

INNOVATIVE PRODUCTS THE KEY TO MORE PLAY

Families choose play destination for its unique design



Innovative products - the key to more play

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Executive summary

"Playgrounds have been identified as the place within parks where children expend the most energy. However, some playgrounds appear more visited and interesting to users than others".

Playgrounds are central to children's physical activity, and physical activity is central to children's health and well-being. But some playgrounds seem to be more popular than others. This study was done to have a look at what makes a playground more visited and interesting from a user perspective.

The study investigated the retention of the Flag Pole Hill playground in Dallas, USA four months after the grand opening of the renovated playground. 177 adults and 50 children were selected at random to be interviewed during 6 days from January 18th to January 23rd, 2019.

The aim was to determine:

- 1. the retention did users visit the park more after renovation?
- 2. the importance of playgrounds to the parents
- the main reasons for visiting the playground
- 4. the play location preferences of children
- 5. the primary users (age, gender)
- 6. the distance travelled to the park
- the average time spent in the playground and park per visitor

Main findings

- 77% of the respondents visited the park more after it was refurbished.
- 98% of the parents said the playground was very important due to the health benefits for their children (54%), and the fresh air (42%).
- The unique playground equipment was the main reason why the respondents visited the playground (71%).
- 76% of the interviewed children said that they would rather play at the playground than indoors at home.
- 61% of the children were under 5 years old (14% below 2 years old, 47% between 2-5 years old).
- 95% of the respondents would travel more than 1.5 miles for a great playground. 42% travelled 1.5 miles to the playground at Flag Pole Hill.
- The respondents spent an average of 60 minutes per visit at Flag Pole Hill Playground.



¹ Jessie Adams (2018): Physical Activity and Fundamental Motor Skill Performance of 5–10-Year-Old Children in Three Different Playgrounds

5 Recommendations for designing attractive playgrounds

There are many worthwhile recommendations for designing attractive playgrounds. The KOMPAN Play Institute has also published some. The Flag Pole Hill playground study reaffirms us in these and adds new insights. The new insights from the study point out five main recommendations for designing attractive playgrounds:

- Choose playground equipment with WOW: unique play equipment was the main reason for visiting the playground.
- Remember that playground equipment needs to be appealing to parents, too.
- Have transparency in design to ensure visibility and easy parental supervision.
- Add playground equipment for all ages and remember the youngest children (a total of 61% of users were below 5 years).
- Place the play equipment for toddlers together in the center of the play area to ease parental supervision.





Key findings

Park use increased by 77% with the new playground

When you decide to invest in a play-ground, you want to be confident that people will use it. When asking the respondents if they visit Flag Pole Hill Park "More often than before", "The same as before" or "Less often than before" the installation of the new KOMPAN playground, 77% said they visit the area more often than before (Figure 1). 73% said it was due to the new unique playground (Figure 2).

98% of parents find playgrounds important

Almost all adults (98%) said playgrounds are important (Figure 3). Their main reason was the playground's positive influence on their children's health (54%). 42% said that playgrounds are important because their children get outside and get fresh air. This shows that in the parents' view, the outdoor location is an important success factor for the playground.



- Child interviewed

76% of the children prefer outdoor playground play to indoor play

The children like to be outdoors. 76% of the children who were interviewed said they exclusively preferred to play outdoors when they were asked where they would rather play. They indicated that they preferred the outdoor play to indoors at home where they could play with iPads or other devices or toys. Only 8% of the children in the study said they would rather play indoors, and these were mainly the children below 5 years old. Only one child between 5-12 years old indicated the preference for indoor play rather than outdoor play (Figure 4).

Play is recommended by the *World Health Organization* to increase physical activity because research shows a great physical benefit of play. In respecting children's play by offering them outdoor play facilities, we are in fact respecting important health requirements. By giving our children room, opportunities and rights to play, we ensure happy children today and healthy adults tomorrow.

