

Research Article

Mothers' Perspectives on the Play of Their Children with Attention Deficit Hyperactivity Disorder

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Background. Play, which is fundamental to children's lives, can be utilised to enrich their daily experience. However, the available knowledge regarding the impact of play on children with attention deficit hyperactivity disorder (ADHD) is limited. Therefore, this study is aimed at investigating mothers' perspectives on their children with ADHD in Kuwait regarding their play preferences, the impact of play on ADHD behaviours, and the strategies used to regulate their children's ADHD symptoms. **Methods.** Eight mothers of children aged five to ten years old with ADHD were recruited via purposive sampling. Their perspectives were qualitatively explored through one-week diaries of their children's routines followed by semistructured interviews. The data were analysed using thematic analysis. **Results.** Four themes emerged: (1) play characteristics for children with ADHD, (2) play preferences, (3) play settings and their impact on ADHD symptoms, and (4) mothers' values, understanding, and influence on play. Children were found to spend most of their playtime in indoor settings, largely playing video games. The mothers acknowledged the positive influence on their children of outdoor play and the deleterious effect of video games. However, they undervalued the contribution of play to their children's development. Their strategies for regulating the types of play that diminish their children's ADHD behaviours were less well understood. The weather and mothers' other responsibilities were the main barriers. **Conclusions.** Understanding the play of children with ADHD revealed the requirement for more opportunities for different types of play, with more consideration of those that positively manage ADHD behaviours.

1. Introduction

Attention deficit hyperactivity disorder (ADHD) is a common childhood neurodevelopmental condition [1]. A child is recognised as having ADHD when inattention, impulsivity, and hyperactivity behaviours cause a disruption of successful functioning in daily activities. Due to these main features of the disorder, children with ADHD are usually at greater risk of poorly managing life's domains, including self-care (e.g., the performance of morning routines) [2], productivity (e.g., low academic achievement) [3, 4], and leisure (e.g., developmentally inappropriate playing skills) [5, 6]. Hence, ADHD disrupts a child's everyday life, including play, which is the child's medium through which he/she develops and interacts with the surrounding environment [7].

Play can be understood as a requirement and an internal motivation for active engagement, enabling enjoyment from an activity that is freely chosen [7, 8]. It is the main childhood occupation and a fundamental building block for developing later life skills [7]. Since a crucial portion of a child's time budget is taken up with play [9], utilising it efficiently can naturally enrich a child's daily experience. Currently, there is a distinct lack of knowledge in particular for children with ADHD regarding this childhood occupation both internationally and in Kuwait.

The rate of diagnosis of ADHD in the Arab world is very similar to those in other cultures, although studies on ADHD in these countries constitute only 0.9% of their mental health publications [10, 11]. Despite the fact that Kuwait is considered to be one of the top countries in terms of mental health

research in the Arab world [11], the review of Farah et al. [10] from 1966 to 2005 found that no studies related to ADHD were conducted in Kuwait in that period. Since 2005, Salem et al. [12] published the first study on ADHD in Kuwait. They highly recommended further studies on this topic because of the disrupted life activities experienced by children with ADHD living in Kuwait.

Children with ADHD may engage in developmentally inappropriate play and experience play deficits compared with their typically developing peers [5, 6, 13]. This suggests an occupational imbalance, as it is the child's occupational right to be able to participate in diverse meaningful occupations [14]. Miller Kuhanek et al. [15] suggest that occupational therapists should recognise play as a primary goal of intervention because it is an essential occupation of childhood, and not just a means to an end.

Pfeifer et al. [6] studied the play preferences of children with ADHD aged seven to twelve. They found that the most preferred types of play were educational and electronic games in schools and inside houses and that the least preferred ones were motor activities and activities at clubs. Classmates were these children's most frequent play partners, and parents were the least frequent. Sedentary activities, video games, and TV were common choices among children with ADHD, with greater use than for typically developing children [6, 16, 17]. It has been suggested that children with ADHD are more attracted to video games because they offer immediate rewards, reinforce disinhibition, and require little attention [4]. Additionally, the severity of ADHD was directly associated with the level of video game use and ADHD children were found to be at a greater risk of problems associated with video games (e.g., addiction, inattention, loss of control, and tolerance) than were typically developing children [4, 17].

