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Gatekeeping behaviour at playgrounds

How parental perceptions influence the use of playgrounds

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Summary

There is an increasing need for child-friendly cities in the world, as a growing percentage of children grows up in urban areas. Playgrounds are important factors in developing child-friendly cities, providing advantages such as developing social skills, physical activity, and educational opportunities. However, it is known that parental gatekeeping can make or break the use of playgrounds. Gatekeeping behaviour is the decision whether someone can access certain areas, or whether this should be limited. Previous studies show that parental gatekeeping is influenced by different design characteristics, such as safety, accessibility, or design, but the studies' results are inconsistent. The influence gatekeeping has on children's activity levels at playgrounds is understudied. This research investigates which playground design characteristics influence parents' choice whether to use a playground, and the effect it has on children's activities. Through a mixed-method, this report discusses the central question: *"how do parental perceptions of playground characteristics influence children's use of urban playgrounds in Groningen?"*

This research shows that design characteristics, namely those of safety and content, have an impact on the use of playgrounds. Social interaction and physical activity are the main levels of children's engagement at playgrounds, influenced by the gatekeeping behaviour of parents. Additionally, the results of research into the playground policy-making process in Groningen are contradictory, as politicians and policy-makers want to include children as a central theme via parental participation, while more than half of the parents in this research do not want to participate, which is possibly a result of the unclear process. In conclusion, an encouraging parent-child relationship positively influences the activity level of social and physical engagement at playgrounds, while the choice of using the playground depends mostly on its safety and content.

Keywords: *child-friendly, gatekeeping, parental perceptions, playground design characteristics, safety, social interaction, parent-child relationship*

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Chapter 1. Introduction

1.1 Background to the importance of play at playgrounds

By 2050, 66% of the world's population will live in cities, the majority of which will be children under the age of 18 (UNICEF, 2016). Child-friendly cities develop, as alarming results show how modern life can restrict children's lives (Van Loon & Frank, 2011). Multiple factors shape a child's prospects, especially their living environment. Child-friendly cities are cities where governments make choices for the children's benefit, securing a child's rights to a beneficial, secure, inclusive, and educational environment (Riggio, 2002). The benefits of child-friendly cities are endless for children and the community: improvement in activity patterns, mental welfare, safe environments, social interaction, and a connection to nature (Arup, 2017). The ongoing process of developing child-friendly cities offers healthier and safer living environments for children in the future.

Primarily, play is key in moulding the cognitive and physical growth of children, while increasing their overall well-being (Ginsburg, 2007). Play is "the instinctive, voluntary and spontaneous human expression through which we learn to make sense of the world" state Brown et al. (2019). Playing is the first step to change a child's life pattern and improves health and behaviour early on. The absence of play can have a substantial impact, as children seek and participate in different types of play that create opportunities to learn and engage with others (Brown, et al., 2019). It does not only improve children's lives, but it creates a safe environment for the community. Play opportunities in a city allow children in a safe community to develop positive health patterns and engage with other children.

Playgrounds are places of interaction, community, and creativity that can be accessed by children from all kinds of backgrounds (Kantz, 2004). Children at playgrounds spend time with same-aged peers and develop future-oriented skills about the environment, society, and activity (Brown, et al., 2019). Reports show that children's health declines: they become overweight and do not move around enough. This responsibility is often placed with children themselves, but they should have the opportunity in outdoor environments to improve their activities. In the end, playgrounds create learning opportunities in designated environments for children.

1.2 Gap: Parental perception

Research on playground design characteristics and their impact on children's use has recently come to pay attention to the importance of parental perceptions. Early research states that children's opinions and parental perceptions both influence the use of playgrounds (Van Loon & Frank, 2011). Adults' standpoints on playgrounds' suitability impact why they would allow or prohibit their children from playing there (Herrington, 2008). Gatekeepers make and control the decision if someone is allowed to use certain areas, tools, or information. The negative or positive gatekeeping behaviour starts with the communication and information parents receive and base their opinions on, from their own and other people's experiences (Bornstein, 2019). Additionally, Cunningham, Jones and Barlow (1996) found that emphasising parental perceptions may lower children's engagement in active and emotional play. Still, parental influence is one of the major elements of children's play behaviour (Valentine, 2004). Thus, there is no conclusive answer yet to the question to what extent, and with what mechanisms, parental perception influences children's use of playgrounds, and consequently, how policy-makers could take these into account when making a playground within an urban area.

1.3 Theoretical and societal relevance

Van Loon and Frank (2011) mention different aspects that influence a parent's choice to approve a child's use of the playground. The aspects are not consistent, as the research states that the most important aspect of playground design is the accessibility of the place, while safety is later appointed as the most important aspect. Rocha, Desidéro and Massaro (2018) state that playgrounds need to be both accessible and safe to promote the use of the space. Playgrounds influence the physical activity of children, so it is vital to understand what motivates parents and to create child-friendly environments. These create opportunities for both children and parents to meet others (Fundamentally Children, 2017). Even when playgrounds meet the needs of children, parents have the final say (Luchs & Fikus, 2013; Van Loon & Frank, 2011). Different articles and research introduce factors that influence allowing children to play in a certain area, without a clear main factor.

Another incentive to research playgrounds is the coalition agreement of Groningen 2019-2022 named "*Gezond, Groen, Gelukkig Groningen*" ("Healthy, Green, Happy Groningen"). The agreement states that every child deserves the same opportunities in life, at school, and when taking part in sports and culture (Gemeente Groningen, 2019). The municipality of Groningen wants to create a city where children have an active and healthy living environment, and increase the number of places where children can play. In January 2020, a policy proposal "*Spelen in de Binnenstad*" ("Playing in the City Centre") was proposed by parties in the council of Groningen (Rustebiel, Van Niejenhuis, Folkerts, & Ubbens, 2020). Groningen wants to create more opportunities to positively develop children's lives in urban areas. The proposal suggests creating areas within the city centre where playgrounds will be accessible to families and visitors. The outcomes of this research can be used in developing future policies.

1.4 Research problem

The aim of this research is two-sided. First, to broaden the academic knowledge of the relation between parents' perception and use of playgrounds in urban areas. Second, to evaluate if the municipality of Groningen's "*Spelen in de Binnenstad*" is achievable the way it is now developed and presented. This research will focus on the geographical location of Groningen, as the city is striving for an equal environment for all children. This all leads to the central research question:

"how do parental perceptions of playground characteristics influence children's use of urban playgrounds in Groningen?"

The secondary questions are:

- What playground design characteristics influence children's active use at playgrounds?
- To which playground design characteristics does the gatekeeping behaviour of parents mostly relate?
- What level of children's use is most strongly influenced by parental perceptions?
- How could parents be included in the design of urban playgrounds?

1.5 Thesis structure

First, the theories and concepts that form the basis of the research are discussed. After that, the data collection, analysis, and operationalisation are discussed in chapter 3. The results of the study are visible in the following chapter, which leads to the conclusion and discussion. In that chapter, the research will be linked to the earlier stated information. In addition, the research process and methods are evaluated and limitations and suggestions for future research will be made. At the end of the report, the references and appendices are included.

Chapter 2. Theoretical Framework

2.1 Parents as gatekeepers

Van Loon and Frank (2011) introduce a model showcasing the influence parents' and children's perceptions have on physical activity. As seen in Figure 2.1, it shows that the choice does not only depend on the child.

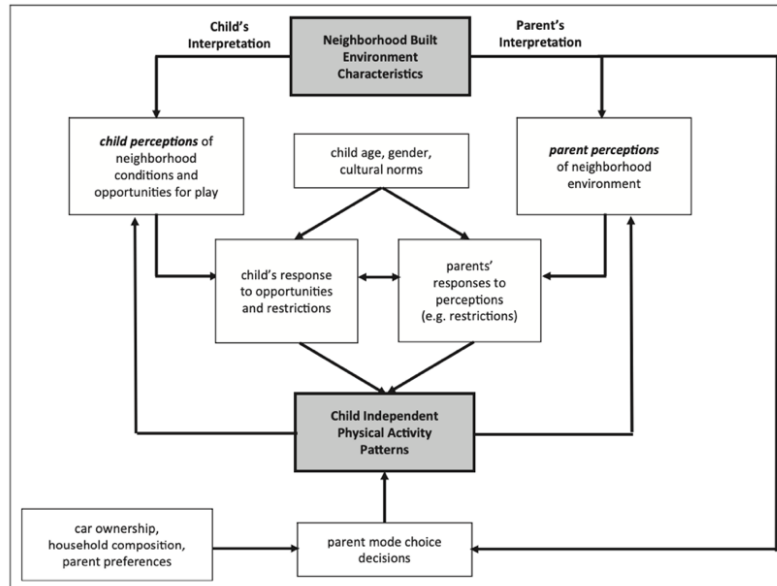


Figure 2.1 A conceptual model by Van Loon and Frank (2011) showcasing the importance of both child and parental perceptions on decisions, influenced by environments and the child's background.

Notably, “gatekeepers” connect children with their venues, and the perception of these places can change the development in a child’s physical activity pattern (Van Loon & Frank, 2011). Parents can act as gatekeepers, putting restrictions on the areas children can use. Visiting patterns of playgrounds are influenced by many aspects, one of them being the playground features settings (Moore, 1989). Parents as gatekeepers are influenced by interpersonal factors and the environmental setting perception, shaping their children’s activities as they can prefer certain spaces and accompany their children to these areas (Vlaar, Brussoni, & Mâsse, 2019; Loon & Frank, 2011). Perception of risk can impact the permission of using the playground. Gatekeeping can make or break the use of an area by children, especially when looking at the environmental characteristics of the place. However, it is not only influenced by spatial characteristics. Parental perceptions and protectiveness can be influenced by all kinds of factors; the amount of children present, neighbourhood cohesion, recreational screen time, “stranger danger” (the idea that children can be hurt by strangers) or traffic towards the area (Valentine & McKendrick, 1997; Clements, 2004). The scope of this research focusses on spatial characteristics.

It is unclear which design characteristics are the most influential ones, as different research mentions different ones each time. Tucker, Gilliland and Irwin (2007) found out that surveyed parents at most accessible parks say that design is more important than access, whereas Carver, Timperio and Crawford (2008) stress the importance of the built environment centring on safety. Understanding the environmental characteristics influencing the gatekeeping of parents can help gain a perspective on the development of playgrounds. This is not the only impact on future design choices, but it is the focus of this research. Other influential factors can be the growth of children populations, governmental choices, and development of parent opinions on social dangers (Verstrate & Karsten, 2011).

2.2 Use of playgrounds

O'Shea (2013) states: "Even though some parents understand the value of outdoor play, they can still be wary of "stranger-danger" and other perceived risks". The feeling of community can decrease the experience of a risk. Studies on the permission of children show that parents' fear of "stranger-danger" prevent children to play outside (Child in the city, 2018). This fear is mostly media-driven, with crime statistics or the increase of attacks shown. However, outside play is key for the different uses and the complementary advantages it brings (Brown et al., 2019).

