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Parental perceptions and family role in promoting physical activity in early childhood: a qualitative study.

Percepciones parentales y el rol de la familia en la promoción de la actividad física en la primera infancia: un estudio cualitativo.

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Chihuahua (approval number CI0092023), all participants signed an informed consent form prior to participation.

Summary
Childhood is a critical period for cognitive and motor development, strongly influenced by the child's surrounding environment. For optimal cognitive growth, children need to engage with their environment through movement. However, little is known about how Mexican children participate in motor activities at home. The present study aimed to explore Mexican parents' attitudes toward physical activity (PA), their perceptions of their preschool-aged children's motor development, and their perceived competence in teaching motor skills. Thirty-three mothers of children aged three to six from Chihuahua, Mexico, participated in semi-structured interviews. These interviews were transcribed verbatim and analyzed using thematic analysis. Six main themes were identified: (a) Integration of physical activity into daily life, (b) Activities that promote motor skills (gross and fine), (c) Parental physical activity, (d) Factors influencing the practice of physical activity, (e) Perceptions of motor development, and (f) The importance of physical activity in child development. The results indicate that physical activity (PA) is part of the daily life of many Mexican families; however, its practice is shaped by various factors. Common barriers include work schedules and a lack of awareness regarding its benefits, while parental involvement and family-based activities serve as facilitators. In conclusion, physical activity is a key component of children's environments. Parents acknowledge its importance and identify both barriers and conditions that support its integration into family routines.
Keywords: physical activity; home learning environment; early motor development; qualitative methodology; parental perspectives.

Resumen
La infancia es un periodo crítico para el desarrollo cognitivo y motor, fuertemente influenciado por el entorno que rodea al niño. Para un crecimiento cognitivo óptimo, los niños necesitan interactuar con su entorno a través del movimiento. Sin embargo, se sabe poco sobre cómo los niños mexicanos participan en actividades motoras en el hogar. El presente estudio tuvo como objetivo explorar las actitudes de los padres mexicanos hacia la actividad física (AF), sus percepciones sobre el desarrollo motor de sus hijos en edad preescolar, y su competencia percibida para enseñar habilidades motoras. Treinta y tres madres de niños de entre tres y seis años de Chihuahua, México, participaron en entrevistas semiestructuradas, las cuales fueron transcritas literalmente y analizadas mediante análisis temático. Se identificaron seis temas principales: (a) Integración de la actividad física en la vida diaria, (b) Actividades que promueven habilidades motoras (gruesas y finas), (c) Actividad física de los padres, (d) Factores relacionados con la práctica de la actividad física, (e) Percepción del desarrollo motor, y (f) Importancia de la actividad física en el desarrollo infantil. Los resultados indican que la actividad física (AF) forma parte de la vida cotidiana en muchas familias mexicanas; no obstante, su práctica se ve influida por diversos factores. Entre los obstáculos más comunes se encuentran los horarios laborales y el desconocimiento de sus beneficios, mientras que la participación de los padres y las actividades realizadas en familia actúan como elementos facilitadores. En conclusión, la actividad física representa un aspecto clave en el entorno

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de los niños. Los padres reconocen su valor e identifican tanto barreras como condiciones que favorecen su incorporación en la rutina familiar.

Palabras clave: actividad física; entorno de aprendizaje en el hogar; desarrollo motor temprano; metodología cualitativa; perspectivas parentales.

Introduction

Importance of Physical Activity in the Preschool Years

The World Health Organization (WHO) defines physical activity (PA) as "any bodily movement produced by skeletal muscles that requires energy expenditure" (including leisure, transport or any work-related or domestic activities). The WHO recommends that children under 5 years of age perform at least 180 minutes PA each day, of which 60 minutes should be dedicated to moderate PA, distributed throughout the day (World Health Organization, 2024, para. 5). PA has benefits for both children and adults such as physical fitness, improved cognitive skills and mental health (World Health Organization, 2024, para. 1).

During the early years, children develop fundamental motor skills (FMS) which are divided into locomotor and object control skills. Locomotor skills involve body movements such as running, galloping, hopping, skipping, and jumping. Object control, on the other hand, focuses on manipulating and projecting objects, including activities like throwing, catching, bouncing, striking, and rolling. These skills form the foundation for the development of more complex movements (Arufe-Giráldez, 2025) and predict later PA (Jones et al., 2020).

