



Parental Influence on Children's Physical Activity Motivation

Research Brief

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Introduction

As of 2012, nearly one-third of young people (ages 2-19 years old) in the United States were considered overweight or obese, which was characterized as having a body mass index above or equal to 30 kilograms/meter² (Ogden, Carroll, Kit, & Flegal, 2014). Obesity in America has become a crisis among young people, an epidemic that is closely linked to physical activity. According to the Centers for Disease Control and Prevention (CDC), children and adolescents should engage in at least one hour or more of physical activity daily (Centers for Disease Control and Prevention, 2011). Unfortunately, an estimated 42% of children ages 6-11 and merely 8% of children ages 12-17 meet daily exercise recommendations (Troiano et al., 2008). Parents play a major role in influencing their children's attitudes towards physical activity (Beets, Cardinal, & Alderman, 2010). Evidence for increasing numbers of overweight and obese youth, combined with the number of youth leading sedentary lifestyles, highlights the importance of understanding how parents can encourage children's physical activity. Additionally, evidence for parents' impact on children's activity levels may inform the interventions that helping professionals use to minimize obesity amongst American youth. Specifically, knowledge of parents' role in obesity prevention may contribute to the development or enhancement of innovative prevention programs.



For the purpose of this brief, the term “parent” includes any guardian that is responsible for the welfare of a child (i.e., not limited to biological parents). The specific needs of children who show delays or deficits in their cognitive and/or physical development have unique challenges, and their experiences are beyond the scope of this review. This review will aim to provide information about the ways that parents influence their children's participation in physical activity and the risk factors that may limit children's participation in physical activity.

Research Findings

Parents are the primary proponents or inhibitors of their children's participation in physical activity. (Beets et al., 2010). Parents can support their children's physical activity via both direct and indirect reinforcement. Parents who support physical activity tend to have children who are more physically active than children whose parents do not display these types of behaviors (Moore, Lambordi, Campbell, Oliveria, & Ellison, 1991; Welk, Wood, & Morss, 2003). Although direct and indirect forms of support will be discussed separately, they often work in conjunction to shape both parent and child behavior. Parents who adhere to strict gender-typed notions of physical activity tend to have children who are less engaged in physical activity (Fredericks & Eccles, 2005). As reviewed below, parents have a variety of direct and indirect ways of reinforcing children's physical activity.

Direct Reinforcement

Parents directly reinforce children's activity when they overtly facilitate a child's involvement in physical activity, including but not limited to, providing transportation, directly engaging in activities, spectating or supervising, and/or purchasing equipment for engagement in physical activity (Beets et al., 2010). Direct reinforcement of physical activity, also referred to as tangible

Direct Reinforcement

- Providing transportation
- Engaging in physical activity with the child
- Spectating/supervising
- Purchasing equipment

support, is one of the most effective means of parental support of physical activity (Beets et al., 2010).

Parents do not need to be active themselves in order to encourage their child to be physically active (Trost et al., 2003). As long as sedentary parents provide children with opportunities and encouragement to be physically active, they can be as effective as active parents in positively impacting their children's physical activity, both with regards to motivation for physical activity and activity levels (Trost et al., 2003).

Indirect Reinforcement

Although overt parental facilitation of physical activity helps children be active, parents can influence their child's physical activity in less direct ways as well. One important form of indirect reinforcement is modeling, in which a parent behaves in a way that s/he would like a child to behave. In the study conducted by Moore et al. (1991), active individuals were characterized as having Caltrac accelerometer counts that exceeded the median activity levels participants, while inactive individuals were below the median activity level. The study found that children of active mothers were shown to be twice as likely to be active as children of inactive mothers. Children of active fathers were 3.5 times more likely to be active than children of inactive fathers. When both parents were active, the likelihood of a child being active increased nearly six times compared to families where both parents were inactive. These results were further shaped by gender. In families with two active parents, boys were 7.2 times more likely to be active and girls were 4.5 times more likely to be active than children of the same gender with inactive parents.

