



Journal of Health Disparities Research and Practice
Volume 8, Issue 1, Spring 2015, pp. 10 - 24

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of Community Health Sciences University of Nevada,
Las Vegas

Gathering Perspectives on Extended Family Influence on African American Children's Physical Activity

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ABSTRACT

Background: The family environment is a key determinant of children's physical activity. The importance of the extended African American family is well established, but there is little research on its influence on school age children's physical activity.

Methods: We recruited eight families in which grandparents and other adult relatives played a central role in child supervision. Semi-structured interviews with parents, other adult relatives, and children revealed various perspectives on the influences of culture and families on children's weight-related behaviors.

Results: Children were between the ages of 6 and 11, and five of the families resided in neighborhoods in which at least 20% of the households reported a total income below the poverty level. Adults described efforts to develop active lifestyles for their families. Children talked about experiencing different types of behavioral influences from parents and other adult relatives.

Conclusions: The findings suggest that resource limitations, neighborhood characteristics, and adults' perceptions of children's activity needs influence the ways that parents and adult relatives engage children in physical activity.

Keywords: Family environment, Physical activity, Parenting strategies, Behavior, Obesity

INTRODUCTION

Regular physical activity is important for children's health and wellbeing (U.S. Department of Health and Human Services, 2010). For school age children, the family and home environment are key social determinants of physical activity engagement and other health behaviors, since parents and other relatives who serve as caregivers typically control children's

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use of time and access to resources related to physical activity (Physical Activity Guidelines for Americans Midcourse Report Subcommittee of the President's Council on Fitness, 2012). There is a need for research that defines how and why specific components of family life influence school age children's physical activity behaviors (Physical Activity Guidelines for Americans Midcourse Report Subcommittee of the President's Council on Fitness, 2012).

Family socialization strategies influence children's behaviors (Coard, Wallace, Stevenson, & Brotman, 2004). Parents and other relatives may have a variety of direct and indirect influences on children's physical activity engagement, including role modeling, involvement, facilitation, and encouragement (Welk, 1999). Because parents typically socialize children to adopt the behaviors necessary to be accepted by and successful within a particular cultural group, influences and socialization strategies are best examined within the cultural contexts in which they occur (Coard et al., 2004). It is also important to consider the familial history, roles, beliefs, and values that impact those influences and the contexts in which they are carried out (Yasui & Dishion, 2007).

One cultural context of importance is children's relationships with family members. Culturally defined relationship dynamics guide children's interactions with parents, siblings, and other relatives (Yasui & Dishion, 2007). Among African American families, these dynamics are often informed by family-based collectivism (Hatchett, Jackson, & McAdoo, 1993), which is associated with a high degree of interaction among kinship support networks such that family members might also serve as behavioral and attitudinal referents for each other (McAdoo & Younge, 2008). Additionally, extended family members have traditionally played a key role in socializing African American children to adopt cultural norms (Hatchett et al., 1993), and there are often co-parenting arrangements that involve extended family members and have fluid boundaries in gender roles as they relate to child rearing responsibilities (McAdoo & Younge, 2008).

Mothers and fathers may use different socialization strategies for conveying acceptable weight-related behaviors to their children (Orrell-Valente et al., 2007). Thus, it is plausible that parents and extended family members involved in child-rearing may also use different socialization strategies. Furthermore, because of the historical experience of African Americans, an intergenerational framework is useful for exploring the diverse aspects of African American family life (Gadsden, 1999). However, extended family members' contributions to children's weight-related behaviors have not been adequately theorized or empirically examined, and additional research is needed to understand the child-extended family member relationship in childhood obesity prevention and management in African American families. This paper presents findings from an exploratory study that examined influences of the immediate and extended family on the physical activity and dietary behaviors of school age African American children residing in Baltimore, Maryland. We focus here on the findings related to the extended family's role in influencing children's physical activity behaviors.

METHODS

This two-part study took place over a 23-month period (September 2008 – August 2010). The initial study took place between September 2008 and December 2008 and included the collection of quantitative and qualitative data from children, 5 to 10 years of age, and their primary caregivers to examine multiple household and neighborhood factors related to childhood

obesity. Data for the follow-up study was collected between April 2010 and August 2010. We designed the follow-up study to build on themes related to extended families emerging from the initial study with the purpose of providing a more detailed consideration of family-level factors related to childhood obesity, particularly among urban African American children and their extended families. We focus here on the research methods and findings of the follow up study; findings from the initial study are not included. The Johns Hopkins Medicine Institutional Review Board approved the research protocols for both studies.