In spite of children with ADHD being less engaged in physical activity, which is their least preferred play type [6, 16], it has many positive influences on managing the symptoms of ADHD. Physical activities contribute to decreasing impulsivity levels, improving inhibitory control, and enhancing neurocognitive functions [18]. Bowler et al. [19], Taylor and Kuo [20], and Wells [21] found that children's function was better than usual after engaging in activities in green settings. Children who played in indoor settings or built areas outdoors (e.g., downtown areas and neighbourhood spaces) had more severe symptoms than did those who played in green settings [19–23].

To summarise the impact of play, it is unfortunately the case that children with ADHD usually engage less in physical activities [17] and play less in green areas [6, 23]. Instead, more time is spent on video games, which are reported to exacerbate their symptoms.

Although play is directed and controlled by the players themselves, it has been shown that parental beliefs, particularly those of the mother, influence its frequency and form [24, 25]. Gerlach et al. [26] showed that the play choices within a home are usually made by the mother. However, there is an absence of knowledge with regard to the play participation of children with ADHD and their mothers' roles and perspectives. The survey of Taylor et al.

[23] appears to be the only available study on parents' perceptions of play's influences on ADHD symptoms. The study investigated the perspectives of parents of children, aged seven to twelve years, with ADHD and attention deficit disorder, with regard to the after-effects of activity on the severity of symptoms. The findings highlighted that parents perceived that activities that occurred in green outdoor settings helped reduce the symptoms, whereas the symptoms were exacerbated after engaging in activities in nongreen settings.

Understanding mothers' views and beliefs towards play can be considered essential to managing their children's condition. Therefore, the purpose of this study was to

- (1) Identify the preferred types of play for children with ADHD from the mother's perspective
- (2) Investigate mothers' perspectives regarding the impact of play on their children's behaviour
- (3) Explore the mothers' strategies used to regulate their children's ADHD symptoms and play

2. Materials and Methods

To understand the influence of play on children with ADHD, a qualitative approach was used because its nature is embedded in investigating life experiences from the participants' perspectives [27].

2.1. Participants and Sampling. The study included eight mothers of children who were born and brought up in Kuwait and had been diagnosed with ADHD. Mothers were purposively chosen for this study as an informant resource for their children, as they manage daily childcare [25, 28]. The inclusion criteria were mothers of at least 18 years of age and having a child with ADHD between the ages of five and ten years. Only children who had been professionally diagnosed by a paediatrician as having ADHD, using a standard assessment procedure based on DSM-5 criteria, were accepted [1].

Mothers were recruited via purposive sampling from a Developmental Paediatric Unit, in Kuwait. Mothers who met the study's eligibility criteria were drawn from the files and contacted consecutively through the unit via a phone call until the required sample size was reached. Participants who gave their initial agreement were then contacted by the researcher to arrange for data collection.

2.2. Ethical Considerations. Ethics approval was obtained from the Ethics Committee at Cardiff University, UK, and the Standing Committee for the Coordination of Health and Medical Research at the Ministry of Health, Kuwait. Participants were given an information sheet which outlined their rights. Informed consent was obtained from all individual participants included in the study. Confidentiality was maintained by keeping all data secured, with pseudonyms replacing participants' actual names.

2.3. Description of the Participants. When referring to the participants, pseudonyms have been used to preserve

anonymity. Table 1 shows the details of the participants. All mothers were living in two-parent families. Most of the families were from the middle to upper middle class. Their educational level ranged from high school diploma to post-graduate degree, with the majority holding a college degree. Two of the participants had children with comorbidities, and another two had a second child with ADHD. The male to female ratio of the children was 3 : 1.