There are also motor skills that involve moving the small muscles of the hand, known as fine motor skills, which allow the child to draw, write, and manipulate small objects. Fine motor skills allow for cognitive development, are essential for day-to-day activities, and predict school achievement (Contreras Jordán & Infantes-Paniagua, 2020; Şahin et al., 2020). Visual-motor integration involves the coordination of visual and motor abilities. Visual-motor integration and manual dexterity are strongly associated with performance in preschool mathematics (Flores et al., 2023a; Flores et al., 2023b; Jiménez-Lira et al., 2024). As the FMS, fine and visual-motor integration skills are related to PA, we consider it an important contribution to assess and present parental activities associated with these skills (Jiménez et al., 2020).

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Motor skills are crucial in infants' physical, cognitive, and social development. Early engagement in PA not only facilitates motor skill acquisition but also predicts strong performance in later stages of life (Bukvic et al., 2021; Flores et al., 2023b). Daily PA, whether at school or through play at home, supports the development of both gross (Manna, 2014) and fine motor skills (Sutapa et al., 2017).

Play fosters attention and problem-solving abilities (Lockman & Tamis-LeMonda, 2021). A longitudinal study by Gashaj et al. (2021) found that various games, including board games and exergames (games incorporating PA), can enhance executive functions, underscoring the importance of diverse recreational activities for children' s cognitive development. A study by García Jiménez (2023) found that physically active primary school-aged children performed better academically compared to those with more sedentary behavior, thus providing further evidence for the importance of PA during childhood.

Coutinho et al. (2016) classify PA into two categories: structured and unstructured. Structured PA refers to formal exercise and sports activities conducted under the guidance of a professional, with the aim of improving physical performance. In contrast, unstructured PA involves non-formal sports where children engage in physical activities for enjoyment, often in more playful and spontaneous settings.

In a longitudinal study, Dapp et al. (2021) assessed preschool children's gross and fine motor skills using the Movement Assessment Battery for Children (M-ABC-2), along with PA habits assessed by a questionnaire in which children had to report structured and unstructured activities. The study found that children who participated in either structured PA or a combination of structured and unstructured PA exhibited significantly higher development of gross motor skills by their second year of primary school compared to those who only engaged in unstructured PA.

Despite the benefits of PA during preschool years, research shows that parents tend to prioritize academic activities over motor tasks (Mota et al., 2017). This is significant, as insufficient PA during this stage can negatively impact a child's motor, emotional, and social development (Huttenmoser, 1995; Waldron & Finn, 2005). In Mexico, González-Valencia et al. (2018) identified parental time constraints and limited space at home as factors that hinder family-based PA (assessed through group discussions with parents, teachers, and children to document perceptions, attitudes, and barriers to

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physical activity and childhood obesity). Thus, it is essential to explore Mexican parents' physical activities with their children, their attitudes towards PA, their perceptions of their children's motor development, their support for motor activities, and their confidence in teaching motor skills.

Bioecological Model to Understand Influences in Physical Activity

Bronfenbrenner and Morris (2006) proposed the bioecological model of development, defining it as the ongoing process of continuity and change in the biopsychological characteristics of individuals and groups. This model proposes that different contexts influence human development, with interconnected levels that relate to one another. The first level, the mesosystem, represents the immediate environment, such as home, school, and the local community. The second level, the exosystem, includes external contexts that, while not directly involving the child, have a significant impact on them, such as media, extended family, and religious organizations. The third level, the macrosystem, encompasses broader societal contexts, including government and cultural values, which affect the individual even though they may not directly participate in them. These levels are interconnected, as past events influence future behaviors.

Applying the bioecological model to the context of PA, parental involvement is particularly important in early childhood, as it helps shape the environment that can either support or hinder the practice of PA. Access to opportunities for PA, along with parents' knowledge and beliefs about the importance of exercise at this stage, plays a critical role. Additionally, parents' willingness to invest time and resources in developing their children's motor skills can significantly influence their physical development (Crumbley et al., 2020).

Physical Activity at Home

Various factors, including maturation and the environment, influence the development of motor skills (Bukvic et al., 2021). Among these, the home serves as the initial environment where children can be stimulated to learn and practice locomotor movements, allowing them to acquire increasingly complex motor skills (Coronado, 2011). Parents play a crucial role in influencing their children's PA practices (Zovko et al., 2021) by modeling behaviors, reinforcing active habits, and providing opportunities that encourage engagement, especially during early childhood. These actions can

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significantly help modify sedentary habits (Beets et al., 2010) and promote a healthy lifestyle (Arufe-Giráldez, 2020), benefiting children's development considerably.