RESULTS

Data were collected from 24 individuals in eight family units (i.e., one child, parent, and extended family member from each family). Fourteen of the 16 adults self-identified as African American; in one family unit, the extended family member self-identified as White and the parent identified herself as 'multiracial' (i.e, White and African American). The children ranged in age from 6 to 11 years, and five were boys. BMI-for-age percentiles indicated that two children were healthy weight (5th – 85th percentile), two were overweight (85th – 95th percentile), and four were obese (above the 95th percentile). In seven cases, the parents were the biological mothers of the children; in one family unit, the parent was the child's maternal grandfather. All extended family members were maternal relatives, and half were grandmothers. In one case, the extended family member shared a residence with the primary caregiver and child, and in two families, the primary caregiver and child lived with extended family members who were not study participants. All of the families resided in predominantly African American neighborhoods (81 – 99%) in Baltimore City. Although we did not collect annual income data from the families or aim to target low-income neighborhoods or families, five families resided in neighborhoods in which at least 20% of the households reported a total income below the official poverty threshold (U.S. Census Bureau, 2000; University of Baltimore, n.d.).

OVERVIEW OF PHYSICAL ACTIVITY SOCIALIZATION OBSERVATIONS

Within the participating family units, adults utilized several mechanisms to teach and encourage the adoption of acceptable physical activity behaviors among the children in their families. Among most of the families, there appeared to be, at minimum, an awareness of the desirability for children to engage in physical activity. In some family units, children experienced similar types and degrees of influences from the primary caregivers and extended family members. This was observed in families in which primary caregivers and extended family members used very active strategies to influence the children's physical activity behaviors, as well as in families in which both adults described more passive, indirect approaches. Children experienced differing types and degrees of influences from the primary caregivers and extended family members. Generally, extended family members demonstrated more active, direct influences, while primary caregivers provided more passive, indirect influences, particularly regarding recreational activity. These differences were evident even in families in which the extended family members had engaged the primary caregivers in physically active lifestyles during their childhood. In general, family units that were self-characterized as 'close' by the adults also more frequently demonstrated active socialization of children's physical activity behaviors via extended family members.

EMERGENT THEMES IN PHYSICAL ACTIVITY SOCIALIZATION

With regard to mechanisms used by primary caregivers and extended family members in socializing children to adopt physical activity behaviors, three primary themes were identified and are discussed below: 'You have to keep them active', 'We're making changes', and 'I want to, but...' We use the term 'activity' to encompass recreational physical activities because most of the interviewees referred to playtime activities or engagement in extracurricular sports when asked about 'physical activity'.

You have to keep them active

The desire to 'keep them active' represents the primary caregivers' and extended family members' efforts to facilitate, encourage, serve as models for, or be involved in the children's activities. Also relevant are adults' beliefs and motives related to the types of influences they impress upon the children's activities. In most of the interviews, extended family members were the primary discussants of these aspects of the children's activity. Quotes related to this theme are provided in Table 1.

As compared to primary caregivers' engagement in physical activity with the children, the extended family members in most families described being more physically active with the children and discussed their general efforts to facilitate and participate in activities with the children (Quotes 1, 2, and 3). This was particularly the case in family units in which the primary caregiver and/or extended family member expressed their perceptions or feelings of having a close-knit extended family network and described the family unit as being 'close'. For example, one extended family member described how she ensured that the participating child was able to remain active during visits (Quote 1). Similarly, another grandmother described taking her grandchildren to a nearby park and being active with them during periods when she provided childcare for their working mother (Quote 2). She also discussed giving the children an opportunity to experience playing in the snow, as well as plans to enroll her grandson in 'martial arts, swimming, anything they have to keep him active' at the local YMCA during the summer months.

Extended family members and primary caregivers shared concerns about neighborhood safety and the availability and/or quality of local activity venues, although some extended family members discussed how these factors actually facilitated their engagement in physical activities with the children. One grandmother described negative neighborhood events as prompting her to keep her grandchildren engaged in activities (Quote 3). Another child's uncle noted that safe options for activity no longer existed in the family's neighborhood and described his efforts to engage his nephew in alternative, indoor activities (Quote 4).