Children do not immediately feel as if they are taking part in physical activities when playing, unwittingly improving the physical growth of children (Ginsburg, 2007). Children at playgrounds interact in different manners as discussed by McKenzie, Marshall, Sallis and Conway (2000) and Borman (1979). Van Loon and Frank (2011) define physical activity by the number of times, the duration, and level of intensity of the activity, meaning the intensive use of facilities and equipment in the area. Physical activity is not the only way to use playgrounds, as playgrounds stimulate the social interaction between children (Ginsburg, 2007). McKenzie et al. (2000) studied physical activity in a school environment in leisure time, dividing children's activities by sedentary, walking and lively behaviour. Children engage in games, verbal communication, and non-verbal interactions with their peers and gatekeepers as part of the recreational environment (Borman, 1979). The results are combined in Figure 2.2, creating three activity levels of children at playgrounds to observe: physical use, sedentary use, and social interaction. In this research the following definitions will be used: physical activity will be observed as the use of the equipment and walking within the observed area; sedentary is outlined as lying down, sitting, and standing (McKenzie et al., 2000); children show social interactions through verbal and non-verbal behaviour in interaction with other children, through games or using the facilities at the playground (Borman, 1979).

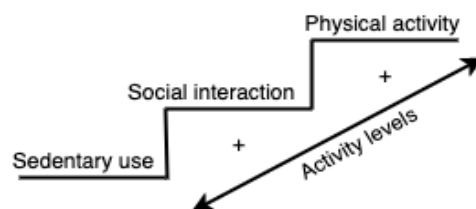


Figure 2.2 Three levels of playground use (McKenzie et al., 2000; Ginsburg, 2007; Borman, 1979).

As Briegel et al. (2019) state: "the parent-child relationship is developed and changed through interactions between a child and his/her parent, and these interactions can strongly influence the child's development across domains (e.g., emotional, physical and intellectual)". A child's development is stimulated by the parent-child relationship, but the influence it has on the different level of activities is understudied. Positive and negative behavioural research connect these behaviours to the perception of parents (Briegel et al., 2019).

2.3 Playground design characteristics

Even when parents allow children to use a playground, children can still possibly not as actively use the space as they would if they liked it. The focus in this research will be on characteristics stimulating active use by children. Currently, playgrounds are organised into different designs: conventional (swings, slides, climbing frames), contemporary (more designed environments, different materials) and adventure playgrounds (children construct their own spaces) (Janson, 2010). Throughout the years, the playground designs changed with the needs and desires of the population. From sand gardens, junk playgrounds, to modern and safe playgrounds. Currently, newly built playgrounds are focused on stimulating adventures and imagination (O'Shea, 2013). These changes are based on the needs of the

population, such as a focus on physical activity or improvement of safety regulations. A significant topic for a better playground facility might be to understand what makes some units special. According to Veitch, Bagley, Ball and Salmon (2006), children use outdoor play environments for three factors: environmental, social, and individual. Naylor (1985) introduced two features, environmental with focus on use in all climate situations and resident settings (availability of play areas), and the individual factors of mobility by children. The mobility of play can be in the social and physical contexts (Naylor, 1985). Different playground designs influence the uses of the area.

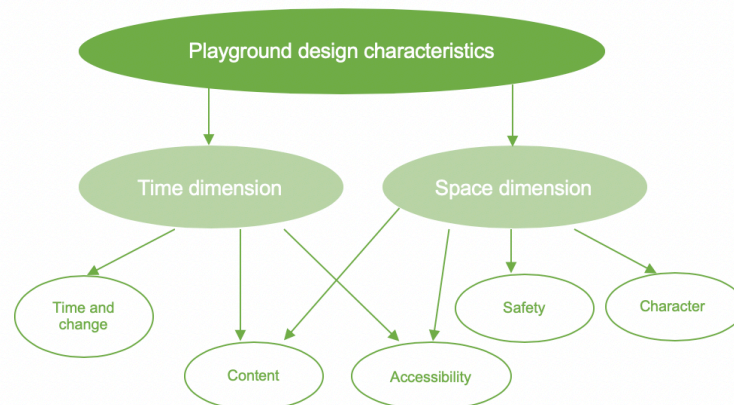


Figure 2.3 Focus playground design characteristics.

In this research, this information is used to form the five different playground characteristics (Fig. 2.3) that will be researched to see the influence on children’s activities at a playground. The overall five playground characteristics are explained in Table 2.1. This research will make a connection between the important design characteristics influencing children to actively use the place and the parental perception on certain features.

Table 2.1 Background theory on the playground design characteristics

Playground design characteristic	Explanation
Character and overall design	Children need space to move around in the designated area (Moore, 1989). Zoned areas for physical activity or sedentary use offer children different opportunities for activities. Children need to feel connected to their natural surroundings through the design (Janson, 2010).
Content	Playgrounds need different kinds of play equipment for diverse skill developments (Janson, 2010). Facilities such as benches are needed to take a break or to take part in sedentary or social interactions (McKenzie, Marshall, Sallis, & Conway, 2000).
Time and change	The design needs to handle different weather and season functions, to create opportunities for children to use the equipment the whole year round (Kantz, 2004)
Accessibility	Accessible playgrounds create empowerment of children to go to a playground, or use certain areas of it (Herrington, 2008). Accessible playgrounds are inclusive for all children.
Safety	Children make decisions to use or be in an area, if they feel safe in an area (Herrington, 2008). Safety can have a physical or social aspect. Physical safety is focused on suitable equipment, heights, and social safety as lack of community, trust or graffiti (Côté-Lussier, Jackson, Kestens, Henderson & Barnett, 2015).

2.4 Child-inclusive governance

Child-inclusive governance means that the government understands the rights of a child, developing the environment with children in the back of their mind and engaging children in

choices to realise those rights (UNICEF, 2011). The authorities consider children part of their demographic, and take them into account from the beginning of the process to implement, change, or develop within the environment, system, or education (Riggio, 2002). It means that children and the idea that children use the city are on the agenda and recognised in the goals of the municipality. As shown in the Groningen coalition agreement, containing the ambition to create more play areas.

2.5 Conceptual model

The relationship between the theories and different concepts is visualised in Figure 2.4.

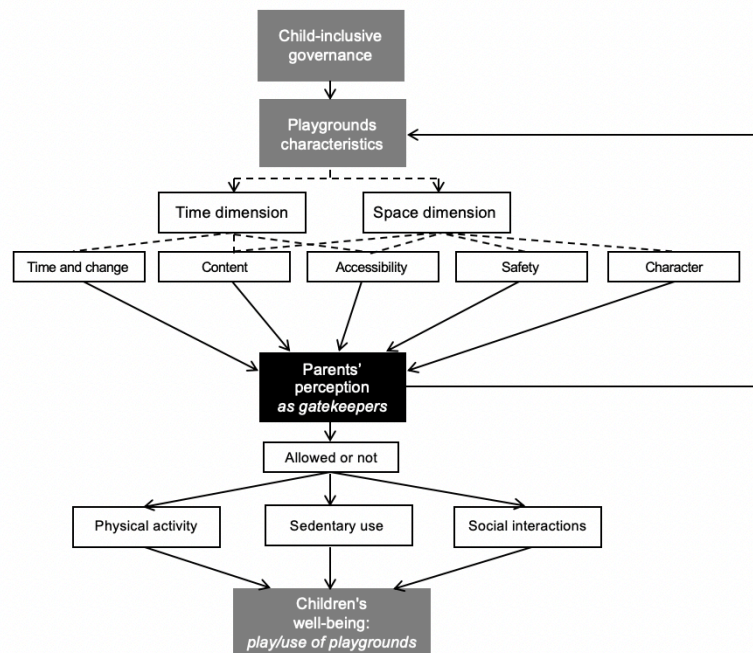


Figure 2.4 Conceptual model.

The conceptual model shows parents as gatekeepers affecting children's use of playgrounds. It is influenced by the playground characteristics, while at the same time gives feedback to those characteristics through their opinions and choices of children's permission using the playground. The arrows between different concepts represent a causal relation. It is influenced by (child-inclusive) governance.

2.6 Hypothesis

Previous research has made it clear that children's play improves their overall physical activity and patterns. This leads to the overall assumption that playgrounds are a perfect place to stimulate this, which gives children a place to play in urbanised areas (Brown et al., 2019; Fundamentally Children, 2017). The choice to use these playgrounds is extremely influenced by parents and their opinion about the design characteristics (Vlaar, Brussoni, & Mâsse, 2019). With this, parental perceptions influence children's use of playgrounds.

Based on the literature, the first expectation is: parents' perceptions can increase or decrease different types of children's use of playgrounds. The second expectation is: the design characteristic of safety is the most important characteristic influencing the choice of the gatekeepers. The feeling of safety through accessibility and the area where the playground is situated influences the choice of parents more than present equipment at the playground does. Furthermore, the third expectation for the research is: within government spatial developments, parental perceptions are not as often taken into account as children's needs.

Chapter 3. Methodology

3.1 Mixed method

To answer the central research question, a qualitative research approach is implemented. It stimulates the creation of knowledge of the current situation, by researching the encounters of people and their opinions of experiences (Punch, 2014). The qualitative method is suitable as a measure of different variables' perceptions. It creates reliable interpretations of the relationships between experiences and perceptions (Punch, 2014).

Within the qualitative method, different methods were employed to create in-depth knowledge. The method of observation is the primary way to observe children's use of playgrounds, as they are unaware of the observations and it does not influence their actions. Due to COVID-19 in the Netherlands in the time period of the research, interviews with parents were not possible and questionnaires were the best method to ask open questions. To research Groningen's policies, the inclusion of parents and children in this process, and the initiative "Spelen in de Binnenstad", experts were interviewed online in combination with desk research. Semi-structured interviews provide insights into the current situation, and it leaves flexibility for the interviewee to answer (Punch, 2014).

3.2 Data collection

3.2.1 Observation

The empirical material was collected at the playgrounds Noorderplantsoen and Stadspark, Groningen. These playgrounds have different children who use the area. Children will mostly use a playground within the area they live, so they do not often go to Noorderplantsoen as well as Stadspark. Observation does not create the option to ask questions, as this can influence participants, by for example pretending they are more active than they are. These playgrounds cannot be easily closed, making these playgrounds suitable observation areas as different playgrounds were closed due to COVID-19 (Altena, 2020). During the observations, information on the day-to-day situation at the playgrounds was collected. A semi-structured observation was carried out at different locations in the area, to make sure that the overall location was represented (Saunders, Lewis, & Thornhill, 2009). A checklist (Appendix I) created useful information, ensuring all variables at the playground were observed, using the operationalisation as the basis (Table 3.2). This could be replicated.

