	3.5	on the phone	Mother	59
13.	2,5	Male	Social issues and Speech delays	Hispanic	7 years old brother	5	on the phone	Mother	55
14.	15	Male	Nonverbal, Neurological and Physical issues, Uses braces, walker and or wheelchair	Caucasian	only child	18	on the phone	Grandmother	40

The Ethnographic Toolkit

This was a qualitative research project focused on playground usability by differently-abled children and guided by anthropological theory and methods. which makes it an applied anthropology project. Applied anthropologists use anthropological knowledge for human problem solving and decision making. Ethnography constitutes one of the primary methodologies in anthropology, which is studying human cultures in detail and in a systematic manner, providing a "thick description" of cultures (Geertz 1973 :6). The goal of ethnography is "… to grasp the native's point of view, his relation to life, to realize his vision of his world" (Malinowski 1922:25). Explaining how the qualitative approaches of anthropology can enrich inclusive design methods, Cremers et al. stated, "These methods are used in anthropology to discover, interpret and explain patterns in human values" (Cremers et al. 2014: 32).

Interviews

The interviews were conducted either in person at a suitable place for the parents, or over the phone, depending on what was convenient for the parent. Five of the fourteen parents were interviewed in person. All interviews were digitally audio recorded. Each interview lasted for around an hour. I took fieldnotes during the interviews and also wrote around a 500-words personal reflection on each individual interview session upon its completion. The interview guide/research questionnaire [See Appendix C] began with a few general, icebreaker questions. The rest of the interview guide consisted of two parts. The first part focused on the current recreation facilities and concomitant barriers to play, while the second part attempted to ascertain the ideal inclusive play environment as perceived by the parents. A semi-structured interview format was selected for this study, so that the list of topics for discussion could be adjusted

according to the dynamics of the conversation. A semi-structured interview "can be both fully expanded at the discretion of the interviewer and the interviewee, and enhanced by probes" (Schensul and LeCompte 2013: 174). It is viewed as a conversation on a topic of mutual interest between two persons (Kvale 1996). The questions were cautiously worded so that parents were comfortable answering and did not feel the focus was on the disability, rather than their children. Initially, focus group discussions were considered for the project; however, the nature of the research required emphasis on each individual parent. Parents' opinions being influenced by one another during group discussions did not appear conducive for the research, getting parents together for the discussion did not appear feasible.

Observations

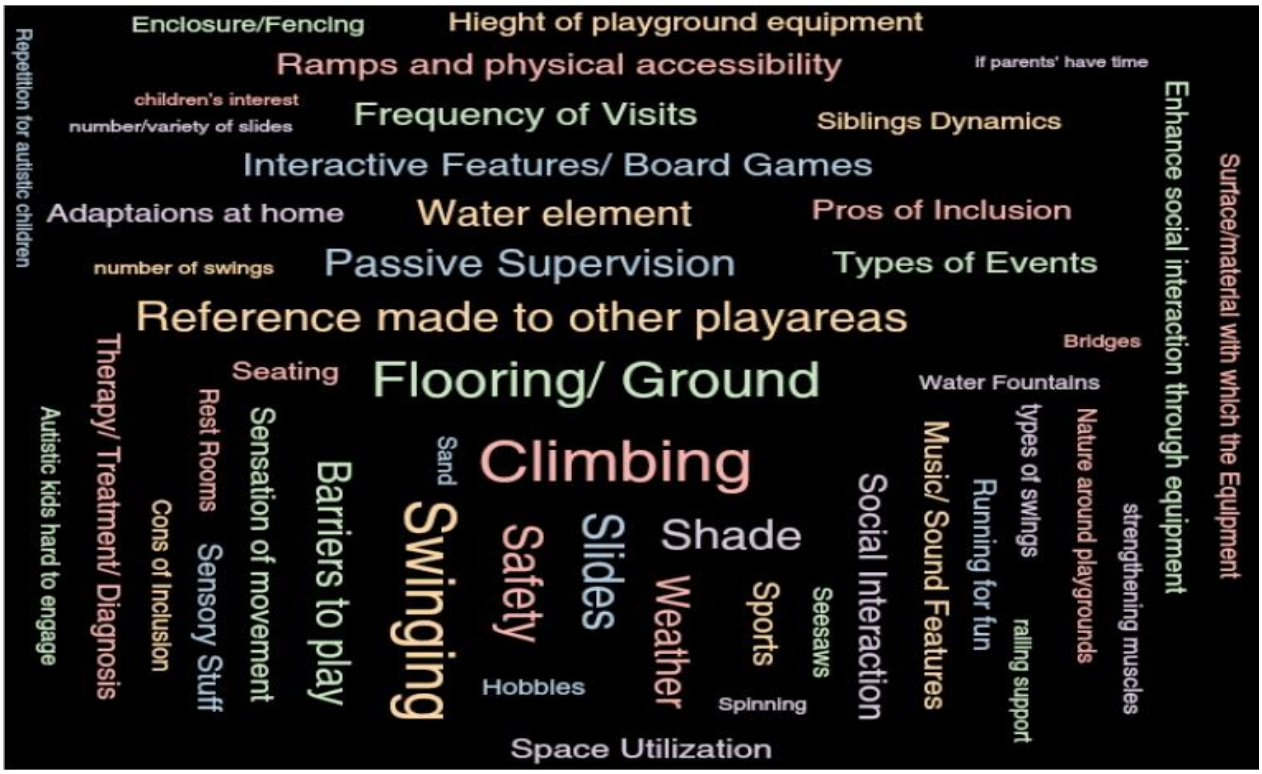
I made observations on inclusive as well as typical playgrounds in the DFW metroplex in Texas to gain a better insight into the play experience. As an applied anthropologist, I went out in the field without any preconceived notions to gain an insider's point of view of a playground experience. Spradley highlighted that "rather than studying people, ethnography means learning from people" (Spradley 1979 :3). Each observation was of half an hour duration in various playgrounds in Texas, including McKenna Playground in Denton, Hope Playground in Frisco, and Allen Shivers and Klyde Warren Playgrounds in Dallas. Despite visiting these playgrounds in relatively favorable weather conditions and reasonable hours of the day during the months of May and June, hardly any children were found playing in the playgrounds, let alone children with special needs. Nonetheless, the observations facilitated and enhanced my understanding of the usability of playgrounds with adaptive equipment. This also made it easier to relate to features or facilities referred to by the parents during interviews. I took fieldnotes during the

observations along with photographs of the equipment. Anthropological research is not complete without observing the research participants in their natural habitat or without developing an emic perspective. To extend observational data collection beyond what I witnesses in person, I watched online videos of children with disabilities playing in different playgrounds.

Analysis Tools

Interviews were transcribed verbatim and Transcribe.wreally.com, a web application, facilitated this process. However, the dictation feature was not useful as my accent did not match what the web application expected. To synthesize the findings into coherent themes, Dedoose (app.dedoose.com), an online encrypted qualitative coding program was utilized. The interview transcripts were uploaded to Dedoose and coded to find patterns emerging across them. Figure 3 shows a word cloud of themes that emerged in Dedoose after conducting the first round of coding.

Figure 3 Initial Word Cloud generated by Dedoose after first round of Coding



Data Analysis

The process of data analysis was triggered the moment I began data collection, as with every interview I noticed similarities in what parents shared. Upon completion of data collection and transcription, the transcripts were coded and major needs were organized into assessment themes and categories using Dedoose. Coding was an inductive process and grounded theory was used to guide the analysis. Strauss and Corbin have viewed grounded theory as a process of the researcher beginning with an area of the study and allowing the theory to emerge from the data (Strauss and Corbin 1990). Each transcript was read a few times to get a general idea of the parent's point of view, and then each response was coded, using a complex, bottom-up, inductive approach. Codes are "names or symbols used to stand for a group of similar items, ideas or phenomenon that researcher has noticed in his or her data set" (Schensul and LeCompte 1999:

56) [See Appendix D]. Coding was an iterative process; the more I got immersed in the data, the more I would go back and forth between codes to refine them. It was comforting to find out that it was quite natural to code and recode; as Galman explained, "The process of coding is especially intensive in grounded theory universe" (Galman 2013: 37). Devi described the process of coding as "selective reduction," as text is arranged into manageable content categories (Devi 2009: 2). This is further substantiated by Bernard, according to whom "Coding turns free-flowing texts into a set of nominal variables" (Bernard 2011:249). Since this was a qualitative study, data were coded on the basis of both frequency of the ideas and also on their mere presence. Ideas that occurred frequently emerged as major themes, while those not so frequent nevertheless formed a part of the research study. In order to operationalize and contextualize codes, rules for categorization were identified, which ensured that categories were consistent and meaningful. Codes were made distinct in order to be distinguished from each other and could be referred to anytime in the future without any ambiguity. Finally, a codebook was created in which 82 codes were clearly identified. Coding was followed by content analysis, construction of overarching themes from the emergent categories and making connections between them. Content analysis "… is a research technique for the objective, systematic, and quantitative description of the manifest content of communication" (Berelson 1971: 18). Context is critical for the anthropological lens and content analysis helped to construe and tease out information, keeping playground usability for children with disabilities in consideration. Thus, content analysis facilitated in creating a story from the available coded data. It was beneficial in classifying core consistencies in parents' responses about playground usability and conceptualizing a prospective framework for the proposed universally designed playground.

CHAPTER 3

LITERATURE REVIEW

In this chapter I have attempted to place "inclusive play" and "universally designed playgrounds" within broader anthropological scholarship through a theoretical review. The anthropological literature on inclusive play and universally designed playgrounds is limited. The chapter begins with an introduction to anthropology as a discipline, followed by an anthropological discussion on topics including play, children and childhood. Later I have analyzed theoretical frameworks on othering, inclusion, socialization, disabilities, and universal design. In the concluding discussion, I have made an effort to synthesize information from the entire chapter to contextualize inclusive play and universally designed playgrounds within the realm of applied anthropology.

Anthropology: The Discipline that Embraces Diversity

Anthropology was an important research frame to study inclusion and diversity. "Anthropology," per Wolf, "is the most humanistic of sciences and the most scientific of the humanities" (Wolf 1964 :88). Thus, as a discipline, it bridges the gap between the sciences and the humanities. Anthropology encompasses everything that is human, across the globe, unshackled by time, and focuses on human issues at both micro and macro levels. This field is differentiated from other social science disciplines by its reliance on cultural relativity as an organizing principle (Frank 1986). The study of culture and social aspects, and how they are socially constructed is the core of the anthropological field (Cremers et al. 2014: 34). The holistic methodological approach of anthropology concentrates on the context rather than only on

the individuals and emphasizes the intricacies of social processees and how social conditions are influenced. This makes the anthropological lens ideal for researching children. As Lancy noted, "So often, western psychologists and others concerned with children use biased samples and a biased, ethnocentric lens to advance propositions about the nature and purpose of childhood. And, along comes anthropology to set the record straight" (Lancy 2012:13).

Anthropology is the discipline that studies races, cultures, identity, language, and the very meaning of human differences (Kottak 2011). Applied anthropology is this discipline's branch where anthropological knowledge is used to solve critical human issues and make policy decisions. "Anthropologists are attuned to looking for similarities and differences in the ways in which social life is organized in different places and situations," wrote Dyck (2012: 8). The particular aspect of dealing with human differences in anthropology is important for this research, as differently-abled children are in focus. Anthropologists are advocates of diversity and they greatly value human differences. Ruth Benedict rightly articulated that the purpose of anthropology is to "make the world safe for human differences" (Ruth Benedict 1974:14-15). In fact, the roots of anthropology as a discipline are found in acknowledging, promoting and valuing diversity.

Play and Childhood in Anthropology

While there is no anthropological research that directly addresses inclusive play and universally designed playgrounds, anthropologists have studied play and childhood. Nevertheless, there is disagreement among anthropologists as to the appropriate coverage of these topics.

Anthropological studies have found that children have a remarkable and undisputed capacity for learning in general and learning culture in particular. However, according to Hirschfeld (2002), anthropological research on cultural learning has overestimated the role adults play and underestimated children's contribution to cultural reproduction, along with lacking appreciation for how children's culture, particularly, shapes adult culture. In his opinion, "Anthropologists may not like children, but they should" (Hirschfeld 2002: 622). Erika Friedl held a similar view, stating, "With few exceptions, children not only are underrepresented in our texts but also undertheorized and outright neglected" (Friedl 2002:19). Roberte Hamayon (2012) also thought that notions of play were not often acknowledged as anthropological research objects and that play occupied a minor role in anthropological theorizing. Schwartzmann (1998), in the foreword to Goldman's book, recognized the value that his work on play added to the field, writing, "I have been waiting a long time for anthropologists to appreciate the value of producing richly detailed and 'thick' ethnographies of children's play… most anthropologists continue to neglect this topic" (Schwartzmann 1998: xi). Michael Puett, in the foreword to Hamayon's book, appreciated his work, as Hamayon focused on "play not as a poor second cousin to ritual" but rather as "… a fundamental way of interacting with the world" (Puett 2012: ii).

David F. Lancy, however, refuted the claim that anthropologists have not studied childhood and has provided a short history of the field. He stated that "one reason for the apparent dearth of work on childhood in anthropology is the fragmented nature of the field… This may account for the claim that anthropologists don't study childhood" (Lancy 2012:2). Anthropology's growing interest in childhood has resulted in the development of a dynamic, synergistic and holistic body of work providing a more complete picture (Bock et al. 2008).

According to LeVine, Boas (1912) focused on children more than 100 years ago. As he asserted, "Boas formulated a developmental perspective suggesting not only that human growth is influenced by environmental factors but also that, given the gradual maturation of the human nervous system, the child's 'mental makeup' must also be affected by 'the social and geographical environment'" (LeVine 2007: 249). Lancy noted that "the 'culture and personality' school produced a great deal of research focused on the relationship between early experience in culture and later personality or character" (Lancy 2012:4). However, Lancy did not deny that there is room for improvement, as "childhood is not static - patiently waiting for us to improve our methods and theories" (Lancy 2012:13).

Play is an area with potential and consequential effects for anthropology (Goldman 1998). However, just like with the topic of childhood, there are contrasting points of view as to the amount of attention "play" has received in the discipline. Sawyer argued, "Anthropology continues to neglect play, creativity, and imagination in children" (Sawyer 2002: 147). Goldman stated, "The view has long prevailed that 'real anthropologists' do not study child play" (Goldman 1998: xv). Huizinga (1949), Malaby (2008) and Hamayon (2012) all believed that play-element in culture has been on the wane since the eighteenth century in the western civilization. They all attributed the limited anthropological literature on play to the treatment of play as a non-serious activity defined by its lack of productivity and efficiency. Malaby discussed how anthropology of play never found a strong institutional footing, as the "Anthropological Association for the Study of Play," founded in 1974, was reduced to simply an interdisciplinary organization, "The Association for the Study of Play," despite efforts by Brian Sutton-Smith, who served as the president of the Anthropological Association for the Study of Play (Malaby 2008: 207). Nevertheless, Lancy (2012) approached the matter more

optimistically, noting that the Anthropological Association for the Study of Play, in its thirty-seven years of existence, was extremely prolific and published an annual volume of studies along with newsletters and journals. He firmly believed that "… in the broad overview of the literature on childhood in anthropology, play and games constitute a significant portion" (Lancy 2012:10).

Deconstructing Childhood: Children as Culture Brokers and Social Agents

The foundation of modern anthropology is that culture is learned, not inherited; thus childhood is an important area of research for anthropological studies. The view of the child as a culture broker encompasses one major and several minor research traditions (Lancy 2012). Lancy viewed childhood as a "Holding Pattern," specifying the function of childhood as "… an external womb or incubator, growing the child until it becomes fully human" (Lancy 2012:8). Research has shown that children have their own social agency, distinct from the adult world. Allison James elaborated, noting, "Children construct their own ordered system of rules by reinterpreting the social models given to them by adults. It is through this creative reordering of adult perception…that the social world of children generates its own system of meanings" (James 1979: 83). Children are social actors and shape their own unique form of agency as opposed to being submissive recipients of the social processes, which they are surrounded by (Attard 2008). They are not merely passive absorbers of adult culture nor are they socialized in a deterministic fashion (Jenkins 1998). They are "independent actors negotiating and navigating through social, cultural and ecological settings" (Bock et al. 2008: 4). According to Sawyer (2002), practice theorists conceive of individuals as active agents who constitute, manipulate, interpret, and invent culture, which reinforces the notion that children create their own culture.

Fantasy or creative play holds great significance in play theory and emphasizes the strong agency the child possesses. Freud (1958) highlighted the creative aspect of play and described how every child at play acted like a creative writer who created a world of his own that pleased him. Goldman also reinforced this idea that while playing, children are "… authors of their own fictions." He claimed that play moves between "mimesis and mythos," between imitation and creativity, between "fantasy and reality" (Goldman 1998: xvi). Through the process of playing the children areconstructing their own reality (Winnicott 1971), a fictional framework with values and possibilities different from empirical reality (Hamayon 2012).

Childhood has been defined as an experience, therefore this phenomenon can be understood in a more effective manner through an ethnographic approach. According to Attard, "Childhood should not be marginalized and excluded from the investigation of social experience, but rather is an element of social experience which must be understood ethnographically" (Attard 2008: 24). Ethnographic research shifts the focus from the perceptions of the researcher, an adult, to what children actually go thorough, thus, "instead of relying on adult-imposed meanings of childhood, anthropologists need to continue to give due attention to young people as social actors in their own right, actively producing their own culture rather than simply being produced by it themselves" (Bluebond-Langner and Korbin 2007: 241). Similarly, Davis et al. (2008) noted that differently-abled children as social actors negotiate their own social, and that the diversity of their lives can be explored by ethnographers being reflexive about how these children experience and respond to issues of access. Therefore, an ethnographic research approach sheds light on children as unique individuals who execute their own social and political agency separate from adults.

Children's Play Culture

Culture and play—both concepts are elusive and both have been the subject of social and academic debate. However, play is ubiquitous across human cultures and has various dimensions (Hamayon 2012). Despite being a truly universal cultural category, its nature is still far from being understood (Csikszentmihalyi and Bennett 1971). Childhood and play go hand in hand; Lev Vygotsky (1978) described play as the leading development during childhood. Children's play culture can have its own language, fads and phases, values, and even its own history and geography as seen in the play landscapes children create and recreate for themselves (Casey 2005). Johan Huzinga discussed play as an element of culture and society and believed that play fulfills a "culture-creating function" (Huizinga 1949: 71). He used the term "play theory" to define the conceptual space in which play occurs, and argued that play is a necessary condition for the generation of culture. Goldman (1998) emphasized the importance of play in a theoretical context and believed that theories about symbolism, identity, and mythology cannot be developed without making reference to fantasy play.