Many respondents related their motivation for keeping the children in their families active to their own childhood activity experiences. Several recounted their own childhood activities to make generational comparisons concerning the surrounding environment that served to illustrate challenges associated with keeping children active (Quote 5). For the mother and aunt of one child, promoting children's physical activity was about addressing cultural and family norms that promoted a lack of participation in extracurricular activities (Quotes 6 and 7). During discussion, they made several statements alluding to the history of segregation in Baltimore, which led to the development of these types of familial

Table 1. 'You have to keep them active' Interview Quotes

Quote Number	Respondent	Child's Weight Status	Quote
1	Cousin of 6-year-old Girl B	Normal Weight	We have a small playground right across the street from us. It just has like a sliding board and maybe jungle gyms. So my son will take her over there for a little while. And my niece moved with me, she'll take her over there. Or they'll bring another child, like another relative's child over there so she'll have somebody to play with...
2	Grandmother of 11-year-old Boy C	Obese	Then they have a park a little further, all the way over there, and I'll take them over there, let them go for it. I just tell them to run 'I'll beat you to the playground.' And we'll be just running...
3	Grandmother of 11-year-old Boy A	Overweight	Always kept them busy exercising.... Because I don't know where they get all their energy. And another reason I try to keep them [busy]—because I'm trying to keep—I don't want them—I pray—when they get older, I can't do nothing. I pray now that they don't be in the street. I want them to know what's going on out there, but I don't want them to be the one just hanging out there with them.
4	Uncle of 10-year-old Boy E	Obese	We do some push-ups, some sit ups. Jumping jacks and jump rope and stuff like that. Yeah, I try to get them involved in stuff like that... I [try] to explain to him more the benefits of him getting involved more instead of watching the TV all day and stuff like that. But I guess he's a kid. He don't really understand the importance of doing that.
5	Mother of 10-year-old Boy E	Obese	See things are changing so much now. And when we was growing up, we had a roller derby rink right there where these houses are at now. And it had a basketball court that extended off of it. So if we didn't really have anything to do within the vicinity of our neighborhood, we'd go there and we'd play. We made our big wheels and play the race in ring. We did it all. And now things are so limited for the children, now they really don't have anywhere to go or where you feel comfortable of them going to get a lot that excess out.
6	Aunt of 11-year-old Girl C	Obese	We weren't allowed in programs like karate and dance...it wasn't allowed...I mean we couldn't even do physical activity at school. Like you couldn't be on a basketball team or cheerleading or any—we couldn't do any of that... [our parents] didn't believe in it.
7	Mother of 11-year-old Girl C	Obese	And I think it was probably more—older people back then was more—well, I think when they close-minded like that—some type of protection thing. If you don't make this, you ain't got to worry about crying.
8	Mother of 11-year-old Boy B	Overweight	Well, actually, they're kids so everything they do is physical. They do everything. They run, they jump, they play.
9	Mother of 6-year-old Girl B	Normal Weight	Because some kids [need you to] lead more by example. Some you can talk to. I can talk, I can show her stuff, but by her being six, it's not going to—once she sees [cartoons are on], that's it, 'What did you say?'

and cultural norms. Because the mother and aunt felt that their parents' actions were wrong, they prioritized their children's involvement in extracurricular activities such as dance and martial arts.

In contrast to deliberate efforts to encourage, facilitate, model, or be involved in the children's physical activities, some primary caregivers described a more passive approach to children's activity. Most notable was a belief that because children were naturally physically active, no additional role modeling, facilitation, encouragement, or involvement was required. For example, when asked about strategies used to teach children about activity, one mother responded with statements regarding what her children do on their own rather than discussing her efforts to engage in them in activity (Quote 8). Another mother responded to a similar question by outlining her daughter's age as a rationale for not using more active techniques to teach about activity (Quote 9).

We're making changes

Another key theme to emerge from the interviews was descriptions of clear attempts to change families' activity routines and behaviors. These changes were predominantly discussed by primary caregivers and were linked to health conditions and concerns, weight management efforts, and a general interest in developing a more physically active lifestyle. Quotes related to this theme are provided in Table 2.

Primary caregivers cited many reasons for changes in families' activity levels. For example, one mother had been involved in sporting activities as a child and made statements expressing her belief that people should be more physically active. Her motives for encouraging her family to increase their usage of local activity venues was, in part, related to her general desire to exercise more, as well as her efforts to help her daughter address weight concerns (Quote 10). In another family, health concerns and weight management efforts led to several family members making a collective decision to adopt a healthier lifestyle, including increasing activity levels. However, while adults were motivated to maintain changes, there were some challenges in encouraging more activity among the children (Quote 11).

