

Play, Work, and Rest: The Developmental Affordances of Designated Child-Friendly Public Spaces in Jakarta, Indonesia

Fitri Arlinkasari

*School of Design, Creative Industries Faculty, Queensland University of Technology
Faculty of Psychology, YARSI University, Indonesia*

**Debra Flanders Cushing
Evonne Miller**

School of Design, Creative Industries Faculty, Queensland University of Technology

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Abstract

To understand how public spaces might support children's development, this study explored the activities and experiences of children (6-12 years) in two designated Child-Friendly Integrated Public Spaces (Ruang Publik Terpadu Ramah Anak, or RPTRAs) in low-income neighborhoods in Jakarta, Indonesia. Thirty-four children participated in interviews, drawing activities, observations, and child-led tours. Reflexive thematic analysis identified play, work, and rest as ways in which children use RPTRA sites for activities that afford their sense of competence. This study contributes to the use of a developmental-affordances framework to explore children's experiences in public space, which can inform urban design practices that promote the psychosocial development of children from low-income families.

Keywords: developmental affordances, child-friendly cities, children's participation, Jakarta, Indonesia, competence

Introduction

Public spaces are windows into the soul of a child-friendly city. These spaces accommodate different age-group needs and enable children to learn about society's values through exploration and interaction (Gleeson & Sipe, 2006). Unfortunately, public spaces in many countries exclude children, with unsafe urban streets and other perceived and real dangers (Gülgönen & Corona, 2015). In the cities of developing countries, such as Jakarta in Indonesia, this exclusion is exacerbated by the deteriorating quality of the physical environment, combined with the conditions of urban poverty (Leitmann, 1992). Consequently, children in poor urban neighborhoods are less likely to experience the developmental benefits of interacting with positive public spaces (Castonguay & Jutras, 2009; Veitch et al., 2008). This is a particular issue for those in middle childhood (6–12 years), a time when children expand their territory from their home to their broader neighborhood (Cunningham & Jones, 2004).

The Child-Friendly City Initiatives (CFCI) framework, launched in 1996, guides the design, planning, and evaluation of public spaces. Using this framework, studies on children's experiences in their city have resulted in definitions and indicators of child-friendly environments from children's standpoint (see Chawla, 2001; Lynch, 1977). Based on these studies, child-friendly environments can be defined as places that support children's development and wellbeing by understanding the context in which they live, facilitating affordances that meet their needs, and catalyzing their agency through participation. However, as documented on the CFCI website (www.childfriendlycities.org), most studies on children's environments have been conducted in the global North, with limited reports on how children in other parts of the world (particularly in Southeast Asia) design and evaluate spaces within their city.

Assessing public spaces in the Indonesian urban context is especially crucial. Since 2015, Jakarta—the capital city of Indonesia—has constructed over 300 designated child-friendly public spaces, called RPTRA sites,¹ which are intended to support the development and well-being of children from low-income neighborhoods. However, little is known about the children's perspective on how well these sites support children's development, as previous studies and design processes have often limited children's participation. Hence, the present study asks how children perceive and use two RPTRA sites, and further, how their experiences in these sites potentially support their positive development.

Children's Experiences in Public Space and Healthy Development

Children's interactions with stimulating and positive environments early in life advance children's foundational physical, psychosocial, and cognitive development (Villanueva et al., 2016). Understanding the short- and long-term developmental impacts of these environmental interactions is essential. To determine optimal child development pathways and the characteristics of the environments that may stimulate children's development, we also need to understand the contexts in which children develop (Coll & Szalacha, 2004).

¹ RPTRA- *Ruang Publik Terpadu Ramah Anak*, or "child-friendly integrated public spaces"

Children living in impoverished neighborhoods often experience more hazardous environments, with higher crime rates and traffic congestion and reduced access to natural features and basic services (Kuo, 2001). Nonetheless, children from low-income families tend to spend more time in their local neighborhoods compared with those from more advantaged families. With less parental supervision and structured time, children from low-income families have greater freedom to select their activities (Kimbrow et al., 2011) and prefer to spend their time outdoors unsupervised (Dewi, 2012; Karsten, 2005; Matthews et al., 1999). However, the expected advantages of being outdoors can be a disadvantage when public spaces are neglected, dangerous, or poorly designed (Richardson et al., 2017), especially when they are designed without children's participation or without considering how an environment might support their positive development. Living in low-quality physical and social surroundings means that children's interactions with environments outside the home are perceived by parents and society as dangerous, and may limit their physical and social development (Evans, 2003; Karsten, 2005).

Children's activities in and perceptions of public space vary according to their lived context and needs, and thus the activities they value and how these can provide opportunities for them to thrive should be explored from children's own perspectives. Previous studies have focused on marginalized children's perspectives on their experiences in public spaces within their neighborhoods (e.g., Evans, 2003; Ghanbari-Azarneir et al., 2015; Karsten, 2005), including how these experiences relate to children's developmental outcomes and wellbeing. In particular, children's interactions with public spaces in these studies are framed in a play context, which sees children's play as a vehicle for gaining independent mobility, interacting with the world, and developing coping skills. Other studies have also framed children's interaction with public space (mainly green open spaces) in the context of restorative experiences, which may improve their cognitive function and wellbeing (Bagot et al., 2015; Kaplan & Kaplan, 2011; Wells, 2000).

A few recent studies have also addressed children's use of public space beyond unstructured play, which includes more structured after-school activities in community centers and local sports fields (e.g., Kreutz, 2015; Langager & Spencer-Cavaliere, 2014). After-school activities have been found to buffer school-age children living in poverty from the adverse outcomes of their neighborhood interactions; specifically, these activities are associated with fewer behavioral problems (Vandell et al., 2005). Studies also suggest that children's interactions with adult supervisors in neighborhood settings are significant in promoting children's positive activities during their free and unsupervised time (Ingoldsby et al., 2012).

