Table S1. Comparison of equipment between playgrounds.

|  | Traditional Playground | Contemporary Playground | Adventure <br> Playground |
| :---: | :---: | :---: | :---: |
| Enclosed slide | $\checkmark$ |  |  |
| Traditional slide | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Curved slide | $\checkmark$ |  |  |
| Spiral slide | $\checkmark$ | $\checkmark$ |  |
| Crawl tunnel | $\checkmark$ | $\checkmark$ |  |
| Spiral | $\checkmark$ |  |  |
| Climb wall | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Bridge | $\checkmark$ | $\checkmark$ |  |
| Chain ladder | $\checkmark$ | $\checkmark$ |  |
| Loop ladder | $\checkmark$ |  |  |
| Metal ladder | $\checkmark$ | $\checkmark$ |  |
| Steps | $\checkmark$ |  |  |
| Fireman pole | $\checkmark$ | $\checkmark$ |  |
| Steps | $\checkmark$ | $\checkmark$ |  |
| Shop front | $\checkmark$ | $\checkmark$ |  |
| Swings | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| See-saw | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Wooden beam | $\checkmark$ |  |  |
| Rockers | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Seat and metal pole | $\checkmark$ |  |  |
| Park bench | $\checkmark$ |  |  |
| Concrete wall | $\checkmark$ |  |  |
| Exercise equipment | $\checkmark$ |  |  |
| Oval/green space | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Castle |  | $\checkmark$ |  |
| Speak tube |  | $\checkmark$ |  |
| Mound |  | $\checkmark$ | $\checkmark$ |
| Ground slide |  | $\checkmark$ |  |
| Rope |  | $\checkmark$ |  |
| Poles |  | $\checkmark$ |  |
| Tyres |  | $\checkmark$ |  |
| Metal slide |  | $\checkmark$ |  |
| Climb net |  | $\checkmark$ | $\checkmark$ |
| Walkway |  | $\checkmark$ | $\checkmark$ |
| Double slide |  | $\checkmark$ | $\checkmark$ |
| Uneven poles |  | $\checkmark$ |  |
| Monkey bars |  | $\checkmark$ | $\checkmark$ |
| Flying fox |  | $\checkmark$ | $\checkmark$ |
| Swing cube |  | $\checkmark$ |  |
| Scramble net |  | $\checkmark$ | $\checkmark$ |
| Spin roundabout |  | $\checkmark$ |  |
| Spin poles |  | $\checkmark$ |  |
| Climbing ropes |  |  | $\checkmark$ |
| Rock climbing wall |  |  | $\checkmark$ |
| Block steps |  |  | $\checkmark$ |
| Climbing circles |  |  | $\checkmark$ |
| Discs on poles |  |  | $\checkmark$ |
| Carved animals |  |  | $\checkmark$ |
| Wooden blocks |  |  | $\checkmark$ |
| Sandpit |  |  | $\checkmark$ |
| Chalkboard |  |  | $\checkmark$ |
| Bird nest swing |  |  | $\checkmark$ |
| Orange pipes |  |  | $\checkmark$ |
| Branches |  |  | $\checkmark$ |
| Family see-saw |  |  | $\checkmark$ |
| Spinner chair |  |  | $\checkmark$ |
| Basketball nets |  |  | $\checkmark$ |



Figure S1. Images of playgrounds (a): Traditional playground; (b): Contemporary playground; (c): Adventure playground.

| 1．Stand | 7．Leap | 11．Balance | 15．Kick |
| :--- | :--- | :--- | :--- |
| 2．Walk | 8．Jump | 12．Climb | 16．Catch |
| 3．Run | 9．Skip／Hop | 13．Hang | 17．Throw |
| 4．Sit | 10．Dodge／Slide | 14．Pull | 18．Strike |
| 5．Lie |  |  | 19．Roll |
| 6．Crawl |  |  |  |