Weight management concerns, coupled with a general interest in trying new types of activity, tended to prompt changes. Concerns about weight contributed to a bidirectional influence on activity encouragement in one family. The child's mother had recently lost weight through healthy lifestyle changes, and the aunt was a liturgical dance instructor for the family's children. The children were also seen

Table 2. ‘We’re making changes’ Interview Quotes

Quote Number	Respondent	Child’s Weight Status	Quote
10	Mother of 11-year-old Girl A	Obese	I like to exercise, but I don’t do it often. We have a track right over here around Lake Montebello. On nice days—we have bikes also, so hopefully we’ll be able to use them more often, and at least set one day aside to go bike-riding or to go walk around the track. ...My husband and I a lot of times will tell her...because she always talks about her weight... So he definitely tells her a lot that she should be doing this and that. I’m trying to get [my husband] to the track. I try to because we all have bikes, so there’s no excuse for that. ‘Let’s go ride bikes,’ or just run around the track. And they have exercise equipment too over there at the track. So Madison and I have hopped on it before. So hopefully we’ll have more days to be able to go over there and spend the time over there, whether it’s bike-riding, exercising, walking, whatever.
11	Cousin of 6-year-old Girl B	Normal Weight	I have to say, ‘Go outside and play’... So I will go outside and do something, walk. We have a store not far from us, so I said, ‘I’m going to go get some water. I ain’t getting in the car. I’m walking.’ What? [He’s] like, ‘We didn’t never walk before.’
12	Mother of 11-year-old Girl C	Obese	So about fitness and stuff...sometimes if they watching the cable station and they see something, they’ll try it. So it’s not like they don’t know nothing about no exercise, and they know we say something about it. And they might be like, ‘Well, ya’ll need to exercise too,’ ...and we’ll be like, ‘Okay, good point.’

as encouraging the adults to try new exercises (Quote 12). Despite the family's positive behaviors and intentions, however, the mother pointed out 'how big' her daughter was. Both adults noted that they had previously engaged in daily walks with their children to address concerns about their children's weight statuses. However, because 'the children got lazy', the walks were no longer taking place. I want to but...

Interviewees presented considerable perceived need to facilitate, model, or be actively involved in physical activities. However, significant barriers were presented from the perspective of primary caregivers, extended family members, and children. Children discussed barriers related to playmates, activity equipment, and disciplinary and other parental actions that restricted activity. Adults focused on time constraints, concerns about neighborhood safety, and a lack of financial resources and local activity venues. Data included several counterfactual statements in which the adults described ideal circumstances and outcomes that were the opposite of their realities. Quotes related to this theme are provided in Table 3.

Some adults described how desires to facilitate children's activities were hampered by time constraints imposed by their job schedules and duties as heads-of-households. For example, one extended family member, who also was the mother of a pre-teen boy (not a participant in this study), expressed concerns about her son's weight and the challenges in finding time to facilitate and engage in physical activity with him (Quote 13). Similarly, another mother indicated that she did not engage in walking as a recreational or functional activity with her son because it simply required 'too much time' out of her daily schedule as a stay-at-home mother to seven children.

Several adults discussed the effects of neighborhood safety on willingness to allow children to participate in casual, outdoor activity. One grandmother noted that this was a concern at the family's residence, and for other relatives living nearby (Quote 14); the perceived need for increased monitoring led to children spending more time inside, primarily playing video games and watching television. Similar concerns were expressed by adults in another family (Quote 15).

One mother described her family's financial situation as shaping how she engaged in activity with her children, and contributing to differences in strategies used by her and the children's grandmother (Quote 16). Another mother described how her family's activity was impacted by multiple factors that included a lack of financial resources, time constraints, concerns about neighborhood safety, and her own challenges with engaging in recreational activity (Quote 17).