Developmental Affordances: A Framework for Evaluating Child-Friendly Environments

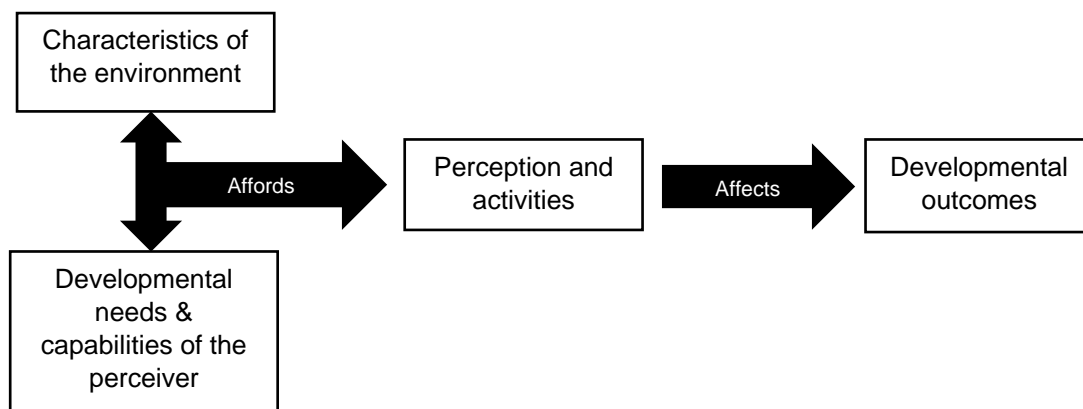
Extensive studies have shown that children associate the quality of an environment with its affordances or opportunities for what they can do (activities) and feel (experiences) within the setting (e.g., Drianda & Kinoshita, 2015; Kreutz, 2015; Kytta, 2002; Langager & Spencer-Cavaliere, 2014). First coined in 1979 by James Gibson, the term *affordances* denotes a transactional relationship between a

perceiver and their environment that is indicated by the opportunities for action offered within the environment (Gibson, 2002). The actualization of affordances is relative to the perceiver’s capabilities and intentions. Heft (1988) suggests that new affordances can emerge as one’s developmental maturity increases, and one has more experiences within their environment. For example, older children can perceive and actualize more affordances from streets in their neighborhood than young children because of older children’s well-developed independent mobility and diverse experiences in that place. They may also have different intentions regarding their use of the streets. While older children use streets as places for building friendships, young children use streets for building their trust in a broader world, such as when following their parents to a neighborhood shop.

Using developmental affordances as a framework in this study, we posit that a child-friendly environment should afford children activities and experiences that are relevant to their developmental needs, the fulfillment of which supports positive outcomes and adaptation to the next developmental stage (Arlinkasari & Cushing, 2018; Loebach, 2004). Focusing on the developmental stage of middle childhood, this study takes a psychosocial perspective to identify further how children’s experiences in public space can support positive developmental outcomes. The psychosocial aspect is especially relevant for children in poverty contexts because it can help buffer the effects of poverty on children, including behavior problems and impacts on future success (Blustein et al., 2014; Dercon & Krishnan, 2009).

In middle childhood, children are driven by their need to develop a sense of competence. Children’s sense of competence can be catalyzed by providing them with opportunities for achieving tasks that are meaningful for them (Maxwell & Chmielewski, 2008), including achieving academic and cultural skills, getting along with peers and the broader community, and exercising autonomy and self-regulation skills (Eccles, 1999; Neiderhiser & McGuire, 1994). Figure 1 illustrates the developmental affordances framework used in this study.

Figure 1. Developmental affordances framework for evaluating child-friendliness of an environment



Qualitative Case Study Methodology

Background: RPTRA Program and Sites in Jakarta

In 2015, to address children's health and wellbeing, Jakarta began building parks as Child-Friendly Integrated Public Spaces: *Ruang Publik Terpadu Ramah Anak* (RPTRA). The RPTRA program aims to improve children's quality of life, especially in poor neighborhoods, and to comply with the CFC initiative (Savitri, 2015). Today, there are about 300 RPTRA sites across the city, mainly in dense and poor neighborhoods (Indriany, 2017).

RPTRA sites combine the functions of a local park with those of playgrounds and community centers, and are gated and staffed (Utami et al., 2016b). Additionally, the sites' program management and development encourage community engagement and local partnerships, which aligns with the *Kota Layak Anak* (KLA)² and *Pemberdayaan Kesejahteraan Keluarga* (PKK)³ programs (Hernowo & Navastara, 2017).