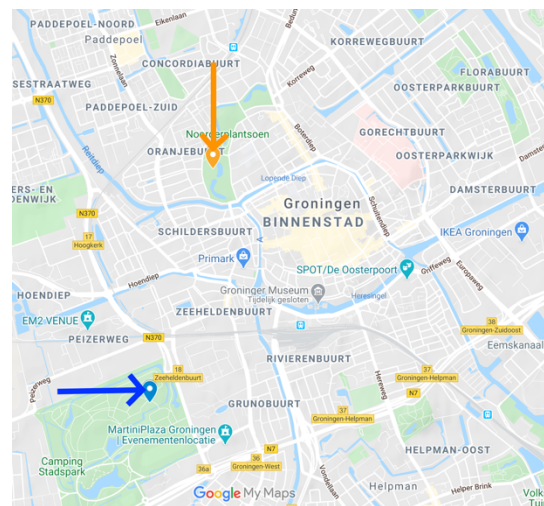


Figure 3.1 Map of the observed playgrounds in Groningen. The orange dot and arrow presents the location of the playground at Noorderplantsoen (Oranjesingel 16) and the blue dot and arrow the location of Stadspark's playground (Concourslaan 1).

The data was collected on 6 April 2020 and 9 April 2020, twice at both playgrounds in the morning and afternoon. The children's use of the playground was noted every time one of the activity levels took place. Counting the duration of activities was done with a stopwatch app. There were 77 children observed in total, but these included children using the playgrounds as shortstops on their route.

3.2.2 Questionnaire

Due to COVID-19 in the Netherlands, interviews with parents were not possible to perform face-to-face. The measures to fight the virus are to stay at home as much as possible, to keep distance from others, and to avoid all social activities and groups of people (RIVM, 2020). This meant that online measures were researched to make the data collection possible. This research used an online questionnaire and provided the option for parents to answer the questions via online interviews. In the end, all participants chose for the questionnaire.

The questionnaire (Appendix II) addresses the importance of playground characteristics in parents' eyes and results in understanding the factors that are the most important ones. The questions were exploratory and all were anonymised. The open and closed questions made it insightful for parents to answer the questions. The parents were recruited in a snowball-sample, using social contacts of the researcher and the respondents to collect more respondents. The questionnaire was set out between 10 April and 13 May 2020. A total of 30 usable respondents were analysed (87% female), and Figure 3.2 shows the locations of all respondents. This is because the questionnaire was placed in a 'mothers of Groningen' Facebook group after a few weeks, to gather more responses.

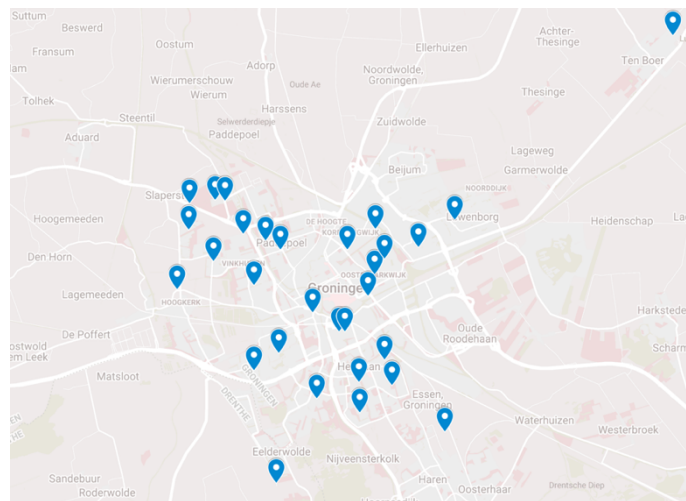


Figure 3.2 The locations of the questionnaire respondents.

The questionnaire respondents mostly had children between 0-4 years or 4-8 years (Fig. 3.3) and children were likely to use a playground more than 11 times a month (Fig. 3.4).

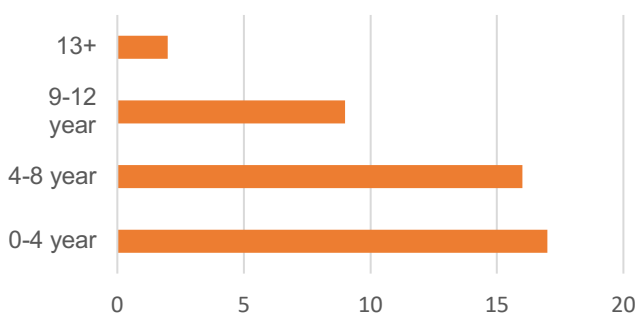


Figure 3.3 How old is/are your child(ren)?

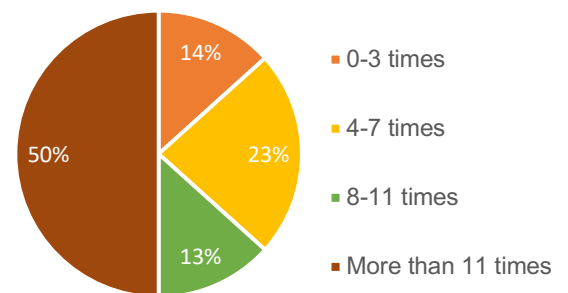


Figure 3.4 How many times a month does your child use a playground?

3.2.3 Interviews

Two interviews were held with politicians about “Spelen in de Binnenstad”. The objective of these interviews was to see how parents are included in the new project. One interview was held with a policymaker for “Bewegende Stad” (“Moving City”) at the municipality of Groningen. The objective here was to gather knowledge about the current policy implementation process within Groningen about child-friendly areas and the parents' and children's participation in this. The interviews gave insight into the current process of children and parents' participation within the implementation process and shed light on this

subject within the initiative “*Spelen in de Binnenstad*”. The interviews were held via Skype on 17, 23 and 30 April 2020 and the interview guide can be found in Appendix III.

3.2.4 Desk research

The desk research included secondary data, case studies of research on playgrounds, and recreational areas for background information on the characteristics and perceptions of it. This method took place throughout the whole research process, and was done by document analysis. This is a form of qualitative research in which documents are interpreted by the researcher to give voice and meaning to a topic (Bowen, 2009). The desk research was used to understand the behaviour of children in connection to parental perceptions and/or gatekeeping. Next to this, desk research was used to focus on policy documents from Groningen and Rotterdam, where children can play in the city centre through playgrounds or other recreational areas. Policy documents of Groningen add information on how parents currently are included. Research about Rotterdam shows how other cities include parents and children.

3.3 Ethical considerations

Regarding ethical considerations on positionality, I am an outsider in the research field, as my daily social relations do not include parents or policy-makers in Groningen. With this, I am more objective towards opinions when generalising data, but it is harder to understand parental choices that they make for their children. It is important to remember that parents' choices are driven by different moral and ethical values. The subject of privacy within this research includes foremostly the protection of observed children and parents' answers. The observation notes include general indications (gender, age-group, hair colour) of the child, which makes it untraceable.

COVID-19 has an influence on the response of people, which is why the questionnaire starts with stating that people should fill it in as if it would have been a normal month of the year, and not take into account the current uncommon situation. Next to this, the observation of playgrounds is influenced, as the number of and way in which children use the playground can be misleading. It can be lower than usual or it can be used for a shorter period than they would otherwise.

3.4 Operationalisation

As described by Saunders, Lewis and Thornhill (2009), operationalisation is the “translation of concepts into tangible indicators of their existence”. Table 3.1 shows the operationalisation for this research. The operationalisation helps to define strict descriptions of the variables, to create research transparency, and increase the results' quality.

Table 3.1 Operationalisation of variables

Concepts	Variable	Operationalisation	Source
Use of playgrounds	<i>Physical activity</i>	Amount of times equipment used and duration of it. Walking, creating and making things, climbing, sliding and hiding.	Van Loon and Frank (2011) and Reimers, Schoeppe, Demetriou and Knapp (2018)
	<i>Sedentary use</i>	Amount of times lying down, sitting or standing (still). Examples are reading, playing card games or sitting in a sandbox.	McKenzie, Marshall, Sallis and Conway (2000) and Reimers, Schoeppe, Demetriou and Knapp (2018)
	<i>Social interaction</i>	Verbal behaviour of children when they talk to others: same-age peers or parents/guardians. Defined in three sizes: small (with one to three persons), medium (with four to eight persons) or large (nine and more persons).	Reimers, Schoeppe, Demetriou and Knapp (2018) and Borman (1979)
Playgrounds Design characteristics	<i>Character and overall design</i>	Planned playgrounds that are zoned areas for equipment and sedentary use, nature as part of the playground: green or sand.	Janson (2010)
	<i>Content</i>	The playground has different equipment and/or different forms of it: monkey bars, climbing frames, swings, slides, merry-go-round, seesaw, sandbox or playhouses. And/or facilities such as benches and picnic tables.	Winship (2017)
	<i>Time and change</i>	The amount of time the playground is open every day if the playground can be used throughout the whole year (with all seasonal changes). When the weather is bad, if the equipment can still be used, it is not slippery or rotting away. And vice versa, if the sun is out, the area is not too hot.	Luchs and Fikus (2013) and Petrova and Sysoeva (2018)
	<i>Accessibility</i>	Access: it is close to the living situation of the child; the child is allowed to go to the playground on his/her own. The area can be used by all children, below the age of 18. Accessible surfacing (rubber tiles, sand and grass) and sufficient space for children. Accessible paths that lead to the playground; wide entrances and sufficient space between equipment.	Herrington (2008) and Fernelius (2017)
	<i>Safety</i>	Safe equipment, observed and unobserved play is possible, feeling of “eyes on the” playground. It is usable for the target audience, the safety of surfaces and fall height and depth of playground.	Van Loon and Frank (2011) and Riley (2019)
Parents’ opinions	<i>Parental perception</i>	Parental perceptions through a semi-structured interview, with open and closed questions. Open question results later analysed by open and axial analysis. Closed questions as multiple-choice questions and/or a Likert scale.	Tucker, Gilliland and Irwin (2007) and Zuback (2015).

3.5 Analysis

After the completion of all interviews and the filled-in questionnaire, both were coded the Gioia methodology in multiple steps. The interviews have been transcribed and were colour-

coded in two ways, a printed version manually, and a digital version on the computer. Printed versions of the questionnaires were colour-coded manually. These steps started with open coding which often created first and second level coding, which afterward was followed by axial coding (Gioia, Gorley, & Hamilton, 2013). These codes often defined the concepts, in combination with selective coding to create an understandable abstraction between concepts. By coding qualitative data, a variety of patterns can be deducted. The used codes can be found in the results of the questionnaire (Appendix IV) and interviews (Appendix V). In Table 3.2 examples of codes can be found. This method is used to answer the second, third, and fourth secondary questions comprehensively.

Table 3.2 *Example of codes used in the interviews and questionnaire*

Interview		
	Quote (translated)	Code
Politician 1	"That people from all the different neighbourhoods in our downtown area should feel welcome".	Ambitions (inclusion)
Policy-maker	"We do not really have a policy of within so many square feet there must be a playground".	Policy on design characteristics
Questionnaire		
Respondent 28	"Absolute security in the sense of a fence". (Q15)	Design (Safety)
Respondent 15	"Challenging for various ages and there is a lot of ways to play. With each other". (Q9)	Child's domain development

Chapter 4. Results

4.1 Playground activity levels

This paragraph answers the first research question: *what playground design characteristics influence children's active use at playgrounds?* Here, the use of Stadspark's and Noorderplantsoen's playgrounds, operationalised by three activity levels: physical activity, sedentary use, and social interaction (Table 3.1) are used to formulate an answer. It gives information on how children use playgrounds. Afterwards, a connection is made between the five playground characteristics and activity levels.