Table 3. 'I want to but...' Interview Quotes

Quote Number	Respondent	Child's Weight Status	Quote
13	Cousin of 6-year-old Girl B	Normal Weight	He's about 5'7", and he weighs probably about 200. So it's like I need—like he was playing football, but like I said, because of my schedule I can't take him. There's a kickboxing class I would love us to take but because [of] my schedule...
14	Grandmother of 11-year-old Boy A	Overweight	...we don't really take them to let them come out there very much. If we come on the front, they can play around the front. Because there's so much activity had went on in that area that we don't really just bring them out unless somebody's—adults are with them.
15	Uncle of 10-year-old Boy E	Obese	So it's almost like now you almost prefer them to be in the house in a sense...to protect them. But being that we have to work and stuff like that now we don't – a lot of times, the parents don't have the time to spend with the kids to get them out and about in the streets and stuff like that to get a little exercise or just to get out sometimes.
16	Mother of 11-year-old Boy C	Obese	Like with me, they'll probably just go out the front, and they'll play in this little area right here. Where she might take them on the bus ride to go somewhere and they go and have fun or whatever. Where I'm going to stay in my area and be right here, because money was low, so it was easier... I mean, if I had money, I would probably take them around or whatever. But sometimes I think they have just as much fun either playing right out here, or we'll go over to the park. That's about as far as we go. Or I just—like there's something else going on, and if I have money, I'll take them somewhere else.
17	Mother of 10-year-old Boy E	Obese	And I'm not a physical type person. I do all my work on the job. And my everyday routine of cleaning the house, washing, what have you. I'm a house person too so I think Isaiah get that from me. I'm a homebody... I do my walking. If I have to go and take care of bills and business I do walk because I don't drive. Walk or [public] transportation. I try to get the children involved in it, but sometimes we go to take care of business. We don't have time to be involved with a child, you know what I'm saying? You do what you've got to do, right. It's just inappropriate for them to be out. I try to get them out at least once a week where we do some walking, sightseeing something like that. We do try to get them in if the money prevails, you know what I mean?
18	11-year-old Girl A	Obese	I used to [play tennis] but the after school program for all the schools stopped in April... I miss tennis. So there's nothing to do after school; just come home, do my homework, and be bored... I like being outside. I don't like being in the house much... [But] there's no kids around here. ...I might be outside maybe an hour here, because it's so boring...
19	6-year-old Girl B	Normal Weight	I ride my scooter. I don't know how to ride my bike because my mommy...took my training wheels off.

Barriers highlighted by adults were accompanied by children's discussion of how circumstances beyond their control affected their ability to participate in certain physical activities. These descriptions illustrated the degree to and manner in which primary caregivers facilitated children's activity via extracurricular programs or local venues. For example, one child expressed that while she enjoyed swimming, tennis, and casual outdoor play, she was frustrated by her family's lapsed YMCA membership, seasonal changes in sports programs, and the lack of local playmates (Quote 18).

Other children described parental actions that prohibited, rather than facilitated, activity through play. For example, children mentioned bicycle maintenance as a barrier. One child noted that while she enjoyed riding her bicycle, she was no longer able to do so alone (Quote 19). Similarly, another child indicated that he owned a bicycle, but because his mother was unable to repair the bicycle after 'the chain broke and the tire broke', he was unable to ride it.

DISCUSSION

This study examined how parents and extended family members describe their efforts to socialize school age children to adopt familial norms regarding physical activity. The analysis uncovered influential factors such as the sociocultural contexts in which socialization practices take place, the similarities and differences in strategies used by parents and extended family members, and barriers and facilitators to children's physical activity.

As noted, extended family members in 'close' families frequently demonstrated active socialization of children's physical activity behaviors. The family-based collectivism may contribute both to the closeness that adults described and more frequent interactions between family members (Hatchett et al., 1993). Thus, extended family members might facilitate positive physical activity behaviors by serving as attitudinal and/or behavioral referents for the children and providing tangible and non-tangible forms of social support and connectedness for children's physical activity (Azar, Naughton, & Joseph, 2009).

Finances and parental roles contributed to barriers to children's physical activity, as several parents described their lack of engagement in physical activity as a function of financial constraints and/or lack of time because of head-of-household responsibilities. Children also noted the impact of financial and time/resource constraints on their physical activity engagement. Factors that have previously been reported as barriers to physical activity for African American women such as mental and physical fatigue, and a lack of motivation may have additional negative implications for their children (Nies, Vollman, & Cook, 1999). It is plausible that these factors also contribute to the differences observed in the socialization mechanisms used by parents and extended family members. Stress, which is often a result of time and financial constraints, has been shown to potentially negatively affect the ability of lower resourced African American parents to engage in effective parenting, including facilitating physical activity (McLoyd, 1990). Stress might not have as much of an effect on extended family members' level of engagement in physical activity with children. This seems especially true for African American grandmothers, for whom caring for and spending time with grandchildren is presented as a privilege and an enjoyable activity (Jimenez, 2002).