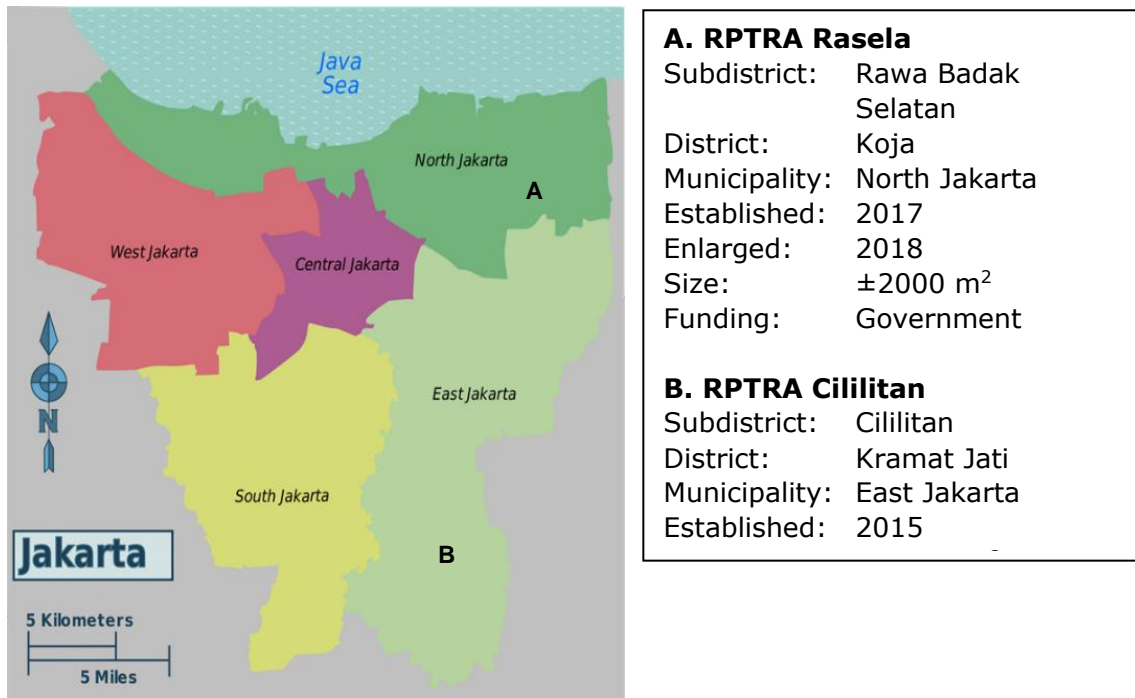
This study took place in RPTRA Cililitan and RPTRA Rasela. The researchers selected these because they are generally representative of RPTRA sites, which are quite diverse in terms of location, design prototype, and construction costs. However, note that the nature of this study is exploratory and does not aim to compare the selected sites. Although there are some differences between the two selected sites (e.g., aesthetic features, size, and location), generally, they have similar design concepts and neighborhood characteristics.

RPTRA sites are gated and staffed parks designed according to child-friendly concepts and equipped with various supporting facilities both indoors—such as libraries, gazebos, and community halls, and outdoors—such as playgrounds, sports facilities, and amphitheatres (Utami et al., 2016). To date there are approximately 300 RPTRA sites, most of which are located in densely populated, lower- and middle-income areas (Indriany, 2017). One of the most significant advantages of the RPTRA sites compared with other urban settings is their proximity to local residents, especially the poor, which means these sites can serve as community centers that allow low-income residents to fulfil their basic needs and improve their wellbeing. This study took place in two RPTRA sites, namely RPTRA Cililitan in East Jakarta, and RPTRA Rasela in North Jakarta (See Figure 2 for additional information about the selected study sites and Figure 3 for an example of site map of RPTRA Cililitan.)

² *Kota Layak Anak* (KLA), or Child-Friendly Cities, are districts/cities with child rights-based development systems (<http://www.kla.id>).

³ *PKK*, or Family Welfare and Empowerment, is an organization that aims to empower families through its 10 primary programs: the practice of Pancasila—communal work; food provision; clothing provision; housing and household management; education and vocation; health; development of cooperative life; environmental, sustainability, and healthy planning (<http://id.wikipedia.org>).

Figure 2. Map of Jakarta and the selected case study sites



Source: Wikimedia

Figure 3. Site map of RPTRA Cililitan



Source: PT Arkonin (with permission)

Research Participants and Ethical Considerations

From December 2018 to February 2019, the first author conducted in-depth qualitative case study research at RPTRA Cililitan and RPTRA Rasela. In total, 34 children (16 from RPTRA Cililitan and 18 from RPTRA Rasela) participated in this project; 20 boys and 14 girls, ranging in age from 6 to 12 years. Formal ethical approval was obtained from Queensland University of Technology before data collection. All child participants and their parents/caregivers gave their consent to be involved in the research, and participants' anonymity was protected; pseudonyms are used here. Children participated voluntarily, with numerous possibilities to negotiate their consent during the study.

Data Collection and Analysis

The data collection methods used in this study were drawing, semi-structured interviews, child-led tours, and participant observations. In the drawing sessions, the researcher asked the children to draw features they liked and disliked within the RPTRA sites. During the individual and/or pair interviews, the researcher discussed the drawings with the children to investigate the activities and experiences they had illustrated and the factors regulating their activities and experiences at the RPTRA sites. Children also explained their perspectives about those activities, which enlightened the researcher as to how these activities supported the children's positive self-identity, which the researcher framed in terms of being competent.

The child-led tours offered insights that were not fully revealed in the interviews, particularly regarding what restricted the children's activities when using specific areas and features at the RPTRA sites. Similar benefits from this methodology are mentioned by Kusenbach (2003), who used the tour as a research tool to investigate environmental perception, spatial supports, and barriers in public space. During the child-led tours in the present study, the researchers interviewed and recorded each participating group of children.

Extensive observations took place over a total of 30 days for both sites, which included a systematic variation of temporal settings (day and night, weekday and weekend). During each visit, the researcher made observational notes and took photographs and videos of the participating children who helped the researcher establish the context of the children's activities and perspectives. The observations and interviews were complementary, as the researcher was often involved in the children's conversations and daily activities at the RPTRA site.

We analyzed the collected data using a reflexive thematic analysis (Braun & Clarke, 2006). Two co-authors contributed to the cross-code interpretation and data analysis. We used NVivo for data management and to identify nodes and subthemes. We used an open-coding process first, followed by multiple iterations to determine subthemes and central themes of developmental affordances at the RPTRA sites that children perceived and actualized.