Play is one of humanity's apparently purest activities (Puett 2012). Yet, there is a debate about whether play should be considered an "activity" or not. Hamayon (2012) viewed play not as a form of activity but as an approach to action, the manner in which this activity makes sense to the relevant individuals. In Giddens' (1984) opinion, play is a disposition that makes the actor an agent within social processes, but in a restrained way. According to him, the actor may affect events, but this agency is not confined to the actor's intent or measured by it, rather, it allows for unintended consequences of action. Malaby (2008) believed that the conception of play as a disposition rather than an activity had always existed. He categorized play as a disposition, an attitude characterized by a readiness to improvise in an ever-changing world. Pierre Bourdieu

(1984) used the idea of improvisation to develop the concept of the habitus, a system of embodied dispositions. Habitus is an interplay between free will and determined structures over time that is created and reproduced unconsciously, "without any deliberate pursuit of coherence…without any conscious concentration" (Bourdieu 1984: 170). Thus, during play children acclimatize to changing circumstances at the spur of the moment and adjust to new conditions without any prior planning or preparation. According to Askins et al. (2013), research findings, children with developmental disabilities spontaneously demonstrate some behaviors associated with the intrinsic motivation to play in social environments, especially when they have the opportunity to control specific environmental parameters and orchestrate events. Sutton-Smith (1975) has also acknowledged this characteristic of flexibility and spontaneity involved in play and perceived play as an example of "adaptive potentiation."

According to Sawyer (2002), the field most closely associated with the study of children and play is developmental psychology. However, he emphasized that anthropologists do not find that research helpful because of its explicit focus on the isolated individual and its neglect of social, cultural, and historical context, and also because of its experimental methodology. Goldman was of the opinion that play rests at the boundary of psychology and anthropology and can bring together an "ethnographically enlightened psychology and a more cognitively aware anthropology" (Goldman 1998: 11). Sawyer (2002) believed that developmental psychologists implicitly assume that child development is universal while anthropologists are much more ready to accept that there are cultural differences in play. Play theorists like Johan Huizinga and Roger Caillois both had a generalized approach towards play; the former brought in the historical perspective while the latter added the sociological viewpoint. However, Brian Sutton-Smith (1981) employed an interdisciplinary research approach towards play that drew insights from

history, cross-cultural studies, psychology, sociology and education, and which seems to be closest to anthropology. His research on playgrounds is most relevant to this study, and in my opinion he adopted an ethnographic research methodology. Observing and collecting data and compiling information from more than a thousand informants including children and adults from every province and school district of New Zealand for three years, Sutton-Smith highlighted various social, cultural, historical, and psychological contexts in which children's play occurs. His main findings revealed that the playground is a place that mostly runs itself and needs little intervention from adults. According to Tucker (2008), when Sutton-Smith began his unique research, he was essentially the only researcher working on the playground.

Play: Children's Work

One of the greatest joys of being a child is the ability to play, socialize and interact with other children (Rick Hansen 2011). According to Article 31 of the proceedings of the Convention on the Rights of the Child held by the United Nations Office of the High Commissioner for Human Rights (OHCHR), play is a fundamental and universal human right of a child. Play is every child's biological, psychological and social necessity (Gleave 2012). Research has revealed that there is no particular definition of play. Playing is a search for the optimal experience, a search for enjoyment (Csikszentmihalyi 1990). Play is a complex, multifaceted behavior that is relatively easy to observe and more difficult to describe (Rubin, Fein and Vandenberg 1983). It is a fundamental way of interacting with the world (Hamayon 2012). It is a freely chosen, personally directed, intrinsically motivated behavior that actively engages the child (John and Wheway 2004). "Play is varied and flexible and there is no 'right' or

'wrong' way to play" (Gleave 2012: 4). Bundy's (1997) definition of play as a child's primary occupation has been used in several studies.

Yet, play has been deemed a non-serious activity, an entertainment, performed by children, or by adults in their leisure time (Puett 2012). The play and work dichotomy has been a topic of great discussion in the literature, and the aspect of productivity has been debated — whether play is unproductive and work more productive. Schwartzman (1978) noted that the earliest documentation of children in varied cultural contexts came from descriptions of play that implicitly or explicitly depicted childhood as a time for purposeless activity, the child passing time in play until they can begin to learn important things or be useful. While discussing play and games for adults, Roger Caillois commented on play's non-work status: "Play is an occasion of pure waste: waste of time, energy, ingenuity, skill" (Caillois 1961:5-6). Sheridan approached this work-play distinction in an optimistic manner, defining play as "eager engagement in pleasurable, physical or mental effort to obtain emotional satisfaction" (Sheridan 1975: 5). Conversely, she defined work as "voluntary engagement in disciplined physical or mental effort to obtain material benefit" (Sheridan 1975: 5). Malaby attributed his observation of the relatively meager treatment of play in anthropological literature to the perception that play is "stake-less" whereas work is "stake-filled" (Malaby 2008: 206). Clifford Geertz (1973) did not agree with the concept of play being "stake-less" in his discussion of play for adults. During his discourse on Balinese Cockfight, a game in the context of play, he demonstrated that a cockfight held the highest stakes of all. Lancy (2012) added an interesting standpoint to the work-play debate as it relates to children. He believed that "children at work" was equally important and as fundamental to childhood as play in most societies, yet it has received far less attention than children's play (Lancy 2012:10).

Disability as Social Exclusion

Before the 1970s, disability in the United States was regarded as a "private problem of unfortunate families and their individual members," but later decades brought improvements to this field (Frank 1986: 43). Disabilities refer to impairments, limitations or restrictions to one or more of children's physical, cognitive, sensory, language, speech, communication, behavioral and/or social functions (Blackburn et al. 2010, Boyle at al. 2011). Research has revealed that there is a distinction between embodied limitations and social discrimination. Disability is not merely a physical, psychological or intellectual handicap but is the social exclusion that takes place due to bodily differences. John and Wheway elaborated, stating, "Impairment is what we have. Disability is what we experience" (John and Wheway 2004: 5). "Studying play in multiply disabled children is especially challenging, because of difficulty in understanding the unique or interactive affect each disability has on children's play" according to Jenvey (2013: 1). However, Vygotsky's sociocultural theory resonated with John and Wheway and viewed children with disabilities under the concept of a "positive differential approach" (Vygotsky 1929: 420). He believed that children whose development is hampered by any handicap are not less developed than their peers but have developed differently. He emphasized that the handicap was not the impairment itself or the associated biological factors, rather the social implications that altered children's relationship with the world and affected their interaction with others. Therefore, "disability exists when people experience discrimination on the basis of perceived functional limitations" (Kasnitz and Shuttleworth 2001: 2). Disability is not intrinsic but a relational classification and is formed by social conditions. Ludvigson et al. conceded that environment plays a critical role in either promoting or discouraging disability, stating, "The barriers that a person experiences to enjoying and participating in the life of their community are not intrinsic

to any medical or other condition or impairment but arise from disabling attitudes and environments" (Ludvigson et al. 2005: 6). The negative interactions between a person with special needs and the social milieu gives rise to disability. Consequently, disability is shaped by the social and material environment and in turn prevents one from fulfilling normative roles.

Exclusion from full participation in society results in the process of othering. Hence, disability could be recognized as cultural segregation since people with disabilities may not be able to identify with the general culture and population in general. Ablon was one of the pioneers in the field of disability as well as anthropology. She believed that people with disabilities are often labeled "the other," somehow separate from people who are not considered to have disabilities (Ablon 1995). Disability is a perception and prejudice of an able-bodied majority (Cervinkova 1996). Ablon studied the social response of the community to people with special needs and identified its reactions as the disabling force rather than the bodily differences. According to Shuttleworth and Kasnitz, in her ethnographic research on people with disabilities, Ablon mentioned her informants' views of their bodily differences and social reactions to such differences "with an eye to revealing social injustices" (Shuttleworth and Kasnitz 2004: 142). Consequently, an ethnographic approach is pertinent for such research since particular focus is put on what the person with special needs experiences. Gleason substantiated this view, stating, "The methodology of ethnographic research is uniquely suited to the study of persons with developmental disabilities because it seeks to develop basic knowledge of the experience of the person in the setting" (Gleason 1990: 75). Ablon's pioneering ethnographic approach to the study of disability, specifically working with stigmatized populations, helped to move medical anthropology from a disease framework of disability to an ethnographic focus (Shuttleworth and Kasnitz 2004). Ethnography provides an insider's perspective on experiencing disability,

especially for children as it enables "… a more organic story to emerge" when studying children with varying abilities (Davis et al.2008: 235). However, in medical anthropology "impairment-disability is still situated peripherally to the core research issues of illness and healing" (Shuttleworth and Kasnitz 2004: 142). There is a need for further research in the area of disability studies. Anthropology's genuine fascination with "the other" can logically inform the field of disability studies, yet this connection has not fully been utilized (Cervinkova 1996; Edgerton 1984; Kasnitz 2001; Klotz 2003; McDermott and Herve 1995).

Othering vs. Inclusion

The idea of cultural relativity in anthropology is to accept diverse cultures as being fundamentally different, rather than considering them any lesser or inferior, thus refuting the binary opposition of "us versus the other." If people in other societies differed from "us," the cause was not their inferiority or their backwardness, but their adherence to a different lifestyle oriented toward different values and embodied in different customs and institutions (Benedict 1974). The process of othering is the human tendency to believe that the group one belongs to is inherently the right way to be human. Bourdieu (1986) noted that social identity is defined and asserted through difference and that individuals and groups recognize how they are different from other individuals and groups. Social identity theory describes how the in-group will discriminate against the out-group to enhance their self-image (Tajfel and Turner 1986). According to Michel Foucault (1987), othering is strongly connected with power and knowledge, when one group "others" another group, they perceive them as weaker to make themselves look stronger or better. Jensen stated, "The concept of othering is well suited for understanding the power structures as well as the historic symbolic meanings conditioning such identity formation"

(Jensen 2011:63). Hence, the process of othering manipulates the power dynamics in a community as well.

Since early anthropology was a direct result of colonialism and focused on marginalized communities, it made an attempt to mitigate these distinctions between "West and the rest," i.e., "us versus the other." In contrast to othering, inclusion is a phenomenon with a similar root to anthropology, as the essence of both is to look beyond human differences and encourage diversity. According to an inclusion toolkit report:

> Inclusion is essentially welcoming everyone into your world, no matter their background, their ethnicity, the language they speak, how they look or how they see, hear or walk. It is an attitude and approach that seeks to ensure that every person, regardless of ability or background, can meaningfully participate in all aspects of life. Inclusion is an approach, not a program (Support for Families with Disabilities 2010: 7-8).

Inclusion can be perceived as removing barriers between us and the other in the realm of disability, us being the able-bodied majority and the other being the differently-abled. The importance of context is already well-established in the realm of anthropology but it holds paramount significance in implementing the concept of inclusion. To design inclusive spaces, the subtle nuances have to be understood in order to develop an emic perspective. While discussing the role of theory as essential in discovering and explaining patterns in cultural and human values, Cremers et al. stated, "Central to these perspectives is the notion that cultural aspects should be studied holistically, neither in isolation of their historically formed contexts, nor from one single viewpoint" (Cremers et al. 2014: 35). Dermot O'Reilly, analyzing inclusion from an anthropological lens, emphasized context as he specified, "… the modelling of relations of inclusion and exclusion needs to address the contextual features in any particular case to be investigated" (O'Reilly 2005: 85). This signifies the importance of "context" in inclusion as well as in the discipline of anthropology.

Inclusion through Socialization and Play

Individuals and groups categorize the world into 'us' and 'the other' to enhance their self-image Nonetheless, developing a self-identity is not necessarily negative; in fact, a balanced self-image is essential for one's wellbeing. "When children have a positive sense of self-efficacy, they are motivated to participate in occupations and seek new challenges" (Askins et al. 2013: 2). A healthy self-identity can be developed through the process of socialization. Jenkins (1998) believed that childhood culture is the site of identity formation and children are active participants in the process of defining their identities. In fact, Lancy (2012) noted that the purpose of childhood according to early anthropological approaches was socialization. He endorsed the view that "childhood exists to afford the opportunity for the child to be shaped to fit the modal personality or social role in a particular society" (Lancy 2012:4). In other words, socialization is cultural development that happens during the process of general upbringing, a "period of humanization" in childhood (Leontiev`s 1978). Socialization also involves the development of the concept of self by being enculturated to the surroundings. One of the ways in which the process of socialization takes place is by individuals engaging in social interaction with other individuals in their surroundings and becoming conscious of the fact that one has a distinct identity, separate from others. Thus, children at play, through their interaction with the social and physical environment, learn how to adopt a certain role in society. Children with developmental disorders may develop self-identities and awareness about individuals at different speeds and varying chronological stages. In inclusive playgrounds, socialization facilitates differently-abled children in particular to develop a healthy image of self and others and makes them feel included, accepted and part of those specific surroundings. Raising children in a diverse environment and involving them in socialization through play enables them to recognize

themselves, as well as others, as distinct individuals and to value each other regardless of their differences and abilities. “Socialization continues, robustly, to serve as the home base of many anthropologists who study childhood,” writes Lancy (2012:5). However, Hirschfeld (2002) suggested that per the socialization theory cultural reproduction rests with adults and is achieved mainly through adult interventions in children's lives. Hence he argued that socialization theory often overestimated the influence that adults actually wielded on children.

The socialization process takes place gradually, over a period of time when awareness about individuals in the surrounding world is gained. On the other hand, a “play episode begins when awareness merges with action. There is a lack of self-consciousness, lack of actor’s analytic or “outside” viewpoint during this interaction with the environment” (Csikszentmihalyi and Bennett 1971:46). So, an insider perspective is maintained during play. It is interesting to juxtapose the process of socialization with that of playing. The socialization process can take place through playing; however, socialization creates self-awareness whereas during play the element of self-consciousness is lacking.

Playing Together

Children with physical, mental, and/or emotional problems are often excluded from play opportunities. Inclusive play creates a conducive environment for all children as it integrates social inclusion with physical accessibility. Hence, inclusive play enables the removal of social barriers along with physical obstacles among differently-abled children. Ludvigson et al. defined inclusion as “embracing diversity, rather than simply tolerating the differences” (Ludvigson et al. 2005: 6). Inclusion is a phenomenon that nurtures an environment where differences are not just respected but also welcomed and valued. Hobson had a different take on inclusive play, stating,

"The concept of inclusive play is consistent with the principle of 'doing to others as you would have them do to you'" (Hobson 2013:32). A rich play environment encourages interaction among differently-abled children. Casey, discussing the benefits of all children playing together stated, "People and peers are a particular source of motivation, inspiration, curiosity, stimulation, and combinations of people create endlessly varied possibilities" (Casey 2005: 21). Children with disabilities need to feel successful and independent and be with peers to experience enjoyment in performing an activity (Csikszentmihalyi 1990). Friendships developed through inclusive play are often carried over into other parts of children's lives and may also result in building a stronger community. Hobson endorsed this view; "Inclusive playgrounds will increase people's acceptance of others and generate goodwill for years to come" (Hobson 2013:33). Therefore, differently-abled and able-bodied children playing together is a mutually beneficial phenomenon.

Play: A Therapeutic Tool

There is consensus in research that play is fundamental to the healthy growth of a child. "Play is an innate childhood instinct, that is not only enjoyable but also crucial to the processes of learning and development" (Gleave 2012: 4). Play is regarded as an all-encompassing activity that supports skill development such as social, intellectual, emotional and physical development (CAOT 1996, Rodger and Ziviani 1999; Stagnetti 2004). Playing provides dynamism, self-confidence, and self-assurance (Csikszentmihalyi 1990). Outdoor play in particular is fundamental for a child's growth as opposed to passive play opportunities, such as online games. Active play stimulates healthy activity, provides physical exercise and builds strength. During play children learn to adapt to the world around them and get real life experience and lessons,

e.g., takings risks, being challenged, gauging their capacities and pushing their limits. During play the child practices and consolidates acquired skills, which encourages cognitive development (Piaget 1978). Playing allows children to naturally test their limits while suspending the constraining conditions of reality in order to imagine other paths (Hamayon 2012). Childhood make-believe play prepares children to explore the world and its possibilities (Puett 2012). Children during play nurture qualities that will eventually help them to develop occupational roles and to become more productive members of society (Clifford and Bundy 1989). They learn about relationships through friendships and experience emotions like excitement, curiosity, nervousness, courage, anxiety, etc. Play also initiates wide-ranging verbal and non-verbal communication and its flexible usage. It leads to perceptual, conceptual, intellectual, and language development, and the eventual integration of cognitive abilities (Levitt 1975, Weininger and Fitzgerald 1988). Play also offers opportunities for behavior and traits to be either appreciated or disapproved, and through it children learn how to conform to the norms of their community. Tai encapsulated the benefits of play very well for all children, including those with disabilities. He believed the reasons to be as follows:

1. Brain development, physical development and health.
2. Building social, emotional and life skills.
3. Helping to develop an awareness for risk.
4. Encouraging children to experiment, generate ideas, practice skills, role play, invent.
5. Allowing an opportunity for children with disabilities to interact with their peers.
6. Offering opportunities for choice and decision making.
7. Establishing a critical bond with nature during childhood. (Tai 2006)

The advantages of play are also well-established in the occupational therapy field; occupational therapists use play as a tool to help children with disabilities reach therapeutic goals. Play activities are used to achieve treatment objectives such as "fine motor skill development, postural control, and concept development" (Missiuna and Pollock 1991: 882). Rast explained that "in therapeutic setting, play often becomes a tool used to work towards a goal" (Rast 1986: 30). Thus, play and therapy go hand in hand for children with disabilities. These children spend a considerable amount of time during the day in therapy and in turn need more play opportunities to catch up on what their nondisabled peers engage in. "Children with physical disabilities often have much less time available for play than do their nondisabled peers, in part due to the time spent in therapeutic programs" (Brown and Gordon, 1987: 830). Without adequate play opportunities, children with disabilities might acquire secondary disabilities, including diminished motivation, imagination, and creativity; poorly developed social skills; and increased dependence (Missiuna and Pollock 1991). Consequently, enhancing free play opportunities for children with special needs is not just a therapeutic tool in general but also a preventive measure for secondary disabilities.

Environment Offered by Universal Design

Playgrounds are most commonly associated with free play, pleasure, and adventures. They are related to physical activities as well as being places for social gatherings where children can meet and interact. According to Sutton-Smith (1981) social play and power relationships form the crux of playground life. However, an inclusive or universally designed playground does not promote power dynamics; instead, it incorporates the principles of equality and is encompassing, embracing, and treats all children the same way. It is intentionally designed not to

discriminate against children on their abilities and does not undervalue the abilities that any child possesses, as "a child with a disability is a child with abilities" (Christensen and Jeon 2006: 48). Ostroff (2001) took a "nothing is impossible" approach to universal playground design, as he believed that the range of people's abilities is ordinary, not out of the ordinary. According to Landscape Structures, a leading manufacturer of universally designed playground equipment, inclusive playgrounds "offer many opportunities for children to further develop physical, cognitive, sensory and social skills. An inclusive design includes a balance of play experiences to build all these skills" (Landscape Structures 2016: 5). Research has demonstrated that a universally designed playground should provide an environment that supports a range of mental and physical challenges, promoting interaction and communication and giving children a choice of challenges (Goltsman 2001; Ringaert 2002). Brennan and Sutcliffe (2008), in a foreword to a design guide, stressed that "a practical design should integrate the principles for creating imaginative, innovative, and stimulating play spaces that could enrich the lives of children" (Brennan and Sutcliffe 2008:3). According to Ringaert, an essential aspect of universal design is having products and environments that are usable by all people without "specialized design, which may be stigmatizing" (Ringaert 2002:29). Therefore, the aim of such a design is that children with special needs do not feel that they are being eliminated or excluded in any way from the environment. Neither should they feel that they are receiving extra attention because of being different from the general social expectations. Hence, children with a diverse spectrum of needs are kept in consideration while designing the usability, and social interaction along with physical and mental exercise is encouraged regardless of ability.