METHODOLOGICAL CONSIDERATIONS

One strength of this work is the use of multiple data sources, which facilitated in-depth investigation of the physical activity behaviors of children and family members as well as the

contexts in which these behaviors occurred. Conducting interviews with multiple family members improved our understanding of how challenges, particularly those related to financial and neighborhood resources, are addressed by the family as a whole. The data collected were self-reported, and although there might be some differences in what the participants discussed and what was actually experienced in families (due to social desirability, recall accuracy, and comprehension), the use of qualitative interviews provided insight into how and why families socialized children to adopt physical activity behaviors.

This analysis is based on the accounts of only three individuals in each family, and the behaviors, attitudes, and beliefs of other family members might play a role in school age children's physical activity behaviors. As in other studies (Kaplan, Kiernan, & James, 2006), adult family members were interviewed together. It is possible that conducting individual interviews would elicit additional or different responses from the adults. Though in general, the parents and extended family members seemed forthcoming, including contributing to one another's responses.

Including children's voices in research is particularly important when seeking to understand the environments that affect child wellbeing (Crivello, Camfield, & Woodhead, 2009; James, 2007). Thus, we sought to include the children's perspective by conducting individual interviews with them rather than only asking the adults about the children's experiences. However, most of the data presented are from the adult interviews, and the children's perceptions are not reflected in all of the thematic areas. Given our interest in the role of adult family members, we see value in future studies to compare the processes of engagement in physical activity between younger children and older adolescents, who might have more autonomy in their own physical activity behaviors, as well as the opportunity to provide greater input in family physical activity practices. The study does not lend itself to empirical generalization, but is rather intended to provide initial, exploratory findings on family influences in order to guide further examination of the familial contexts surrounding the physical activity behaviors of African American children residing in urban settings and with similar family structures.

CONCLUSION

Efforts to increase the physical activity of primary caregivers and extended family members is potentially particularly important for younger children, who are not necessarily capable of negotiating physical activity opportunities with adults or seeking out other opportunities for physical activity on their own. New experiences and exposure to new ways of thinking can change cultural rules concerning health-related behaviors (Caprio et al., 2008). Primary caregivers and extended family members in our study agreed on some the experiences and exposures that shaped generational differences in activity levels, most notably in the areas of neighborhood safety and participation in extracurricular activities (Kumanyika, 2008; Nies et al., 1999).

Our study illustrates how the intersection of race/ethnicity and structural factors, such as lack of municipal funding and/or support for organized physical activity venues, creates inequities in neighborhood resources, with subtle and profound effects on school age children's obesity-related behaviors (Nicholson & Browning, 2012). Previous research has suggested that social conditions (e.g., vandalism, neighborhood safety, dilapidated housing) and the built environment (e.g., lack of sidewalks, parks, recreation centers) are associated with the unhealthy

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weight status of African Americans living in low-income communities (McAlexander, Banda, McAlexander, & Lee, 2009; Singh, Siahpush, & Kogan, 2010). Conditions of neighborhood disadvantage in areas highly populated by African Americans are a result of historical factors that led to or were influenced by racial discrimination and neighborhood segregation. Today, segregation of neighborhoods, both by race and incomes, remains a key component of the social structure of Baltimore (Boger, 2009), and research indicates that this type of structural segregation might contribute to the behaviors and lifestyles that lead to disparities in obesity (Ludwig et al., 2011). In this study, families who lived in low-income and resource-poor neighborhoods felt forced to look elsewhere for physical activity opportunities for their children, or had to limit their children's playtime to ensure their safety.

Given the emotional and mental health issues that might arise from living in such neighborhoods and the protective role of collective efficacy in family functioning (Fan & Chen, 2012), it is important to understand how extended families influence the intersection of physical activity and children's emotional and mental wellbeing. Also, this work highlights the importance of understanding how and why parents and extended family members decide to transcend neighborhood boundaries or defy unhealthy family or societal traditions to create physical activity opportunities for children. Investing in affordable or free organized physical activity opportunities for children living in cities like Baltimore is important, not only for obesity interventions, but also for the potential to remove children from exposure to and involvement in violent activities and other potentially high-risk situations.