The Rigor of the Study

The rigor of this study is shaped by researcher reflexivity, the variation and quality of data collection, and data analysis processes. The first author—the principal

researcher—is an educational psychologist who grew up and has lived in Indonesia. This enabled her to gain access to the sites and to easily communicate with the participants, without being considered too much of an outsider. Her reflexivity illuminated her subjectivity and critical thinking during the study. Reflexivity also facilitates a positive relationship between the researcher and participants to ensure that participant views are effectively captured, confirming the rigor of the whole study (Woodhead & Faulkner, 2000). Here, four different methods combined visual and verbal approaches and created triangulation, whereby the data collected contributes to the credibility of other data (Vanner & Kimani, 2017).

Results

Data from the two sites were first analyzed separately. Then, the researchers combined the findings from both sites, which aided the researchers' ability to reflexively grasp the similarities and differences in children's perspectives about RPTRA sites. The similarity that seems clear from the children's perspective is the meaning of RPTRA as "beyond playgrounds," because at both sites children can do many activities besides playing, including activities that compensate for the children's lack of access to resources in other settings within their neighborhood. Meanwhile, the differences in children's activities and experiences at the two RPTRA sites were generally related to their physical features, such as the size of the sites and aesthetical features which influence the children's opportunities to activate particular affordances at different sites.

The first section below identifies the accessibility and safety factors that facilitate children's developmental activities within the two RPTRA sites, which are discussed in the second section. Finally, we identify and discuss how children's perceived experiences at the sites may channel their sense of competence.

Children's Perceived Accessibility and Safety of Public Space

Most children come to the RPTRA sites before and after school and on the weekend. All the children expressed that the proximity of the RPTRA site to their home provides opportunities for independent travel and repeated visits. Although some children mentioned that they also played elsewhere within their neighborhood, they admitted that their play was limited in those spaces due to insufficient access, safety, and amenities.

Children emphasized that the gated and staffed RPTRA site allowed them to feel safe when playing. The gate set clear boundaries between perceived unsafe places within their neighborhood and the RPTRA site that they perceived to be safe. The presence of familiar persons affords a feeling of being looked after.

Outside the RPTRA site, there was a robbery. One day a bike was stolen near the RPTRA site... However, here [in the RPTRA site] those things are unlikely to happen because the bad guys will not enter the gate, and the onsite managers and friends watch us (Pluto, 10).

Table 1. Summary of developmental affordances in RPTRA sites perceived and actualized by the children

Main themes	Subthemes and behavioral context	Specific activities	Setting
Theme 1: Play	<i>Prescribed play</i> : play using designated features and in intended ways; positively reinforced by adult supervisors and local partners	Traditional games	Indoors, outdoors
		Free play in allocated spaces	
		Construction and board games	
	<i>Risky play</i> : play using non-designated features and in unintended ways; usually only possible without adult supervision, and if noticed, children are given negative reinforcement (e.g., play terminated)	Play using non-playable features (e.g., broken rides, aesthetic sculpture)	"Hidden" outdoors
		Play using features allocated for adults (e.g., fitness equipment)	
	<i>Purposeful play</i> : adult-initiated play to divert children's unstructured play activities into purposeful activities, yet in a playful way, usually using specific tools (e.g., for gardening, tinkering, cleaning) to mediate the play	Helping with maintenance through play	Outdoors
Preserving nature through playing			
Shifting the risky play into playful work			
Theme 2: Work	<i>School-related work</i> : child-led initiated activities to achieve specific skills related to school and academic performance	Doing homework and school assignments	Indoors
		Guided learning to write, read, and count	
		Implementing school-based knowledge in a real setting, particularly the garden	Outdoors
	<i>Community-integrated work</i> : Partnership between RPTRA and local community/partners to promote children's collaboration and integration with society	Preparing and attending community events (e.g., workshops, seminars, group counseling)	Indoors
		Joining long-term junior cadre program	
	<i>Self-initiated work</i> : Children's chosen regular activities usually related to their hobbies and interests; the programs are usually low cost or free, and not available at children's schools	Cultural and arts training (e.g., dance, musical instruments, martial arts)	Outdoors
		Literacy program	
Sports			
Theme 3: Rest	<i>Rest between play</i> : usually observed when children are less physically active, and they take a rest before and after playing to restore their energy	Watching a game and waiting for a turn	Sheltered outdoors
		"Cool off"	
	<i>Rest between school and home</i> : usually observed on weekdays, when children "transit" at the site after school and before going back home to cope with school and home burdens	Mind-wandering and short napping	
Hanging out with friends after school			
<p><i>Indoors</i> includes the hall, library, and gazebo; <i>outdoors</i> includes the field, amphitheater, playgrounds, and gardens; <i>hidden</i> defines areas away from adult supervision; <i>sheltered</i> defines areas with natural or built cover.</p>			

Children's Perception and Use of Public Space

Children were extremely active in using the RPTRA sites to meet various needs, which we categorized into three key themes of activity: playing, working, and resting. The varied activities at the RPTRA site suggest they perceive it as "beyond a playground." A summary of children's core activities is outlined in Table 1, alongside subthemes and specific codes showing the children's perspectives of the sites and researcher-observed behaviors in the different settings (indoors, outdoors, sheltered, and hidden). Critically, these sites afforded children multiple interactions with peers and adults beyond their family, and diverse experiences that enhanced their sense of competence. Children also associate their activities with certain attitudes, which helps us to understand how their activities may channel their new capabilities and psychosocial developmental outcomes. Therefore, in explaining their activities, we also identify how their experiences in this setting might affect their sense of competence.