A conducive environment, an appropriate space, and a suitable cultural setting at the playground are crucial to improving the quality of play. The space utilization not only focuses on

the physical aspect of play, but also integrates its emotional, social, and psychological benefits. As children move beyond exploring their environment, they are innately drawn to seek challenges, meet the demands of a situation, and produce effects to bring about a desired outcome (Riley 1974). In fact, play has been defined as "a state of experience in which the actor's ability to act matches the requirements for action in his environment" (Csikszentmihalyi and Bennett 1971: 45). In the case that the environmental challenges exceed the child's skills, it leads to anxiety and frustration (Missiuna and Pollock 1991). Hence, experiencing frustration in the playground defeats the purpose of play as per Freud (1935) the goal of children's play is to get rid of any anxiety. So, a favourable environment accentuates the play experience rather than effecting the children adversely. As a consequence of their behavior; either success or failures, children move on to the achievement phase of play, which requires children to take risks and reflect on their skills (Reilly 1974). Weisner noted, "Anthropologists believe that the most important influence in human development is the ecological and cultural setting within which a child will grow up" (Weisner 2015:451). There could be no better place than a playground with a healthy and favorable atmosphere to make a positive impact on children's upbringing. Context is of paramount significance in anthropology, which in this case is the playground's environment. Bateson discussed how space and surroundings impact play and referred to play as one of the "categories of contextual organization of behavior" (Bateson 1979: 138). Children will be more receptive and flexible if they are raised in a diverse community. A lot of effort is required for designing and planning such an environment; Ludvigson et al. described inclusion as "the process of conceiving, designing, planning, and maintaining of all parts of the physical and cultural community to cater for the widest spectrum of ability and need" (Ludvigson et al.2005: 6). Proper space utilization affects a person's overall wellbeing, as the perceptions and

experiences of that space penetrate a person's emotions and state of mind, their sense of self, social relations, and cultural predispositions (Low and Lawrence-Zunigna 2003). Children's communication and interpersonal skills are also polished through varied surroundings. Descriptors such as "ADA (Americans with Disabilities Act) accessible" and "inclusive/ universally designed playgrounds" have become almost synonymous when describing these playgrounds; however, each is quite distinct. Steinfeld (1994) spelled out the distinction between the two: accessible design simply provides a token response to the needs of people with disabilities whereas universal design integrates the accommodation of disability into the basic concept of the design. In other words, accessible design acknowledges that children with disabilities have access to the playground, but it doesn't take into consideration social integration or any other facets of the child's experience. Universal design makes place for children with disabilities alongside their able-bodied peers in the playground. ADA accessible playgrounds meets minimum accessibility standards per the legal framework whereas a universal design normally meets and exceeds those requirements.

The seven principles of universal design listed below were developed in 1997 by a group of architects, product designers, engineers, and environmental design researchers led by the late Ronald Mace at North Carolina State University (2014 National Disability Authority). The examples of playground structures that illustrate each principle come from the National Center of Accessibility (Skulski 2007). The seven principles are as follows:

1. Equitable Use: The design is useful and marketable to people with diverse abilities.

   E.g., the entire surface of the playground utilizes an accessible unitary surface that is firm and stable.

2. Flexibility in Use: The design accommodates a wide range of individual preferences and abilities.

E.g., elevated composite structures provide multiple means of access, including climbers, ladders, stairs, transfer systems, and ramps.

3. Simple and Intuitive Use: Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

E.g., a design team has addressed the "boring" standard transfer platform by transforming the platform and steps into the side of a mountain.

4. Perceptible Information: The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

E.g., one color scheme is used for equipment serving children 2 to 5 years and other color scheme is used for equipment serving children 5 to 12 years.

5. Tolerance for Error: The design minimizes hazards and the adverse consequences of accidental or unintended actions.

E.g., attention is paid to design openings on elevated structures that permit the passage of one child at a time to use the slide or climber, while prohibiting unintended use or passage.

6. Low Physical Effort: The design can be used effectively and comfortably with a minimum of fatigue.

E.g., drop zones that are outdoor elevators that utilize hydraulic pressure. The child's weight pushes the platform to the ground and as the child steps off the platform, it goes back returns automatically for the next passenger.

7. Size and Space for Approach and Use: Appropriate size and space is provided for approach, reach, manipulation, and use, regardless of user's body size, posture, or mobility.

E.g., if the slide or swing is designed to accommodate a larger person, the mom or dad could use it to demonstrate or cradle the child in comfort on their lap (2014 National Disability Authority; 2007 Skulski).

These seven principles of universal design incorporate fair and just usability of playground equipment for all children. Universally designed playgrounds have been identified as a means of addressing accessibility inequalities and providing all children with greater opportunities to be physically active, socialize, play, and learn (Stout 1998). Iwarsson and Stahl also perceived inclusive play as a tool to combat social inequality on the playground, writing, "the theme of inclusivity was consistent with the principles of universal design, specifically the principle of 'equitable use,' and the idea of universal design as a social movement" (Iwarsson and Stahl 2003: 60). Thus, these principles ensure that space, environment, and equipment in the playground treat all children equally.

Discussion

An inclusive playground incorporates some of the basic principles of an anthropological framework including diversity, acceptability and equality. These playgrounds provide a context i.e. environment for inclusive play. They serve as participatory, socializing, and inclusive spaces where play becomes a universal language through which the children communicate with each other. Universally designed playgrounds provide high quality play opportunities to all children and their usability does not discriminate on the basis of abilities. No specialized designs exist to

cater to any specific special need, so no child feels conscious of being given extra attention or deprived of any particular activity. Hence, the overall play experience is enhanced for all children. The physical space as well as its socio-cultural construction is designed to facilitate removal of physical and social barriers. The focus is on children, not as isolated individuals, but as members of a rich, dynamic environment. They are unified on the basis of their similarities rather than their differences. The playground can be viewed as a social space where differently-abled children as social agents bring in their own unique agency to contribute to the varied environment. They develop their own culture within which their self-representation, social actions and social relations occur. Since all children are being provided equal play opportunities, the playground minimizes power relations based on abilities and imparts a sense of equality among children. Such an inclusive environment has no set defined or desired social expectations to which children need to conform, thus reducing the chances of children experiencing social exclusion based on abilities. The setting aims to remove the distinction between "us and the other" along with social inequalities and prejudices based on physical and intellectual differences. The social patterns that emerge in a diverse milieu encourage every child's psychological and social survival. The process of socialization in the playground ensures that instead of making an attempt to enhance their self-image, individual children experience a positive reinforcement of their identity and are encouraged to develop self-esteem. This enables all differently-abled children recognize their own strengths and makes them aware of their worth and place in the ecosystem. The freedom of choice of children with disabilities is greatly diminished due to their continuous dependence on adults. Inclusive play as opposed to adult-planned activities improves children's sense of independence and personal identity.as they

control the content and intent of the play. However, this process of self-actualization may take place in a different way among able-bodied children and those with developmental disorders.

The social model provided by an inclusive playground prepares children for healthy engagement with the world around them. Children explore what effect they have on objects and people around them inside the playground. In turn they develop social and occupational roles that prepare them to become productive members of society later in life. This enculturation is particularly significant while growing up, as children develop an understanding of the world around them. This way they internalize a truer sense of the world; they realize that there are similarities and differences among people and that everyone has different strengths, which makes nobody inferior or superior. The life lessons children receive in an inclusive playground help them learn about the adult social world to which they will eventually belong. The playground environment contributes to their perception of a just and fairer society where everyone has a place.

Inclusion creates a suitable environment for all children to adapt to, which makes the concept of habitus more meaningful for children with varying abilities. In a universally designed playground, these children relatively have more opportunities to improvise and indulge in spontaneous play, as well as interact with space, structures and overall environment more than elsewhere, in their daily routine.

Literature has defined play, childhood and disability, all three as "experiences." Research has shown that ethnography is a particularly appropriate tool to study an experience, as the focus is on what the individual undergoes physically, mentally, socially, and emotionally in a certain environment. Ethnography is a strong methodological approach to study differently-abled children in playgrounds and to explore the rich depths of their lives and experiences.

CHAPTER 4

RESEARCH FINDINGS AND DISCUSSION

The opinions of the interviewed parents regarding playground usability were consonant with existing epistemological frameworks from the literature on playgrounds and disability. In this chapter, quotes from interviewees have been presented alongside citations from the existing literature, demonstrating a consensus between them. This in turn facilitated a deeper understanding of the findings and made them more relevant and focused.

Creating a Richer Environment

Interviewees gave a lot of positive feedback on an inclusive environment in a playground. They believed a diverse environment will enrich the playground experience in numerous ways. There are many benefits of a diverse environment in a playground as children are able to develop motor skills, take risks and push their limits, interact with each other, learn social norms and values, and discover their environment (Shaw 1987, Fjortoft 2001, Isenberg and Quisenberry 2002, Turner et al. 2009).

The following subthemes related to creating a richer play environment emerged from the interviews and have been discussed in detail in this section:

1. Promoting equality
2. Honing interpersonal and social skills
3. Embracing diversity
4. Symbiotic gain
5. Life lessons

6. Catharsis

Promoting Equality

Encouraging equal play opportunities was one of the major expectations of parents from such a playground. While discussing their children's playground activities and experiences, parents kept comparing their children with disabilities to able-bodied children and shared what their children wanted to do but could not. A mother specified that "my foundation is that she [my daughter] needs to be able to do what other kiddos do." The idea of an inclusive and diverse environment is to foster an atmosphere where all children can feel that they are equal in most aspects and that they have the same access to different equipment and activities as others. Iwarsson and Stahl also articulated this value: "the application of this concept [inclusion] suggests that children should be able not only to access a space but also to use the play space in the same way as other children" (Iwarsson and Stahl 2003: 59). Whether children with special needs utilize all facilities or not should be left to their discretion. Ludvigson et al. conceded that "while children won't always be able to participate in all available activities, an inclusive project should offer all children a real choice of play activities" (Ludvigson et al. 2005: 3). Availability of diverse facilities gives children with disabilities more control over their play, allows them to make their own choices, encourages independence and makes them feel equally capable as others. A mother expressed her son's desire to be like others by saying, "that is all they really want to be, like any other boy, dirty, muddy [laughing]." Parents anticipated that their children will experience greater equality while playing in a universally designed playground.

Honing Interpersonal Skills

Parents considered refining interpersonal and social skills to be one of the benefits of an inclusive environment by the parents. Prellwitz and Skär also stressed that "instead of concentrating only on playground equipment, measurements and meeting accessibility standards, it is important to focus on designing opportunities for [social] interaction" (Prellwitz and Skär 2007:152). Apart from parents of children who had social limitations like autism, social interaction was not considered a challenge by most parents. Nonetheless, parents hoped that their children's social skills would be further enhanced by a diverse environment. A father of a daughter with autism remarked that her social skills had improved with therapy. The only grandmother interviewed in this study deemed her grandson "a social butterfly," as he was good at initiating conversations and making friends. Many parents mentioned that both their able-bodied and children with disabilities enjoyed social interaction, and an all-embracing setting would enrich their social experience. Furthermore, some parents suggested that equipment that required team play would encourage greater social interaction and build interpersonal skills. The topic of Team Play is discussed in detail in the Playscapes section.

Embracing Diversity

Parents wanted their children with special needs to feel accepted and be treated fairly by their peers. At the same time, they wanted their children to be valued and respected for their different needs in such a diverse environment. A mother declared, "How ideal would it be that if typical kids go there and treat everyone equally, ohh that would be a dream come true!" None of the parents wanted sympathy or for others to feel sorry for their children with disabilities. They just wanted others was to be a little sensitive and considerate towards their children. A mother

explained that “typical children can learn how to interact with our kids and treat them like anyone else and ours can feel like normal, accepted.” A father described a girl with disabilities at his children’s school being maltreated by her peers and expressed how agonizing it was to witness such a sight. He stated, “I know a lot of kids… kids are kinda… kids can be cruel…they will mess with her a little bit…they can be cruel.” A warm and welcoming environment would minimize such incidents and encourage children to treat each other humanely and considerately.

Symbiotic Learning

Parents believed a diverse environment would be conducive for both groups of children, able-bodied children as well as children with disabilities. It would provide an opportunity for able-bodied children to interact and learn from children with disabilities and vice versa. One of the mothers mentioned the benefits of an inclusive playground was that “everyone gets to know each other and recognize that there is big diverse world out there and learn from each other and grow together.” Another mother conveyed that “the kids realize that we all have differences and you know they can still play among each other even with their differences.” According to Rogers-Warren et al., children with disabilities, “especially, can profit from the opportunity to observe, interact with, and imitate their normal and perhaps more skilled peers” (Rogers-Warren et al. 1980: 3). Hence, mutual learning was another predicted gain from a diverse setting.

Life Lessons

Parents viewed inclusion in the playground as a healthy life experience for children with all abilities. They were of the view that their children could gain life lessons including turn

taking, sharing, patience, kindness, and a sense of helping others from such an atmosphere. One of the mothers said, “For my typical kid I think it would create awareness for her, character building, sympathy and empathy and everything!” Another parent had a different way of expressing it, saying, “It opens up their hearts and minds to different abilities and different situations.” Thus, parents believed constructive life lessons could be derived from an inclusive play environment.

Catharsis

Freud (1935) perceived play as a means of catharsis since children “act out” their negative emotions and get rid of their anxieties. A mother who had two sons with autism described her hectic daily routine while making her appointment for the interview: “We do 82 hours of therapy weekly between the boys, thankfully, much of it overlaps!” A rich playground experience would be a means of catharsis and a place for children with special needs to unwind from their therapy schedules. Differently-abled children lack control over their lives and routinely miss out on doing what their able-bodied counterparts take for granted. This notion resonated with Ellis, who stated,“The [disabled] human has greater need for recreation or play services because of their limited circumstances" (Ellis, 1973: 147). Consequently, playground experience is important for the development and well-being of all children, but play as a medium of venting frustration is even more significant for children with disabilities.

Providing Quality Family Time

Visits to playgrounds were considered a recreational outing not only for the children but for the entire family, and parents had a lot to share as to how this experience could be enhanced

for all family members. Parents not only wanted siblings' interaction to be encouraged in the play settings but also wanted to play with their children in the playgrounds themselves.

The following subthemes related to providing quality family time during play emerged from the interviews and have been discussed in detail in this section:

1. Equipment encouraging sibling interactions
2. Playground catering to all siblings
3. Parent-children interaction in the playground

Equipment Encouraging Sibling Interaction

Parents wanted the playground equipment to be designed to foster siblings' interaction to nurture a stronger bond between them. Some parents who had able-bodied children as well as children with special needs mentioned that siblings would come and check on their siblings with disabilities in the playground but would not necessarily play with them. One of the mothers complained, "At home my kids do play together but when we go out, they don't because… the playgrounds are kind of designed not to facilitate that!" Hence, equipment that appeals to differently-abled children is needed in the playground to facilitate siblings' playtime together.

Playground Catering to All Siblings

Parents wanted a playground catering to all siblings, both able bodied and children with disabilities. One of the mothers explained, "Especially having multiple children, a place where all of my kids can kinda play together really and feel that they are not eliminated in any way, on either end of it." As much as parents wanted their children with disabilities to have an enjoyable playground experience, they didn't want their abled-bodied children to be ignored either. A

mother described her perception of an ideal playground in these words: "The equipment is intermixed so that the kids can play together and they don't feel that I'm going to go over here to play for this one thing or they are kind of in the same general area and not separated by two playgrounds." Equipment designed for all children would promote equality within the family among siblings as well as make supervision easier for parents.

Parent-Children Interaction in the Playground

When parents were asked whether they would like to participate in the playground with their children, almost all of them replied in the affirmative. Playful parent-child relationships lead to flexible, friendlier, and happier children (Sutton-Smith 1974). A lack of playfulness in many parental interactions is another potential area of social deprivation during play (Kogan, Tyler & Turner 1974; Oster 1984). A mother who was very enthusiastic about parents participating in the play described a swing that she had seen somewhere and really liked:

> It's a swing where there is a seat for the mother and then there is a little brown bucket seat for the baby and so the baby and the mother are facing each other and they are like both swinging at the same time.

Apart from the playground being a source of recreation for the parents, they wanted to participate in enhancing their child's experience by helping them use the equipment. Some said that their children were not comfortable using slides, swings, or climbing or walking across the bridge on their own, and others said that they would like to demonstrate to their children how the equipment was used. Some parents also mentioned that they would like the equipment to be accommodated for their use as well. This is discussed more in the Age-Appropriate Play section.

Building Community

Parents with children who have disabilities faced several challenges in their daily routines and personal lives that reverberated in their conversations during the interviews. Parents had some great ideas regarding how parental interactions could be increased within and outside the playground in order to provide a support system for each other. Casey has also acknowledged the importance of inclusive play in building a well-knit community,writing, “The benefits of inclusive play ripple through the community of the setting” (Casey 2005: 30).

The following subthemes related to community building emerged from the interviews and have been discussed in detail in this section:

1. Special circumstances within families
2. Helping hand in the playground
3. Seating arrangement to encourage parent interaction
4. Formation of parent support groups
5. Parent’s interest and involvement in the building process
6. Events at the playground

Special Circumstances within Families

Special circumstances within the families were prevalent to an extent within the sample. Three out of the fourteen children came from either single, divorced, or remarried families. One of the mothers expressed her dilemma, explaining, “I was an 18 [year old] mom…that was a challenge in itself and being that he came out with special needs, was even harder.” One father shared that he was in the middle of getting a divorce while one of the mothers said that she and her children lived with a step dad. Such situations within families make it more difficult for

parents to cope with the disabilities of their children, and the support of other parents as well as of the community would make life a little smoother for them.

A Helping Hand in the Playground

From time to time, parents mentioned that their children could be hard to manage and a helping hand could facilitate their visit to a playground. Parents described how their playground visits varied if they had other families to accompany them, another person going with them or if both parents were taking the children to the playground together. A mother explained, "If I have help, if someone goes with me, we can try to pick him up and put him on a slide." A few also mentioned that a little help from someone would make their playground visit less stressful. Some also believed that it would give them some relief to socialize with other parents, for which they mostly did not get much opportunity. A few also mentioned that a little help from someone would make their playground visit less stressful. Some also believed that it would give them some relief to socialize with other parents, which they did not get many opportunities to do.

Seating Arrangement to Encourage Parent Interaction

The playground is not just a place for social interaction for the children but also a place for parents to socialize, connect, and share their common concerns. A few parents also brought up the topic of space utilization and infrastructure arrangement to facilitate their social interaction. A mother said she would like "just somewhere to sit and just be with other parents if they want to sit down [together] or whatever." Laying out the playground in a way to facilitate parents' interaction would be a source of comfort for most parents.