Date： Park：Alma Park
$\qquad$

Time： Finish Time
Age：
ID Number： Weather： $\qquad$

6．Crawl

|  | $\begin{aligned} & \frac{8}{3} \\ & \frac{y}{5} \end{aligned}$ | $\frac{\varrho}{\bar{\circ}}$ | $\begin{aligned} & \text { n } \\ & 0 \\ & 0 \\ & \stackrel{\sim}{x} \\ & \stackrel{\mathbb{E}}{0} \\ & \stackrel{0}{2} \end{aligned}$ | $\begin{aligned} & \overrightarrow{-} \\ & \vec{S} \\ & \underline{0} \end{aligned}$ | $\begin{aligned} & \text { y } \\ & \text { à } \\ & \text { i } \end{aligned}$ | $\begin{aligned} & \text { Do } \\ & \frac{\overline{1}}{0} \\ & \text { on } \end{aligned}$ | $\begin{aligned} & \text { n } \\ & 0 \\ & 0 \\ & 0 \\ & \overrightarrow{1} \\ & 0 \\ & i \end{aligned}$ | $\begin{aligned} & \text { un } \\ & \text { n } \\ & \text { nin } \end{aligned}$ | 3 0 5 0 | $\begin{aligned} & \text { n } \\ & \text { त } \\ & \text { n } \end{aligned}$ | $\begin{aligned} & \text { a } \\ & \text { a } \\ & \text { i } \end{aligned}$ | $\begin{aligned} & 7 \pi \\ & \stackrel{7}{7} \\ & 3 \\ & \stackrel{1}{2} \\ & \frac{0}{6} \end{aligned}$ | $\begin{aligned} & \text { Q } \\ & 0 \\ & \text { 号 } \\ & \text { a } \\ & \frac{n}{\overline{0}} \end{aligned}$ | $\begin{aligned} & \varrho \\ & \overline{3} \\ & \vdots \\ & \sum_{i}^{\sim} \end{aligned}$ |  | $\begin{aligned} & \text { गु } \\ & \text { OD } \end{aligned}$ | $\begin{aligned} & \text { a } \\ & \text { a } \\ & \text { a } \\ & \text { jo } \end{aligned}$ | $\frac{D}{R}$ | ぶ | $\frac{3}{0}$ $\frac{0}{\dot{d}}$ $\frac{\vdots}{1}$ $\frac{1}{0}$ | $\begin{aligned} & \cap \\ & \vdots \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | n $\frac{\square}{3}$ $\frac{u}{n}$ $\frac{\overline{1}}{0}$ | $\begin{aligned} & \frac{\pi}{2} \\ & 0 \\ & 3 \\ & 0 \\ & 0 \\ & \frac{0}{6} \end{aligned}$ | $\underset{\substack{\stackrel{\sum N}{\hat{N}} \\ \underset{\sim N}{N}}}{ }$ | $\begin{aligned} & \text { ס} \\ & 0 \\ & \frac{5}{\sigma} \\ & \frac{0}{\sigma} \\ & \frac{n}{\overline{0}} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { a } \\ & \text { à } \\ & \text { i } \end{aligned}$ | 钲 | $\begin{aligned} & \text { u } \\ & \stackrel{N}{p} \\ & \mu \\ & \omega \\ & \kappa \end{aligned}$ |  |  | Monkey bars |  |  | $\begin{aligned} & n \\ & 0 \\ & \vdots \\ & 3 \\ & \frac{0}{0} \\ & \frac{0}{0} \\ & 0 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { n } \\ & 0 \\ & \frac{0}{3} \\ & 0 \\ & 0 \\ & \vdots \\ & 0 \\ & \ddot{U} \\ & 0 \\ & \vdots \\ & \hline \end{aligned}$ |  | n $\frac{0}{3}$ $\frac{0}{0}$ $\frac{0}{9}$ | $\begin{aligned} & \text { z } \\ & 0 \\ & \text { m } \\ & 0 \\ & \stackrel{c}{c} \\ & 3 \\ & 3 \\ & \underset{\sim}{0} \end{aligned}$ |  | $\geq$ 0 0 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Figure S2．Observation chart（Observation chart developed for the contemporary playground．For each scan，the corresponding FMS number was written in the box matching the piece of equipment the child was playing on．）．