Environments that promote independence in movement can enhance children's levels of PA (Mota et al., 2017). Children can be physically active at home, at school, or during commuting; however, simply providing free time outside the home does not guarantee increased PA, as it largely depends on the child's preferences (Alhassan et al., 2007).

Cools et al. (2011) examined the relation between parents' PA, their beliefs and involvement, parent-child interactions, family context variables such as transportation to and from school, and motor performance in a sample of 846 preschoolers and their parents in Belgium. To assess PA, the authors engaged participants (parents, children and teachers) in group discussions to obtain insights on perceptions and barriers related to childhood obesity and physical activity; the child's motor performance was assessed through reports of children's participation in sports and recreational activities offered in schools and community centers. The findings revealed that parents' importance on their children's PA, the father's PA levels, and the use of car transportation to and from school were related to the children's motor performance. Additionally, girls who biked to school demonstrated better motor skills than those who did not. For instance, children whose parents emphasized the importance of PA for sports achieved higher scores on motor skills tests, while those whose parents focused on the competitive aspects of PA scored lower. Regarding parental PA, the study found that children of parents who engaged in daily PA scored higher than those whose parents reported exercising once a month or less; likewise, the level of maternal engagement in sports or PA with her children is another factor that determines the level of PA in preschoolers (González et al., 2024).

Dowda et al. (2011) used ActiGraph accelerometers, The Observational System for Recording Physical Activity in Children-Preschool Version (OSRAC-P), parent survey and children's body mass index and identified factors that promote PA in preschoolers at home. These include the importance that parents place on their child's engagement in PA and sports, the availability of resources for PA at home, the quality of the preschool attended, and the enjoyment experienced by both the child and parent during physical activities. However, in contrast to Cools et al. (2011) and to González et

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al. (2024), the authors did not find a relation between parental PA and the PA levels of the children.

Barnett et al. (2019) found that children's interactions with materials and resources for PA are linked to better motor performance (assessed by ActiGraph accelerometers, The Observational System for Recording Physical Activity in Children-Preschool Version (OSRAC-P) and Test of Gross Motor Development-2). Additionally, research has shown that outdoor playtime and participation in sports positively impact motor skills in preschool-aged children (Niemistö et al., 2019).

Parents' Perception of their Children's Motor Skills

Parents play a crucial role in their children's motor development by providing various activities. These activities, in turn, are influenced by parents' perceptions about the importance of PA and the motor skills their children are developing (Hu et al., 2021).

Agard et al. (2021) through qualitative and semi-structured interviews found that some parents of preschool children believe that skills such as hand-eye coordination, running, and balance are essential and require support, while others feel that motor skills develop as the child needs them. In the same study, some parents expressed confidence in their ability to teach these skills, while others stated that they would enroll their children in sports classes to learn from a coach.

In a mixed-methods study, Kesten et al. (2015) interviewed 53 parents of preschoolers aged 5 to 6 years in the United Kingdom regarding their perceptions of their children's PA (assessed with Actigraph GT3X accelerometer19). The authors found that parents with more accurate perceptions tended to have more physically active children since they have greater awareness, willingness to support, and facilitated additional PA to help the child remain physically active. Interestingly, Kesten et al. (2015) discovered that many parents felt it unnecessary to motivate their children to engage in more PA, believing their children were already sufficiently active.

Considering the importance of a child's context in promoting PA, this study aimed to explore Mexican parents' attitudes toward PA, their perceptions regarding the motor development of their preschool children, and their perceived competence in teaching motor skills.

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Materials and Methods

A qualitative study was conducted to explore the home and family factors that influence and promote PA in Mexican preschool children. Twenty questions and their prompts were formulated by the main, second, and fifth author to guide the semi-structured interviews; drawing on insights identified in the literature review. The questions focused on the following topics: family physical activities and their frequency, childhood PA, the importance of PA in preschool, parental attitudes toward PA, parents' perceptions of their children's motor development, parental support for their child's physical activities, and parental competence in supporting their child's PA (see Appendix 1).

Participants

A sample of 33 mothers was recruited from two preschools in Chihuahua, Mexico. Inclusion criteria were that participants had to be mothers of three-to-six-year-old children who were enrolled in preschool and with typical neurological and motor development. Table 1 provides participants' characteristics. The children of the interviewees comprised 55% girls and 45% boys, with an average age of 62.4 months (S.D. = 8.76; range = 44–75 months).