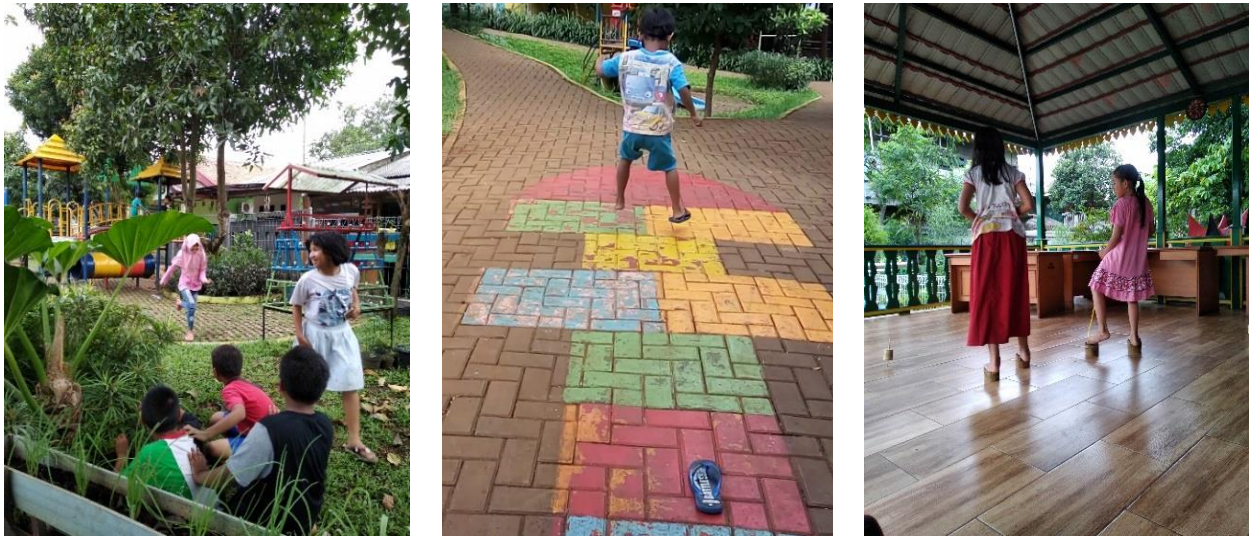
Theme 1: Play—"This is where we children play!"

Play was the most prominent theme for both sites, characterized by activities driven by their intrinsic motivation for physical activity, excitement, and enjoyment. We observed children playing with their friends and siblings; we also observed them playing with onsite managers. Additionally, the involvement of onsite managers, along with the various type of space and features, contributed to the diversity of children's play in the RPTRA sites, categorized as prescribed, risky, and purposeful.

Play Subtheme 1: Prescribed Play

The children played in the designated areas and used the prescribed features, such as swings and the slide in the playground, played soccer in the field, and played other rule-based games in indoor and outdoor areas (Figure 4). We found that traditional games, such as hopscotch, hide and seek, bamboo tops, and bamboo stilts—the most observed form of play at both RPTRA sites—had specific meanings that enabled the children to develop their social skills via various types of interactions and players (see Arlinkasari, Cushing, & Miller, 2019). Traditional games were not only highly valued by the children to develop their social skills and networks but also by the onsite manager and local partners as a way of preserving Indonesian cultural values and outdoor play (Arlinkasari et al., 2019).

Figure 4. Children play traditional games in RPTRA Cililitan and RPTRA Rasela using designated areas and properties. From left to right: hide and seek, hopscotch, bamboo stilts



Play Subtheme 2: Risky Play

For many children, rule-based games offered limited excitement and were restricted due to equipment access; as a result, they shaped new affordances using non-playable features and equipment. We categorized these as risky play: play using physical experimentation in a non-prescribed way (Figures 5 and 6). With minimal supervision from the onsite manager, the children created their own playful activities. They turned the broken swing (which had been removed from the playground) into climbing equipment, the pull-up bar in the fitness area (which is intended for those aged 13+) into a climbing and hanging feature, the goal net into a spider web, the fish pond into a swimming pool, and the sculpture into a balancing bar. Children also perceived that risky play invited their sense of autonomy: "Because I can climb to the top [of the fitness equipment], and feel free, feel so high!" (Green, 8). When engaged in risky play, the children implied that they assessed their physical capabilities and managed the risks simultaneously: "I feel excited when I almost fall from the stick/peg [pull-up bar], my tummy gets tickled, but hanging there makes my hands stronger!" (Maroon, 9).

In addition to seeking a challenge, children engaged in risky play when they had limited play options. This was observed at both sites, where children used broken rides to play in ways that could have caused them harm. We observed children, mainly boys, using the rusty and broken slide. Later, a boy participant said that he kept playing on it because he had limited options to enjoy the sensation of sliding but was aware of the possibility of negative reinforcement if the onsite managers noticed—a sign of risky play.

Although adults discouraged most forms of risky play, we found that RPTRA Rasela was unique. Its cemented court area afforded water play on rainy days, where

children could splash one another (Figure 7). When we first observed children's water play, we expected it to invite negative reinforcement from the onsite managers. However, interestingly, they allowed the children to proceed under their supervision. Consistent with our observations, the children admitted that this water play was common at RPTRA Rasela on rainy days: "We can play on rainy days... especially when the field is watery and slippery. It feels great! So, we can slide on it!" (Moon, 9 and Ananke, 11). On the contrary, the soil-covered field at RPTRA Cililitan afforded nothing for children on rainy days because the onsite managers restricted children from using it: "If it is rain[ing], we are not allowed to play in the soccer field because it will get muddy and slippery. Other areas can get dirty too" (RPTRA Cililitan children on tour; see Figure 8).