Table 4.1 shows the order of the activity levels at Stadspark's and Noorderplantsoen's playgrounds (Fig. 4.1 and 4.2). The most observed activity of both playgrounds is the physical activity level (41.2%), while separately Noorderplantsoen's highest activity level is sedentary use (45.3%). As mentioned, COVID-19 probably influences the number of children using playgrounds and their social interaction. The researcher overheard different parents telling their children to use a different area to play in which fewer children were active.



Figure 4.1 Stadspark's playground



Figure 4.2 Noorderplantsoen's playground

Table 4.1 Children's activity levels at observed playgrounds

Observation		Stadspark		Noorderplantsoen	
		6 April 2020 (afternoon)	9 April 2020 (morning)	6 April 2020 (afternoon)	9 April 2020 (morning)
Number of children active		20	25	9	13
Amount of each activity	Physical activity	115	159	24	60
	274		84		
	Sedentary use	75	91	33	101
166		134			
Social interaction		65	67	25	53
	132		78		
Total amount of each activity combined	Physical activity	358 (41.2%)			
	Sedentary use	300 (34.6%)			
	Social interaction	210 (24.2%)			

Table 4.2 shows how the different playground design characteristics are observed connected to the three activity levels. In the end, all design characteristics influence children's activity levels differently. The variable content influences all activity levels, while the character of the playground influences most physical and sedentary activity levels. The variable time and change of a playground influences all levels. The accessibility of a playground influences the physical activity and social interaction of children. Safety empowers children to use the areas on their own and this is reflected in all activity levels, children run around on their own, talking to same-aged peers and parents.

Table 4.2 Activity levels connected to playground design characteristics

Playground design characteristic	Activity level		
	Physical activity	Sedentary use	Social interaction
Character	Available equipment and tools are used by a child.	Sand (sandpit) surfaces are used.	Equipment with no room around them to move, shows children talking to other peers more than equipment where parents are participating.
Content	Different equipment increase movements of children between them.	Sand and grass areas are used for sedentary use and social interaction. Benches are used by children to take a break between playing with their parents.	
Time and change	Children play throughout the day at weather resistance equipment and open playgrounds.		
Accessibility	At playgrounds without locks at entrances and without roads with cars, children run to the playground.	Benches with moving room around them. Children use open sand (sandpit) to sit and communicate.	Children make contact with others in open areas at equipment.
Safety	Children (0-10 years) do not use equipment, which young adults (15-24 years (United Nations, 2013)) are using.	Children use surfaces (soft, sand, grass) for sedentary use and social interaction.	

4.1.1 Reflecting on the expectation

As mentioned in the theoretical framework, the three different activity levels are all visible at the playground. As expected, physical activity is the main action taking place at the playground. It complements the research as all playground design characteristics stimulate this activity. Overall, children need all playground design characteristics to create opportunities to move around, have different equipment to motivate skill development, and offer play opportunities throughout the whole year. Sedentary use and social communication are stimulated mostly by the character and content of the design, as this creates opportunities to interact in lying, sitting, or standing positions.

4.2 Parental perceptions of playground design characteristics

This paragraph answers the second sub-question: *to which playground design characteristics does gatekeeping behaviour of parents mostly relate?* The parental opinions on the five operationalised playground design characteristics are researched through the coded questionnaire (Appendix IV). After coding, the four recurring themes were “child-friendly playgrounds”, “content”, “character and overall design” and “safety”.

First of all, throughout the questionnaire parents state the importance and need for a playground to be child-friendly. It will not be used if it is not suitable for children. They find it child-friendly when it is age-friendly, answers children’s needs and provides skill development and creativity opportunities. Parents mention these aspects of the characteristics. Parents’ needs are child-focused, which expresses itself in the demand of suitable equipment or by having parents visible in the area (Fig. 4.3). It shows that if a playground has no suitable equipment as playground characteristics, it is unlikely that parents will use it often.

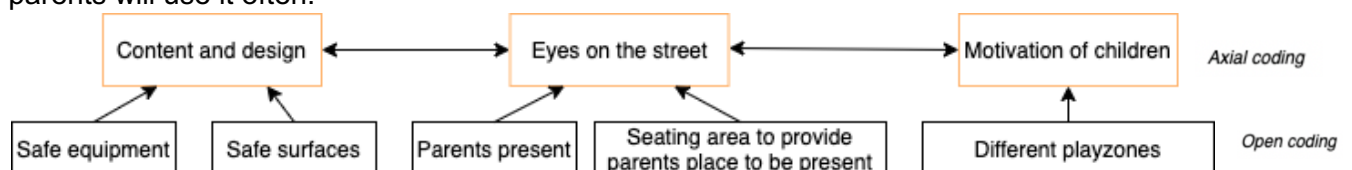


Figure 4.3 Code map Q10. What does a childproof playground look like and why like this?

Secondly, respondents answered the variable safety with a mean of 5.93 (Fig.4.4) as the highest priority to the question of the importance of playground design characteristics. After this, the opinion of a child (5.89) and equipment (5.63) scored the highest. The variable character and overall design scored lowest, even though the use of sand and nature in the design is one of the themes most discussed. In this research, the use of nature was operationalised as the character and overall design, but this is seen as a different aspect by the respondents.

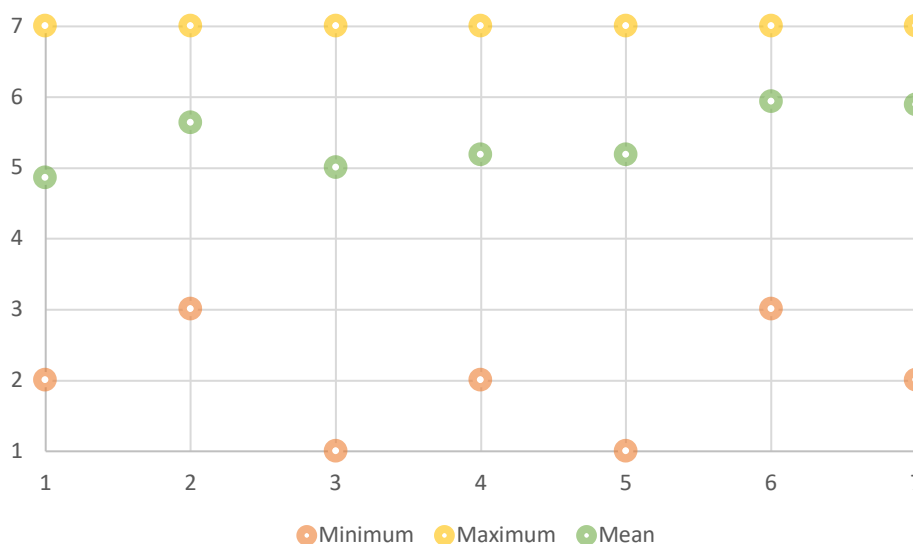


Figure 4.4 Q1. What kind of influence do the following factors have on your decision to allow your child to go to a playground? (1-not important, 7-very important) Note. Horizontal axis: 1-Design, 2-Equipment, 3-Weather, 4-Opening times, 5-Accessibility, 6-Safety and 7-Opinion child.

Overall, safety, content, character and overall design (factor of nature and sand) are often mentioned throughout the questionnaire and the results of different questions. To understand the importance of these factors and the influence it has on the gatekeeping of parents, the questionnaire results are included in Table 4.3.

Table 4.3 Results per most mentioned playground design characteristics

Playground design characteristic	Result of questionnaire
Content (5.63)	Parents need different equipment and play opportunities in one area. It needs to be used for different ages and kinds of children. Parents need parental advantages to use a playground, such as benches to watch the children. They find it important that a playground motivates and stimulates creativity through different equipment, tools, and surfaces the playground provides.
Character and overall design (4.86)	Parents use playgrounds that look safe and inviting to use, and subsequently use nature and sand in the design. Parents find this important as it creates play opportunities and need to be offered in a city. The use of green materials within the design is necessary.
Safety (5.93)	Playgrounds need to be safe when looking at or using it. There needs to be room around the equipment, to have a view of the children and clean to use. The equipment used needs to be safe and not harmful for children.

However, when respondents were asked to name the factors that would contribute to a successful playground in the city centre, there were four main codes (Fig. 4.5). Parents will use a green playground. It shows that playgrounds need to be accessible, have facilities,

and the design needs to be safe and fitting in the placed area. Again, safety is mentioned in a combination of green material use (design) and facilities (content).

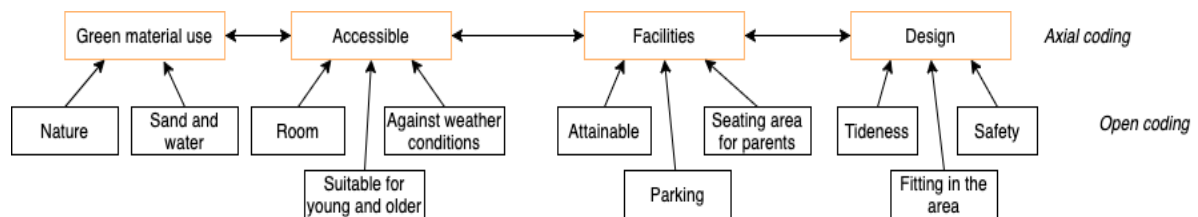


Figure 4.5 Code map questionnaire question 9.

Lastly, when parents were asked specifically about the ideal accessible playground, they mentioned different characteristics (Fig. 4.6). It shows that parents see accessibility as part of different playground design characteristics, as part of the content, character and overall design and safety.



Figure 4.6 Code map Q15. What factors do you think contribute to a successful playground in the city centre?

4.2.1 Reflecting on the expectation

The results stated here are partly aligned with the second expectation of the research: the design characteristic of safety is the most important characteristic influencing the choice of the gatekeepers. Overall, the five playground design characteristics do influence the gatekeeping of parents, but some less intensive than others. Safety and content are often combined by parents as part of other playground design characteristics. Safety is mentioned in combination with other variables, such as content, design and accessibility. It was expected to be important, however, it is often connected and experienced by the other factors and cannot be seen only as one specific variable. Furthermore, the content variable is returning, contradicting the earlier stated expectation. However, children's opinions are not connected to a playground design character, but influence the choice of permission as said by Van Loon and Frank (2011). In the future, this aspect could be combined with this research.

4.3 The role of the parent-child relationship on the child's activity level

This section answers the third research question: *what level of children's use is most strongly influenced by parental perceptions?* Firstly, the results of the desk research are stated, then the observation results and in the end the results of the questionnaire.

The desk research explains that parental influence on activity levels or children's behaviour is defined as any opinion, attitude, or action. Parents' reflection of enthusiasm on a child's action, is a child's encouragement to use a certain tool or equipment at a playground (Fogelholm, Nuutinen, Pasanen, Myöhänen, & Säätelä, 1999). A child is mostly influenced by reactions, actions, and experiences from inside their family, meaning the patterns of physical activity and social interactions are immensely (dis)encouraged throughout a child's development (Goldberg & Carson, 2014). At the playground, the freedom of using equipment is influenced by parental perceptions of children's capabilities and the safe

environment (Goldberg & Carson, 2014). In the end, parents can support and take part in play activities. If an adult makes all the decisions about how, what and when their child plays, the play opportunities are not stimulated.