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Table 1.

Participant´s characteristics

Participants	Participant's Employment	Level of education	Child Gender	Child age (months)
Subject 1	Employee	High School	M	54
Subject 2	Housewife	Vocational degree	F	75
Subject 3	Business owner	Vocational degree	F	49
Subject 4	Employee	Middle School	M	63
Subject 5	Employee	High School	F	44
Subject 6	Employee	Middle School	F	55
Subject 7	-	-	M	70
Subject 8	Employee	High School	F	54
Subject 9	Employee	Middle School	M	72
Subject 10	Housewife	High School	M	65
Subject 11	Housewife	High School	M	69
Subject 12	Employee	High School	F	72
Subject 13	Employee	Bachelor's degree	M	63
Subject 14	Employee	Middle School	F	63
Subject 15	Housewife	High School	F	52
Subject 16	Housewife	High School	M	62
Subject 17	Housewife	Middle School	M	60
Subject 18	Employee	High School	F	55
Subject 19	Employee	Bachelor's degree	F	58
Subject 20	Employee	Bachelor's degree	M	53
Subject 21	Employee	Graduate degree	M	52
Subject 22	Employee	Bachelor's degree	F	58
Subject 23	Employee	High School	M	61

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Subject 24	Employee	High School	F	60
Subject 25	Employee	Middle School	F	70
Subject 26	Employee	High School	F	72
Subject 27	Housewife	High School	M	68
Subject 28	Housewife	High School	F	74
Subject 29	Employee	High School	M	73
Subject 30	Employee	Vocational degree	F	48
Subject 31	Employee	Middle School	M	72
Subject 32	-	Middle School	F	71
Subject 33	Housewife	High School	M	71

Note: This distribution is consistent with the state's overall employment statistics (Instituto Nacional de Estadística y Geografía [INEGI], 2024).

Ethics statement

Ethical approval for the project was granted by the ethics committee of the Faculty of Medicine and Biomedical Sciences of the Autonomous University of Chihuahua. All participants received clear and complete information about the study before signing the informed consent form. Parents were informed that their participation was voluntary and that they could withdraw at any stage without any consequences, finally, confidentiality of the data was guaranteed.

Procedure

Permission was requested from 2 preschool directors to recruit parents for the study. Upon receiving authorization, a meeting was organized to invite parents to participate in interviews (interview questions can be provided in supplementary material). During this session, interested parents provided informed consent to participate in the study, and the mothers' phone numbers were requested to schedule the phone interviews, which lasted between 30 and 45 minutes.

The interviews were conducted by phone between October and December 2023 by the first author. The data collection process was concluded once saturation of

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responses was achieved. Subsequently, the interviews were transcribed verbatim using Sonix software (Sonix, 2024) and coded by the first and second author. To protect confidentiality, the initials of the participants' names were used.

Data analysis

Thematic analysis was conducted in the 33 interviews, which had been recorded verbatim and transcribed. The six-step process outlined by Braun and Clarke (2006) was followed and includes the following steps: 1) the interviews were read multiple times to become familiar with the content, 2) initial codes were generated, 3) themes were searched for, 4) the identified themes were reviewed, 5) each theme was named and defined, and 6) the final report was prepared. In step 5, a map was created to illustrate the selected themes and their interrelations (Figure 1). In order to corroborate reliability, three interviews were coded independently by the first and second authors; the codes were shared, and disagreement was encountered for one code (integration of PA into daily life), which was further discussed until an agreement was met.

Results

This study aimed to explore Mexican parents' attitudes toward PA, their perceptions regarding the motor development of their preschool children, and their perceived competence in teaching motor skills. The thematic analysis revealed six key themes: Integration of PA into daily life, Activities that promote motor skills (gross and fine), PA by parents, Factors related to PA practice, Perception of Motor Development, and Importance of PA in child development. These themes are outlined below (see Table 2 for more examples of parent quotes).

Integration of PA into Daily Life

This topic refers to physical activities where parents involve the child either at the family level or individually. Some parents mentioned that both parents try to practice P.A. with their children as often as they can, spending time outdoors and engaging in unstructured physical activities such as informally jumping rope, playing soccer, ball, or riding a bicycle; these activities are carried out mainly in the outdoor environment.

Subject 16… "*Whenever we are out there at the house, we play soccer or hide-and-seek, tag, and things like that. It's almost like I think three times a week, we almost always come home and go to the little park…*" -Son (5 years old).