Figure 5. (left) A child swimming in the fish pond at RPTRA Cililitan

Figure 6. (right) Children climbing, hanging, and jumping from the pull-up bar at RPTRA Cililitan



Figure 7. (left) Children playing under the rain and splashing water in the cemented court of RPTRA Rasela

Figure 8. (right) The soil-covered field in RPTRA Cililitan affords nothing on rainy days once it gets muddy



Play Subtheme 3: Purposeful Play

We categorized children's play activities as purposeful when they intend to achieve a specific goal, with an adult catalyzing the activities. The purposeful play was usually observed when children were in free-play mode or risky play, and the onsite managers then diverted their attention to something extrinsically motivated. For example, swimming in the fish pond (see Figure 5) was prohibited by the onsite manager, but they reframed this by inviting children to feed the fish and clean up the pond, which gave them the bonus of getting wet—a reward after the playful work.

At both sites, children said they enjoyed such purposeful play, especially when onsite managers invited them to maintain the site (Figure 9). With purposeful play, children could use cleaning and gardening tools, with each accomplished task bringing them a sense of competence for showing initiative, practical knowledge, and a sense of belonging:

I feel happy with the onsite managers because usually, we do it together. And doing something is better than nothing, isn't it? Usually, the boys help the onsite managers to pour out the watery field. We also mopped the hall. So, bunda⁴ doesn't have to instruct us; we act first! (Pluto, 10—initiative)

[I learned] about [the] plantation when helping bunda [with] watering the plants... for example, Aloe Vera, it can heal a wound. [Also] the sap from leaves of a castor oil plant... can be used to heal a toothache (Kale, 11—practical knowledge).

⁴ Bunda means "mother" in Bahasa Indonesia. It is also a polite title for other women—like "madame" or "mam."

We like to do the "kerja bakti"⁵ to clean up the RPTRA site because this is where we children play (Grey, 8—belongingness).

Figure 9. Children enjoy maintaining the RPTRA Cililitan and Rasela sites using gardening and cleaning tools



Theme 2: Work—"Kids can do that too!"

The second key theme was work. We found that children at both sites were actively engaged in purposeful work, deliberately achieving specific skills as they and their community desired. The work theme revealed that activities included a sense of regularity, rules, and time to achieve individual and communal goals. Children perceived that the RPTRA site can be their "second school" with more structured activities provided that resemble school and after-school activities.

Work Subtheme 1: Self-Initiated Work

RPTRA sites and programs give children opportunities to actualize their hobbies and participate in nourishing Indonesian traditions through cultural and arts programs (e.g., *silat*⁶, *marawis*⁷, *angklung*⁸, traditional dance) and sports (see Figure 10). These sites and programs invite partnerships with local volunteers, trainers, and

⁵ *Kerja bakti* is best translated as cleaning up a communal space (usually within a neighborhood area) with other community members.

⁶ *Silat* is a collective word for a type of indigenous martial arts from the geocultural area of the Indonesian archipelago.

⁷ *Marawis* is a small double-sided hand drum originally from the Middle East.

⁸ *Angklung* is an Indonesian musical instrument made from bamboo tubes attached to a bamboo frame.

neighboring organizations, offering children low-cost or free training when their schools cannot facilitate the activities.

Figure 10. Low-cost or free course of *silat* (left) and traditional dance (right) in RPTRA Cililitan, organized by the subdistrict office and local trainers



Work Subtheme 2: Community-Integrated Work

The RPTRA program was designed to be integrated with the CFC initiative and the PKK program. This means the RPTRA program offers children's self-interest activities alongside more social and community-focused activities, such as group counseling (Figure 11), workshops, and seminars (Figure 12). At RPTRA Rasela, some participants stated that they were trained by adult community cadres to be junior cadres in the larva monitoring program (*Jumantik*⁹) under the institution of *Forum Anak* (Children's Forum). Children said they felt proud and respected when they could carry out community tasks because they perceived their power as equal to that of adults.

Kids can do that too! For example, when we found larva, we would tell the homeowners to drain the bathtub or pour the larvicide powder [into the tub] (Ananke and Deimos—exercising power).

Further, their work gave the children opportunities to meet the community leader in their city:

I feel excited because sometimes, we meet the governor's wife in person on the training (Carne, 12—working with prominent figures).

⁹ *Jumantik* is an abbreviation for *Juru Pemantau Jentik*, or larva monitoring officer.

Figure 11. (left) Children attend a regular storytelling and group counselling session organized by the subdistrict office and local psychologists

Figure 12. (right) Children prepare a community event in RPTRA Cililitan



Work Subtheme 3: School-Related Work

Children described the RPTRA sites as their “second school” because the sites’ facilities and spaces supported their school-related activities, such as study and doing homework (Figure 13). Children from both sites consistently stated that they found the library and hall valuable for their study:

I do homework with friends, [and] I usually ask bunda if I have difficulties. In the library, I can read books that I can’t find at home (Cyan, 10).

Children also liked to study at the RPTRA site because they knew the onsite manager would help them (Figure 14) and viewed the manager as their teacher, though providing formal teaching was not the onsite manager’s official duty:

[I] often learn to read and count with Ms. Whitefly and Ms. Ladybird [pseudonyms of two female onsite managers]... It’s like a reading course on Wednesdays (Red, 6).

The children also appreciated taking part in a program such as *Jumantik*, as it affords them experiential learning opportunities:

Interviewer: Do you also learn about dengue fever at school?