Proximity and unique play equipment attracts parents

During the interviews parental anxiety was observed, as the parents expressed their fear when asked at what age they thought it was ok for children to go outside and play on their own. This parental caution is a trend worldwide, which is why it is important to pay attention to what attracts parents to a playground space as they are of great influence on children's playground visits. Having a park a short distance from home can help increase physical activity.

Park access for residents within a tenminute walk of home is an initiative by *The Trust for Public Land* in the US. Many cities in the US have signed up for this initiative. Cities such as Boston and San Francisco have been successful, and Dallas is currently working towards this goal. At the time of writing this report 69% of residents in Dallas, Texas have a park within 10 minutes' walk of their home.

27% of the adults in the study responded that the distance to the playground is important for their playground visit. 71% responded that they were attracted to the playground because of the unique equipment. During the collection of data, parents were observed using the play equipment as well. They were climbing in the *Boomerang*, swinging in the *Bird's Nest* and spinning on the *Supernova* (Figure 8).

Playground equipment that is appealing to parents, and distance to the playground should be considered when designing a playground because they influence parents attraction to the playground.

Figure 1: Visits to the playground before and after the installation

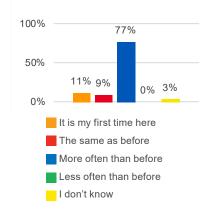


Figure 2: Why do you visit this park generally speaking?

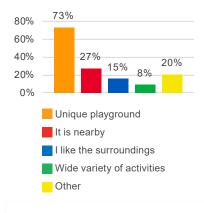


Figure 3: Are playgrounds important?

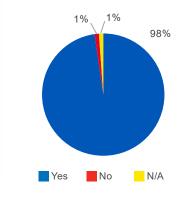
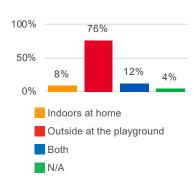


Figure 4: Where would you rather play?



61% of the children were younger than 5 years old

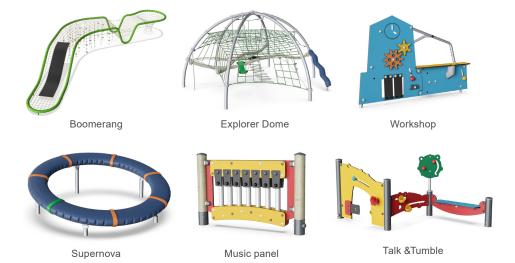
Most of the children in the playground were below 5 years old (61%) (Figure 5). The young children and their parents (mostly mothers) primarily visited the playground in the mornings. Older children visited the playground less frequently, and later in the day (after school hours). However, quite often families brought children across the age ranges to the playground.

The outdoor playground is great for my child's health and important because of the ability to get outside and get fresh air.

- Parent interviewed

Playground equipment for toddlers should be given special attention when designing an attractive playground, as this age group is of great influence on parents visits. But as the younger children are followed by their parents and often older siblings, a wide variety of playground equipment ensures a play area that is fun, safe, and attractive, to the greatest extent possible for all ages and abilities.

Figure 8: Equipment with WOW factor



60 min. average play time

The people interviewed spent 60 minutes on average at the playground (Figure 6). This may be due to the wide variety of the play equipment for all ages and abilities. Everyone, even the adults, could play with something and have fun.

60 min. of playground play is very beneficial. *The Centers for Disease Control and Prevention* recommends that children of 3-5 years should have 180 minutes of activity per day of varying intensities. Children of 5-17 years should have as a minimum 60 minutes moderate to vigorous physical activity per day.

Unique play equipment has a WOW factor

Most of the children visiting the playground were between 2-5 years old. 54% of the parents of this age group indicated that the unique equipment was the main reason for their visit to the playground (Figure 7).

Unique playground equipment has a WOW factor. At the playground there were big WOWs, such as the *Boomerang* and *Explorer Dome*, which clearly were an attraction for the children older than 5 years old.