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On the other hand, some parents mentioned that their children engage in structured PA outside the home environment, attending either private sports lessons (e.g., jazz, boxing, soccer, etc.) or attending activities that their parents are involved in.

Subject 19… "*Well, for example, my two sons play baseball. So, they train all week. On Saturdays we go. They have games (baseball). So, it's almost always three hours outdoors. Today we don't have one (baseball game), I try to take them to the park because they like it. So, they really prefer to be outside. Hey? Rather than, inside the house, actually…"* -Daughter (5 years old).

Unstructured PA at the child's initiative was also mentioned. Parents reported that children find physical activities appealing, and they tend to dance to music videos or enjoy playing ball or football outside with their neighbours:

Subject 30… "*Well in fact, I don't even need to encourage her. She just jumps around and so on. Here…. I don't think…. she moves from one side to the other, she is not like very calm to say the least…*" -Daughter (3 years old).

Activities that Promote Motor Skills

Another theme highlighted by parents was the practice of unstructured gross and fine motor activities. Mothers noted that this practice is encouraged when opportunities naturally arise, either through child's own initiatives or those of other family members, such as when siblings are completing homework.

Gross Motor Skills

Subject 1… "*Sometimes here at home… I stimulate him mmm I make him mmm jump, run, bend down, and exercise like that. Well, we do it almost every day. I'm kind of like teaching him. Let him jump, jump or dance. Mhm. So that he gains a little more confidence…*"-Son (4 years old).

Fine Motor Skills

Subject 3… "*I make accessories for girls, so I am cutting out or making (sewing) patterns and things like that all the time and she wants to help me all the time. So even she, on her little table, I put the same things that I put, her scissors, her colours, so that almost all the time we are doing the same thing*..." -Daughter (3 years old).

Parental Physical Activity

This theme refers to parents' interest in being physically active and participating in dance classes, soccer, baseball, or using home exercise equipment. Importantly,

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children are reported as being interested, involved, and enjoy spending time with their parents during these activities.

Subject 8… "*The thing is that since I play soccer, usually my three children and I are the ones who are there. If I have a game on Saturday and then on Sunday and then each game lasts an hour and that's when we stay, there...*" -Daughter (4 years old).

Factors Related to the Practice of Physical Activity

This theme includes external aspects that result in the practice of PA in different environments. Some parents mentioned that due to factors such as parental work schedules, the practice of PA is limited:

Subject 18… "*Since I work all day, well no, I have no way to move her…*" -Daughter (4 years old).

A factor that promotes PA is commuting, whether to school or somewhere else:

Subject 5. ... "*We walk every day, we take her, and we walk back (from school to her house) for it takes us about ten minutes or so...Well, I think it is about three, about six, seven blocks and we walk...*" -Daughter (3 years old).

Some parents mentioned that some professionals recommend engaging their children in PA to improve their development:

Subject 33… "*My son is diagnosed with Attention-Deficit Hyperactivity Disorder (ADHD). So, this (PA) has been highly recommended to me, both by the neurologist and the psychologist. So, both for concentration and also to calm all the anxiety that it brings...*"-Son (5 years).

Parental perception of their own competence for teaching their children was another factor that parents mentioned that promoted PA:

Subject 29… "*Yes, yes, I feel competent, and I like to do it (PA), I don't think I do it like that every day, but I try to do new things…*" -Daughter (3 years old).

Perception of Motor Development

This theme includes expectations and perceptions of parents regarding their child's motor development. Parents are aware of their children's development by comparing them with other children or observing what they can or cannot do.

Subject 33… "*What is failing him a lot is his hand movements; it is very difficult for him just to hold the pencil correctly…*"-Son (5 years old).

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Subject 13. … "*I have seen many children her age. But really, she is not one of those girls who falls a lot, she is rather very good at running without problems. She doesn't have… she knows how to climb without any problem, and she knows how to play with the ball. She can direct the ball without falling. …. So, I think she is within the normal range, within the average for her age*…" -Daughter (5 years old)

Importance of Physical Activity on Child Development

This theme refers to parents' opinions regarding the practice of PA by their minor and the benefits it brings to development. Parents mentioned that PA enhances children's physical (being less sedentary, with better strength), cognitive (acquiring the desire to learn more), social (spending time with other children), and emotional development.