2.4. Data Gathering. The study occurred during the summer holiday to limit the influence of the school-day routine. Diaries and interviews were used to collect data. Participants were initially asked to keep one week of the children's daily activities, capturing the events and experiences in natural and spontaneous contexts. One week was considered a manageable timeframe, without being too burdensome for participants [29, 30]. The structure of the diary was designed by the researcher and included a cover page with a clear set of instructions on how it was to be completed, with an explanation of what was needed in each section of the diary to record the following: the types of play in which the children engaged, for how long, where, and with whom. The design of the time-based diary used fixed intervals to encourage the participants to keep their records every two hours. This approach was adopted to limit retrospection bias or missing events between longer intervals [30, 31]. Before using this diary, its reliability and ease of use were established by asking two mothers of typically developing children, a boy and a girl (6 years, 0 months, 7 years, and 6 months), to fill the diaries two weeks apart. Most of the findings reported during the first administration were again reported in the diary for the second week. Following the piloting, minor changes were made on the diary by adding an example for one day and having the pages of the diary clearly ruled up with headings.

The interviews were scheduled following completion of the diary. A private room in the Developmental Paediatric Unit was used for the semi-structured face-to-face interviews, which lasted for about one hour and were audiotaped for later transcription. In addition to the prepared questions, which acted as an interview guide (see Table 2), the researcher had the flexibility to pose unplanned follow-up questions when specific issues needed further clarification.

2.5. Data Analysis. The data of verbatim transcripts of the interviews and diaries were analysed using thematic analysis. They were summarised to short phrases by searching the data for repeated patterns of meaning and reduced to key points eliminating unnecessary features [32]. This was done to initiate constant comparison where lists of similarities and differences were prepared. These relationships supported the coding process, where data were reduced into meaningful categories that formed the themes [33]. These developed themes were sent to the participants for member checking to ensure that the evolving findings accurately reflected their views. Since the data were collected in Arabic, only the participants' quotes that were included in the paper were translated into English to minimise the risk of mistranslation [34]. Translation was performed by

a bilingual investigator and was reviewed by another bilingual English and Arabic speaker.

2.6. Trustworthiness. Trustworthiness was maintained via triangulation and member checking to increase the confidence in the findings [35]. The multimethod use, triangulation of diaries besides the interviews, assisted in building a coherent justification for the chosen themes [29, 35]. In addition, sufficient descriptions of the participants were presented with the detailed transcripts established from the recorded interviews [35, 36]. Direct quotes from the interviews were also used, thereby guiding the reader throughout the process of reaching particular findings [36].

The primary researcher has prior experience working with children from the same sociocultural context as that of the research. This insider status facilitates sensitivity towards the participants. However, having a preconception regarding this population might influence the analysis process. Triangulation and having a coauthor from another background were used to mediate any prior presumptions.

3. Findings and Discussion

Based on an in-depth analysis of the data collected from the perspectives of mothers concerning the influence of play on their children with ADHD, four themes emerged: (1) play characteristics for children with ADHD, (2) play preferences, (3) play settings and their impact on ADHD symptoms, and (4) mothers' values, understanding, and influence on play (Table 3).

3.1. Theme One: Play Characteristics. Under this theme, there were two subheadings: stimulation and change and play partners.

3.1.1. Stimulation and Change. The mothers reported that their children were active and liked to play and explore the world around them. However, their children easily become bored and continuously changed the game they were playing.

Sameera: "she plays most of the time, she doesn't sit down and always wants to move about to explore her surroundings. She gets bored very quickly, even when playing. She doesn't play the same thing for more than ten to fifteen minutes unless it's the iPad."

This describes the children's need for stimulation and change. The children lacked persistence and displayed excessive motor activity. They were seen as moving and exploring, which could be explained as features of the condition itself. Additionally, their difficulties in sustaining focus and their desire for immediate rewards [1] could explain their behaviour of changing the game.

3.1.2. Play Partners. The children usually played and preferred to play with a partner rather than alone, unless that they were spending their time using electronic devices.

Laila: "he often plays with his brothers; he doesn't play alone unless it's the iPad or watching television."

Children's play partners were usually their siblings and/or cousins. This study occurred during the summer holiday, which may explain why classmates were not reported.

TABLE 1: Participants' details.