Indirect Reinforcement

- Modeling
- Perceived competence

In addition, a study conducted by Bois, Sarrazin, Brustad, Trouilloud and Cury (2005) found that mothers' perceptions of their child's physical competence correlated with the child's self-perceived competence, while fathers' perceptions of their child's physical competence related to the child's actual activity level. Although the ways that parents perceive their children's physical competence impacts the child's perception of their physical activity competence, parents are also being acted on by external forces. Parental perception of gender is often

influenced by society, leading parents to encourage boys to engage in physical activity more than girls (Beets et al., 2010), this is commonly referred to as gender typing.

Societal and Environmental Risk Factors Influencing Physical Activity

Gender Typing

According to Hetherington and Parke (2003), gender typing is the socialization process by which children acquire the values, motives, and behaviors deemed appropriate for males and females within a culture. Each culture has set standards of desirable behaviors that each gender is expected to display.

Conventionally, males are expected to be independent, assertive, and competitive, while females are expected to be passive, sensitive, and supportive. These societal standards often cause boys and girls to develop very different attitudes towards physical activity. Parental gender-typing, in particular, plays a major role in the ways that boys and girls perceive physical activity with girls seeking parental support for physical activity (Peterson, Lawman, Wilson, Fairchild, & Van Horn, 2012), while boys already perceive more parental encouragement to be physically active (Welk et al., 2003). Parents have reported perceiving their sons to be more competent in sports than their daughters, and that sports are more important for boys than girls (Fredericks & Eccles, 2005). These parental perceptions appeared to translate into girls perceiving significantly lower levels of sport competence than males (Bois et al., 2005). Parent and child perceptions of sports competence may feed one another in a cyclical fashion.

Gender Typing

- The socialized process by which children acquire the values, motives, and behaviors deemed appropriate for males and females within a culture.



Establishing positive attitudes towards physical activity at a young age is extremely important for youth to maintain healthy habits into adulthood. Many girls are not socialized to have positive attitudes towards physical activity and do not receive the social support they need in order to develop healthy habits. Although researchers have not found any significant gender differences in obesity among toddlers, they have reported a dramatic increase in obesity among women later in life (Ogden et al., 2014). Differences in gender-typing may leave girls at an increased risk for obesity and obesity-related diseases into adulthood.

Safety

Although parents influence their children's participation in physical activity in many ways, broader environmental factors are also important to consider. Generally, parents are concerned about the safety of the neighborhood environment and the opportunities for their children, regardless of gender, to have access to safe spaces for physical activity outside of the home. The neighborhood environment consists of the built environment, such as sidewalks, high traffic streets or highways, and parks or other recreational spaces. Children who are allowed to play anywhere in the neighborhood have been found to be more physically active (McMinn, Griffin, Jones, & Van Sluijs, 2012), and neighborhoods with positive environmental conditions have also been found to be positively associated with decreased body mass index (BMI) among youth (Evenson, Scott, Cohen, & Voorhees, 2007).

Aside from the safety of the built environment, parents are also highly concerned with social cohesion in the neighborhood. Social cohesion refers to the connectedness and solidarity among social groups (Berkman & Kawachi, 2000). Parents who perceive higher levels of social cohesion in their neighborhood have been shown to have more active children than parents who perceive lower levels of social cohesion (Pabayo, Belsky, Gauvin, & Curtis, 2011).

Perceived Safety

- Perceived neighborhood safety = PA participation
- Neighborhood Social Cohesion = PA Participation

Future Directions for the Field

The following three suggestions may be useful in expanding knowledge in this domain. First, although evidence suggests the importance of parental reinforcement, gender-typing, and neighborhood safety in the promotion of physical activity in youth, existing research is hindered by the lack of consistency within measurement tools (Davison et al., 2013). Creating standardized assessments may help researchers better understand the role of parenting and related factors, and translate research into the development and implementation of successful interventions. Second, more fine grained analysis of children's physical activity levels by various demographics (e.g., age, ethnicity, region of residence) would prove informative and could guide culturally-relevant interventions. Finally, obesity prevention research may benefit from combining assessment of physical activity with assessment of nutrition in order to more accurately understand the habitual patterns that children learn that increase their risk for obesity.