Subject 19… "*It was important that they practiced sports from the age of three, which is when they begin to have more strength and more ability. Mhm, above all because of discipline, commitment, all these things that come from sports, a healthy mind, stability. So, it was always instilled in me...*"-Daughter (5 years old).

Parents support sports activities later in their child's education as long as it does not affect academic performance:

Subject 13. … "*I think it's a good idea, if they don't neglect school…. But many times, when they participate in these activities, eh, the coaches kind of focus a lot on the child having a good performance outside and they are relegated from academics and that is what I don't like…"* -Daughter (5 years old).

Discussion

This study aimed to explore Mexican parents' attitudes toward PA, their perceptions regarding the motor development of their preschool children, and their perceived competence in teaching motor skills to their children. Thematic analysis of 33 interviews revealed six main themes within the family context: integration of PA into daily life, activities that promote motor skills (gross and fine), PA by parents, Factors related to PA practice, Perception of motor development, and Importance of PA in child development.

Regarding the integration of PA into daily life, parents reported both unstructured activities (e.g., playing in the park with balls, bikes, etc.) and structured ones (e.g., extracurricular classes such as jazz or baseball). This is relevant, as both types help

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meet the World Health Organization (2020) PA guidelines, especially in a country with high childhood obesity rates (Shamah-Levy et al., 2024).

In terms of activities promoting motor skills, parents recognize that their children engage in both gross and fine motor activities at home, whether through direct teaching, imitation of siblings, or their own initiative. A bidirectional relationship between the child and the environment is observed, consistent with Bronfenbrenner's ecological theory (1979).

Concerning parents' own PA, some reported a sports background and are therefore more aware of its benefits. Others exercise at home or attend classes. This underscores their role as models in shaping healthy behaviours (Jaimes-Reyes et al., 2022).

The fourth theme relates to contextual factors influencing PA. Facilitators include walking to school or relatives' homes, while car travel tends to reduce PA (Cools et al., 2011). Some children themselves request to be enrolled in PA-related activities or visit places that promote movement. Health professionals' recommendations were also cited as factors of influence.

Barriers include lack of time due to long work hours (González-Valencia et al., 2018). In some cases, children with ADHD were perceived as not needing additional stimulation, reflecting a lack of awareness regarding the benefits of structured PA in this population. Suazo et al. (2019) found that structured PA in children with ADHD positively impacts the child's cognition and their learning and socialization abilities, since aerobic exercise stimulates neurotransmitters that promote synaptic plasticity and cognitive processing. Similarly, Zang et al. (2023) found that engagement in regular PA improves executive functions in children with ADHD. Physical Activity involves a cognitive component (e.g., when playing ball games or group activities that require following rules), which may favour increased attention span in children (Latino & Tafuri, 2024).

Regarding parents' perceived competence in teaching motor skills, most feel capable of doing so, and those who do not are willing to learn. This is consistent with Agard et al. (2021), who found that while parents are confident in teaching basic motor skills, they feel less capable when it comes to more complex sports skills.

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Parents' perceptions of their children's motor development suggest awareness of age-appropriate skills. Many compare their children to peers and are familiar with certain developmental milestones (e.g., walking, running, using scissors). However, some parents expressed concern that involvement in sports may interfere with academic duties, echoing findings by Mota et al. (2017), who noted a preference among some parents for academic tasks over physical ones.

Finally, parents' views on the role of PA in development were positive. They believe early PA promotes discipline, physical and mental health, and social skills. These findings align with Trudeau and Shephard (2008), who reported that physical education supports academic success and social development.

Conclusion

PA is embedded in the daily lives of Mexican preschoolers through parental interest, children's own motivation, available home resources, and external recommendations. According to Bronfenbrenner and Morris (2006), this reflects a bidirectional relationship in which the child both influences and is influenced by their environment.

The findings emphasize the need to further explore PA practices at home, particularly in children with ADHD, where parents may unintentionally limit PA. It is also important that parents have basic knowledge of motor development to identify areas needing stimulation. Communication between physical education teachers and families is crucial to support home-based PA that aligns with children's developmental stages and to assist parents who feel less confident implementing new activities.

This study provides valuable insights into Mexican children's home-based PA and motor activities. However, it is limited to the city of Chihuahua and includes only mothers. Future research should include fathers, children, and families from varying socioeconomic backgrounds to gain broader perspectives. In addition, as a qualitative study with semi-structured interviews the generalizability is limited, thus results should be interpreted within specific contexts, perceptions, and experiences of the participants.

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