Participant's name	Child's gender	Child's age*	No. of siblings	Child order	Grade at school**	Comorbidity	History of ADHD in the family	Household income	Mother's educational level
1 Hanan	Male	6 yrs, 8 mths	3	3rd	2	—	Older brother	High	Bachelor's
2 Amal	Female	10 yrs	2	2nd	5	Dyslexia	—	Moderate	Bachelor's
3 Zahra	Male	9 yrs, 6 mths	4	4th	5	—	Older brother	Moderate	Bachelor's
4 Mariam	Male	5 yrs, 8 mths	1	2nd	1	—	—	High	Bachelor's
5 Laila	Male	5 yrs, 8 mths	4	3rd	1	—	—	High	Master's
6 Amna	Male	6 yrs, 4 mths	1	1st	1	—	—	Moderate	Bachelor's
7 Nadia	Male	5 yrs, 11 mths	0	1st	1	—	—	Moderate	High school
8 Sameera	Female	5 yrs, 11 mths	1	2nd	1	Learning difficulties	—	Moderate	Bachelor's

*The child's chronological age on the day of participation; ** the grade that the child will enter the next term.

TABLE 2: Interview guide.

1.	Is your child's play affected? Explain why yes or why no.
2.	What types of toys are available at home?
3.	Who usually chooses the toys?
4.	What type of play does your child prefer?
5.	With whom does your child usually play?
6.	How important do you think play is?
7.	What types of play do you ensure that your child engages in?
8.	Tell me about your child's routine
9.	Mention 3 play types that you think affect your child's ADHD symptoms positively? Explain how?
10.	Mention 3 play types that you think affect your child's ADHD symptoms negatively? Explain how?
11.	How you are dealing with these negative influences?
	From your point of view, what are the effects of medication?
12.	How severe are your child's symptoms when he/she is not on medication?

TABLE 3: Emerged themes.

Themes	Subthemes
<i>Theme one:</i> play characteristics	(a) Stimulation and change (b) Play partners
<i>Theme two:</i> play preferences and their impact on ADHD symptoms	(a) Electronic devices (b) Physical activities
<i>Theme three:</i> play settings and their influence on play and ADHD symptoms	(a) Indoor settings (b) Outdoor settings
<i>Theme four:</i> mothers' values, understanding, and influence on play	(a) Limited understanding of the value of play (b) Mothers' influence on play

Siblings were easily accessible for play most of the time. Further, cousins being frequent play partners reveal the close relationships among Kuwaiti-extended families. However, there was a clear lack of mothers' participation in childhood play experiences.

Amal: "sometimes I have time to play with her, but that only happens rarely like when she moans, so I tell her I'll play with her but not for long because I have other work."

3.2. Theme Two: Play Preferences and Their Impact on ADHD Symptoms. All children preferred playing video games and watching TV. The play least reported was games with rules, as well as educational games, which they usually refused. Their preferences of the selected play types can be understood from the clarification of Khalife et al. [37] regarding the requirements of play, i.e., concentration, perception, and self-directedness, which may be challenging for children with ADHD.

Two main types of play were indicated by the mothers that had a direct influence on their children's ADHD symptoms: video games and their negative impact and the positive influence of physical activities. These were both consistent

with the literature of how play influences the symptoms of ADHD [17, 38].

3.2.1. Electronic Devices. The diaries showed that children spent most of their time on electronic devices but that their use varied on a daily basis. The minimum use was found to be one hour, and the maximum was nine hours per day (median of two and half hours per day); their use varied between 12 and 58 hours per week (median 17 hours per week). These times may be compared to those of Weiss et al. [4] who reported that in the general population, people spend three hours per day on videogames, while in the psychiatric population including people with ADHD, people spend 6 hours per day, which is double to that of the general population.

Playing with electronic devices was one of the few activities that all the mothers described clearly in their diaries.

Nadia: "he only has Minecraft blocks, PlayStation, and an iPad, plus he watches television, so these four things, he plays with remote-controlled cars, that's only when he gets bored with the PlayStation and the iPad or if I take them from him."

Participating in this study seems to have been a revelation for the mothers because of the nature of qualitative research, which offers rich descriptions of experiences (e.g., daily routines) that mothers may have been unaware of prior to keeping the diaries.

It was interesting that the mothers clearly stated the negative effect of videogames on their children's behaviour. Zahra indicated the following:

"If he plays on the PlayStation, iPad, or mobile game apps, he gets very angry and fights with his brothers. He stops paying attention to his surroundings and doesn't respond at all."