Venus: Yes! But in the RPTRA, it is like we get opportunities to see what the larva exactly looks like. Also, we practice getting rid of it. At school, those are only in books.

Figure 13. (left) A group of children finishing their school assignment in the library at RPTRA Cililitan

Figure 14. (right) An onsite manager helping children with math homework



Theme 3: Rest—“Time to do nothing”

In addition to physical and social activities, RPTRA sites allow children time and space to do nothing if they wish and be what they want to be in a private place. In the areas of the sites that were sheltered, dominated by natural elements such as water and plants, and with an expansive view, we observed some children enjoying their privacy by sitting in the gazebo, on the “bridge” (Figure 15), or on a small bench beneath the trees. Although the children did not discuss these rest activities as much as their play, we observed that rest opportunities were meaningful for them, especially considering that privacy and peaceful moments were likely scarce in their homes and high-density neighborhoods.

Rest Subtheme 1: Rest between Play

Although play dominated the children’s time at both RPTRA sites, they also admitted that idle time was just as important as playtime for expressing their agency and finding the best way to manage their energy—as Yellow explained, “I feel free when I enjoy watching people play soccer, and have time to do nothing.” Children also used the sheltering tree next to the field for watching games and waiting for their turn (see Figure 16), which are critical for their self-regulation:

You know, the spaces in RPTRA Rasela are not so big. So, all children could only play if we take turns and share spaces... sit and wait under the tree until our turn is up (Pluto, 10—self-regulation).

Rest Subtheme 2: Rest between School and Home

School-related burdens and domestic chores can also be stressful events for children. On weekdays, we observed that the children in our study liked to visit the RPTRA sites after school and before returning home to find calm:

It [bench under a big tree] is a spot to hang out and take a rest... Usually, we come here in the afternoon, after school... so we go directly here. It is an excellent place to do nothing and cool off (RPTRA Rasela boys during a tour—finding calm).

Indeed, we observed two children intentionally stopping by the site for a short nap before going home (Figure 17). When we asked them why they did not go straight home and nap there, one of them said that school was tiring, and resting at home was not easy because the home was “chaotic” with many family members living under the same roof and household responsibilities awaiting them at home.

Figure 15. (left) Pink and her friends sitting on the "bridge" and enjoying the view from their favorite hidden spot

Figure 16. (right) Children sitting under the small tree while watching the soccer match and waiting for their turn



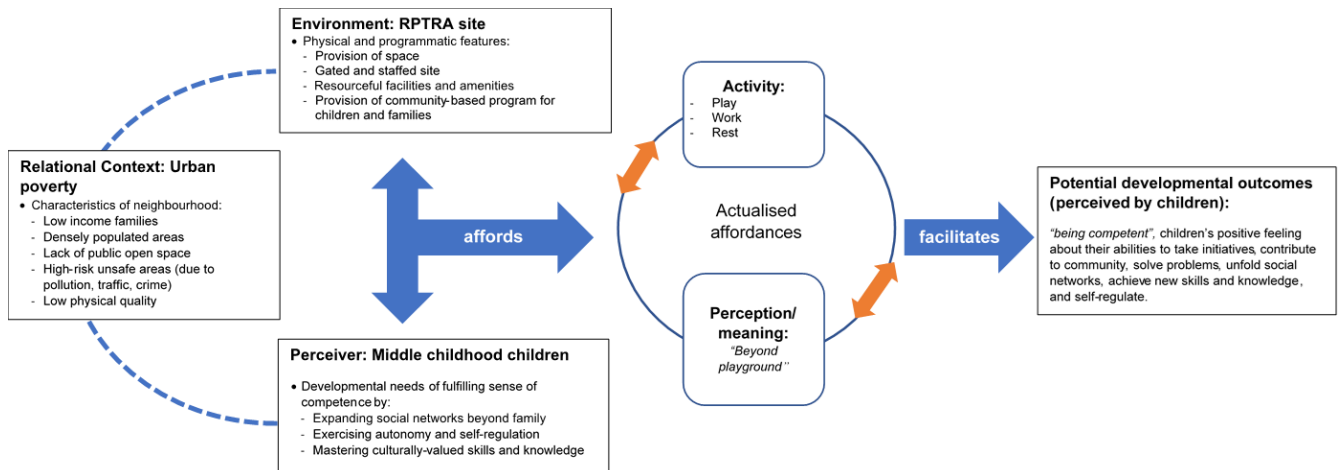
Figure 17. Two children taking a short nap at the RPTRA Rasela site after school



Discussion

This paper aimed to investigate how public spaces might support children's development by exploring their activities and perceived experiences at two RPTRA sites. Using the developmental-affordances framework, we identified that children perceive RPTRA sites as "beyond playgrounds" where they can have varied activities that were not just about play, but also work and rest. Their engagement with these activities also afforded them to be competent through actualizing various opportunities for taking initiative, playing a role, resolving problems and managing risks, being with friends and communities, and self-regulating. All these activities and the perceived experiences can be understood as children's developmental channels to inform environmental characteristics and interventions that set their optimal developmental trajectories. Figure 18 summarizes the interrelationship of children and the environment, and how this interaction potentially facilitates the developmental outcomes of their activities.