Additionally, through the observations, it showed parental perceptions mainly influencing the physical activity level of children, encouraging the activity by words or joining them. This happened more at Stadspark playground, as parents would walk with their children to different tools and equipment. The children’s social interaction is with the parents or their (dis)encouragement of socialising with others. At Noorderplantsoen, parents were visible around the play area, creating social opportunities mostly between children. Children’s sedentary use is a choice of the child, but when a parent discourages a child, it influences it in the end. A child sits or stands where they want to, the (dis)encouragement happens more afterward. It shows that within the observation, mostly physical activity and social interaction are influenced by parent-child communications. Because parents can decide if a child can play, use a certain tool at the playground or talk to others via their own communication with their children.

Table 4.4 Observed levels and parent-child relationship

Aspect	Result
Physical activity	Motivated by the encouragement of parents to use certain equipment. Done through watching, talking or joining them in the activity.
Sedentary use	(Dis)encouragement happens after the activity, letting children know they cannot sit in a certain area.
Social interaction	Parent-child relationships by talking to each other. Children at Stadspark had more contact with peers than parents, children at Noorderplantsoen had more contact with same-aged peers.

Secondly, within the questionnaire, parental motivation of using a playground is stimulated through children’s gathering, the possibility of physical activities, and the entertainment it brings (Fig. 4.7). Parents go to playgrounds because children are able to socialise and play with other children. It shows that parents want their children to use a playground for active play and social interactions.

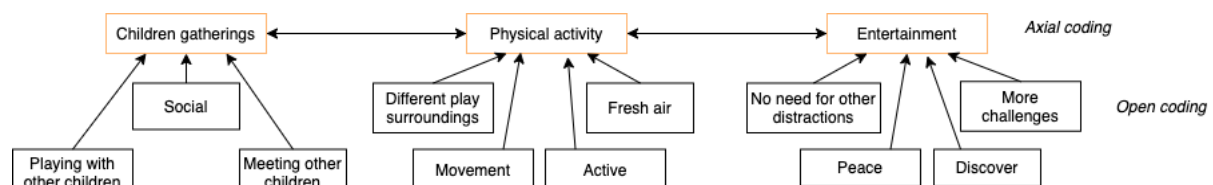


Figure 4.7 Code map Q6. What motivates you as a parent to go to a playground?

Finally, the questionnaire results show that parents find it necessary to use a playground because of social interaction, physical activity, and lastly for sedentary use (Fig. 4.7). Question 8 asked how applicable the statements were, discussing playgrounds’ importance for providing space to be active outside (statement 6), playgrounds as a social environment (statement 7), and playgrounds offering rest to children (statement 10). Fig 4.8 shows statement 6 with a mean of 5.2, statement 7 with a mean of 5.4 and statement 10 with a mean of 3.4. This shows that parents want their children to use the playground mostly for social interaction.

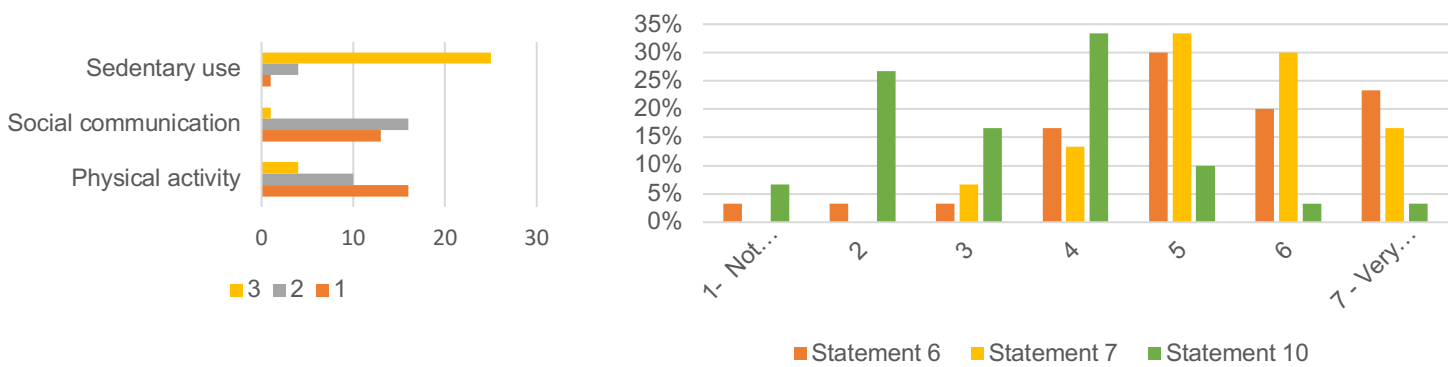


Figure 4.7 Q5. How do you want your child to use the playground? **Figure 4.8** Q8. Answer the next statements (6,7 and 10)

4.3.1 Reflecting on the expectation

The first expectation of the research is that parents' perceptions can increase or decrease different types of children's use of playgrounds. The results complement this expectation. Previous research shows that parent-child relationships mostly influence physical activity through social interaction. The observations complement these findings and show that parents influence the physical activity level by words, joining them or by enthusiasm. Additionally, the questionnaire shows that social interaction is the most important function at a playground. The results complete each other while showing contradiction to parental opinions. This can be a result of the current COVID-19 as at the observation social interaction between peers was sometimes discouraged.

4.4 Design process of urban playgrounds

Within this paragraph, the fourth research question will be answered: *how could parents be included in the design of urban playgrounds?* For this question, the results of the coded interviews (Appendix V), analysed documents of Groningen and Rotterdam and the coded questionnaire were used. First, it creates an overview of and recommendations for the current policy situation in Groningen through comparison with another city. Afterwards, it shows how parents want to be included in the process.

First of all, the interviewees show that the building of a playground starts with one or a combination of three initiatives: the municipality, inhabitants, or the neighbourhood's area team. The process begins with a combination of ambitions, (international) challenges, and the creation of a support base (Fig. 4.9). Ambitions differ per project, but the underlying idea is the area's need for placement. There needs to be a support base to realise the project. Throughout the interviews, children are mentioned as a priority of playground policies, but parents are often not one of the main drivers.

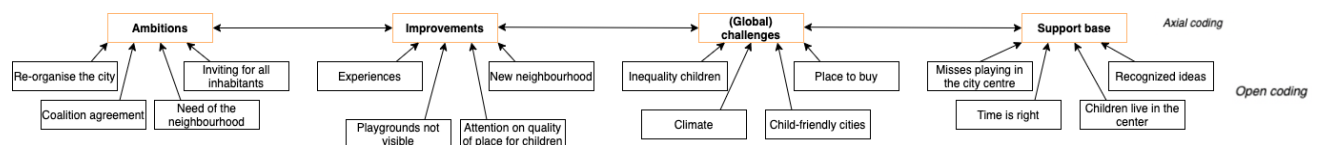


Figure 4.9 Coding map of interviews

The city of Groningen does mention the need to include children in design choices, for example in the coalition agreement 2019-2022 or in Speeltuincentrale Groningen (Gemeente Groningen, 2019; Speeltuincentrale Groningen, 2017). However, the policy-maker interviewee explained that there is no clear playground vision or policy. On the other

hand, Rotterdam had a clear child-friendly vision in 2010, which created eight child-friendly districts in the city (Gemeente Rotterdam, 2010). This vision was used in other policies, where children's participation was stimulated through mental maps or parental meetings. The Speeltuincentrale Groningen does talk about a children's participation project, which includes children's views on different aspects of a playground. However, parental participation is not mentioned in any policy document of Groningen.

Furthermore, the interviewees explicitly mentioned that parental participation is inconsistent within projects. It depends on the area teams how they are handling the participation of inhabitants and parents, often through information evenings or project groups. However, the policy-maker interviewee mentioned that if parents are asked for their opinions, this is not always circled back to them, as this is not feasible.

"Sometimes things are also just placed, and then of course there is contact, but how intensive that is, depends on the size of the place of course".
- Interviewee 3: policy-maker

However, it seems that most of the respondents of the questionnaire do not consciously know that they can participate in the design of playgrounds in their areas. Of the participants of the questionnaire, 67% mentioned not being interested in participating in this process. The rest do currently not know how to participate or if this is happening. On the other hand, parents do state that they find it important to include end-users in the design process. Most parents do not feel they are included in the implementation process of designing playgrounds. Respondents feel included if they are one of the initiators.

"Designed our own playground and the council gave us a lot of room for it".
- A respondent questionnaire, Q13

4.4.1 Reflecting on the expectation

In the end, the third expectation: within government spatial developments, parental perceptions are not as often taken into account as children's needs is partly complemented by the results. On the one hand, parents' and children's perceptions are taken into account at the beginning of the process, starting with neighbourhood meetings. However, throughout the process of implementing playgrounds, parents are not included or, if they are, their feedback is not circled back to them before being implemented, which some parents have mentioned in the questionnaire. This research shows that even if it is important for child-friendly cities, most parents do not want to be included in the design choices. They do find it important to include end-users' opinions. The possibility of participation or the process of it is not always clear, but it could be that parents are not aware of being end-users or that they can participate. Consequently, future research can explore why parents do not want to participate and how policy-makers could take this into account as well, as there is no fixed playground policy.

Chapter 5. Conclusions, limitations, and recommendations

5.1 Conclusions

In this study, the central question was: *how do parental perceptions of playground characteristics influence children's use of urban playgrounds in Groningen?* It was formulated in response to the need to develop child-friendly cities. Playgrounds are a way to improve the positive development of children's skills and parental gatekeeping influences the choice of using a playground.

The parent-child relationship stimulates children's activity levels at playgrounds. As Briegel et al. (2019) state, parents' perceptions influence children's positive and negative behaviour in environments. This research corresponds with former research on the beneficial influence parents have on physical activity, by showing that encouragement and permission to use equipment at a playground influences children's use. It concludes that physical activity and social interaction are influenced mostly by parent-child relationships, complementing the first expectation. Nevertheless, the strength of parent-child relationships fluctuate between days or years, meaning that it can depend on the child's age as the relationship changes.

It is known that parental perceptions impact children, but the design characteristics that do are inconsistently mentioned in earlier research. Rocha, Desidéro and Massaro (2018) state that playgrounds need to be both safe and accessible, as Tucker, Gilliland and Irwin (2007) define design as the most influential factor on the permission by parents. This research shows that the parental choice of using a playground depends on the way the area looks, with the most influential factor being the safety and content aspects of a playground. This confirms and contradicts earlier research. It is in line with the second expectation, which stated that safety would be the most important characteristic. However, safety is often indirectly connected or explained in combination with the other researched characteristics. Additionally, if a playground is not suitable for children, or has no parental facilities or different equipment options to use for play, it is uncertain if it would be used as often as a playground that has these options. On the other hand, there were findings in the research that show the importance of children's choices in the activity level of a playground and the influence this opinion has on a parent, complementing Van Loon and Frank (2011).