Family-based approaches to childhood obesity usually focus on the immediate family without considering how extended family members may influence children's weight-related behaviors. Our work shows that extended family members and primary caregivers may differ in how they teach school age children about physical activity, with extended family members using more active strategies to engage children in physical activity. These differences may be influenced by time and financial constraints, neighborhood characteristics, and adults' perceptions of children's physical activity needs. Areas for further study include adults' perceptions of their roles in children's physical activity socialization and the influence of place on family physical activity norms and socialization practices.

ACKNOWLEDGEMENTS

At the time this research was conducted, N.A. Brown was a doctoral student in the Department of Health, Behavior, and Society at the Johns Hopkins Bloomberg School of Public Health, where she was supported by the Research Training Grant in Behavioral and Preventive Aspects of Heart and Vascular Disease (5T32HL007180, David Levine, PI), funded by the National Institutes of Health (NIH)/National Heart, Lung, and Blood Institute. Dr. Brown is currently supported, in part, by the Teamwork in Research and Intervention to Alleviate Disparities (TRIAD-2) Center of Excellence in Health Disparities Research, which is funded by the NIH/National Institute on Minority Health and Health Disparities (5P20MD002289, Debra Wallace, PI). The Childhood Neighborhood Study was funded as a pilot study of the Washington, DC-Baltimore Research Center on Child Health Disparities (5P20MD000198, Renee Jenkins and Tina Cheng, PIs). The content is the sole responsibility of the authors and does not necessarily represent the official views of the NIMHD, NHLBI, or NIH. We would like to thank Ms. Elizabeth Gall for her feedback during the analytic process and Dr. Jonathan Ellen

(PI of the Childhood Neighborhood Study) for his contributions and support of this research project.

REFERENCES

- Ayers, L., Kavanaugh, K., & Knafl, K. A. (2003). Within-case and across-case approaches to qualitative data analysis. *Qualitative Health Research, 13*, 871-883.
- Azar, D., Naughton, G. A., & Joseph, C. W. (2009). Physical activity and social connectedness in single-parent families. *Leisure Studies, 28*(3), 349-358.
- Berg, B. L. (2007). A dramaturgical look at interviewing. In B. L. Berg (Ed.), *Qualitative research methods for the social sciences* (6th ed.). Boston, MA: Pearson Education, Inc.
- Boger, G. (2009). The Meaning of Neighborhood in the Modern City. *Journal of Urban History, 35*(2), 236-258. doi: 10.1177/0096144208327915
- Caprio, S., Daniels, S. R., Drewnowski, A., Kaufman, F., Palinksa, L. A., Rosenbloom, A. L., & Schwimmer, J. B. (2008). Influence of race, ethnicity, and culture on childhood obesity: Implications for prevention and treatment. *Diabetes Care, 31*(11), 2211-2221.
- Coard, S. I., Wallace, S. A., Stevenson, H. C., & Brotman, L. M. (2004). Towards culturally relevant preventive interventions: The consideration of racial socialization in parent training with African American families. *Journal of Child and Family Studies, 13*(3), 277-293.
- Corbin, J. M., & Strauss, A. L. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Crivello, G., Camfield, L., & Woodhead, M. (2009). How can children tell us about their wellbeing? Exploring the potential of participatory research approaches with *Young Lives. Soc Indic Res, 90*, 51-72.
- Fan, Y., & Chen, Q. (2012). Family functioning as a mediator between neighborhood conditions and children's health: Evidence from a national survey in the United States. *Social Science & Medicine, 74*(12), 1939-1947. doi: 10.1016/j.socscimed.2012.01.039
- Gadsden, V. (1999). Black families in intergenerational and cultural perspective. In M. E. Lamb (Ed.), *Parenting and child development in "nontraditional" families* (pp. 221-246). Mahwah, NJ: Lawrence Erlbaum Associates.
- Hatchett, S. J., Jackson, J. S., & McAdoo, H. P. (1993). African American extended kin systems: An assessment. In H. P. McAdoo (Ed.), *Family ethnicity: Strength in diversity* (pp. 90-108). Thousand Oaks, CA: Sage Publications, Inc.
- James, A. (2007). Giving voice to children's voices: Practices and problems, pitfalls and potentials. *American Anthropologist, 109*(2), 261-272.
- Jimenez, J. (2002). The History of Grandmothers in the African American Community. *Social Service Review, 76*(4), 523-551. doi: doi:10.1086/342994
- Kaplan, M., Kiernan, N. E., & James, L. (2006). Intergenerational family conversations and decision making about eating healthfully. *Journal of Nutrition Education and Behavior, 38*(5), 298-306.
- Kumanyika, S. K. (2008). Environmental influences on childhood obesity: Ethnic and cultural influences in context. *Physiology & Behavior, 94*(1), 61-70.