It may be suggested that the predominance of the use of video games in the current study is a consequence of the dramatic changes in technology in recent years. Personal tablets (e.g., iPad) have become a toy that most children own. The negative impact of video games is commensurate with Mazurek and Engelhardt's results [17], who found that the duration of video game use correlated with problems associated with video game use (e.g., addiction and inattention).

The mothers' use of video games in this study varied. Laila used video games, the same tool, for different purposes, i.e., for reward and distraction:

"If you want to punish him, tell him, 'You won't get the iPad,' and he will listen, or if he does good, I let him download a new app."

"Sometimes when I'm tired and can't be bothered, I give it to him".

Thus, videogames were being used by mothers as negative reinforcement for any maladaptive behaviour, as positive reinforcement for desirable behaviour and to occupy the child. This might explain why children with ADHD had greater in-room video game system access than did typically developing children [17].

3.2.2. Physical Activities. All the mothers either took their children to sport clubs or wished to do so for a variety of reasons. All but two mothers in the current study failed to link

TABLE 4: Play settings.

(a) Indoor	(i) Domestic indoors	Places indoors where it feels close and the space is limited	Child's house or relatives' houses
	(ii) Public indoors	Indoor places with more space than domestic indoor settings	Shopping malls and clubs
(b) Outdoor	(i) Built outdoors	Places that are paved or constructed, mostly man-made areas	Yards (paved stone area in front of the house), downtown areas, neighbourhood spaces
	(ii) Open outdoors	Natural settings (not necessarily green areas)	Beaches, desert landscapes, farmland, parks

their desire to take their children to engage in physical activity with regulating their child's ADHD symptoms.

Amna: "they advised me to release his energy on something else, so I decided to take him for swimming lessons. The extra energy has gone; he comes back and sleeps straight away. This is because he is using up his time and energy on the right things."

The mothers' responses highlight a mainly positive impact of physical activity on children's hyperactivity and inattention. This is consistent with Gapin and Etnier's study [38], who surveyed parents of children with ADHD regarding their perceptions of the influence of physical activity on ADHD symptoms.

3.3. Theme Three: Play Settings and Their Influence on Play and ADHD Symptoms. With regard to the various play activities in which the children engaged, they spent almost all of their time in indoor settings (Table 4). They were rarely found to spend time in built outdoor areas, and when they did, it was only for very limited periods; no activities were practised in open outdoor areas at all. This is proposed to be due to several factors, mainly the weather. Kuwait, the location for this study, is in the north-western corner of the Arabian Gulf, in the Middle East [39]. The climate is typical of a dry desert area, with very long hot summers that are characterised by dusty weather and high temperatures. The mean daily maximum temperature is 45°C and occasionally reaching above 50°C [39, 40]. Adopting an international perspective, several studies identified that the poor or extreme weather conditions (i.e., hot and humid for some countries or wet and rainy for others) influence children's play and its location as their play may vary seasonally [41, 42].

3.3.1. Indoor Settings. Due to the nature of the weather in Kuwait, children spend most of their time in indoor settings. Hence, the diaries were able to shed light on this issue. They spend their summer holidays playing either at home or at their relatives' houses with their cousins. People might spend some time during the week in public indoor settings at shopping malls, where children can access amusement arcades. All of the houses and the shopping malls are air-conditioned areas [39].

3.3.2. Outdoor Settings. Mothers highlighted how much their children enjoy outdoor play. However, there were also those who did not allow the children to engage in outside play, mainly due to the weather.

Mariam: "we don't have many options for outdoor games. In summer, all we have are indoor games in a mall, while in winter, it's different. In winter, we don't even go to indoor games; for example, in the park, he (*her son with ADHD*) always rides his bicycle or takes a walk and then comes back."

This, in turn, increased the hours spent in the home. Consequently, more time was spent on sedentary activities, mainly video games and watching TV. This is consistent with Pfeifer et al. [6] study conducted in Brazil, where children with ADHD preferred playing inside homes and with electronic devices.

Open outdoor areas in this study refer to natural settings, rather than to green areas (Table 3). This is a variation from previous nomenclature regarding playing outdoors. Most previous studies occurred in Western countries and classified areas as green or nongreen [23].

All the mothers acknowledged the positive influence of spending hours in open outdoor areas and perceived these as beneficial both to ADHD symptoms and to their children's moods.