Formation of Parent Support Groups

A few parents also suggested that formation of parent support groups in the playground community would be beneficial and keep the parents connected. A mother said, "They [playground management] could have mom support groups where we can meet while the kids play because that is always needed, like support systems!" Hence, the formation of a network for parents with children with disabilities in the Flag Pole Hill neighborhood would be a morale booster for these families.

Parents' Interest in the Building Process

Parents showed a great deal of interest in the playground renovations at Flag Pole Hill during the interviews. A few parents wanted to be involved in the process of building the playground. A mother expressed her interest, saying, "I would like to be probably involved in the building part of it, or some type of volunteering." Another mother shared her business card with me after the interview, mentioning that she might be able to help generate funding for this cause. One of the parents interviewed in Denton for this research study was approached because she had been actively involved in giving her feedback for the universally designed Eureka 2 Playground in Denton. A few mothers who were interviewed also followed up on the building process through emails later on. Hobson has noted that building a playground can play an important role in uniting a community: "the process of planning for the playground and learning about the importance of inclusion has the power to educate, change attitudes and build fellowship" (Hobson 2013:33).

Events at the Playground

Parents strongly supported the idea of having different events at the potential playground, as they believed it would be a great way to develop a cohesive and closely knit community. Along with promoting interaction among parents, different occasions would serve a recreational purpose for the families. A father excited about this idea said, "Because then you also meet other parents who are in similar situation as you." Parents had great suggestions for such events, including concerts, story nights, movie nights, picnics, play dates, running for a cause, activities promoting environmentalism, a ribbon cutting event for the inauguration, carnivals, information fairs on resources for children with disabilities and Easter egg hunts.

Playscapes: How Environment Shapes Play

The kinds of activities children will indulge in depend upon the surroundings of the playground and the level of stimulation provided by the environment. Prellwitz emphasized the effect that the environment has:

> All occupations, including play, are carried out in an environment that provides a context that is external to the person. Environments consist of physical elements, both built and natural, and social influences. Therefore, is the environment, the context for all performance, and depending on how the environment influences a person it can enable or hinder occupational performance (Prellwitz 2007:14).

The anthropological lens stresses context and is well-suited for this study, as the environment of the playground is under focus. Besides physical play, the social element of play was extremely important to parents. They discussed how team, parallel and solitary play would augment their children's social interaction in the playground. They also emphasized the significance of a cognitive, sensory and interactive environment for a richer play experience.

The following subthemes and meta-themes related to types of play emerged from the interviews and they been discussed in detail in this section:

1. Team play
2. Parallel play
3. Meditative environment- Solitary play
    a) Passive resting
4. Cognitive environment
    a) Imaginative/pretend play
    b) Exploratory/intuitive play
5. Sensory environment (tactile, auditory, visual)
    a) Water activity, textures, sand area
    b) Music/ sound features
    c) Aesthetics
6. Interactive play environment
    a) Interactive equipment/board games

Team Play

Parents were in favor of group play in order to encourage socializing among children and to improve their social skills. They were of the opinion that equipment that required the participation of multiple children, like equipment for balancing and spinning, e.g., seesaws and merry-go-rounds, facilitated social interaction. According to Rogers-Warren et al., “Activities that bring the children into physical proximity and play equipment that requires more than one child can enhance social interactions" (Rogers-Warren et al. 1980:1). A mother of a girl with

Down Syndrome described merry-go-rounds by saying, "You can't ride it by yourself, it almost kinda begs for more than one child." In the context of supportive play, parents also mentioned two-sided swings with seats facing each other. Throughout the research, parents mostly referred to seesaws in the team play context, although a seesaw actually falls under the parallel play category.

Parallel Play

As much as parents of children with autism wanted their children to interact and play with others, they were also aware that their children were more comfortable with parallel play. A mother of 12-year-old twins, an able-bodied son and a daughter with autism explained, they don't necessarily play together…she doesn't play interactively; she will play side by side." Parents also believed that children learned consciously or subconsciously through parallel play and by observing children next to them.

Meditative Environment: Solitary Play

In addition to parallel play, solitary play is also a means of relaxation for children with autism. "Children with social-emotional disabilities, particularly autism, require spaces where they may withdraw themselves from the social experience of the playground to internalize the experience" (Christensen and Jeon 2006: 50). Surprisingly, only a couple of parents of children with autism mentioned passive resting areas for solitary play. However, they gave examples of cozy places within their houses where their children would want to be by themselves. The father of a daughter with autism described "a quiet spot behind the couch in the living area where she goes and likes to be by herself." Phyfe-Perkins acknowledged therapeutic benefits of solitary

play. As he expounded, “Lack of private spaces for passive resting, has been shown to correlate with occurrences of aimless wandering and aggressive behavior” (Phyfe-Perkins 1982: 20). Hence, it is essential that playground design incorporates passive resting spaces as well along with other features.

Sensory Environment

Parents were very vocal about their preference for a sensory-rich playground experience for their children; tactile, auditory, and visual elements were all essential for sensory stimulation in their opinions. Research has shown that sensory stimulation and play are synonymous. Hughes believed that “a continuing lack of sensory stimulation is sometimes referred to as play deprivation” (Hughes 2003: 108). Stout (1988) suggested play with sand, water and noise-makers to be beneficial for children with sensory limitations. This was validated in this research when a mother stated that she wanted “things that make noise, things that have colors, texture.” Nonetheless, it is important to strike a balance. Christensen and Jeon elaborated:

> The use and absence of sights, sounds, colors, textures, and/or smells can highlight important elements and areas… and improve the play experience. However, care must be taken not to overly clutter the sensory environment. Such sensory overloads may make understanding the environment difficult and cause anxiety (Christensen and Jeon 2006: 53).

Thirteen out of fourteen participants indicated their children’s fondness for water activities, especially in the Texas summer. The only exception in this regard was a mother whose daughter wore an AFO (ankle-foot orthosis), which was not water tolerant. A sand area was another popular sensory element that parents mentioned as something their children would enjoy. A mother talking about her daughter’s preferences said, “She likes sand tables and water tables and stuff like that.” Other tactile elements described included textured walls and bases, as

another mother described, "… like a little texture base that's real simple…where they can walk around and touch the different textures as they just walk through." Interactive musical features were also popular among parents. Many parents mentioned that their children enjoyed music or activities involving music. A parent elaborated on auditory features saying "I have seen drums and xylophones and stuff like that, if there is a horn or, or a telescope or anything like that." However, loud music could be overwhelming, especially for children with autism, as mentioned by the father of a child with autism, so soft and mellifluous music was preferred by parents of such children. In fact, a mother said that her son loved classical music. White emphasized that "particularly noisy, reverberant environments cause stress in adults and even more stress in children" (White 1997: 5). Parents also mentioned having concerts, which has already been discussed in the Building Community section.

The more diverse the natural and physical surroundings, the greater the range of learning and developmental opportunities will be for all children including those with disabilities (Tai 2006). Parents had many suggestions for making the surroundings visually and aesthetically pleasing for their children, which included the use of vibrant colors; the playground having a theme; adding benches of different shapes; putting up motivational quotes; incorporating natural elements around the playground; and landscaping with ponds, bridges, trees, ducks, etc. White also conceded, "Children who have behavioral or learning difficulties often perform much better in an outdoor nature setting and show preference for playing in natural landscapes" (White, 1997: 3). Parents not only wanted the playground to be visually appealing, but they wanted it to be designed in a way that would engage children even during the activities. A mother said, "I think some things that would visually stimulate him [her son] too would be nice... especially if

he can get it while he's swinging because he is not really going to be as happy as swinging still. Parents expected stimuli to cater to various senses.

Cognitive Environment: Imaginative Play and Exploratory Play

Parents wanted the playground to be a cognitively challenging environment as well. Two popular suggestions given by parents in this regard were dramatic play and exploratory play. Christensen and Jeon differentiates between the two: "… while exploratory play is focused on internalizing stimulus, dramatic play is focused on externalizing the surrounding world" (Christensen and Jeon 2006: 51).

Dramatic/creative/imaginative/pretend play was mentioned by some parents who wanted either the play structures or the décor of open areas to be designed in a way that would provoke and facilitate imaginative play for their children. This type of play is "a byproduct of the senses at play" (Landscape Structures 2016: 5). Children derive the utmost pleasure in imaginary situations by subordinating themselves to the rules (Vygotsky 1978). Goldman glamorized this kind of play as he stated, "make-believe play is social poetry in the making" (Goldman 1998: 12). A mother shared an interesting experience while watching her children at the playground:

> They would run up the ramp and pretend they were Elsa and building their castle together and then slide down on ice... my one daughter who has hard time keeping up you know, she could keep up with them… whenever they go there, they pretend that they are Elsa building a castle [laughing].

This description demonstrates how imaginative play can utilize structure like ramps and facilitate certain disabilities and encourage inclusive play in the playgrounds.

Exploratory play was another cognitively stimulating activity frequently mentioned by parents. A father elaborated on his daughter's interest, explaining, "she likes to explore and learn

how things work, so she is kind of intuitive like that." Incorporating games like scavenger and treasure hunts into the playground equipment would meet such requirements.

Interactive Play Environment

Almost all parents believed that an interactive environment would enrich the playground experience for their children and gave many suggestions for incorporating interactive features in the equipment. A father of a daughter with autism preferred equipment "… that would entice her to interact with other kids and play with playground equipment." The most common interactive features mentioned included board games, tic-tac-toe, puzzles, funny mirrors (distorted mirror reflections), interactive features integrated with climbing structures, and speaking tubes or voice pipes. The idea of funny mirrors seems quite apt, especially for an inclusive play environment because funny mirrors reflect all children in a humorously distorted way, regardless of disabilities.

Contextualizing Physical Elements in Inclusive Play

The integration of social surroundings into physical stimuli creates an overall fulfilling play experience. Play equipment and structures need to be properly placed and designed, as the "physical environment of a playground can be difficult to master and thereby be an obstacle for participating in play activities" (Tamm and Skär, 2000: 177). Parents gave a wide range of feedback regarding how physical aspects of the playground perform a crucial role in children's enjoyment. This section elaborates on parents' preferences for different aspects of the physical environment. According to Moore et al., some of the most popular physical activities among children include "climbing, swinging, bouncing, balancing, jumping, crawling, hopping,

skipping, sliding, rolling, pushing, pulling, hand-over-hand routines, hanging by the arms, spinning" (Moore et al. 1992: 69).

The following subthemes related to physical elements of playground emerged from the interviews and have been discussed in detail in this section:

1. Equipment preferences
2. Pronounced sensation of movement
3. Diversity and variety of equipment
4. Greater quantity of the equipment
5. Building physical strength through play

Equipment Preferences

Swings, slides, equipment for climbing including jungle gyms, monkey bars, rock-climbing walls, and bridges were undoubtedly the most popular equipment periodically brought up by parents. These were followed by equipment for spinning, e.g., merry-go-rounds, and also for balancing, e.g., seesaws. A few parents also mentioned that their children enjoyed bouncing on trampolines and spring rockers. Some children were also said to enjoy something for pushing/pulling.

Pronounced Sensation of Movement

Most of the parents stated that their children's idea of enjoyment was a "serious sensation of movement," as categorically stated by one mother. They emphasized the concept of movement and how it related to the element of fun and amusement in the playground. One of the mothers shared an explicit portrayal of how her son enjoyed continuous movement:

> You know his happiest times are when he is riding in the car, swinging, but he doesn't get to do that anymore since he is so big for all the swings... we were doing roller skating yesterday and so I just took him onto the floor of the skating rink and around and around and around [laughing], so he loves movement, you know, he loves movement!

Hence, play structures that induce a strong feeling of movement were thought to be essential for an enjoyable play experience. This conforms to Christensen and Jeon's assertion that, "for kids, anything that moves is more exciting than anything that does not. Dizziness activity engages the large muscles and allows the child to experience sensations of movement that may not be experienced during normal life routines" (Christensen and Jeon 2006: 49).

Diversity and Variety of Equipment

Parents preferred a diverse mix of equipment, as the play requirements of each child varied relative to those of others. "When a playground presents a diversity of types of play activities, a greater diversity of children, both with and without disabilities, are better able to find play opportunities appropriate to their abilities" (Christensen and Jeon 2006: 49). A father suggested "[a] broader spectrum of equipment." Within the swings category only, an entire range of swings was suggested by parents: adaptive swings, flat swings, platform swings, swings with back support, wheelchair accessible swings, bench swings, swings at a lower level, swings with seats facing each other, bigger swings, bucket swings, etc. One of the parents vividly described a wheelchair accessible swing:

> A wheelchair swing where they can wheel into and like on the other side is a bench where a parent or the other kids can sit and then on one side it's open where a wheelchair can come in.

A range of equipment is also important because certain parents had conflicting feedback. One said that her children "… really enjoy the playground that have slides that are not just straight down. They have bumps or twists or stuff like that in them. That is thrilling to

them." Conversely, a few parents were not fond of winding slides. A mother specified, "Slides should be with wider steps and not so many curves because kids with braces get caught up in the curves." This reflected that needs of children varied as the disabilities varied. Parents also wanted different heights for different equipment depending on their child's disability. A father wanted "… lots of slides, different slides that are manageable, not too over whelming for them to go down." The height and reach ranges of equipment are discussed in detail in the section on Age-Appropriate Play. Feedback generated from parents revealed that the true essence of an inclusive environment encompasses diversity of play equipment along with other aspects.

Larger Quantity of Equipment

Not only was variety of equipment important for parents but also its quantity. Many parents specifically complained about the number of swings. One of the mothers vented her frustration saying "Swings! It's weird like we have been to playgrounds and it seems like they kinda don't have enough of them. If you are going to have swings, have a few more!" Another mother lightly said while describing her daughter, "She does not wait well...
she doesn't understand that somebody else gets a turn... I mean you would have to have five thousand swings for her you know [laughing]." Slides were another piece of equipment that parents wanted in greater number.

Building Physical Strength through Play

Parents were aware that physical activity on the playground plays a vital role in building strength and muscles in children. Apart from that, children using physical bodies during play enables them to feel physically confident, secure, and self-assured (Isenberg and Quisenberry,

2002). A few parents mentioned time and again how exertion on the playground, they believed was pivotal for their children's development and growth. A mother expounded, "Play therapy is a critical piece of their development…not to mention the physical aspect that builds their strength, and getting out in the sun, they get their vitamin D and all that, fresh air and all." Depending on the child's capability, physical exercise was deemed fundamental for a healthy play experience.

How Space Channels Play

Parents were of the opinion that appropriate utilization of space and well-designed layout of the playground could significantly improve the playground experience and had many suggestions. This view was also endorsed by Brennan and Sutcliffe (2008) in a foreword to a design guide, that play space needed to be of high quality and good design to attract children and families and become a valued part of the local environment.

The following subthemes related to how space utilization in playground effects play emerged from the interviews and have been discussed in detail in this section:

1. Easing congestion
2. Encourage children's independence
3. Bringing children with disabilities to center stage
4. Open area for activities
5. Minimizing visual obstructions to supervision

Easing Congestion

Most parents believed that the playground should be spread out and not too congested in order for their children to fully enjoy it. Almost all parents said that their children did better with more space, and were better at interacting and playing with others if the playground was more spacious. Space was important for children with autism due to their social limitations and also for the convenience of children on wheelchairs as movement of wheelchairs requires space. A father of a son with autism explained that "… too big kids kinda freaks him out. I mean if it is not too crowded, it is better." Hence, the playground having a larger area would allow equipment to be placed reasonably far apart and also hold back children from crowding together.

Encouraging Children's Independence

Sutton-Smith (1981) believed that with minimal adult intervention, children could keep order, handle bullies, and take care of all but the most serious problems on their own in the playground. However, that was in the case of typical playgrounds. Parents interviewed for this research were aware that they could not let their children be completely on their own but at the same time they wanted them to have a sense of independence for a fulfilling play experience. Casey has explained need of independence for children with disabilities:

> Many children with disabilities have few areas in their lives in which they feel able to exercise real choice and control. Play can be a process through which they can regain a sense of control or work through difficult or challenging experiences (Casey, 2005: 21).

One of the mothers mentioned that endorsing the concept of independence in the playground would make children "… less conscious of being watched" and would not only give them the space they need but also give parents some respite. A mother believed "… it would be nice if I could go and relax a little bit and then she doesn't have to… you know feel like I am right there

all the time." This approach of parents resonated with Diamond, "Children need the freedom to initiate and engage actively in activities, the chance to make decisions and take risks, and the opportunity to master their physical selves or to accomplish a task they have chosen" (Diamond 1981: 30). Askins et al. referred to the pleasure children derived from being independent during play as "mastery pleasure" (Askins et al. 2013: 6). Parents wanted a play environment that promoted their children's independence to a reasonable and healthy extent. Another parent was more specific about the kind of independence her son demanded. She said:

> He does not like for us to push his wheelchair because he can do it by himself but I make sure I'm right there because the wheelchair is the safety hazard in itself. It can flip over if it's caught on to something...as long as I am not touching his wheelchair or he doesn't feel like I'm helping him. I just follow him.

As mentioned in the discussion on Promoting Equality in the Creating a Richer Environment section, providing children with a wide range of equipment, regardless of their disability would allow them to make their own selections, decide what to use and what not to, and encourage them to make more independent choices.

Bringing Children with Disabilities to Center Stage

One of the major considerations for the parents regarding space allocation was that they did not want their children with special needs to be left out at the periphery of the playground. One of the parents specifically mentioned that children with disabilities "should be kept in the middle of the action rather than out on the edge." Some parents wanted the play structures to be around the center and the center to be an open space. One of the mothers said that "Instead of having something in the middle, make that open and have all of play structures surrounding, like the layout of an octagon." Most parents' feedback for the layout was to have the playground

structures along the perimeter of the playground and some open space and smaller structures in the center.

Open Area for Activities

An open area for running and sports, within or outside the playground, was a popular demand of the parents. Running was a very common activity discussed by parents. Running away or wandering-off was a safety hazard for some children with autism, but for all others who were able to run, it was a source of recreation and parents encouraged them to do so. A mother said she used to let her son "run off that [extra] energy." This aligned with an early theory of surplus energy by Spencer (1873) which held that play was an activity that discharged excess natural energy of the body. Some parents wanted the playgrounds to have a safe communal area for running where children could fall and not hurt themselves. Quite a few parents kept mentioning sports like soccer, football, basketball, and bat-ball as their children's idea of recreation. They were aware that playgrounds were not meant for sports but still some insisted that having a safe sports area would greatly enhance their playground experience, especially because most current sports areas do not cater to children with disabilities. A mother expressed her desperation by constantly repeating a need for sports area. She said:

> I am stuck on the basketball thing [laughing]. They would just have a basketball, not a whole court, but they will have like a... just basketball net at an appropriate height yeah, not just for him… I have met quite a few around his age, they like wheelchair basketball but there is nowhere to take them to play.

Adjustable reach ranges of nets and other sports equipment was important, considering that they should be accessible to children in wheelchairs of varying heights and ages. Hughes (1996) also believed that successful play spaces offered children challenges and activities which tested their limits including rough and tumble, sports and games, and opportunities to climb.