The parents of the 2-5yearolds expressed that there were also WOWs within the equipment for toddlers such as the *Workshop*, *Music Panel* and *Talk & Tumble* (Figure 8). All of the toddler equipment was intelligently placed in the center of the playground with surfacing that the parents felt comfortable with. Having the toddler space in the center assisted parents in supervising children across the age ranges.

Figure 5: Number of children within each age group (%)

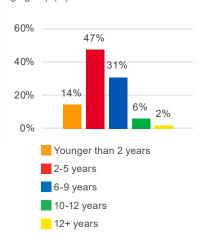


Figure 6: Relation between age groups and time spent on average at the playground (min.)

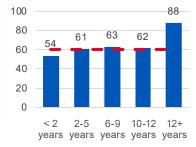
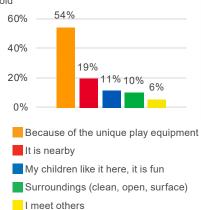


Figure 7: The reason for visiting the playground by parents of children aged 2-5 years old



Conclusion

The study showed that the playground at Flag Pole Hill is a great success. It is being used by people of all ages and abilities. After the refurbishment of the playground, 77% of the users had increased their visits to the park area, mainly due to the unique playground equipment (71%).

Uniqueness was described as equipment with a WOW factor, explained as equipment that attracted different age groups. For the children older than 5 years old and the parents, the Boomerang and Explorer Dome were attractive. The ground level activities, such as the Workshop and Music Panel, were attractive to the toddlers as well as their parents. Attractiveness to both parents and children is particularly important for the infants and toddlers, as the child-adult interaction is essential. The importance of having unique playground equipment with a WOW factor in order to attract users is confirmed by other research². This research has found that uniqueness or constant change of the playground appear more important to playground interest than novelty. These are factors that should be considered, particularly in playgrounds that rely mainly on play equipment and not place-specific qualities.

As most of the children (61%) brought to the playground were below 5 years

old, this age group is important to consider when designing attractive public playgrounds.

Besides having unique play equipment, the organization of the toddler equipment seems to be attractive too. It was placed in the center of the play area which gave a good visibility for the parents who monitored the children across the age groups.

Also, the surface of the playground at Flag Pole Hill was attractive to the toddlers and the parents. It is soft and clean with no loose-fill. This made it secure and hygienic for the infants and toddlers who were still hesitant walkers and who wanted to explore everything by putting things in their mouth. If the playground is attractive, people are willing to drive long distances for it. 95% of the respondents would travel more than 1.5 miles, while 49% said they would even drive more than 5 miles to visit a great playground. Thereby the playground visit became a family attraction. That was confirmed by the fact that the families who brought young children

often also brought older children to the playground. The variety of equipment, meaning something for all ages and abilities becomes important when attracting people to stay for longer time. Flag Pole Hill succeeded in attracting people and making them stay for longer times (on average 60 minutes across all ages), which could be due to the variety of play equipment.

Having playgrounds is important. 98% said clearly YES when asked "Do you think playgrounds are important?" At a time of sedentary lifestyles and indoor living, the respondents find playgrounds very important because they can get outside and get fresh air while positively having an influence on their children's health.

When asking the children where they would rather play, indoors at home with electronic devices or outdoors at the playground, 76% prefer to play outdoors at the playground. Only 8% prefer indoor play and most of those were the children below 5 years old.



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² Märit Jansson (2010): Attractive Playgrounds: Some Factors Affecting User Interest and Visiting Patterns. Routledge

Introduction to Flag Pole Hill playground

Flag Pole Hill is a 433 m² (107.1 acre) metropolitan park, established in 1929. In 2014, a non-profit organization called For The Love Of The Lake (FTLOTL), located in Dallas, Texas, had concerns as to the accessibility for children with disabilities to the playgrounds of the area. The FTLOTL decided to undertake a renovation project of the Flag Pole Hill playground to incorporate inclusiveness and diversity in the playground design. A study with families with disabilities was conducted for FTLOTL Foundation to gain insights into their success criteria for the playground. The study found that parents supported an inclusive playground initiative based on universal

design principles. They desired a space that would help their children to play along with other children, rather than being segregated from the community. After 4 years of planning and fundraising, the community worked in partnership with KOMPAN and Dallas-based landscape architecture *la terra studio*SM to design and build a playground based on the principles of universal design, with dynamic ground level activities and a range of play opportunities for all ages and abilities.