Hanan: "when I take them (*her children*) to the park early in the morning, they play and run and get tired; I feel it's natural and of great benefit, I feel like all the negative energy comes out; when I go back home, I feel he's happy and calm and he even listens to me more. When we go to the chalet on the beach, he plays in the sea the whole day, and when he leaves the sea, he's not tired but happy; you feel like it's an innocent type of play. He becomes less hyperactive because he uses all his energy in a good way."

Sameera: "playing outside, it's very hot, but I feel it's much better; their favourite outing is to the park; they really, really enjoy the park; it's much easier to make them go to sleep after the park; they sleep straight away."

Some of the mothers in the current study reflected on the benefits to their children's condition of playing in green outdoor settings or in natural spaces (i.e., becoming like normal children in their sleeping and eating patterns). Bowler et al. [19] noted that self-reported emotions (e.g., levels of calmness, reduction in tension, or aggression) were the most common outcomes in their studies. In Taylor et al. [23] study, parents found that ADHD symptoms were more controllable after engaging in activities that occurred in green areas rather than other settings. The findings were also similar to those of Kuo and Taylor [22], who found that indoor play exacerbated symptoms.

The positive influence of playing in built outdoor settings was also recognised by some of the mothers.

Laila: "I feel like at home; because it's a closed place and there isn't much space, he uses his energy to argue and fight with his brothers causing many problems. Though, if he plays on his bike outside (*referring to a paved stone area in front of the house*), he comes back too tired to do anything else."

By contrast, Kuo and Taylor [22] showed that playing in built outdoor settings did not reduce symptoms. Moreover, activities in built outdoor settings were found to be related to more severe symptoms such as hyperactivity and the severity of symptoms did not significantly differ from playing in indoor settings [19, 20]. The contrast to the current study may be explained by the type of play in which the children engaged while in outdoor settings rather than by the outdoor space alone.

3.4. Theme Four: Mothers' Values, Understanding, and Influence on Play. Two subheadings revealed from this theme were the limited understanding of the value of play and the mothers' influence on play.

3.4.1. Limited Understanding of the Value of Play. The mothers in this study did not feel that their children had any problems regarding play and considered them to be similar to typically developing children. At the same time, deficits in their play were acknowledged indirectly.

Nadia: "he plays like any other child; I feel like my son thinks bigger than his age; I feel he plays really well."

Later in the interview, she stated the following:

"The last time, three boys were playing football together, so I told him to play with them; he didn't know how to play, and they wouldn't give him the ball, so he got angry and wouldn't play with them."

The above point can be explained by a lack of understanding about the concept of play, its significance, and its benefits. This is illustrated when Amal states the following:

"You can't judge a child on his actions, especially when playing games; you don't say this game is for young children or for old ones."

However, when the mothers compared their children's other skills (e.g., academic performance and self-feeding), they were not considered to be as good as their peers. They also did not value the time spent on play, except with the types they specified.

Mariam: "during the summer holidays, we change the games he plays; for example, we want him to play more focused games that make him think more, like puzzles; we want him to change from the usual cars and trains. This will be more useful for him and will help with school. I don't want him to play useless games. I got him some activity books so that he can work on them before he starts school."

Although this study was conducted during the summer holiday, all the mothers considered children's academic performance in their reports to be their main concern. Therefore, it is not surprising that they indicated that there was a lack of playtime on school days.

3.4.2. Mothers' Influence on Play. Childhood development is strongly influenced by the caregiving environment. The

mothers' perceptions of what they regard as important influenced what play opportunities they provided for their children.

Hanan: "he has loved cars since he was a year and a half old, but lately, I have moved him away from them because I feel all his focus has been on cars."

Zahra: "I like him to participate in active games; I tell him to play on his bike and scooter. I want him to move and release his energy; his energy is repressed, so I want him to be exhausted."

Although the findings suggest that mothers acknowledged the positive and essential influence of spending time playing in outdoor areas, both open and built, as was previously mentioned, the children spent most of their times indoors.

The limited opportunities for outdoor playing for the studied population are considered to be the result of several factors, mainly the weather, but mothers also needed to keep their children under constant supervision. They stressed that their responsibilities were a barrier to taking their children to open play areas.