Minimizing Visual Obstructions to Supervision

Most parents in this research believed that their children could not be left on their own for long on the playground. Even those who could allow their children to be more independent wanted an uninterrupted line of sight for visual supervision. They were of the opinion that equipment should be arranged in such a way and space allocated in such a manner that they could see through the equipment and ensure that their children were safe. A mother explained that "it would be important to be able to see all the angles of the playground, not have anything in the way, you know to any large degree that would have obstruct the vision." Thus any obstruction in the field of vision was not favored by the parents and considered a hindrance to visual supervision.

Considerations for Age-Appropriate Play

A few parents supported the idea of age-appropriate play equipment while others did not favor the segregation by age. According to Gray:

> Age-mixed play offers opportunities for learning and development not present in play among those close in age, permitting younger children to learn more from older playmates than they could from playing with only their peers. It also permits older children to learn by teaching and to practice nurturance and leadership (Gray 2011: 500).

However, there are many factors in deciding whether the playground and the play structures need to be age appropriate or not, especially when children with all varying abilities are in consideration. This section deals with some conflicting viewpoints of parents regarding age limit on play equipment and play areas.

The following subthemes related to age-appropriate play emerged from the interviews and have been discussed in detail in this section:

1. Conflicts between cognitive and chronological age and physical size

2. Elevated vs. ground level play
3. Accommodation for parents on the equipment
4. Siblings interaction
5. Hazard of children of varying sizes playing together
6. Bad influence of older children

Conflicts between Cognitive and Chronological Age and Physical Size

Cognitive and chronological ages and physical sizes of children with special needs are not always commensurate with one another. The question therefore arises whether age-segregation of the play equipment is appropriate. One parent strongly opposed age segregation saying that "You know my son will go to this playground for the rest of his life no matter how old he gets." There were many other parents who reaffirmed this notion. A mother whose son was 12 years old and liked to play in an area for 2 to 5 years old said that "if there is something that he can participate in, I take him there anyway and nobody cares because he is not going to disrupt anything so I break the rules [laughing]." A lot of parents mentioned that either their children were too big or too small for the equipment. A mother remarked,

> Now we try avoid taking him more because he is so heavy. Before when he was little, we could carry him up the ladder, climb with him… but now like he is huge, he is 12 but bigger than me.

This also implies that size wise, the bigger the children with special needs get, the more difficult playground usability becomes for them.

Elevated vs. Ground-Level Play

Parent's preferences varied as far as the height of the equipment was concerned. Most parents were either apprehensive themselves about play equipment being too high or said that their children liked equipment at a lower level. A mother of a 7-year-old girl with autism described her experience in a preschool play area: "I can feel comfortable standing completely back and she can maneuver that whole thing. It's really short, it's meant for like pre-school kids." Another mother of a 5-year-old reiterated this opinion that her daughter "gravitates towards climbing. And sometimes the things are way too tall for my comfort level." As against this, a father of a 4-and-a-half-year-old son with autism believed that "the older the child gets, the more thrills he needs, higher slides..." These inconsistencies in opinions regarding elevated play and ground-level play further validate the need for a variety of equipment with varying heights in the playground.

Accommodation for Parents on the Equipment

As already mentioned, parents wanted to have some playful interaction with their children on the playground, and therefore wanted some flexibility and accommodation in the play structures for themselves. They wanted to accompany their children in the activities, inform them about the usability of the equipment and also make them feel safe and comfortable on the structures. One of the mothers spelled out her dilemma:

> I just wish that more playgrounds were more kids friendly, where the parents could actually get on with their children and there was not that much of an age limit on certain things. Because some kids are apprehensive about getting on slides, or swings and they want their parents to be there with them.

However, parents were aware that current playgrounds were not fit for their use. A mother exclaimed that "The other day I hit my head real bad while chasing them in the playground

[laughing], of course something that was not built for an adult." A father when asked if he would like to participate in the play said that "Climbing or running around with them, something like that. Most of the things are really small for me [laughing], a little tight." Thus, accommodation for parents on the play structures would improve the playground experience for the children.

Sibling Interaction

An age-appropriate playground might not facilitate playful interaction among siblings if they belong to different age groups. As discussed in the section Quality Family Time, parents were inclined towards equipment that facilitated siblings' collaborative play and also a playground that catered to all their children. A mother expressed her disappointment with current play structures, "They want to do something that is higher up and she can't really get to it then that's when she goes one way and they go another way." Thus, the concept of age appropriate play areas would conflict with the parents' desire for siblings' interaction if they are not in the same age bracket or if their abilities varied to a great extent. Conversely, not having an age appropriate play area could cause a safety concern, as equipment meant for older children and used by younger ones could be dangerous. A mother discussed her daughters playing together and expressed her apprehension about heights for her younger one, "the challenge is for me because my youngest wants to play where the older kids play because that is where her sister wants to play and that's where it gets a little more dangerous."

Hazard of Children of Varying Sizes Playing Together

In case playgrounds do not have age appropriate play areas, a pertinent consideration would be the presence of physically bigger and smaller children in the same space. A scenario

like this could be hazardous if the parents are not closely supervising their children, and most of the parents were aware of such a risk. A father of a four-year-old son with Down Syndrome stated that his child has been the victim in such a setting at a birthday party. A mother who was fond of taking her daughter to the play area for smaller children mentioned that "I just have to worry that she does not trip over the little babies that are crawling up and stuff like that." Hence, presence of children with varying physical sizes within the same area require certain safety measures.

Bad Influence of Older Children

Some parents were concerned about the negative influence of older children in the playground on their own children. One mother shared that 12-13-year-old boys were smoking around a playground, which she considered highly inappropriate. Another mother referred to a skate boarding park where older boys were using foul language. She stated that "We have been there and just gotten an earful a few times." This was one of the drawbacks of not having segregated play areas. On the contrary, as mentioned earlier, some parents found play areas without age limits to be beneficial.

Thinking through Nuances of Design

Parents went into detail about equipment design to express their preferences. They described in detail what kind of play structures were suitable for their children and what caused inconvenience and hindrance during play.

The following subthemes related to subtleties of playground design emerged from the interviews and have been discussed in detail in this section:

1. Simplicity of usage
2. Repetitive activities
3. Better grips for children with weak fine motor skills
4. Ramps and more accommodating steps
5. Disability itself a barrier to play
    a) Hard to engage- children with autism
    b) Too much destructive energy-children with autism

Simplicity of Usage

Parents frequently mentioned that keeping play simple would make the play experience fulfilling for their children. A father stated that "Simplicity is [important] for her, the simpler it is the more she can interact and engage with it." Parents were not very specific about simplicity but overall wanted things in the playground to be easy to use.

Repetitive Activities

Parents of children with autism shared their children's fondness for repetitive activities. Freud (1922) endorsed this idea long ago and believed that playing out a situation again and again gave mastery and control to the child which led to resolution of a problem or a feeling. Some parents also suggested having activities in the playground that involve repetition. A mother discussed how her daughter would love to continuously take out a small bucket of water from a shallow ditch and dump it back in. She added, "I can see her playing, sitting there doing that over and over again." Hence, opportunities for repetitive play, especially for children with autism, was seen as important to keep them involved in the play.

Better Grips for Children with Weak Fine Motor Skills

The children of some interviewees did not have strong fine motor skills, and their parents wanted equipment designed to facilitate a better grip. A mother explained the challenge her son faced, "… his fine motor skills are not good, like picking up stuff… so it's easier for him to have like bigger stuff... we let him use regular stuff but we just add a sponge, like a big foam." This mother strongly recommended that the playground equipment should offer better grips for such children.

Ramps and More Accommodating Steps

Parents were not very fond of steps or stairs and described how climbing steps could be made easier. One of them mentioned that "We need more ramps and less steps." Literature has revealed that ramps dramatically change the inclusion of wheelchair users in public life, an aspect of universal design that is fundamental to a fully democratic built environment (Russell 2002, Crews and Zavotka 2006; Friedner and Osborne 2013). Another parent was specific about the type of steps. She said that "Stairs that are wider you know and at an angle versus straight up and down … their tiny little feet don't even fit on the step." Another mother also suggested that steps could be marked with bright colors to guide visually impaired children with autism.

Disability as a Barrier to Play

A few parents, while discussing the design details of equipment, also added that their children's disability, rather than the environment, was a barrier to play. A father explained his son's inability to have a fulfilling playground experience as he stated that "Because the autism kind of gets in the way… so it is his own handicap that keeps him from doing what a

typical kid would do." Uys (2002) reiterated that children with intellectual impairments are less creative and less likely to engage in constructive play and more likely to indulge in non-specific touching of play structures. A couple of parents of children with autism shared incidents where children channelized their energies in a destructive way like urinating on other children in the playground, running around naked in the neighborhood, throwing household stuff on the rooftop etc. Parents did have suggestions for improvement in playground design, yet they were cognizant of their children's own limitations.

Making Play Conducive and Safe

For playground usability, safety was of paramount significance to the parents. Parents used the interviews as venting sessions about the current safety situations in the playgrounds. In response to various questions during the interviews, they brought up their safety concerns in the playground settings and how they could be dealt in a better manner.

The following subthemes related to safety measures in the playground emerged from the interviews and have been discussed in detail in this section:

1. Flooring
2. Weather considerations
3. Perimeter containment
4. Passive supervision
5. Equipment material
6. Smooth and curved surfaces
7. Hand railing for support
8. Harnesses and seat belts

9. Regular maintenance and repair
10. Colors used as safety and wayfinding tool

Flooring

Uniform floor surfacing was the biggest concern for parents and was brought up by almost every single one during the interview. Ground cover and play equipment are important factors to consider when planning or modifying playgrounds, in order to provide easy access and independence for children with mobility limitations (Prellwitz and Tamm 1999, Stout1988). Foamed/soft/padded flooring was the most common alternative suggested by parents. A few proposed soft turf as well. Wood chips were an extremely unpopular form of flooring and many parents vented their frustration regarding them. One mother articulated that "Those wooden chips that sometimes push through the shoe [aghhhh] that's a little bit scary!" Parents gave a wide range of reasons for the unacceptability of woodchips. One of the fathers described that his children were oral sensory and "they put things in their mouth all the time so it's kind of a pain following [them]." Children hurting themselves by falling on woodchips was also a concern. A mother explained that her son "has a shunt and I am always scared that he will fall and hurt his head." The inconvenience of pushing medical strollers or wheelchairs over wood chips was another concern for the parents. In addition to wanting the floor to be padded, parents also wanted it to be level. Some parents said that their children loved running, which only safe and even flooring would facilitate. Talking about her daughter, a mother described that "She has a very uneven gait, and she likes to run, but the ground is often uneven so she won't." One of the mothers vividly described the hazard to her son created by uneven flooring, "Sometimes they [sidewalks] are a little bit elevated. He will flip over because where he rests his feet [on the

wheelchair], if it is too low, that part is going to be caught and then he will flip over." For just a couple of parents, properly leveled flooring was so important that they were even fine with the idea of having either a concrete floor or woodchips, as long as the floor was well evened out.

Weather Considerations

According to most parents, weather was the decisive factor for playground visits and taking weather conditions into account was among the primary safety measures that parents took. Parents were aware that Texas weather could be unpredictable, especially the summers could be exceptionally hot. A mother described her challenge of managing playground visits with the weather, "I mean we have gone as early as 7:30 in the morning and as late as 8 o' clock at night. We have tried to work around that but… really it is just the climate, the mid-west." Thus whether it was cold, hot or raining, weather conditions dictated the playground visits of the families.

Perimeter Containment

A playground enclosure was also a major safety requirement for most parents. A father precisely stated that "having some kind of enclosed, one way in, one way out [area], I think is a good safety measure and then puts a parent at peace of mind." Fencing was a requirement for parents whose children were fond of running and for all parents who had children with autism as running posed a safety hazard for them. A mother described her daughter's condition that "when she gets going, she will try 'n run away, so that is a big thing. I think having it fenced in for those of us who have runners." One of the fathers expounded on the severity of wandering-off by children with autism and the importance of fencing. He quoted a study according to which 6000 parents who had children with autism between the ages of 3 to15, 80% of their children had wandered off and according to him, 30% of them had been killed by getting into some sort of

accident. He was also well aware of the location of Flag Pole Hill and was of the opinion that enclosing the playground is essential owing to the busy street where it is located.

Passive Supervision

Almost all parents interviewed provided passive supervision to their children with special needs on the playground. When a mother was asked about the safety measures she took for her child in the playground, she remarked, "You mean other than going out with her [laughing]?" This reflected how absolutely essential it was for parents to be watching over their children on the playground all the time. A father commented on keeping his son with autism under supervision on the playground, "We have to keep an eye on him, we can't just sit there. You have to constantly watch where he is at, can't have social interaction with other parents, else in seconds, boom! He is gone!" On the other hand, the supervision of parents with able-bodied children was also important to ensure that their children didn't hurt others in anyway. One of the parents expressed that parents of able-bodied children should be around the playground as well, watching over their children. While sharing his son's mistreatment in the playground he stated, "[Typical children's] parents are not there to kind of control them or you know the parents are not aware if your kid may be just acting a little selfishly." Consequently, supervision by parents contributes to a safe environment for play for everyone.

Equipment Material

Weather resistant equipment material was suggested by a few mothers who were troubled by the construction materials of play structures. They believed, especially in summers, the plastic gets too hot and burns the children's skin. A mother explained that her daughter "… has to hold on and a lot of handrails are metal. If it is raining, cold or hot, whatever the temperature it is,

then it is hard for her." Moreover, parents gave examples of playgrounds that have temperature resistant equipment. Parents also proposed that the surfaces of play structures and equipment have curved and smooth finish so that children do not hurt themselves by any sharp edges.

Heights of Play Structures

The height of the play structures has been covered in other sections but it was also a safety concern for some parents. A mother voiced her anxiety regarding her daughters climbing up to heights and getting back down safely, "I kinda just wish…they just make it a little bit safer so if the little kids do want to go up there, there is more of a failsafe situation." Therefore, parents wanted a more secure playground setting where heights did not threaten the wellbeing of their children.

Other Safety Suggestions

Various other facets of a safer playground environment were mentioned by only a couple of parents, nonetheless, they were valid concerns. Having handrails was important as it facilitated movement of the children and provided physical support to them in certain postures in which they required assistance. Harnesses and seat belts were also suggested to augment the safe usability of the equipment. According to a few parents, regular maintenance of the playground and timely repair would increase parents' comfort level and ensure safer use. One of the mothers had a daughter with a visual impairment and autism who could see bright contrasting colors. She was of the opinion that bright colors could be used on steps or other surfaces to differentiate between them, which would help her daughter to see them better.

Surrounding Facilities

Parents were quite clear about the facilities that would make their playground visits more convenient. This section deals with all the support elements and architectural features that would make the playground experience more pleasant and enjoyable for families. Shade, seating and restrooms were priorities for almost all parents in this regard. These priorities were followed by ramps, water fountains, trash cans, storage area and picnic area.

The following subthemes related to supporting facilities in the playground emerged from the interviews and have been discussed in detail in this section:

1. Shade
2. Seating
3. Restrooms; changing tables in rest rooms
4. Ramps and more accommodating steps
5. Water fountains
6. Storage place
7. Trash cans
8. Picnic areas
9. Accessible parking
10. Walking track around the playground
11. Electrical outlets

Scorching Texas heat and direct sun in summers was a big safety concern for almost all parents. Whether the playground had shade from trees or awnings impacted playground visits, especially in the summer. One of the parents had a different perspective on shade. She suggested a gazebo, “For some reason…everyone loves them [gazebos]. The kids feel so grown up and

connected to the community [under them].” A few parents showed preference for a fully covered playground and one of them reasoned that out, “Kid on foot runs down and gets to the shade, finds a spot, but the kid in the wheelchair has to actually get to the spot with shade.” Appropriate and sufficient seating was also a major requirement for the parents. Some parents complained that seating and shade do not go hand in hand in current playgrounds. A mother vented, “There is just not enough [seating] for the parents and the seating is in the sun. So, if you trying to watch your child, you are frying while they are playing [laughing].” Restrooms were an absolute essential for parents, as most of them believed that children tend to have “accidents” at the playgrounds. Some parents were also descriptive about the accessibility of the restroom. One of them explained, “He is sitting in it [wheelchair] and I have to change him, stand him up, then I have to support him so, you know a really big changing station for like grown up kids would be great.” Thus, parents wanted not just restrooms but accessible restrooms. Apart from the features mentioned, parents wanted ramps, as they facilitated their wheelchair-ridden children as well as other children with disabilities on the playgrounds. A mother of a daughter with autism shared that “Ramps work really well. They have those actually at their school and that doesn’t stop her from keeping up with her classmates.” Water fountains were another necessity for a comfortable playground experience. This was followed by the need for trash cans. A parent said that “I always say that they want more trash cans. Every time some people won’t take their trash with them when they walk away.” A few parents also wanted storage or locker areas where they could safely keep the extra stuff they were carrying. Picnic areas were also seen as an enhancement of the playground experience. A mother was eloquent in conveying her desire for a “picnic table with a cover or umbrella. Round is easier because the pedestal style means wheelchairs can pull up to table easily and make the bench part way around to leave space for wheelchairs.” Other

facilities mentioned by individual parents included nearby convenient parking, a walking track around the playground for parents to get some exercise while their children play and also electrical outlets to charge motorized chairs or scooters. Some miscellaneous things that parents mentioned that they carried and would assist them if are provided by the playground management included sanitizers, sunscreens, and insect repellants.

CHAPTER 5

RECOMMENDATIONS

The Research Findings chapter was based on the parents' insights regarding the current playground's settings and what they proposed for the potential playground. In essence, that chapter was an attempt to systematically arrange the suggestions and recommendations directly generated by the parents for an improved playground setting. This chapter is based on my suggestions as a researcher, drawn from parents' responses as well as from my own observations for a better play environment. It is important to keep in mind that getting the right amount of funding is essential for this renovation project, nonetheless appropriate implementation planning can make the project more effective. Research has shown that "it is not always the amount of money that makes the best play environments, but the quality of time and energy in planning for play opportunities of children of all ages" (Hartle and Johnson, 1993:35).

Input of Occupational Therapists on Design

Many parents throughout the interviews kept referring to how occupational therapy had made positive impact in their children's developmental growth. Input from recreational, physical, and occupational therapists may support a well-designed inclusive playground. Stout also supported this notion, "Occupational therapists could provide perspectives on playground design and equipment so as to develop playgrounds for children with and without disabilities" (Stout 1988: 655). The activities that are conducted during therapies could be incorporated in playground structures so that the playground outing is more engaging and at the same time therapeutic.

Insights from Other Playgrounds and Play Areas

While discussing their preferences for various playground features, parents gave examples of many other playgrounds in Texas. The most popular playgrounds turned out to be Hope Playground in Frisco, Allen Shivers and Klyde Warren Playgrounds in Dallas, and Morgan's Wonderland, an accessible amusement park in San Antonio. Parents also made references to play areas in malls, specific schools and in fast food restaurants like Chucky Cheese and McDonalds. Playground features that parents mentioned include ground level play, smooth surfaces, and padded floor [topics covered extensively in the Research Findings chapter]. Decision makers and designers could keep features and structures of these playgrounds in mind when finalizing the construction plans.