The playground at Flag Pole Hill was made possible by a number of community and private fundraising efforts.

In September 2018 the innovative out-

door area celebrated its grand opening, featuring inclusive equipment that encourages social interaction as well as the physical and cognitive development of children of all ages and abilities. Each area of the playground has graduated activities so that the play activities challenge users in ways that are suited to the ability and interest of each individual.

While writing this whitepaper, the Flag Pole Hill playground has been awarded the *ASLA Merit Award* (25th of April 2019).

Methods

The study examines the retention of people on a newly refurbished playground in Dallas, USA. The playground was refurbished during a 4-year process that involved the design of a new playground with new equipment designed to be inclusive of people with disabilities. Data was collected using anonymous questionnaires and brief interviews, as well as observations of the environment at the park for a period of 6 days, from January 18th – January 23rd, 2019. 177 adults and 50 children were interviewed and observed at the playground. Data was collected four months after the completion of the playground in order to buffer for the possible effects of the novelty of the new equipment.

The general conditions during the field-work were mostly sunny but cold (some temperatures in the 60s F (15°c) some in the 40s F (5°c)).

The questionnaire was created online, with closed-ended questions that could be used in face-to-face interviews on site. Although the questions were closed-ended, the interviewers gave the respondents an opportunity to be as open in their responses as necessary. This was to avoid constraining the respondents' answers, and to allow for a range of input to the question prompts. Data was collected by two trained researchers from the KOMPAN Play Institute.



177 adults & 50 children were randomly selected for interview



Interviews were conducted during 6 days from 18th – 23rd January 2019



Approximately 500 people were observed at the playground

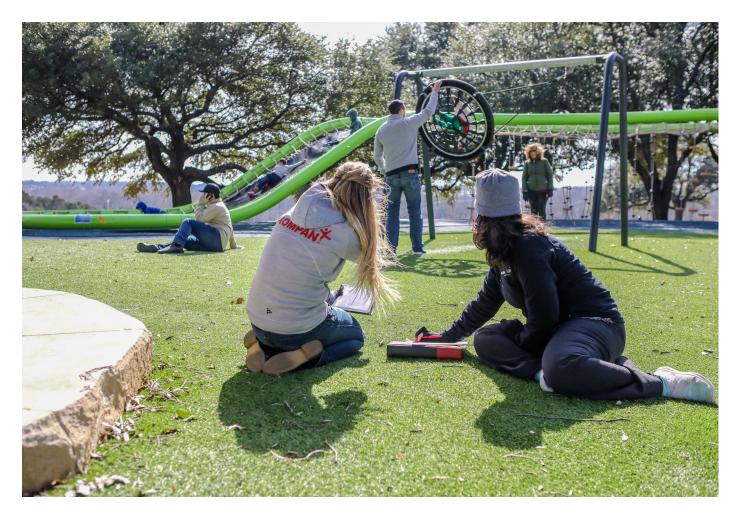
Ethical considerations

All data was collected with the consent of the participants. The researchers made all participants aware that they worked for the playground manufacturer KOMPAN, that no personally identifiable information would be collected, and that

the information would be used to better understand playground use.

Parents were asked for consent to ask their children about the playground, and if they agreed, the children were also asked for their permission to be interviewed. The researchers explained what the purpose of the study was, in a manner that was understandable to the children. The researchers were careful not to interrupt the play or the safety of the children during the interview process.

³ Hira Hasan (2016): Universally Designed Playground Needs Assessment for Flag Pole Hill in White Rock Lake Park, Dallas, Texas











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