23 Gathering Perspectives on Extended Family Influence on African American Children's Physical Activity
Brown et. al

- Lofland, J., Snow, D., Anderson, L., & Lofland, L. H. (2006). *Analyzing social settings: A guide to qualitative observation and analysis*. Florence, KY: Wadsworth Publishing.
- Ludwig, J., Sanbonmatsu, L., Bennetian, L., Adam, E., Duncan, G. J., Katz, L. F., . . . McDade, T. W. (2011). Neighborhoods, obesity, and diabetes - A randomized social experiment. *New England Journal of Medicine*, 365(16), 1509-1519.
- McAdoo, H. P., & Younge, S. N. (2008). Black families. In H. A. Neville, B. M. Tynes & S. O. Utsey (Eds.), *Handbook of African American psychology* (pp. 103-116). Thousand Oaks, CA: SAGE Publications, Inc.
- McAlexander, K. M., Banda, J. A., McAlexander, J. W., & Lee, R. E. (2009). Physical activity resource attributes and obesity in low-income African Americans. *Journal of Urban Health*, 86(5), 696-707.
- McLoyd, V. C. (1990). The impact of economic hardship on Black families and children: Psychological distress, parenting, and socioemotional development. *Child Development*, 61, 311-345.
- Miles, M. B., & Huberman, A. M. (Eds.). (1999). *Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Muhr, T. (2004). *User's manual for ATLAS.ti 5.0*. GmbH, Berlin, Germany: ATLAS.ti Scientific Software Development.
- Nicholson, L., & Browning, C. (2012). Racial and Ethnic Disparities in Obesity During the Transition to Adulthood: The Contingent and Nonlinear Impact of Neighborhood Disadvantage. *Journal of Youth and Adolescence*, 41(1), 53-66. doi: 10.1007/s10964-011-9685-z
- Nies, M. A., Vollman, M., & Cook, T. (1999). African American women's experiences with physical activity in their daily lives. *Public Health Nursing*, 16(1), 23-31.
- Orrell-Valente, J. K., Hill, L. G., Brechwald, W. A., Dodge, K. A., Petit, G. S., & Bates, J. E. (2007). "Just three more bites": An observational analysis of parents' socialization of children's eating at mealtime. *Appetite*, 48, 37-45.
- Physical Activity Guidelines for Americans Midcourse Report Subcommittee of the President's Council on Fitness, Sports & Nutrition,. (2012). *Physical activity guidelines for Americans midcourse report: Strategies to increase physical activity among youth*. Washington, DC: U.S. Department of Health and Human Services.
- Singh, G. K., Siahpush, M., & Kogan, M. D. (2010). Neighborhood Socioeconomic Conditions, Built Environments, And Childhood Obesity. *Health Affairs*, 29(3), 503-512. doi: 10.1377/hlthaff.2009.0730
- U.S. Census Bureau. (2000). Census 2000, Summary File 1 and Summary File 3. Retrieved December 12, 2010, from U.S. Census Bureau, American Factfinder <http://factfinder.census.gov>
- U.S. Department of Health and Human Services. (2010). Healthy People 2020 - Improving the health of Americans. Retrieved January 18, 2011, from <http://www.healthypeople.gov/2020/default.aspx>
- University of Baltimore. (n.d.). Baltimore Neighborhood Indicators Alliance-Jacob France Institute. Retrieved December 13, 2010, from <http://www.bnijafi.org>
- Welk, G. J. (1999). Promoting physical activity in children: Parental influences. *ERIC Digest*. Retrieved December 16, 2010, from <http://www.eric.ed.gov/PDFS/ED436480.pdf>

24 Gathering Perspectives on Extended Family Influence on African American Children's
Physical Activity
Brown et. al

Yasui, M., & Dishion, T. J. (2007). The ethnic context of child and adolescent problem behavior:
Implications for child and family interventions. *Clinical Child and Family Psychology*,
10(2), 137-178.