Reference to Design Guides

The literature review yielded ample design guides of various universally designed playgrounds. For actual design purposes, these readily available design guides can serve as invaluable resources and success stories of their respective playgrounds can help in making better policy decisions regarding the potential playground at Flag Pole Hill. Examples include: Accessible Playground Toolkit by IDNR Division of Outdoor Recreation [http://www.in.gov/dnr/outdoor/files/or-IDNR_Accessible_Playground_Toolkit_2010.pdf], Inclusion Toolkit by Special Needs Inclusion Project Support for Families of Children with Disabilities [http://www.snipsf.org/wp-content/uploads/2011/08/v2010Inclusion-Tool-Kit-Sept-update1.pdf], Inclusive Play Design Guide by Playworld Systems [http://response.playworld.com/InclusivePage], Let's Play: Creating Accessible Play Spaces [https://www.rickhansen.com/Portals/2/Documents/PAC%20toolkit_7JUN11.pdf].

Building a Virtual Presence

Nowadays website representation and social media presence is essential for any project being executed on a reasonable scale. Eureka 2 playground, which is being built at South Lakes Park in Denton, has maintained a virtual presence [See Figure 3].

Figure 4 Eureka 2 Website Screenshot

A screenshot of Eureka 2's website posted above demonstrates that the website plays an important role in collecting donations, updating visitors on the building process, amount of funds raised as well as providing an avenue for community members to volunteer. Such a website along with social media pages should be developed for the Flag Pole Hill Universally Designed Playground. From my field experience, I can confirm that there is no special needs community network around the Flag Pole Hill area. A website and social media pages may create awareness about this project, unite the community and also make fundraising easier. Virtual presence of the project would give it more credibility; hence community members and potential users may be more willing to donate. A few interviewees followed up regarding the progress of the project that showed there is public interest in getting updates on the playground. A website could make it convenient for parents to independently keep a track of the latest developments. Groups on social

media could facilitate networking of parents and may lead to the formation of parent support groups. Involving community in the construction process could be beneficial at various levels. Community members might offer to volunteer in the building process or could have relevant resources or contacts who could facilitate the construction process.

Retaining and Refurbishing Some of the Current Equipment and Design

Observations in the Flag Pole Hill playground led me to the conclusion that while the existing pieces of equipment were spaced randomly and had worn out with time, nonetheless the playground was not outdated in its equipment design. Comparing its current equipment with that of highly regarded universal design playgrounds like Hope and Allen Shivers, I realized that adding a range of the latest structures along with refurbishing the current ones could serve the required purpose. The current slide set has interactive as well as sensory features as shown in figures 5 to 8. The playground has both types of slides, curved as well as straight down slides as the parents had suggested for in an ideal setting [figures 9 and 10]. Bucket swings, a jungle gym and spring bouncers are currently present there [figures 11 and 12]. The current playground has a lot of trees, contains a pavilion, benches and tables in the open space around the playground/ picnic area, trashcans and water fountains are also found there. Installation of new structures and reconditioning of current equipment, along with strategic and appropriate placement would serve the purpose of universal design.

Figure 5 The Slide Set at Flag Pole Hill Playground

Figure 6 Interactive Features in the Slide Set

Figure 7 More Interactive Features in the Slide Set

Figure 8 Interactive and Sensory Features in the Slide Set

Figure 9 Curved Slide in the Slide Set

Figure 10 Straight-down Slides in the Slide Set

Figure 11 Bucket Swings

Figure 12 Spring Bouncers and Climbing Bars

Volunteer Supervision Program

FTLOTL administers Second Saturday Shoreline Spruce Up at White Rock Lake Park, where every second Saturday of every month Adopt-A-Shoreline volunteer groups join the cleanup effort at White Rock Lake. Similarly, once the playground is built and ready for use, volunteer groups can also be formed to assist parents with differently-abled children in the playground. In the Building Community section of the Research Findings chapter, the fact that parents desired a helping hand to manage their children on the playground was discussed in detail. Since FTLOTL already has a well-developed volunteer program, they could also develop a volunteer supervision program. Volunteers could watch children in the playground, every alternate Saturday for two hours while parents take a breather and socialize among themselves. However, establishing such a volunteer program might quite be tedious as thorough background checks of the volunteers would be required due to vulnerable population being under consideration.

Themed Playground

The aesthetics of the playgrounds were frequently brought up by the parents during the interview sessions. Quite a few parents had suggested that a playground with a theme would enhance the playground experience and some fondly talked about existing playgrounds that have themes. The playground could have a jungle theme. It sounds typical but parents, as discussed in the section on How Environment Shapes Play, have shown a preference for elements of nature like ponds, trees and ducks. With a theme like that of a jungle, it would be easier to incorporate the elements of nature within the playground design. Apart from that, such a theme would

accentuate the outdoor play experience as majority of differently-abled children spend most of their day indoors.

Color Usage

Parents suggested that bright colors be used in the playground. Contrasting colors can serve an extremely useful purpose for improving visibility. As mentioned in the Research Findings chapter, a couple of parents discussed colors as way-finding tools. Contrasting the color of the surfacing with the equipment color can result in better vision for children with visual impairments. Also, contrasting the color of the containment barrier or the fenced perimeter with the surfacing color as well as marking the change of elevation with different colors would facilitate better visibility. However, colors selection has to be done sensibly as dark colors absorb heat and would not only keep the equipment hot but also retain heat in the playground surroundings.

Shade

Shade in the playground was of paramount significance for most parents. Quite a few even suggested that the entire playground should be covered. Figures 13 and 14 are photographs of a playground at South Beach, Miami, which is covered to quite an extent. There is a pole in the center of the playground and a few around the perimeter, and triangular flaps of shades are attached at an angle to the pole in the center and to the ones on the periphery. This is a pragmatic approach to shading the playground, as it keeps the playground well-lit and ventilated and at the same time offers maximum coverage and protection from the sun, while retaining the outdoor feel. A similar approach to shade can be adopted for the potential playground at Flag Pole Hill.

Figure 13 Triangular Flap of Shade Attached to Pole in Center and on Sides

Figure 14 Triangular Flaps of Shade Providing Maximum Coverage

Trying and Testing Playgrounds

Some parents mentioned that they keep searching for different playgrounds to see whether they meet the requirements of their children and whether their children enjoy them or not. This shows that the playground needs to be designed in a way that captivates children's interest in the first visit or at least in the initial few visits, retains it and also finds favor with the parents. The potential playground at Flag Pole Hill should be introduced to the public when it is fully complete and should be designed in a way that it instantly appeals to the families and hold their interest in the long run. Piecemeal installations of structures and equipment might lead to families losing interest in the playground and consequently resources spent on this playground not being fully utilized and its full potential not being achieved. An inaugural event should be arranged after the full range of equipment is installed to introduce the inclusive play space to the community.

Educating the Community

Existing literature as well as feedback generated from parents interviewed is replete with benefits of inclusive play and universally designed playgrounds; however, creating a warm and welcoming environment is easier said than done. It cannot be achieved overnight but gradually, with a change of mindset of general public. Most parents either implied or explicitly complained how their children had been discriminated against in playgrounds. A couple of parents shared stories about interactions where the other party was totally unaware of the condition of their differently-abled children. Assumption is that majority of visitors in a universally designed playground would be able-bodied. They might be insensitive towards the minority, or actually ignorant of their condition, and even if being aware of their disabilities, they

may choose not to be thoughtful. Therefore, to achieve the anticipated goals of inclusion, the entire community, especially children, not only need to be sensitized but also educated regarding the implication of interacting with children of different disabilities. This is something that has to be done at a macro-level and is not in the scope of FTLOTL alone. Nonetheless, FTLOTL can create awareness in its community and while renovating and redesigning the playground, keep general attitude of the majority towards disabilities in consideration.

CHAPTER 6

PERSONAL REFLECTIONS AND LIMITATIONS

Being at the final stage of my graduate degree, I can certainly say that working on this research was an overall fulfilling and rewarding experience. However, the journey was a long arduous one, full of challenges and obstacles. Like any other research, this study also had some constraints that prevented me as a researcher from exploring its potential to the full, which have been touched upon briefly in Research Methodology chapter. This chapter focuses on my experience and reflections as a researcher on the entire research process along with some limiting factors.

Being an Outsider

The separation between the researcher and the researched group by "the distance, conceived as both cultural and geographic" has been the essence of traditional anthropological research (Peirano 1998:105). The aim of such research was to grasp the non-Western perspective, as Malaby (2008) believed that willingness to move past Western preconceptions has been anthropology's hallmark. Anthropologists have been stereotyped as Westerners studying "exotic" people living in foreign lands. Yet, being from the developing world, I was conducting my research in the West. This made for a fascinating case of "reverse gaze." Being an outsider and approaching a vulnerable population made me a little uncomfortable out in the field. My outsider status did not pose any major obstacle to the research, still I believe it's worth mentioning that it inhibited me to some extent, or at least made me a bit self-conscious. I tried to appropriately introduce myself in the field and shared the scope of the research to prove its

credibility. However, I felt that whomsoever I approached wondered why a foreigner was inquiring about a vulnerable segment of the population. Not having a native accent probably added to the communication gap. Nevertheless, being an outsider, and encountering limitations associated with that notion and overcoming them, made me live the true spirit of traditional anthropology.

Finding a Thesis Client

As an international student, not having any networks in the US, finding a thesis client was a great challenge. My professor referred me for a summer internship at State Farm Corporate Headquarters and it was hoped that the internship would be my thesis research. However, the internship did not turn into a thesis project, instead State Farm suggested an alternative research to be conducted later on. As I had already gained experience working with a corporation in the summer, I decided not to take up that research. I also realized that, being a fully funded international student, I would be doing the research free of cost, and doing it for a big corporation did not appear to be morally gratifying. I wanted to base my thesis research on a socially worthy cause. It was not easy to find a client requiring such research but finally I was fortunate enough to come across my thesis client, Elisabeth Aikin at FTLOTL, through a reference in our Anthropology Department.

The Field Experience

Participant recruitment was the most frustrating part of the entire research process as discussed in chapter 2. Recruiting 12-15 participants initially did not seem difficult at all until I actually went out in the field to reach out to the potential interviewees. People with disabilities

and children in general, both are considered vulnerable populations. This study was focused on two sets of vulnerable populations which overlapped; this made approaching the research participants and the recruitment process a little more sensitive and complicated.

The time of the year for data collection was not very favorable for this research, however I did not have much of a choice as I had to begin fieldwork as soon as possible. Firstly, by the time I got the IRB approval, schools were winding up their school terms before summer vacations so they could not provide any help in the recruitment process. Secondly I did not find children with special needs in the playgrounds during my observation sessions. This research study was focused on children's experience in the playgrounds and what they went through in that space. Theoretical Framework in chapter 3 established that to understand someone's "experience" in particular, ethnography is essential. Unfortunately, when I visited playgrounds in the DFW metroplex for observations, I found them to be mostly deserted even during reasonable hours and at relatively cooler summer days. Apart from these factors, weather bias might have influenced parents' feedback. Since the interviews were being conducted during peak summer season, all weather related issues, like shade, water for playing, equipment getting too hot etc. could have been emphasized more by parents. In Texas these matters would have been raised anyways, but probably they might not have dominated the interview conversations the way they did, if it was not summers.

During my visits to the playgrounds, I did not come across children with special needs. There were only a few times when even able-bodied children were playing out there. However, when able-bodied children were playing there, I experienced a lively and cheerful atmosphere, with giggles and sniggers of children in the air. On the contrary, in the recreation centers where I came across special needs children, I found the atmosphere to be very tense and gloomy despite

hearing all the laughter. This is a personal observation and a subjective view, but I still believe it was worth sharing.

While conducting the interviews, my non-native accent was at times difficult for the parents to comprehend, however, I repeated and rephrased questions a lot so that they could understand me better. I learned from every interview and tried to improve my interviewing skills and overcome communication barriers. Similarly, at times it was difficult for me to understand the accent of parents. I asked for clarification of words, but at the same time this interrupted the flow of the interview. During these sessions, at times I got a little overwhelmed with emotions. Most of the parents did not show any vulnerability while discussing their children's disability. In fact, they talked about their children in a very matter-of-fact manner, not wanting sympathy at all. Nonetheless, keeping their entire background and everyday challenges in consideration, made my heart go out for them. After every interview, I would contemplate upon what was shared with me, before penning down my personal reflection on each interview session. I would realize that this was just a research assignment for me and my association with it would soon be over but this was the participants' life. It would continue this way for ever, getting more complicated as the children grew up. Nevertheless, it was rewarding to know that I was trying to contribute in improving the quality of life of these families in my own humble way.

By the time I completed the interviews, I had developed considerable rapport with the interviewees, and they appeared to have gained confidence in the credibility of my research. Parents used these interviews as venting sessions on the current playground scenarios and their usability. This was beneficial for the research and in generating rich data for an improved playground experience. I was obliged to the parents for giving me their precious time. Apart from giving them the assurance that playground would be soon renovated, I was not

compensating them for their time and feedback. They seemed to be enthusiastic about the potential playground and were looking forward to it. I also felt that by participating in the research, they not only wanted to make their voice heard but also wanted to support me for taking up such a research initiative.

Parents with Special Needs Children Are Short on Time

Since this was a qualitative research and my graduate thesis project, I had to have at least a thirty to sixty-minutes in-depth interview session in order to gather sufficient data. Conversely, it was really hard for parents with special needs children to spare this much time. A parent who participated in the research, expressed her exasperation in taking out time for the interview in an email:

> Without exaggerating, between working and managing the therapy schedules of two children with special needs (plus insurance claim resolution, a bonus!), almost every waking moment is scheduled.

Many other parents, whether they participated in the study or not, expressed similar views on taking out this much time for the interview. Sparing time might have been more demanding for parents specifically during this time of the year as children were off from school. Children being home almost all day required more attention and time of the parents, which did not leave them with much time for themselves. Owing to such challenges in the recruitment process and keeping parents' convenience in mind, the majority [9 out of 14] of the interviews were conducted over the phone. The facial expressions, body language and other in-person interactions of the four parents interviewed in person, added depth to the interview.

Time constraint for the research was another limiting factor. If time had allowed, it would have been a wonderful opportunity to follow-up with the parents already interviewed and

accompany them to the playground on their upcoming visits. That would have been an ideal setting for observing children in the playgrounds whose parents' interview data I already had. I assume those parents wouldn't have had any reservations with this idea as I had developed a good rapport with them and they had developed trust in the research.

Parents' Opinions vs. Actual Needs of the Children

The research was based on parents' feedback and on their perception of their children's usability of the playground rather than any direct input from the children. The ability to consult children about design of playgrounds has been shown to increase children's enjoyment of the space (Titman 1994). Literature in chapter 3 has discussed a point of view that children's role as social agents and their unique agency is underestimated in the field of anthropology. Unfortunately, that claim is also validated in this study as the study is based on adult perceptions. Despite providing greater insight for the research, directing the research straight at the children would not have found favor with the IRB. Apart from not getting IRB approval, participant recruitment would have been nearly impossible for interviews directed towards children with special needs. Parents themselves were not willing to be interviewed, which makes it doubtful that they would have allowed any direct contact with their children. Other than parents, nobody else could know a child's recreation needs, yet, some additional findings could have been revealing if one had directly interacted with children. Out of the fourteen interviews, I met children of only two interviewees. One was a very close interaction with a four-year-old boy with autism while I just had a glimpse from a distance of the thirteen-year-old boy with cerebral palsy. Prellwitz and Skär described a limitation in their study: "A methodological limitation of the study was that the interviewer only met the children once" (Prellwitz and Skär 2007: 144).

On the contrary, I did not even meet all the children even once. Meeting children even for a few minutes would have added depth to the research. I could have developed a connection between the child's physical built, level of social interaction along with parent's feedback and further gauged their strengths and weaknesses.

Dynamics of FTLOTL

Acquainting myself with FTLOTL's operations to understand its research requirements also revealed its political dynamics. FTLOTL is one of 26 nonprofit organizations working for White Rock Lake's conservation and maintenance, and it faces competition from its counterparts. Apart from identifying the recreational needs of the community and creating awareness of the potential playground, the needs assessment research would build goodwill toward FTLOTL and enhance its image. Playground renovation project would also make FTLOTL's contribution to White Rock Lake Park more prominent and help prove its worth to The City of Dallas. Connection with academia in the form of graduate research also added credibility to FTLOTL's operations. Being a small non-profit organization, FTLOTL had to secure funding for the renovation project. This needs assessment research would give reliability to the renovation venture and was intended to be used in generating funds.

Attending the relevant meetings, I figured out that despite the playground project being FTLOTL's initiative, FTLOTL was not the key decision maker in the implementation process. The City of Dallas Parks and Recreation Department (DPARD) had the final say and every step had to be approved by The City. FTLOTL's role was to coordinate with The City, secure funding, plan and propose ideas for implementation and get them authorized by The City. At the same time FTLOTL's role as a catalyst, in expediting the bureaucratic process was crucial. In

December 2015 DPARD requested FTLOTL to have three playground equipment vendors create 3D renderings for Flag Pole Hill's existing playground footprint. Recently following-up with my client revealed that the Flag Pole Hill playground project has been put on hold since March 2016 by a Dallas Park Board Representative, Robb Stewart, at the request of a Town Hall Council Member, Adam McGough. I was informed that Stewart and McGough both have a copy of the needs assessment client research report that I prepared for FTLOTL. However, there seemed to be some miscommunication as McGough emailed me separately asking which research was being referred to in emails being exchanged with FTLOTL [he was copied in the emails by my client]. When I informed him about the needs assessment research, he asked for a copy as per him he didn't have one and also wrote that "We want to use as much input as possible." In June 2016 a Flagpole Hill Task Force was formed under Stewart's leadership, in order to engage more community groups in the planning process. Task Force meetings are private and its members are unknown to FTLOTL. Initially FTLOTL board members were told that they would be included in the Task force, however later they were not. In the first Task Force meeting in June, discussion was based on the main findings of this research according to my client. Currently the Task Force is exploring the prospect of a larger playground and looking at the entire 107 acres of Flag Pole Hill area. At this point in time, my client was unsure regarding the extent to which needs assessment research has been utilized in the planning process. The new tentative date for the completion of this playground is Spring 2017.

Through the Lens of an Anthropologist

As an applied anthropologist, the researcher's involvement and activism within the participating community is of utmost importance so I tried to fully immerse myself at various

levels of the research process. I faced a dilemma when I started conducting interviews. I felt that I was instilling hope into the parents that a playground fulfilling their needs would be ready soon while I was unsure about the plan for its execution. Around that point in time FTLOTL had been refused funding for the playground by KaBoom. That made me doubt if the playground was ever going to be renovated. Being aware of the bureaucratic system that surrounded the renovation plan, I knew that even if the implementation of the new playground was to materialize, without any substantial funding it could be pushed back two to three years. This meant that if the new playground had an age limit (2-12 years), the 11-year-old children whose parents I interviewed would not be able to benefit from this project when the playground was finally renovated. Towards the end of completing my fieldwork in October 2015, I was relieved to hear that FTLOTL had been approved for a $15,000 grant by KaBoom and that the implementation was planned for 2016. FTLOTL had also scheduled some fundraising events. However, at this point in time, the tentative completion date of the project has been pushed back to 2017. Administering a quantitative survey was not part of my thesis project, but if I was still in Denton, I would have liked to help FTLOTL to administer that part of the research. I think I have developed some expertise on this research topic and have also become familiar with the geographical area and community surrounding the Flag Pole Hill Playground. I am sanguine and optimistic about my thesis research being utilized and anthropology being put to use.