Implications

Youth, parents/family, schools, and the community may all be able to contribute to the prevention of obesity in the following manners.

Youth

- Youth should be encouraged to directly engage parents in their physical activity by informing their parents of sports and activities that interest them.
- Youth should be encouraged to foster friendships with other physically active youth.

Parents and Family

- Parents should seek ways to help their children engage in physical activities that they enjoy.
- It is crucial that parents expose their children to a variety of activities.
- Once youth find an activity of interest, parents should continue to provide them with opportunities to stay engaged.

School

- Schools should partner with parents to develop and implement interventions that promote physical activity.
- Schools should create fun programs that engage both children and their parents.
- Schools should provide safe spaces where parents and children can enjoy physical activity outside of the regular school day

Community

- Communities should create safe neighborhood environments where children can play safely.
- Communities should encourage relationships that create neighborhood cohesion.

In Practice

In additions to ways in which youth, parents/family, schools, and the community may contribute to the prevention of obesity, the following program policy guidelines may also contribute to the prevention of obesity:

Policies

- Policies can provide subsidies for parents who cannot afford youth sports, thereby increasing access for children to have more opportunities for physical activity.
- Policies could be created that provide support for parents, communities, and neighborhood coalitions to work together to provide safe indoor and outdoor spaces for neighborhood youth and families to engage in physical activity.

Programs

- Programs that allow parents and their children to engage in physical activity together would reinforce modeling and teach parents how to include physical activity in their family lifestyle while remaining engaging and fun.
- Programs educating parents on the risk factors of a sedentary lifestyle would help them identify and prevent habit forming behaviors among their children that could lead to obesity.
- Community centers and schools could create programs that allow children and their parents to use safe spaces and equipment.
- Helping professionals may encourage parental awareness by developing interventions to remind parents to avoid gender-typing and to increase the number of opportunities for their daughters and sons to engage in physical activity.

Summary

Children's attitudes towards physical activity can be both directly and indirectly influenced by their parents. Whether parents demonstrate overt forms of support such as driving kids to sport practices, facilitating physical activity opportunities, or simply watching sporting activities, their children are more likely to engage in physical activity (Beets et al., 2010). In addition to direct forms of support towards physical activity participation, the behaviors that parents model for their children also heavily influence a child's perception of physical activity. In order to fully understand the ways that a child's perception of physical activity is shaped, one must

also understand the external forces that influence parents. Socialization affects how parents perceive their child's competence in physical activity. Researchers have found that parents may be reinforcing boys to participate in and enjoy physical activity more than they do with girls. These acts of increased support for boys to engage in physical activity may be subconscious. Thus, daughters may benefit from parental education about gender-typing parents, as well as parents intentionally providing daughters opportunities for physical activity. In addition, parents have the responsibility of ensuring their child's safety. Parents rely heavily on their perception of the neighborhood environment and social cohesion to determine where their child is allowed to play. Although the concepts discussed in this brief may have a major impact on a child's engagement in physical activity, childhood obesity is an issue that is layered and complex. Addressing this problem requires an integrated, multidisciplinary approach, including physicians, mental health professionals, school personnel, community leaders, and others committed to children's welfare, all of whom can work together to support children and their parents. All aspects of a child's life and lifestyle must be considered in order to truly minimize the risk for obesity.

Additional Resources



National Institute for Children's Health Quality - Healthy Care for Healthy Kids Tool Kit: http://www.nichq.org/childhood_obesity/toolkit_prevention_family.html



Centers for Disease Control and Prevention: <http://www.cdc.gov/healthyweight/children/>



U.S. Department of Agriculture: <http://ars.usda.gov/is/AR/archive/mar10/obesity0310.pdf>

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