Amna: "currently, I can't take him to open areas because firstly, it is hot and secondly, I have to look after his younger brother because I can't leave him with anyone."

As video games were the only play category that negatively influenced ADHD from the mothers' point of view, they used a variety of techniques to address this issue. Amal reported the following:

"I'm keen that she doesn't spend a long time on a specific thing, especially the iPad. Now that she's on holiday, every time I come back from work, I see her on the iPad. Even when I go shopping, she brings it along to use in the car. I've signed her up for swimming classes so she can get distracted from the iPad."

"Honestly, I don't give her the iPad charger. At one point, it wasn't working and had a broken screen which helped me get rid of it, I didn't fix it."

Setting rules was the first technique used by the mothers. They set rules regarding the use of video games, they chose which games to download, and they specified playing hours. However, children usually spent more time in the absence of their mothers. The second technique used was to redirect the child's attention to other things. Another technique was negative reinforcement, either directly (e.g., taking away the video game player or controller and deleting specific games) or indirectly by limiting the child's playing time (e.g., not fully charging the video game player or taking away the charger).

Despite the different methods that mothers used to limit the children's use of video games, these strategies appeared ineffective due to the long hours still spent on these devices. It appeared that the mothers were overwhelmed by other responsibilities, did not have the time to guide their children's play, and resorted to using electronic devices that helped occupy their children and keep them busy and out of trouble. This was in addition to a lack of knowledge of how to deal with the condition and appropriate ways of applying strategies. Sciberras et al. [43] studied the information required by parents of children with ADHD. They found

that information regarding problems associated with ADHD, behavioural management, social skills, and educational strategies was considered important by almost every family (93-99%). With respect to the Kuwaiti population, Al-Daihani and Al-Ateeqi [44] surveyed 240 parents of children with special needs and found that a lack of information to help parents cope with their child's problem was the second highest barrier for the parents, after a lack of resources in Arabic.

3.5. Limitations. Although the study's findings are informative, they were based on a small sample size of mothers of children with ADHD between 5-10 years of age and from a specific culture. These factors are therefore likely to limit the generalisability of the results; however, sufficient descriptions of the participants were considered, which could enable comparisons to be made. Another limitation of this research concerns data gathering. In spite of the benefits of utilising short intervals in the diaries, every two hours, some bias of retrospection is to be expected. Also, due to the study's aim of investigating children's play during the summer holiday, it impacted data gathered regarding the type of play since the hot weather revealed as having a significant impact on children's play. The children in this study were sometimes found playing videogames together as parallel play, in the presence of their siblings or cousins. This type of play was classified in the video games category and not within the social category, which increased the likelihood of this category being more prevalent than the others.

4. Conclusions and Recommendations

The study draws on mothers' perspective of the play of their children with ADHD. This includes understanding children's play characteristics and routines as well as the impact of play. Due to the characteristics of ADHD, children were found to be in need of stimulation and change. The limited outside playtime led to leaving more time to engage in sedentary activities with electronic devices. Contrary to expectations, most of the mothers failed to recognise any positive impact on their children's condition after participating in physical play. Some mothers, however, confirmed that their children greatly preferred playing outdoors and acknowledged the positive after-effects of playing in outdoor settings. Our data revealed that weather was the main constraint on time spent in outdoor areas during the summer holiday. Furthermore, the children needed constant supervision when in outdoor areas, which the mothers felt unable to sustain.

The results of this study indicate that the mothers had a limited awareness of the significance of play and its value. The findings also established that the mothers' strategies to deal with the play types that impacted their children's condition were inappropriate. Hence, this study adds knowledge of play occupation, drawing on the need to support both the children and their mothers. The mothers require more professional assistance and guidance to use strategies effectively. These findings are also informative for professionals working

with children with ADHD with respect to helping understand the children's occupation of play and its characteristics. Further research is required to investigate play both during the school term and during the winter holiday break. The impact of different play types and the duration of after-effects requires further research. Noteworthy, creative ideas to incorporate physical play in a hot climate need to be developed to provide opportunities for optimal development for children with ADHD.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Disclosure

The presentation of the manuscript in the British Journal of Occupational Therapy has been presented as abstract.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

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