While my written report was still incomplete, I orally defended my thesis as well as orally presented my research findings to the client before moving back to my home country. The transition phase was quite long and it interfered with the flow of my work and also with my timely degree completion. Ideally, I would have wanted to complete my graduate degree before returning home and moving on to the next phase of my life, but circumstances were not so

favorable. I would have also loved to see the new playground functional before returning and would have liked to gauge the extent to which my findings and recommendations were used. Since a few parents I interviewed followed up with me about the timeframe of the renovation, it would have been a pleasure to personally inform them about the playground's inauguration and see their reactions to that news. In the future, whenever I visit the United States, I will make sure that I visit Dallas and see the new, renovated playground for myself and (hopefully) see anthropology in action!

APPENDIX A

SURVEY QUESTIONNAIRE

(Please give only one response for all questions except for question 3 and 4)

1. What is the name of the playground you visit most frequently with your child/children?

2. To what extent is this playground a universally designed/inclusive playground (serves children with various abilities)?

a. To a great extent
b. Somewhat
c. Very little
d. Not at all

3. What is the age group of your child/ children whom you take to the playground? (check all that apply)
    a. Under 3 years
    b. 3-5
    c. 5-7
    d. 7-9
    e. Over 10 years

4. Does your child/children use any of the following adaptive aides? (check all that apply)
    a. Wheelchair
    b. Walker
    c. Glasses
    d. Hearing aides
    e. Others _____

5. What is the one activity that your child likes doing the most at the playground you visit?

a. Climbing
b. Swinging
c. Sliding
d. Spinning
e. Balancing
f. Bouncing/ Jumping

6. What is the one thing that your child likes doing the least at the playground you visit?

a. Climbing
b. Swinging
c. Sliding
d. Spinning
e. Balancing
f. Bouncing/ Jumping

7. Select one piece of equipment that is the easiest for your child with special needs to use in the playground?

a. Swings
b. Slides
c. Monkey bars, jungle gyms
d. Merry-go-rounds
e. Seesaws
f. Spring rockers
g. Other _____

8. Select one piece of equipment that is the most difficult for your child with special needs to use in the playground?

a. Swings
b. Slides
c. Monkey bars, jungle gyms
d. Merry-go-rounds
e. Seesaws
f. Spring rockers
g. Other _____

9. Does your child fall frequently during play?
    a. Yes
    b. No

10. What do you think is more important in a playground?

a. Social inclusion (interaction among of children with all varying abilities)
b. Physical accessibility of equipment

11. What do you think is more important in a playground?

a. Different types of accessible equipment
b. Greater quantity of the same accessible equipment

12. How frequently would you visit an inclusive playground that is less than 2 mile from your home?

a. Almost daily
b. 2-3 times a week
c. Once a week
d. Once every two weeks
e. Once a month

13. What is the maximum distance you are willing to travel for an inclusive playground?

a. Up to 5 miles
b. 5 to 10 miles
c. 10 to 15 miles
d. More than 15 miles

14. How would you like your child to interact at a playground? Rate each of following activities from 1 to 5, 1 being liked the most and 5 being the least.

    a. Solitary play (playing by oneself)
       1 2 3 4 5

    b. Parallel play (playing side by side with peers)
       1 2 3 4 5

    c. Team play (playing interactively with peers)
       1 2 3 4 5

    d. Interactive play (playing with interactive features incorporated within the equipment)
       1 2 3 4 5

    e. Play through cognitive stimulation (pretend play, exploratory play)
       1 2 3 4 5

    f. Play through sensory stimulation (tactile, auditory and visual elements)
       1 2 3 4 5

15. How important are these factors in your decision-making process to visit a particular playground? Rate from 1 to 5, 1 being the most important while 5 being the least.

    a. Weather
       1 2 3 4 5

    b. Safety of the playground
       1 2 3 4 5

    c. Accessibility of the equipment
       1 2 3 4 5

16. To what extent do these features relate to the safety of your child in a particular playground? Rate from 1 to 5, 1 being to a great extent while 5 being the least.

    a. Surface/Flooring of the playground
       1 2 3 4 5

    b. Fencing around the playground
       1 2 3 4 5

    c. Height of the equipment
       1 2 3 4 5

17. How important are accessible restrooms in the playground for you and your children? Rate from 1 to 5, 1 being the most important while 5 being the least.
    1 2 3 4 5

18. How important is a shaded area in the playground for you and your children? Rate from 1 to 5, 1 being the most important while 5 being the least.
    1 2 3 4 5

19. Do you or would you like to participate or interact with your children while they are playing in the playground?
a. Yes
b. Maybe
c. No

20. What would be the main benefit of the diverse environment of an inclusive playground in your community?
a. Promoting equality among children with varying abilities
b. Improving social skills of children
c. Embracing diversity
d. Promoting mutual learning among children with varying abilities

APPENDIX B

RECRUITMENT FLYER

Do you live near the Flag Pole Hill - White Rock Lake Park Area?
Do you think your child with special needs
is left out at the playground?

Do you want the Flag Pole Hill Playground to be transformed

from **to** **?!?**

GREAT NEWS!

For The Love Of The Lake - White Rock Lake

in collaboration with University of North Texas
is conducting a research study to
build a playground at Flag Pole Hill
for children with ALL ABILITIES!

MAKE YOUR VOICE HEARD!
PARTICIPATE IN A SMALL INTERVIEW

CONTACT

Elisabeth Akin (Lis), Executive Director For the Love of the Lake
info@whiterocklake.org

Hira Hasan, Graduate Researcher, University of North Texas
HiraHasan@my.unt.edu

APPENDIX C

INTERVIEW GUIDE

(About the current playground facilities)

1. Can you share something about your family, your children? Tell me more about (name of the child with special needs)? What are his/her hobbies?
2. How do your children feel about outdoor recreation? Do they enjoy playing outdoors?
3. Do you take your children to any playground? If so, which one? Why that one? What do you/they like about it? How frequently? If no, why not?
4. Taking your kids to the playground depend on which factors?
5. What are some of the things they like to do? Which types of play equipment do they like? What does (name of special needs child) like to do the most? What is the easiest for him/her?
6. What is the hardest, most frustrating and annoying for him/her (name of special needs child)?
7. Is it different for your different children? How do you think that the recreational/play needs vary among your children?
8. Can you discuss any challenge that your child faces pertaining to being social in the playground? If yes, then how do you think it can be overcome to certain extent?
9. Can you discuss any challenge that your child faces pertaining to physical accessibility? If yes, then how do you think it can be overcome to certain extent?
10. What safety measures do you take when you take your child with special needs to the playground?
11. Any interesting-specific experience of your children in the playground that you would like to share?
12. Have you currently or in the past installed any adaptive features for your children's recreation/play in your house?

(Expectations from the potential playground facilities)

13. If you have an inclusive playground in the community, how frequently will you visit it?
14. What kind of equipment/play structures would you want for your children in that playground and why?
15. How can the space in the playground be best utilized and the layout made better in your opinion?
16. What is your opinion about inclusion, bringing together children with all varying abilities in the same playground? What do you think are the pros and cons of such inclusion?
17. What safety measures do you think should be there in the play area for him/her?
18. How do you think that play can be kept safe yet thrilling and fun for you children in the playground?
19. Would you like to participate/interact with your children while they are playing in the playground? If yes, what do you think would facilitate it?
20. As parents, what kind of features/facilities would make your visit to the playground more comfortable and convenient?
21. Would you prefer segregated age-appropriate play areas, 2-5 years, 6-12 years?
22. What types of events or activities would make you want to come to such a playground?
23. Do you have other feedback or general suggestions for any features (sensory, physical and/or social) that you would like to see incorporated in the potential inclusive playground? Any other recommendation?

a) Total number of children:
b) Age of the child with special needs:
c) Gender of the child with special needs:
d) Special needs challenge that the child faces:
e) Ethnicity of the child with special needs:
f) Able-bodied siblings:
g) Approximate distance between your house and Flag Pole Hill Playground:
h) Approximate distance between your house and the most frequently visited playground:
h) Please choose an average annual income range of your household if you like:
i) Less than $24,999 ii) $25,000 to $49,999 iii) $50,000 to $99,999 iv) $100,000 or more

APPENDIX D

CODE DESCRIPTIONS

No.	Code Title	Code Description
1	Adaptations at home	any adaptive equipment installed at home or any changes made at home to facilitate and accommodate the child's disability
2	hard to engage with autism	when parents talked about their autistic kids being lost in their own world and that nothing kept their attention. this is a social barrier to play
3	Awareness and acceptability by others	when parents talk about the social acceptability of their children in the playground
4	Bad influence of older kids	when parents mentioned that older kids in the playground are a bad influence on their children
5	Barriers to play	when parents discuss challenges, frustrations and barriers to play for their children in the playground
6	Bridges	when bridges are mentioned as one of the playground equipment
7	changing Tables	When parents mention changing tables as a requirement in restrooms
8	children's interest	When parents mention that going to a playground depends on the interest of the child
9	Children's participation in playground décor	a parent suggested that her son painted a tile that would be used to decorate her neighborhood playground
10	Children's Unique Characteristics	characteristics related to children’s disability, which are specific to them only
11	Child's age and size, age segregation and playground usability	how child's age and size effects the playground usability and whether parents prefer age segregated playgrounds or not
12	Child's independence	when parents’ mention independence as the child's need in the playground or share such an experience
13	Climbing	when the activity of climbing any structure is mentioned
14	Cons of Inclusion	when parents express whether there were cons of exclusion or not
15	Electrical outlets	a parent described the need of an electrical outlet as a required facility in the playground.
16	Enclosure/Fencing	when parents mentioned the requirement for an enclosed playground
17	Enhance social interaction through Equipment	when parents suggest or give examples as to how sports or playground equipment can help facilitate social interaction among children

18	Exclusion as a possibility	when parents mention or imply to have a separate approach for children with disabilities.
19	Exploratory/ Intuitive Play	where parents mention that their children like to explore in the playground and play intuitively
20	Flooring/ Ground	when parents talked about the type of floor that would make the playground experience better
21	Frequency of Visits	frequency of visit to the playgrounds currently or to the potential inclusive playground in future
22	Height of playground equipment	when height is mentioned with respect to playground equipment, whether parents and children like it or not
23	Hobbies	when parents discussed something their children like doing in general, for recreation
24	if parents' have time	When parents mention lack of time as a barrier to taking children to the playground
25	Imaginative/ Creative Play	when parents mention that children enjoy imaginary/make belief kind of play in the playground
26	Interactive Features/ Board Games	when parents talk about their children's recreation through interactive games and features
27	it caters to all the siblings	When parents stress the importance of a playground that fulfills the need of all their children
28	Minor Factors effecting playground visit	when parent’s mentions variables on which their visit to the playground depends upon
29	Music/ Sound Features	when parents mentioned sounds or music in relation to their children's enjoyment
30	Nature around playgrounds	when parents mention natural elements like, trees, creeks, ponds as attractive features for playgrounds
31	no obstruction in vision	when parents mention that the playground structures should not interfere with their line of sight during supervision
32	number of swings	When parents stress on the need of more swings
33	number/variety of slides	When parents talk about the variety or number of slides
34	Parents needing a helping hand in the playground	when parents mention or imply that they like some help with the children in the playground
35	Parents support groups	when parents express the need of socializing with other parents with similar concerns
36	Parents wanting to participate with their children in the playground	when parents say that they would like to play/interact with their children while playing or share any such experience.

37	Parking	parents mentioning the need for convenient parking
38	Passive Supervision	when parents talked about being on the toes, keeping their children under constant supervision
39	Picnic area	when parents mention that they would like space for picnics
40	Playground equipment accommodation for parents	where parents mention that they would like to use the equipment with their children or such an experience where they wanted to be accommodated but were not
41	Pros of Inclusion	when parents express the benefits of inclusion in the playground
42	Pushing and Pulling	when parents directly mention or share an experience of their children liking pushing or pulling activities in the playground.
43	Railing support	when parents mention the need of a hand railing for their children in the playground
44	Ramps and physical accessibility	when parents talk about ramps and physical accessibility to and within the playground
45	Reference made to other specific play areas	whenever parents talked about their children's recreational experience in any other play area
46	Repetition for children with autism	when parents of children with autism mentioned that their children repeat activities
47	Rest Rooms	when parents mention that bathroom facility is important for them within a playground
48	Running as a safety hazard for children with autism	when running is a safety concern for the parents
49	Running for fun	when parents specify that their children enjoy running
50	Safety	any mention of safety, safety concerns of parents or safety measures taken by parents
51	Sand	when parents specifically say that their children enjoy playing with sand or share such an experience
52	Seating	when parents mention the need and importance of seating in the playground
53	Seesaws	when the usability of seesaws is mentioned
54	Sensation of movement	when parents describe the feeling of movement as an important and enjoyable component of play
55	Sensory Stuff	the mention of all other sensory stuff apart from, water, sand and music
56	Shade	whenever parents mention availability of shade in reference to playground

57	Siblings Dynamics	how do or whether or not siblings play together or interact in the playground
58	Simplicity	when parents say that play and equipment should be kept simple in the playground
59	Slides	when the usage of slides is mentioned
60	Social Interaction	any mention of how children interact or do not with their peers in the playground
61	Space Utilization	when parents discuss how they like the space utilization or the layout of the playground or imply what they ideally think about it
62	Special circumstances in the family	when parents mention stress in the family reflected in the form of broken homes or single/ very young moms
63	Spinning	when parents share an enjoyable experience of spinning in a merry-go-round or any other equipment or specifically say that their children like it
64	Sports	when parents mention some sports activities along with other things their children enjoy in the playground
65	Spring Bouncers	when parents talk about their children enjoying rocking on the spring bouncers
66	Storage Place	when parents state that they would like a place to store their stuff
67	Swinging	when parents talk positively about swinging in the playground or for recreation in general by their children
68	swings of varying sizes	when parents stress upon the need for swings with varying sizes
69	swings with back support	when parents speak about back support being important in swings
70	Temperature resistant materials/surfaces	when parents mention that the material with which the playground is built should be temperature resistant to counter the effect of extreme weather
71	Theme for the park	when parents talk about parks having a certain theme positively or suggest that the potential park should have one.
72	Therapy/ Treatment/ Diagnosis	when parents talk about the details about their child's disability in general or in particular to the playground usability
73	Too much destructive energy	when a parent described his autistic son to have never exhausting energy
74	Trampoline	when parents mentioned that trampoline is a source of enjoyment for children
75	Trash Cans	when parents talked about trash cans as a requirement in the playground
76	Trying and Testing Playgrounds	when parents talk about trying out playgrounds to see if their children like them or not
77	Types of Events	types of events that would make parents want to go to the new playground

78	types of swings	when parents talk about variety of swings
79	Walking track	mentioned by parent that walking track around the playground would be convenient for her
80	Water element	when parents directly said that they would like to have a water element in the potential park or when they mentioned that their kids like going to pools or spray parks or enjoy some other water activity
81	Water Fountains	when parents mentioned the requirement for water fountains in the playground
82	Weather	when parents mention how Texas unpredictable weather, heat, cold or rain interferes with their children's playground experience.

REFERENCES

Ablon, Joan
1981 Stigmatized health conditions. Social Science & Medicine. Part B: Medical Anthropology, 15(1), 5-9.

About KaBoom
https://kaboom.org/about_kaboom, accessed July 18, 2015

Attard, Sharon
2008 Emerging perspectives in the anthropology of childhood. Anthropology Today, 24(5), 24-25.

Askins, Lindsey, Brittany Diasio, Dagmara Szewerniak, and Susan M. Cahill.
2013 Children with Developmental Disabilities and their Motivation to Play. The Open Journal of Occupational Therapy 1, no. 4: 4.

Bateson, Gregory
1979 Mind and Nature: A Necessary Unity. New York: E. P. Dutton.

Benedict, Ruth
1974 The Chrysanthemum and the Sword: Patterns of Japanese Culture. New York: New American Library.

Berelson, Bernard
1971 Content Analysis in Communication Research. Macmillan Pub Co Bernard, Russel H.
1998 Handbook of Methods in Cultural Anthropology. AltaMira Press.

Bernard, Russel H.
2011 Research Methods in Anthropology: Qualitative and Quantitative. (Fifth Edition) Altamira Press.

Blackburn, Clare M., Nick J. Spencer, and Janet M. Read
2010 Prevalence of childhood disability and the characteristics and circumstances of disabled children in the UK: secondary analysis of the Family Resources Survey. BMC pediatrics 10, 1(1).

Bluebond-Langner, Myra, and Jill E. Korbin
2007 Challenges and Opportunities in the Anthropology of Childhoods: an introduction to Children, Childhoods, and Childhood Studies. American Anthropologist 109(2), 241-246.

Bock, John, Suzanne Gaskins, and David F. Lancy
2008 A four-field anthropology of childhood. Anthropology News, 4, 391-420.

Bourdieu, Pierre
1984 Distinction: A Social Critique of the Judgement of Taste. London, Routledge.

Bourdieu. Pierre
1986 Distinction, London: Routledge.

Boushh, JC., Cindy Burkhour, Jim Dziatkowicz, Carrie Fannin, Blake Hobson, Christopher Joseph, Mara Kaplan
2013 Inclusive play design guide. Playworld system, the world needs play.

Boyle, Coleen A., Sheree Boulet, Laura A. Schieve, Robin A. Cohen, Stephen J. Blumberg, Marshalyn Yeargin-Allsopp, Susanna Visser, and Michael D. Kogan.
2011 Trends in the prevalence of developmental disabilities in US children, 1997-2008. Pediatrics 127 (6): 1034-1042.

Brennan, Kevin and Gerry Sutcliffe
2008 Foreword. In Design for play: a guide to creating successful play spaces. Shackell, Aileen, Nicola Butler, Phil Doyle, and David J. Ball. The Department for Children, Schools and Families (DCSF) and the Department for Culture, Media and Sport (DCMS).

Brown, M., & Gordon, W. A.
1987 Impact of impairment on activity patterns of children. Archives of physical medicine and rehabilitation, 68(12), 828-832.

Bundy, A.
1997 Play and playfulness: What to look for. In L. D. Parham & L. Fazio (Eds.), Play in occupational therapy for children 52–66. St. Louis, MO: Mosby.

Caillois, Roger
1961 Man, Play and Games: The Free Press of Glenco, Inc.

Casey, Theresa
2005 Inclusive Play; Practical Strategies for Working with Children Aged 3 to 8: SAGE Publications Ltd, 18-30.

Cervinkova, H.
1996 Disability and the other in cultural anthropology. Human Mosaic, 30(1–2), 56–63.

Christensen, Keith, and Jill Morgan
2003 To Help Children with Disabilities, Design by Types of Activities, Not Types of Equipment. Parks & Recreation 38 (4): 50.

Christensen, Keith M. and T. K. Jeon
2006 Creating Inclusive Outdoor Play Environments; Designing for Ability Rather than Disability. The Journal of Eyewitness in Special Education 910. 48-55.