Parental opinions develop through the years and are not only influenced by spatial characteristics. Parents are more protective these days than before, and this creates the need for safe environments for their children. However, this is not always the right decision as the experiencing of fear is not only influenced by environmental aspects, but also by media or the provision of 'safer' play options with technology. Currently, playground designs focus on safe and modern areas. Safety is physical and social and the answer is not always to create safer playgrounds, but to improve the communication about playgrounds and encourage a stronger connection between playgrounds and communities. Parental gatekeeping is stimulated by information, and the perception of safety can be improved by media or other information outlets.

On the other hand, design choices are not often made by parents or children, but are influenced by trends, demographics, or land value as well. Upcoming trends are adventurous designs, to stimulate creativity and imaginative skills, which can appeal to children and parents to move outside for play. This research shows the need for playgrounds to be adventurous by using natural elements or sand in the design. If a child is less motivated to use a playground, it will work counterproductive.

In contrast to the earlier mentioned research, this research includes a study on how parental opinions are included in the design process. Parents are taken into account less throughout the whole process, but policies try to make parents participate more. It shows that parents

do not feel obliged to participate, if they do not know how. This is partly coherent to the last expectation. Apart from that, this research also has societal value. As stated in the introduction, Groningen has the goal to improve the living situation of children. This research shows that using parental perceptions on playground designs will increase the use of playgrounds by children. This knowledge can be used in policy-debates concerning the ways to accomplish the coalition agreement goals. However, participation options need to be clear if they want to have participants. Inclusive governance is a trend, but people need to want to participate. The results show that communicative planning needs to be researched, as it would not be effective to ask parents' participation otherwise.

5.2 Limitations and recommendations

Overall, this research leaves room for improvement. Firstly, it is clear that parental perceptions are influenced by all characteristics, and by which one the most, but not which parts of the safety characteristic stimulate this. Examples are mentioned, but this could be more efficiently studied in research focusing on fewer characteristics, so that the effect of one variable and its aspects can be researched. Next to this, it would be good to include the inclusiveness of all children, disabled or not, as parents will focus on other aspects and playgrounds should facilitate as a child-friendly environment for everyone.

Additionally, the observation checklist should be extended to noting down the duration of social interaction or sedentary use. This was not done in this research, so a comparison between duration levels was not possible. This could provide a better discussion on the results in the future.

Since this study consists of qualitative research in a specific region of Groningen, it is not possible to generalise statements about parental gatekeeping and the influence it has on physical activity for different regions or other countries. It would be interesting to compare this research to other countries or child-friendly cities and to see how the differently implemented design characteristics impact the use of playgrounds.

Furthermore, the number of respondents in this data collection is rather low. Thus, a larger dataset and different types of questions could result in more significant and representative results for the research group. Because of COVID-19, the data collection of parents was done by a snowball-sample. The problem with this type of sampling is that it can be hard if nobody knows other participants and the sample stops. Fortunately, the participants of this research helped to collect other respondents. For the future, the idea of contacting schools could be an option to improve the sample size and to make it more representative.

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Appendices

Appendix I. Observation checklist

Children		Activity level								
Number	General details; alone?	Physical activity			Sedentary use			Social interaction		
		Activity/equipment	Times	Duration	Lying	Sitting	Standing	Small	Medium	Large

Notes:

- Is the playground only used by children? *Yes, how so:* *No, how so:*

- How is the surface of the playground? *rubber tiles* *sand* *grass* *safe*

- Is there enough space for children? *(around/on) equipment & facilities* *paths & entrance* *density*

- Is it safe? *equipment* *observed/unobserved play* *target audience* *height & depth*

Other notes

Appendix II. Questionnaire frame

1. Wat voor invloed hebben de volgende factoren op uw besluit om uw kind naar een speeltuin te laten gaan?

Geef aan hoe belangrijk u de volgende elementen vindt door in dezelfde regel het nummer te markeren dat het best met uw mening overeenkomt.

Speeltuinfactor	Schaal van 1 (heel onbelangrijk) tot 7 (heel belangrijk)							n.v.t.
I Ontwerp	1	2	3	4	5	6	7	n.v.t.
II Toestellen	1	2	3	4	5	6	7	n.v.t.
III Weer	1	2	3	4	5	6	7	n.v.t.
IV Openingstijden	1	2	3	4	5	6	7	n.v.t.
V Toegankelijkheid	1	2	3	4	5	6	7	n.v.t.
VI Veiligheid	1	2	3	4	5	6	7	n.v.t.
VII Mening kind	1	2	3	4	5	6	7	n.v.t.

2. Vindt u dat er in uw buurt op loopafstand (binnen 500 meter) voldoende speelgelegenheden zijn voor kinderen?
- Ja: *volgende vraag*: in wat voor vorm zijn deze speelgelegenheden aanwezig?
 - Nee: *volgende vraag*: hoe vindt u dat deze situatie verbeterd kan worden?

Allebei de vragen door naar vraag 3:

3. Hoe vaak in de maand maakt uw kind gebruik van een speeltuin?
- 0-3 keer
 - 4-7 keer
 - 8-11 keer
 - Meer dan 11 keer

4. Vink aan wat voor u geldt:

- Mijn kinderen mogen normaliter zelfstandig naar de speeltuin
- Mijn kinderen mogen normaliter zelfstandig naar de speeltuin mits een broer/zus of buurjongen/meisje of vriend/vriendinnetje mee gaat

Als u deze vinkt, wat is de leeftijd van broer/zus, buurjongen/meisje of vriend/vriendinnetje: ...

- Mijn kinderen mogen normaliter naar de speeltuin mits een ouder mee gaat

5. Hoe wilt u dat uw kind een speeltuin gebruikt? Zet op volgorde van belangrijkheid: (1-meest belangrijk)

- Intensief gebruik van faciliteiten/toestellen
- Sociale communicatie
- Om tot rust te komen

6. Wat motiveert u als ouder om uw kind naar een speeltuin (samen) te laten gaan?

7. Wat vindt u het belangrijkste in het **ontwerp**/de inrichting van een speeltuin? Vink aan wat het meest van toepassing is:

- Verschillende speelzones
- Materiaalgebruik
- Openheid
- Gebruik van natuur of zand
- Verschillende toestellen
- Andere aspecten: ...

Volgende vraag: waarom vindt u dit het belangrijkste?

8. Beantwoord de volgende stellingen:

Schaal van 1 (helemaal niet van toepassing) tot 7 (zeer van toepassing)							
I Bij goed weer ga ik vaker <i>mee</i> naar een speeltuin	1	2	3	4	5	6	7
II Bij goed weer ben ik meer geneigd mijn kind(eren) <i>alleen</i> naar een speeltuin te laten gaan	1	2	3	4	5	6	7
III Bij slecht weer ben ik meer geneigd mijn kind(eren) <i>alleen</i> naar een speeltuin te laten gaan	1	2	3	4	5	6	7
IV Speeltuinen moeten altijd open zijn	1	2	3	4	5	6	7
V Als ik denk dat het rustig is bij een speeltuin, laat ik mijn kind(eren) sneller <i>alleen</i> naar een speeltuin gaan	1	2	3	4	5	6	7
VI Speeltuinen zijn er vooral om kinderen een plek te geven om <i>buiten te spelen</i>	1	2	3	4	5	6	7
VII Het belangrijkste aspect van speeltuinen is dat het <i>een sociale omgeving</i> voor kinderen creëert	1	2	3	4	5	6	7
VIII De toegankelijkheid van een speeltuin en de veilige route naar de speeltuin is belangrijk voor het gebruik van de speeltuin	1	2	3	4	5	6	7
IX Speeltuinen zijn interessant voor kinderen door de verschillende aanwezige toestellen	1	2	3	4	5	6	7
X De aanwezigheid van andere ouders op speeltuinen geeft mij een <i>veiliger</i> gevoel	1	2	3	4	5	6	7
XI Een speeltuin geeft kinderen vooral de ruimte <i>om tot rust</i> te komen	1	2	3	4	5	6	7

9. Hoe ziet de ideale toegankelijke speeltuin eruit en waarom zo?

U kunt denken aan oppervlaktes (rubber, zand, gras), de ruimte rondom toestellen en faciliteiten en gebruik door andere kinderen/ouders.

10. Hoe ziet een kind-veilige speeltuin eruit en waarom zo?

U kunt denken aan toestellen, oppervlaktes, hoogtes, aanwezigheid van andere ouders of andere aspecten.

11. Heeft u gehoord over het initiatief "Spelen in de Binnenstad" in de stad Groningen?

a. Ja: *volgende vraag:*

i. *Wat voor voordelen ziet u in dit idee?*

ii. *Wat vindt u er niet goed aan?*

Hierna naar vraag 13.

b. Nee: *meteen naar vraag 13.*

12. Zou u mee willen participeren in het ontwerpen van een speeltuin?

a. Ja: *volgende vraag:*

i. *Vindt u dat ouders nu voldoende betrokken worden in dit proces?*

1. *Waarom wel/waarom niet?*

ii. *Hoe zou u meer aanwezig willen zijn in de besluitvorming van deze ruimtes?*

b. Nee: *volgende vraag:*

i. *Waarom niet?*

13. Wat vindt u van de manier waarop meningen van ouders worden meegenomen in ontwerp- en implementatiekeuzes van speeltuinen in de stad?

14. Wat vindt u van het idee van de gemeente om speeltuinen te plaatsen in de binnenstad? Zou u uw kinderen hier naartoe meenemen?

15. Welke factoren vindt u dat sowieso bijdragen aan een succesvolle speeltuin in de binnenstad?

Bedankt voor uw reactie! Dit helpt mij zeker in mijn afstudeerproject naar meningen over speeltuinen, hoe deze invloed hebben op het gebruik van speeltuinen en om een passend advies te geven aan de gemeente Groningen.