Figure 18. Developmental affordances of RPTRA sites actualized by the participating children



Source: Fitri Arlinkasari

Children’s perception of their competence influences the formation of their self-concept and global self-worth, which enables self-determined behavior and shapes the extent to which one is intrinsically motivated (Deci & Ryan, 2000; Harter, 2011). Improving their competence may thus support impoverished children to be resilient and cope with childhood poverty (Bartlett, 2017; Black & Krishnakumar, 1998; Blair & Raver, 2012). Children’s activities demonstrated in this study channel the development of their sense of competence in various ways. Participating in play and work activities with friends and their community afforded opportunities to acquire social and cultural skills and stewardship; rest activities afforded opportunities to cope with negative feelings and find privacy through which children develop their capacity for autonomy and self-regulation. However, we identified that resting for the children in our study may differ from the notions of resting in most non-poverty contexts. In our study, children’s motives for resting were related to the burdens of poverty (e.g., long-term uncertainties, household responsibilities, high-density dwellings), rather than to recover from their overscheduled lifestyles (Villaire, 2003). Therefore, incorporating children’s life contexts and circumstances is essential to understand their developmental trajectories.

Based on our findings, we identified critical attributes of RPTRA sites that can be used for place-based interventions in public space to optimize the developmental benefits for children living in a low-income urban neighborhood. These place-based interventions can enhance children’s experiences of play, work, and rest, activities that prior research has found to be critical for channeling the positive development of children from low-income families (e.g., Black & Krishnakumar, 1998; Ingoldsby et al., 2012; Vandell et al., 2005). First, the gated and staffed characteristics of public space offer unique opportunities to fulfill children’s basic needs of feeling secure, which becomes the foundation of their environmental exploration within site. Although the gated and staffed park might be associated with the privatization

and homogenization of public spheres (Kafafy, 2010), this study identified that these features are critical for two reasons: (1) children value them as boundaries between safe and unsafe environments for their play; (2) in the Jakarta context, most open spaces lack of sense of community and sufficient maintenance, and as such these spaces become a starting spot for criminal actions (Nursanto, 2011; Runtianing, 2016).

Second, children actively used the sites' amenities and programs for their structured activities to compensate for the lack of access to resources in other places, including home and school. While the provision of play space offered children countless and playful experiences, the built facilities and amenities were highly valued by the children to support other activities. Providing and maintaining these facilities are invaluable for children when those facilities are neither available nor affordable at home or in other settings.

Third, children optimized the use of natural areas and elements for their risky play and purposeful play. Children created new affordances of natural elements (e.g., water and mud) for challenging actions, but we found that adult supervision often restricted risky play. Providing guidelines for risky play can be critical to further improving the sites, given that the benefits of risky play outweigh the risks of children not developing skills to assess and manage risk (Brussoni et al., 2012; Gray, 2014). In natural areas, children were also consistently attracted to engage in gardening and cleaning activities, which form their "purposeful play". Aligned with Montessori's concepts of children's purposeful activity as a means of promoting their sense of competence, such opportunities and tools should be provided in children's environments (Heroman, 2017; Lillard, 2005), and we contend they should be more accessible for children at RPTRA sites.

In addition to their play, children utilized affordances for restorative experiences provided by hidden natural areas. However, the relative lack of natural elements at the sites and the high number of users relative to their size may constrain these experiences; while prior studies have found that restorative experiences are usually associated with the presence of natural elements and wide landscapes, and with few other people using the space (Korpela & Staats, 2014). Therefore, adding natural elements and features that offer prospect and refuge might enable children's sense of calm and privacy (Profice & Tiriba, 2018), especially when enlarging the landscape is not feasible in the context of the RPTRA sites.

Fourth and last, we identified that the presence of onsite managers and affordable extracurricular programs significantly shaped children's structured activities at the sites. The provision of structured activities beyond leisure may indicate a child-friendly city, as emphasized in the KLA policy (Dewi, 2012). Echoed by Marsh, Derose, and Cohen (2012), we suggest that building the capacity of onsite managers as facilitators of children's activities and keeping up the affordable programs are critical for improving children's experiences at RPTRA sites. We need to account for the benefits of supportive non-parental adults within the neighborhood community to supervise impoverished children's free time and facilitate structured activities, which can be the buffer for negative behaviors and

misconduct among young people (Ingoldsby et al., 2012). In addition to proper supervision, Werner (1993) identified that participation of impoverished children in structured extracurricular activities supports their resilience, which is critical for their adjustment to stressful life events because such activities afford "solace in adversity and a reason to feel proud" (p. 94).

Conclusion

This study explored children's use and perception of designated child-friendly public spaces in two low-income neighborhoods in Jakarta. Using a developmental-affordances framework, we found that children perceive these spaces as places with characteristics beyond that of playgrounds, in which they can develop a sense of competence through activities that are not only playing but also working and resting. The recommendations from this study can be used to improve place-based interventions in child-friendly public space within the context of urban poverty, through which children's positive development can emerge alongside their stimulating and constructive experiences.

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Fitri Arlinkasari (Inka) is a Ph.D. student at the School of Design, Queensland University of Technology, and lecturer in the Faculty of Psychology, YARSI University. Her research focuses on children's placemaking of public spaces and neighborhoods in the Indonesian urban poverty context. As a psychologist, Inka also collaborates with several Indonesian community-based organizations aiming to create child-friendly interventions for improving the child-friendliness level of her city, Jakarta.

Debra Flanders Cushing, Ph.D. is an Associate Professor in Landscape Architecture and the Discipline Leader for Spatial Design at the Queensland University of Technology. Her research combines critical people and place theories with an understanding of effective community participation to inform the design of healthy, sustainable and vibrant places for children and youth.

Evonne Miller is Professor of Design Psychology and Director of the QUT Design Lab in the School of Design, Creative Industries at Queensland University of Technology in Brisbane, Australia. Her research focuses on how to design environments—built, technical, socio-cultural and natural—that better engage and support all users. Evonne is also a passionate advocate for design and creative arts-based participatory research methods.

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