Clifford, J. M., & Bundy, A. C.
1989 Play preference and play performance in normal boys and boys with sensory integrative dysfunction. Occupational Therapy Journal of Research, 9, 202–217.

CAOT (Canadian Association of Occupational Therapists)
1996 Practice paper: Occupational therapy and children's play. Canadian Journal of Occupational Therapy 63, 1-9.

Corbin, J.M. & Strauss,
1990 Grounded theory research: Procedures, canons, and evaluative criteria A. Qual Sociol (1990) 13: 3. Qualitative Sociology, Volume 13 (1) 3–21.

Cremers, Anita HM, Yvonne JFM Jansen, Mark A. Neerincx, Dylan Schouten, and Alex Kayal.
2014 Inclusive design and anthropological methods to create technological support for societal inclusion. In International Conference on Universal Access in Human-Computer Interaction (pp. 31-42). Springer International Publishing.

Crews, D.E. and Zavotka, S. 2006. Aging, disability, and frailty: implications for universal design. J. Physiol.Anthropol. 251:113–18.

Csikszentmihalyi, Mihalyi, and Stith Bennett.
1971 An Exploratory Model of Play. American Anthropologist, New Series 73(1): 45-58.

Csikszentmihalyi, Mihalyi
1990 Flow: The psychology of optimal experience. New York: Harper and Row.

Dallas Parks and Recreation-White Rock Lake
http://www.dallasparks.org/235/White-Rock-Lake, accessed May 15, 2016.

Davis J, M, Watson N, Cunningham-Burley, S
2008 Disabled Children, Ethnography and Unspoken Understandings. Research with children: perspectives and practices (2nd revised ed.), edited by Pia Christensen and Allison James, eds. 220-238. London, Routledge.

Devi, Naorem Binita
2009 Understanding The Qualitative and Quantitative Methods in The Context of Content Analysis ;1-10 QQML2009: Qualitative and Quantitative Methods in Libraries, International Conference, Chania Crete Greece, 26-29.

Diamond, S.
1981 Growing up with parents of a handicapped child: A handicapped person's perspective. In j. L. Paul (Ed.), Understanding and working with parents of children with special needs 23-50 New York: Holt, Rinehart & Winston.

Dyck, Noel
2012 Fields of Play: An Ethnography of Children's Sports. Toronto: University of Toronto Press.

Edgerton, R. B
1984 Anthropology and mental retardation: Research approaches and opportunities. Culture, Medicine and Psychiatry, 8, 25–48.

Ellis, M. J.
1973 Why People Play. Upper Saddle River, NJ: Prentice Hall. Federlein, A. C. 981. Play in Preschool Mainstreamed and Handicapped Settings. Saratoga, CA: Century Twenty-One Publishing.

Fjortoft, I
2001 The natural environment as a playground for children: the impact of outdoor play activities in preschool children. Early Childhood Education Journal 29 (2): 111–117.

Foucault, Michel
1987 Madness and civilization, a history of insanity in the Age of Reason. London.

Frank, G.
1986 Venus on wheels: Two decades of dialogue on disability, biography, and being female in America. Berkeley, CA: University of California Press.

Freud, Sigmund
1922 Beyond the pleasure principle. New York, Norton & Co. (1961).

Freud, Sigmund
1935 An autobiographical study. New York: Norton Freud, S (1965).

Freud, Sigmud
1958 Formulations on the two principles of mental functioning. In The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume XII (1911-1913): The Case of Schreber, Papers on Technique and Other Works 213-226.

Friedl, Erika
2002 Why are children missing from textbooks? Anthropology News, 43(5), 19-19.

Friedner, M. and Osborne, J
2013 Audit bodies: embodied participation, disability universalism, and accessibility in India. Antipode 451:43–60.

Galman, Sally Campbell
2013 The Good, the Bad, and the Data: Shane the Lone Ethnographer's Basic Guide to Qualitative Data Analysis. Left Coast Press, Inc.

Geertz, Clifford
1973 Deep play: Notes on the Balinese cockfight. In Gertz, The Interpretation of Cultures. Selected essays (pp. 412-453). New York: Basic Books.

Geertz, Clifford
1973 Thick Description: Toward an Interpretive Theory of Culture. In Gertz, The Interpretation of Cultures. Selected essays (pp. 3-30). New York: Basic Books.

Giddens, Anthony
1984 The Constitution of Society: Outline of the Theory of Structuration. Cambridge: Polity.

Gleason, John J.
1990 Meaning of Play: Interpreting Patterns in Behavior of Persons with Severe Developmental Disabilities. Anthropology & Education Quarterly 21 (1). [Wiley, American Anthropological Association]: 59–77.

Gleave, Josie
2012 A world without play: A Literature review.

Goldman, Laurence R.
1998 Child's Play: Myth, Mimesis and Make-Believe. New York: Berg 302

Goltsman S
2001 Universal design in outdoor play areas. In: Preiser WFE, Ostroff E (eds.), Universal Design Handbook. New York, NY: McGraw-Hill; 1.3–1.12.

Google
Flag Pole Hill, White Rock Lake, app.googleearth.com accessed January 1, 2013.

Gray, Peter
2011 The Special Value of Children's Age-Mixed Play, American Journal of Play 3 (2011): 500–22.

Hamayon, Roberte
2012 Jouer: Une Étude Anthropologique, Éditions La Découverte [Why We Play: An Anthropological Study. English Translation © 2016 HAU Books and Roberte Hamayon] The University of Chicago Press Books.

Hansen, Rick
2011 Let's play; toolkit. Creating inclusive play spaces for children with physical disabilities. Rick Hansen Foundation.

Hartle, L. and J. E. Johnson
1993 Historical and Contemporary Influences of Outdoor Play Environments. In Children on Playgrounds: Research Perspectives and Applications. Albany: State University of New York.

Heah, Tom, Tara Case, Brianna McGuire, and Mary Law
2007 Successful participation: The lived experience among children with disabilities. Canadian Journal of Occupational Therapy, 74(1), 38-47.

Hirschfeld, L. A.
2002 Why Don't Anthropologists Like Children? American Anthropologist, 104: 611–627.

Hobson, Blake
2013 Taylor's Dream: Inclusive play spaces can unite communities, Indiana Park & Recreation Association the Profile Summer 2013.

Hughes, B.
2003 Play deprivation, play bias and play practice, in F. Brown (ed) Playwork: theory and practice, Open University Press.

Hughes, B
1996 A Playworkers Taxonomy of Play Types. London: PLAYLINK.

Huizinga, Johan
1949 Homo ludens. A Study of play element in culture (1971 ed.). London: Paladin.

Huizinga, Johan
1955 Homo Ludens: A Study of the Play Element in Culture. Boston: Beacon Press.

Isenberg, J and Quisenberry, N
2002 Play: Essential for All Children. Olney, ML: Association for Childhood Education International.

Iwarsson, Susanne, and Agnetha Ståhl
2003 Accessibility, usability and universal design—positioning and definition of concepts describing person-environment relationships. Disability and rehabilitation, 25(2), 57-66.

James A.
1979 Confections, Concoctions and Conceptions, Journal of the Anthropological Society of Oxford 10(2): 83-95.

Jenkins, Henry
1998 ed. The Children's Culture Reader. New York: NYU Press.

Jensen, S.Q.
2011 Othering, identity formation and agency. Qualitative Studies, 2(2): 63-78.

Jenvey, Vickii B.
2013 Play and disability. Encyclopedia on Early Childhood Development.

John, Alison, and R. Wheway
2004 Can Play, Will Play: Disabled Children and access to outdoor playgrounds. London: National Playing Fields Association.

Kasnitz, D., & Shuttleworth, R. P.
2001 Anthropology in disability studies. Disability Studies Quarterly, 21(3): 2–17.

Klotz, J.
2003 The culture concept: Anthropology, disability studies and intellectual disability. Paper presented at the Disability at the Cutting Edge: A colloquium to examine the impact on theory, research and professional practice.

Kogan, K. L., Tyler, N., & Turner, P.
1974 The process of interpersonal adaptation between mothers and their cerebral palsied children. Developmental Medicine and Child Neurology, 16: 518-527.

Kottak, C.P
2011 Cultural anthropology: appreciating cultural diversity. McGraw-Hill.

King, S., Goltsman, S. and Brooke, C.
2001 Enhancing the Quality of Children's Lives Through Exceptional Play Area Design. ASLA Parks/Recreation.

Kvale, Steinar
1996 Interviews: An Introduction to Qualitative Research Interviewing. Sage.

Lancy, David F
2012 Why Anthropology of Childhood? A short history of an emerging discipline. AnthropoChildren. (French Studies in the Anthropology of Childhood) 1 (1).

Last, Cadell
2012 The 'othering' process.

LeCompte, Margaret D. and Jean J. Schensul
2010 Designing and Conducting Ethnographic Research: An Introduction (Ethnographer's Toolkit, Second Edition). Walnut Creek: AltaMira Press.

Lefebvre, H.
1974 The Production of Space. Oxford, UK: Blackwell.

Leontiev, A.N.
1978 Activity, consciousness, and personality. Englewood Cliffs, NJ: Prentice-Hall

LeVINE R.A.
2007 Ethnographic studies of childhood: A historical overview. American Anthropologist 109(2): 247-260.

Levitt, S.
1975 A study of the gross-motor skills of cerebral palsied children in an adventure playground for handicapped children. Child. Care, Health and Development, 1:29-43.

Low S. & Lawrence-Zuniga, D.
2003 Locating Culture. In S. Low and D. Lawrence-Zuniga (Ed.), The Anthropology of Space and Place (1-47). Malden, MA: Blackwell.

Ludvigson, A., C. Creegan, and H. Mills
2005 Lets Play Together: Play and inclusion evaluation of better play round three. Barnardo's.

Mancini, Marisa C., and Wendy J. Coster.
2004 Functional predictors of school participation by children with disabilities. Occupational Therapy International 11 (1): 12-25.

Malaby, Thomas M.
2008 Anthropology and Play: The Contours of Playful Experience. New Literary History Vol. 40 (1) :205-218.

Malinowski, Bronislaw
1922 Argonauts of the Western Pacific; An account of native enterprise and adventure in the Archipelagoes of Melanesian New Guinea: London, G. Routledge & Sons; New York, E.P. Dutton & Co.

McDermott, R. and Herve, V.
1995 Culture as disability. Anthropology and Education Quarterly, 26(3): 324–348.

Missiuna, Cheryl, and Nancy Pollock
1991 Play deprivation in children with physical disabilities: The role of the occupational therapist in preventing secondary disability." American Journal of Occupational Therapy 45, no. 10: 882-888.

Moller, Signe Juhl
2015 Imagination, Playfulness, and Creativity in Children's Play American Journal of Play, volume 7 (3): 322-346.

Moore, R. C., S. M. Goltsman, and D. S. Iacofano.
1992 Play for All Guidelines: Planning, Design and Management of Outdoor Play Settings for All Children. Berkeley, CA: MIG Communications.

Norbeck, Edward
1974 The Anthropological Study of Human Play. Rice Institute Pamphlet - Rice University Studies, 60 (3) Rice University.

O'Reilly, Dermont
2005 Social inclusion: A philosophical anthropology. Politics, 25(2): 80-88.

Oster, K.
1984 Physical disabilities in children: An exploratory study in mother and child interactions. Unpublished doctoral dissertation, University of Toronto.

Ostroff E
2001 Universal design: the new paradigm. In: Preiser WFE, Ostroff E (eds.), Universal Design Handbook. New York, NY: McGraw-Hill; 19.1–19.16.

Our Commitment because all kids love to play
https://www.playlsi.com/en/inclusive-play/inclusive-play-commitment, accessed May 20, 2015.

Peirano, Mariza GS
1998 When anthropology is at home: the different contexts of a single discipline. Annual review of anthropology, 105-128.

Phyfe-Perkins, E.
1982 The Preschool Setting and Children's Behavior: An Environmental Intervention. Journal of Man - Environment Relations 1(3): 10-29.

Piaget, Jean
1978 The development of thought: Equilbration of cognitive structures. Oxford: Blackwell.

Playworld Systems.
2013 Inclusive Play Design Guide.

Prellwitz, Maria and Tamm M
1999 Attitudes of key persons to accessibility problems in playgrounds for children with restricted mobility: a study in a medium-sized municipality in northern Sweden. Scandinavian Journal of Occupational Therapy 6: 166–173.

Prellwitz, Maria
2007 Playground accessibility and usability for children with disabilities. Experiences of children, parents and professionals. Doctoral Thesis, Department of Human Work Sciences, Luleå University of Technology.

Prellwitz, Maria, and Lisa Skär.
2007 Usability of playgrounds for children with different abilities. Occupational Therapy International 14 (3): 144-155.

Puett, Michael
2012 Foreword. In Why We Play: An Anthropological Study. English Translation © 2016 HAU Books and Roberte Hamayon. The University of Chicago Press Books.

Rast, M.
1986 Play and therapy, play or therapy? In The American Occupational Therapy Association, Inc., Play: A skill for life [Monograph] 29-41 Rockville, MD: American Occupational Therapy Association.

Reilly, M.
1974 Play as exploratory learning. (Ed.) Beverly Hills, CA: Sage Publications.

Ringaert L
2002 Universal design and occupational therapy. OT Now. September/October, 28–30.

Rodger S, Ziviani J
1999 Play-based occupational therapy. International Journal of Disability, Development and Education 46: 337–365.

Rogers-Warren, A. K., T. R. Ruggles, N. L. Peterson, and A. Y. Cooper.
1980 Playing and Learning Together: Patterns of Social Interaction in Handicapped and Non-handicapped Children. Lawrence, KS: Kansas Early Childhood Institute.

Rubin, K.H., Fein, C.G., & Vandenberg, B.
1983 Play. In E.M. Hetherington (Eds.), Handbook of child psychology, (Vol. 4), Socialization, personality, and Social development 693-774 New York: Wiley.

Russell, M.
2002 Beyond Ramps: Disability at the End of the Social Contract. Monroe, ME: Common Courage.

Sawyer, R. Keith
2002 The New Anthropology of Children, Play, and Games. Reviews in Anthropology 31 (2) :147-164.

Schwartzman, Helen B.
1978 Transformations: The anthropology of children's play. New York: Plenum.

Schwartzmann, Helen B.
1998 Foreword. In Child's Play: Myth, Mimesis and Make-Believe. Laurence R. Goldman. xi-xxi. New York: Berg.

SF Department of Children Youth and their Families
2010 Inclusion Toolkit, Special Needs Inclusion Project 2010; Support for families of Children with Disabilities, San Francisco.

Shackell, Aileen, Nicola Butler, Phil Doyle, and David J. Ball
2008 Design for play: a guide to creating successful play spaces. The Department for Children, Schools and Families (DCSF) and the Department for Culture, Media and Sport (DCMS).

Shaw, L.
1987 Designing playgrounds for able and disabled children. In: Weinstein CS, David TG (eds). Spaces for Children: The Built Environment and Child Development 187–213 New York: Plenum Press.

Sheridan, M. D.
1975 The importance of spontaneous play in the fundamental learning of handicapped children. Child: Care, Health and Development, 1, 3-17.

Shuttleworth, R. P.
2004 Stigma, Community, Ethnography: Joan Ablon's Contribution to the Anthropology of Impairment-Disability. Medical Anthropology Quarterly, 18: 139–161.

Sigafoos, Jeff, and Rachel Littlewood
1999 Communication Intervention on the Playground: a case study on teaching requesting to a young child with autism." International Journal of Disability, Development & Education 46, no. 3: 421-429.

Skulski, J.
2007 Designing for inclusive play: Applying the principles of universal design to the playground. Bloomington, IN: National Center on Accessibility, Indiana University-Bloomington. Retrieved from www.ncaonline.org

Spencer, H.
1873 The principles of psychology. New York, D. Appleton and Co.

Spradley, James P.
1979 The Ethnographic Interview: Wadsworth Cengage Learning.

Stagnetti K
2004 Understanding play: the implications for play assessment. Australian Occupational Therapy Journal 51: 3–12.

Steinfeld, E.
1994 The concept of universal design. Proceedings of the Sixth Ibero-American Conference on Accessibility. Rio de Janeiro (June 19, 1994).

Stout, Janet
1988 Planning playgrounds for children with disabilities. American Journal of Occupational Therapy, 42(10), 653-657.

Structures, Landscape
2016 A Higher Level of Inclusive Play; Ideas for better playgrounds for all. Inclusive Play Catalog. Landscape Structures Inc.

Sutton-Smith, Brian and Shirley Sutton-Smith
1974 How to play with your children (and when not to) Hawthorn Books Pp. 274.

Sutton-Smith, Brian.
1975 Play as adaptive potentiation. Sportswissenschaft, 5, 103-118.

Sutton-Smith, Brian
1981 A History of Children's Play: The New Zealand Playground, 1840-1950. Philadelphia: University of Pennsylvania Press, Pp. 331.

Tai, Lolly
2006 Designing Outdoor Environments for Children: Landscaping schoolyards, gardens and playgrounds, McGraw Hill.

Tajfel, H. and Turner, J. C.
1986 The social identity theory of inter-group behavior. In S. Worchel and L. W. Austin (eds.), Psychology of Intergroup Relations. Chigago: Nelson-Hall.

Tamm, Maare, and Maria Prellwitz
2001 If I had a friend in a wheelchair: children's thoughts on disabilities. Child: Care, Health and Development 27(3) :223-240.

Tamm, Maare and Skär L
2000 How I play: roles and relations in the play situations of children with restricted mobility. Scandinavian Journal of Occupational Therapy 7(4): 174–182.

Titman, Wendy
1994 Special places, special people: the hidden curriculum of school grounds. London: WWK UK/ Learning through Landscapes.

Tucker, Elizabeth
2008 Children's folklore: A handbook. Greenwood Press, pp 164.

Turner, J., Newman-Bennett K, Fralic J, Skinner L
2009 Everybody needs a break! Responses to a playgarden survey. Pediatric Nursing 35(1): 27-34.

Uys, Catharina Jacoba Elizabeth
2002 Validation of a play package to facilitate the development of communication-related skills. PhD diss., University of Pretoria Pretoria.

Vygotsky, Lev
1929 The cultural development of the child. Journal of Genetic Psychology 36, 415-434. (Original work published in 1928, Pedology, No 1., 58-77).

Vygotsky, Lev.
1978 Interaction between learning and development. Readings on the development of children 23.3 pp 34-41.

Weininger, O. and Fitzgerald, D.
1988 Symbolic play and interhemispheric integration: Some thoughts on a neuropsychological model of play. Journal of Research and Development in Education, 21(4), 23-40.

Weisner, T.S.
2015 Childhood: Anthropological Aspects, International Encyclopedia of the Social & Behavioral Sciences, 2nd edition, Vol 3. Oxford: Elsevier. 451–458.

White, R.
1997 Sometimes, You Just Gotta Make Mud Pies; Children's Adventure Play Gardens. Kansas City, MO: White Hutchinson Leisure and Learning Group.

Winnicott, Donald Woods
1971 Playing and reality. Psychology Press.

Wolf, Eric R.
1964 Anthropology. New York: W.W. Norton.