Hier hebt u nog ruimte om alles te noemen wat u nog wilt toevoegen en wat zeker moet worden meegenomen in het onderzoek:

Appendix III. Interview guide politician and policy-maker

Openingsvragen

1. Hoe is uw betrokkenheid bij spelbeleid?
2. Hoe lang werkt u al in deze positie? / Wat maakt uw werk interessant?

Hoofdvragen

Thema I: Spelen in de Binnenstad

3. Hoe is de motie Spelen in de Binnenstad tot stand gekomen in Groningen?
 - a. *Wat zijn bepaalde eisen en factoren (zoals bepaalde mensen en financiën (?)) die ervoor zorgen dat Spelen in de Binnenstad mogelijk is?*
 - b. *Hoe is het initiatief begonnen? Doorvragen naar details over wie/hoe/waarom?*
 - c. *Wat waren (formele) beslissingen die genomen moesten worden om het idee zo ver te krijgen als het nu is?*
4. Hoe gaat Spelen in de Binnenstad in de komende maanden verder geïmplementeerd worden?
5. Waarom keurt u het idee goed om speeltuinen in het stadscentrum te plaatsen?
6. Denkt u dat deze speeltuinen succesvol zullen zijn? *Waarom? Hoe?*
7. Hoe worden kinderen en ouders (en hun ideeën) in deze beslissingen meegenomen? *Verschillende vragen kunnen hierop doorgevraagd worden:*
 - a. *Waren ze initiatiefnemers?*
 - b. *Hoe hebben ze hun mening kunnen laten horen?*
 - c. *Zijn de speeltuinruimtes voor iedereen toegankelijk of vooral voor mensen wonend in het centrum?*
 - d. *Kunnen ze meepraten tijdens het proces of alleen tijdens de evaluatie?*

Thema II: Beleid en ontwerpkeuzes

8. In hoeverre kan Groningen gezien worden als een kindvriendelijke stad?
9. Hoe vindt u de aanwezigheid van het aantal speeltuinen/kindvriendelijke omgevingen in Groningen?
10. Wat is het implementatieproces van recreatie(speel)ontwerpen of concepten in Groningen?
11. Welk beleid is in plaats om kindvriendelijke gebieden te realiseren?
 - a. *Wat zijn de onderliggende (beleids)doelen? Zoals duurzaamheid, mobiliteit, leefbaarheid, gemeenschap...*
 - b. *Welke onderdelen van de beleidsvorming op dit gebied zijn het meest tijdrovend?*
12. Laten we zeggen dat het Noorderplantsoen nog geen speeltuin heeft, hoe zou het proces eruitzien om daar iets neer te zetten?
13. Hoe worden kinderen, *hun eisen/benodigdheden/meningen*, meegenomen in het ontwerp van speeltuinen?
14. Hoe participeren ouders in ontwerpkeuzes en het beleidsproces dat plaatsvindt?
Verdere vragen kunnen zijn:
 - a. *Waarom gebeurt dit zo?*
 - b. *Vindt u dat dit de goede manier is?*
 - c. *Hoe zou de participatie omhoog kunnen als ouders dit zouden willen?*

Thema III: Mening van ouders en andere vragen

Ouders zijn per enquête gevraagd wat zij belangrijk vinden aan speeltuin ontwerpen en ...
Deze vragen worden later gemaakt, afhankelijk van de resultaten van de enquête Daarnaast kunnen de vragen bij de andere thema's geplaatst worden als dat beter past.

Sluitingsvragen

15. Is er nog iets wat u wilt toevoegen?

Dank u wel.

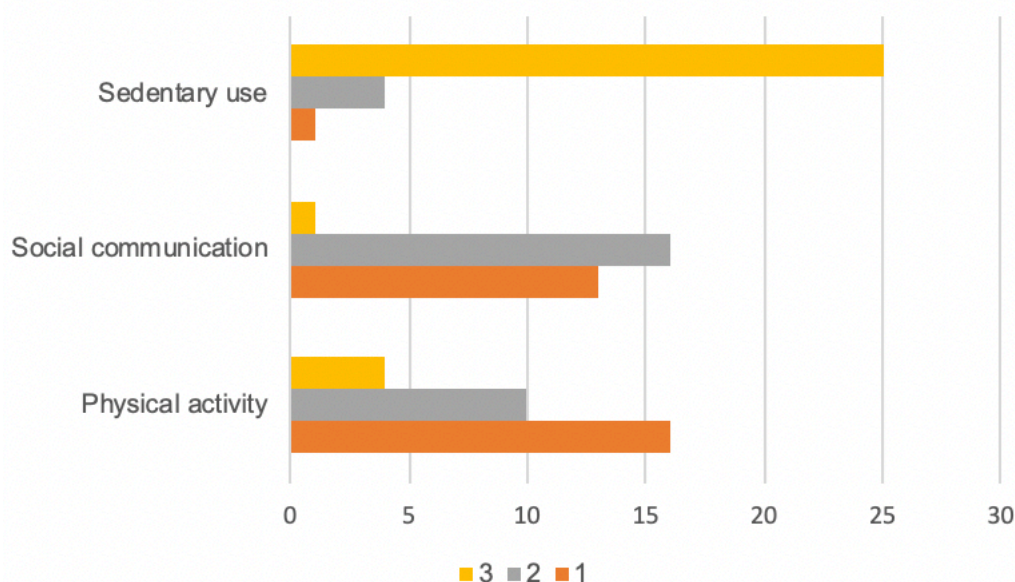
Appendix IV. Questionnaire results and coding

Key questions

Q1. Wat voor invloed hebben de volgende factoren op uw besluit om uw kind naar een speeltuin te laten gaan?

	Minimum	Maximum	Mean	Std. Deviation	Variance	Total
I Ontwerp	2	7	4,86	3,21	10,29	29
II Toestellen	3	7	5,63	4,39	19,24	30
III Weer	1	7	5	3,55	12,57	30
IV Openingstijden	2	7	5,18	2,54	6,48	22
V Toegankelijkheid	1	7	5,18	2,89	8,33	28
VI Veiligheid	3	7	5,93	4,85	23,48	29
VII Mening kind	2	7	5,89	4,83	23,33	28

Q5. Hoe wilt u dat uw kind een speeltuin gebruikt? Zet op volgorde van belangrijkheid: (1-meest belangrijk)



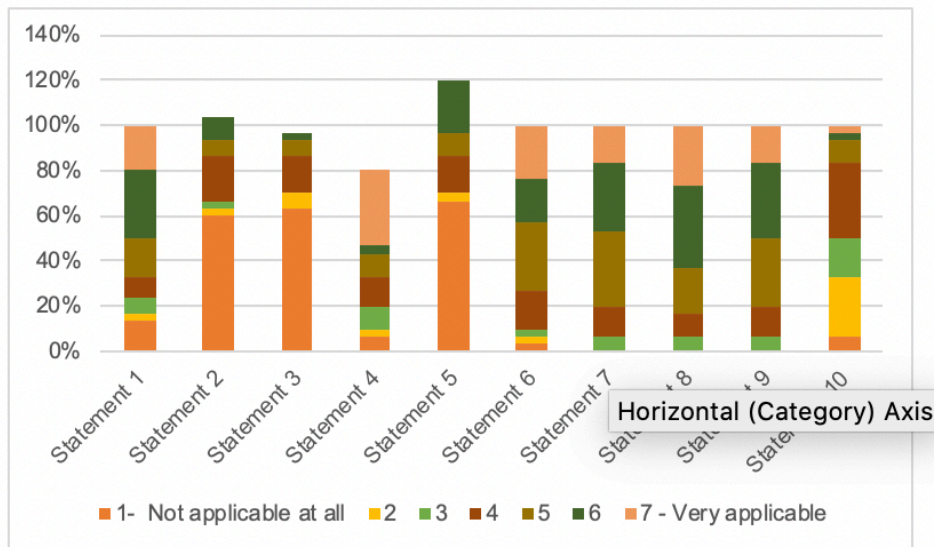
Q6. Wat motiveert u als ouder om uw kind naar een speeltuin (samen) te laten gaan?

Open codes	Level 2	Level 3	Axial codes
Level 1	Level 2	Level 3	
Samen met andere kinderen spelen	Samen met andere kinderen	Sociale moment voor kinderen tussen elkaar	Samenkomst van kinderen
Een sociaal momentje met de burenbuurtkinderen	Sociaal	Ontmoeting	Children's gathering
Goed om andere kinderen te ontmoeten	Andere kinderen ontmoeten	Fysieke beweegmoment	Buiten de huis creëert een andere omgeving voor de beweging van een kind
Even wat beweging	Beweging	Om kinderen actief te laten zijn	Outdoor physical activity
Om mijn kinderen andere beweging te geven	Andere beweging		
Actieve levensstijl en beweging kind	Actieve levensstijl		
Kind kan zich uitleven	Uitleven		
Kinderen kunnen energie kwijt	Energie kwijt		
Afwisseling in de dag	Afwisseling	Buiten zijn op een dag	
Kinderen even lekker buiten zijn	Buiten		

Lekker even eropuit	Eropuit		
Andere omgng voor het kind	Andere omgeving		
Kinderen in de buitenlucht	Buitenlucht		
Even lekker naar buiten gaan	Buiten		
Kan ze dingen ontdekken	Ontdekken	Ontwikkeling door uitdagingen.	Speeltuin biedt andere ontwikkelingen en entertainment aan door aanwezige toestellen Entertainment
Motorische ontwikkeling, gezond.	Ontwikkeling		
Ik kan rustig zitten zonder te hoeven entertainen	Rustig voor ouder	Geen entertainment meer nodig	
Ze worden meer uitgedaagd dan in onze eigen kleine tuin	Meer uitgedaagd		
Aandacht voor mijn kind	Aandacht	Persoonlijke contact met kind	Het is kinds en ouder motivatie om samen naar een speeltuin te gaan. Parent-child relationship
Heerlijk om samen te schommelen	Samen spelen met kind		
Gezellig met mijn kinderen spelen	Gezellig samen met kind spelen		
Kinderen vinden het leuk	Kind motivatie	Motivatie van het kind	
Ons kind wil graag actief buiten zijn	Actief buiten motivatie		

Q8. Beantwoord de volgende stellingen:

Stelling	1- helemaal niet van toepassing	2	3	4	5	6	7 – zeer van toepassing	Total
Stelling 1	13%	3%	7%	10%	17%	30%	20%	30
Stelling 2	60%	3%	3%	20%	7%	10%	0%	30
Stelling 3	63%	7%	0%	17%	7%	3%	0%	30
Stelling 4	7%	3%	10%	13%	10%	3%	33%	30
Stelling 5	67%	3%	0%	17%	10%	23%	0%	30
Stelling 6	3%	3%	3%	17%	30%	20%	23%	30
Stelling 7	0%	0%	7%	13%	33%	30%	17%	30
Stelling 8	0%	0%	7%	10%	20%	37%	27%	30
Stelling 9	0%	0%	7%	13%	30%	33%	17%	30
Stelling 10	7%	27%	17%	33%	10%	3%	3%	30
Stelling 11	13%	3%	7%	10%	17%	30%	20%	30



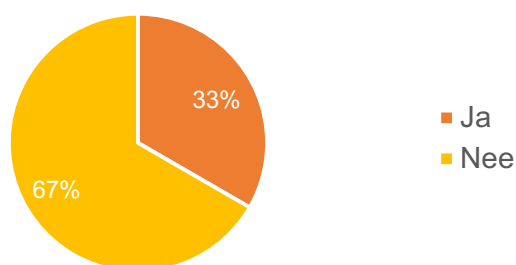
Q9. Hoe ziet de ideale toegankelijke speeltuin eruit en waarom zo?

Open codes <i>Level 1</i>	<i>Level 2</i>	Axial codes	Selective codes
Veel afwisseling aan toestellen en materialen	Afwisseling toestellen en materialen	Aanwezigheid van verschillende toestellen en materialen	Verschillende speeltoestellen en het gebruik van verschillende materialen creëert gebruik van verschillende kinderen Equipment and materials
Verschillende toestellen met voldoende ruimte erom heen	Verschillende toestellen met voldoende ruimte		
Mix van materialen voor ondergrond, gras en zand	Mix van ondergrond materialen		
Zo natuurlijk mogelijk	Natuurlijk	Natuur en zand aanwezig op de speeltuin	Natuur in vorm van gras of zand ziet er toegankelijk uit
Natuur betrokken	Natuur betrokken		
Aanwezigheid van natuur en zand	Natuur en zand aanwezig		
Prullenbak	Prullenbak	Schoon	Een schone omgeving die spelen aanbied door veilige toestellen en oppervlaktes
Bordjes geen honden uitlaat	Geen honden uitlaat		
Kleinschalige buurtspeeltuin in plaats van massale verzamelSpeeltuin	Liever kleine dan grote speeltuinen	Een veilige omgeving voor kinderen	Clean and safe
Ruimte is rondom de speeltoestellen	Ruimte rondom toestellen		
Veiligheid	Veiligheid		
Goed zicht op wat er gebeurt in de speeltuin	Zicht op speeltuin		
Makkelijk om bij de speeltuin te komen	Makkelijke route naar speeltuin		
Veilige valzones	Veilige valzones		
Uitdagend voor diverse leeftijden en op veel manier te spelen	Uitdagend voor diverse leeftijden		
Voor oudere kinderen nog wat grotere dingen	Voor oudere kinderen		
Voor verschillende soorten kinderen (leeftijd, motoriek) het kunnen gebruiken	Voor verschillende soorten kinderen		
Geschikt voor meerdere leeftijden	Geschikt voor meerdere leeftijden		
Er is alles voor elk kind	Voor elk kind		
Heggetjes om achter elkaar te verstoppen	Heggetjes voor verstoppen	Ruimte voor creativiteit	
Het moet ruimte geven om zelf een spelvorm te bedenken	Ruimte om spelvorm bedenken		
Avontuurlijk	Avontuurlijk		
Meest ideaal is een plek om koffie te halen	Plek om koffie te halen	Faciliteiten aanwezig speciaal voor ouders	Ouders willen ook voordelen naar het gaan van een speeltuin Parents' advantages
Bankjes zodat ouders lekker kunnen zitten	Bankjes voor ouders		
Voldoende bankjes waar je als ouder kan zitten	Voldoende bankjes voor ouders		

Q10. Hoe ziet een kind-veilige speeltuin eruit en waarom zo?

Open codes <i>Level 1</i>	<i>Level 2</i>	Axial codes	Selective codes
Toestellen waar niet pijn aan kunnen doen	Toestellen geen pijn	De aanwezige toestellen en ondergronden van de speeltuin moeten niet zorgen voor pijn.	Veiligheid in omgeving, toestellen, materialen en ondergronden Safety in content and design
Als het hoog is, moet het goed afgesloten zijn	Hoogte, goed afgesloten		
Veilige ondergronden	Veilige ondergronden		
Geen scherpe toestellen of uiteindes	Geen scherpe vormen		
Veilige valzones	Veilige valzones		
Aanwezigheid van ouders	Aanwezigheid ouders	Veiligheid door aanwezigheid ouders	“ Eyes on the street ”
Zitplaats voor ouders zodat die in de buurt zijn	Zitplaats zodat ouders in buurt zijn		
Meerdere ouders in de buurt	Ouders in de buurt		
Goed zicht op het speelterrein	Zicht op het spelen		
Overzichtelijke plek	Overzichtelijk		
Een hek zodat ze niet weglopen	Hek voor afsluiting	Kinderen in de gaten houden	
Geen hoge bosjes of dicht struikgewas, open zijn.	Open		
ieder op zijn niveau veilig spelen	Spelen voor iedereen mogelijk		
Ik mis de uitdaging	Mis uitdaging	Aanbieden van verschillende speelmogelijkheden	Motivation van een kind om te spelen
Het mag allemaal wel een beetje uitdagend	Meer uitdagend		
Niet gebruikt door hangplaats van kinderen ouder dan 15/16.	Geen hangplaats zijn		

Q12. Zou u mee willen participeren in het ontwerpen van een speeltuin?



Q15. Welke factoren vindt u dat sowieso bijdragen aan een succesvolle speeltuin in de binnenstad?

Open codes	Axial codes	Selective codes
Zand en of water	Natuurgebruik in de speelruimte	Groene materiaal gebruik
Natuur		
Een groene plek		
Verschillende doelgroepen toegankelijk	Toegankelijk en interessant voor verschillende doelgroepen	Benaderbaar
Geschikt voor jong en oud		
Afwisseling		
Ruimte		
Toestellen tegen weer en gebruik		
Uitdagend voor kinderen, unieke toestellen		
Goedkope parkeergelegenheid	Aangeboden mogelijkheden om spelen makkelijk te maken	Faciliteiten
Bereikbaar		
Zitbank voor ouders		
Mogelijkheid van ouders om daar te zijn en zicht te hebben		
Passend in het straatbeeld	Fijne en veilige uitstraling van de speelplek	Design
Netheid		
Gezellig uitziet		
Veiligheid van kinderen		
Omheind veilig		

Appendix V. Interview codes

Table V1. Selective code: Begin design process

Open codes <i>Level 1</i>	<i>Level 2</i>	Axial codes	Selective code
We gaan de binnenstad herontwikkelen	Herontwikkeling binnenstad	Ambitions of (inclusion) needs to improve the city	Begin design process
Het is ook een ambitie in ons coalitieakkoord staat	Ambitie in het coalitieakkoord		
Het voldoet aan veel ambities	Voldoen aan ambities		
Dat mensen vanuit allemaal verschillende wijken in onze binnenstad moeten welkom voelen	Verschillende mensen vanuit wijken welkom in binnenstad		
Dus een wijk heeft er soms meer behoefte aan speelplekken, dan een andere	Behoeftte van buurt voor speelplekken	The present support base to change areas	
Blijkbaar was de tijd goed	De tijd is goed		
Ik lees het binnen stadsplan en ik mis eigenlijk een beetje het spelen	Mis spelen in binnen stadsplan		
Inderdaad iets is wat leeft in de stad	Leeft in de stad		
Er wonen natuurlijk ook gewoon kinderen in de binnenstad	Wonen kinderen in binnenstad	Improvement aspects of the city centre	
Hier moet meer aandacht voor zijn, voor het verblijf en kwaliteit in de binnenstad, met name voor kinderen	Meer aandacht kwaliteit en verblijf voor kinderen		
Plek waar je belevenissen ervaart	Belevenissen		
Er zijn ook natuurlijk heel veel speeltuintjes relatief onder het oog onttrokken	Veel speeltuinen onder het oog onttrokken		
Heel nieuwe wijk ... niet gewacht tot de bewoners er mee komen	Nieuwe wijk krijgt speelplek		
De aandacht voor kinderen overal in meenemen	Aandacht voor kinderen		
Van een Place to buy naar een Place to be	Place to buy naar Place to be	International challenges	
Bijna alle steden in de wereld hier over nadenken.	Steden denken hierover na		
Erg zorgen dat er ongelijkheid is, dus kansen ongelijkheid van kinderen toeneemt	Aanwezige ongelijkheid tussen kinderen		
Binnensteden worden ook geconfronteerd met allerlei nieuwe uitdagingen en dat is bijvoorbeeld de hittestress en water	Binnensteden nieuwe uitdagingen vanuit klimaat		

Table V2. Parental participation in policy process

Open codes <i>Level 1</i>	<i>Level 2</i>	Axial codes	Selective code
Wel ideeën kunnen aandragen [social media]	Ideeën aandragen via social media	Mediums for knowledge sharing	Parental participation in policy process
Let's Gro kun je kleine proefstellingen kun je maken	Let's Gro proefstellingen		
Kijken door een bewonende avond	Bewonende avond		
Combineert met projectgroep, je wilt zo goed mogelijk draagvlak creëren	Projectgroep creëert draagvlak	Reasons to participate	
Dat heel veel mensen dit wel herkende	Mensen herkennen dit		
Fijn vinden dat doelgroepen worden betrokken bij de uitwerking hiervan	Doelgroepen betrokken		
Inderdaad hier is draagvlak voor	Draagvlak voor		
Willen we natuurlijk de eindgebruiker willen spreken	Eindgebruiker spreken		
Maar dat [hoe gebruiken ouders het] is participatie en dat is voor ons belangrijk	Participatie belangrijk om gebruik te weten	Feedback on the process of parent participation	
Het liefst proberen we het kind er dan ook in te betrekken	Kind er bij te betrekken		
Vraag ophalen en vertaal naar ontwerp, in sommige gevallen wordt dat ook nog met de buurt gecommuniceerd dat er nog wat laatste opmerkingen over geplaatst kunnen worden, maar ik moet zeggen dat het niet per de met elk speeltuintje gebeurd	Vraag naar ontwerp, niet altijd terug gecommuniceerd naar buurt		
Maar dit gemiddelde Groninger ontgaat dit natuurlijk helemaal	Gemiddelde Groninger ontgaat het		
Liever dat het proces helder is	Proces moet helder zijn		

Table V3. Important playground design characteristics

Open codes <i>Level 1</i>	<i>Level 2</i>	Axial codes	Selective code
Als ik met mijn kinderen in de binnenstad ben, dan is er voor hen niks te doen	Voor kinderen niks te doen	Currently, not attracting children	Important playground design characteristics
We gaan alles opnieuw inrichten. We kunnen het gewoon meenemen	Opnieuw inrichten	Attractivity	
We kijken wat het meest gebruikt wordt	Meest gebruikt wordt		
Investeren in spectaculairdere speeltuinen	Investeren spectaculairdere speeltuinen		
Je maakt daarmee de voetganger prioritair	Voetganger prioritair		
Verschillende manieren er veel aandacht aan besteden [kindvriendelijke stad zijn]	Verschillende manieren aandacht aan kinderen		
Sociaalveilig zijn, waar dan ouders of zelfs opa en oma ook plezier in hebben om er even te gaan zitten	Sociaalveilig voor ouders en opa en oma	User-friendly to different stakeholders	
Hoe leuk is het dat als er 's avonds studenten opzitten en overdag kinderen daar mee spelen dan heeft iedereen daar plezier van	Studenten en kinderen kunnen er gebruik van maken		
De ene plek het maakt voor de echte kleine kinderen en op de andere plek wat echt grotere toestellen	Ene plek voor kleine kinderen en andere voor grotere		
Toegankelijk is met mensen met een beperking	Toegankelijk voor mensen met beperking		
Erg afhankelijk van de leeftijdsopbouw	Afhankelijk van leeftijdsopbouw	Policy on design characteristics	
We hebben niet echt een beleid van binnen zoveel vierkante meter moet er een speelplek zijn	Geen precies beleid over spelen		
Misschien wat bomen planten en wat water elementen maken	Bomen en water elementen maken	Inclusion of nature in the design	
Duurzaam is	Duurzaam		
We hebben wel een speelruimtebeleid, maar dat gaat natuurlijk ook over veiligheid dat soort zaken ja	Speelruimtebeleid over veiligheid	Inclusion of safety in the design	
Het moet veilig kunnen onderhouden worden, voorwaarden aan het moet voldoen	Veilig kunnen onderhouden		
Dat ze zich daar veilig voelen	Daar veilig voelen		