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A Qualitative Investigation of the Urban African-American and Latino Adolescent Experience with Wildlife

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Few studies have investigated the wildlife-related experience of urban African-American and Latino adolescents. Using a grounded theory research approach, we identified four general conditions (i.e., demographic characteristics, socialization, place of residence, wildlife encounters) that were important in shaping four general processes (i.e., connecting with wildlife, selective engagement with wildlife, tolerating wildlife, wildlife disconnect) that describe the differing wildlife experiences of these adolescents. Our findings suggested that urban African-American and Latino adolescents will demonstrate differing levels of interest and appreciation for wildlife, ranging from active interest and engagement to a complete disinterest in wildlife. To foster an appreciation for wildlife in urban African-American and Latino adolescents, three general conditions should be present: (a) childhood access to wild places, (b) supportive mentoring from adults, and (c) positive encounters with a variety of wildlife species.

Keywords African American, Latino, wildlife, adolescent, urban

Introduction

Despite the benefits associated with natural environments (Kaplan & Kaplan, 1982, 1989), urban adolescents sometimes express apprehension, fear, and disgust with both indigenous (e.g., snakes, spiders, rats) and nonindigenous animals (e.g., bears, lions, tigers, sharks) (Bixler, Carlisle, Hammitt, & Floyd, 1994.) Such expressions are partially attributable to inaccurate depictions of wild animals from media, parents, and friends (Bixler et al., 1994). Travel distances and economic barriers limit urban adolescents' opportunities to experience natural areas and their negative perceptions toward wild animals may constrain their interest in wildlife-related activities.

Changing demographics in the United States (e.g., increasing urbanization) has contributed to an increase in the general public's isolation from traditional wildlife value orientations that emphasize the use and management of wildlife for human benefit (DiCamillo, 1995; Manfredo, Teel, & Bright, 2003; Mankin, Warner, & Anderson, 1999; Steel, List, & Shindler, 1994). Ethnic diversity is also rapidly increasing in North America and is a powerful demographic force shaping society in the United States (Gramann & Allison, 1999). Minority ethnic groups will account for one-third of the United States

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population by 2025 compared to one-fifth in 1980 (Gramann, Floyd, & Saenz, 1993; Parker & McDonough, 1999). Although the increase in ethnic diversity has been experienced nationwide, the growth in urban centers has been the most dramatic (Simcox, 1993).

Recognizing that ethnic minority groups comprise a large proportion of urban populations and given the lack of information reflecting the experiences of these cultural groups with respect to wildlife, we attempted to explain how urban African-American and Latino adolescents experience wildlife and how these experiences shape their interest in and appreciation for wildlife.

Methods

We sought to understand the processes and meanings associated with how urban African-American and Latino adolescents experience wildlife using qualitative research. Qualitative methods rely on the interpretation of phenomenon in the setting where they occur. Meaning for participants is understood in relation to the society as a whole (Gibbs, 2002). Guba and Lincoln (1989) suggest that "there exists multiple, socially constructed realities" (p. 86), which are created by individuals to make sense of their experience. Qualitative researchers try to mirror those realities by viewing events, actions, norms, and values from the study participant's perceptive. Our goal was to capture young peoples' experiences with wildlife in a mid-western city and derive a general theoretical framework that describes the complex interactions and processes associated with the urban African-American and Latino adolescents' experience with wildlife.

Research Setting

Our research was conducted with high school sophomores, juniors, and seniors in a culturally diverse urban high school in Kansas City, Kansas; a metropolitan area of approximately 600,000 people. Twenty-four of the participants were African American and 10 were Latino. There were 18 females and 16 males in the study. All participants lived in neighborhoods surrounding the high school, which consisted of a mix of single family homes, multifamily units, commercial development, and green space (e.g., small streams, ditches, riparian areas; vacant lots, backyards with dense vegetation). Although the majority of experiences described by the study participants occurred in the urban setting in and around their neighborhoods, many students had experiences in non-urban settings in the Kansas City metro area (e.g., state & county parks, lakes, farms). Because our overall goal was to investigate how urban adolescents experience wildlife, we decided that all experiences were pertinent to the research, not just urban experiences.

Data Collection

We used dimensional analysis, a form of grounded theory, for this study. Grounded theory develops theory from systematic data collection and analysis (Glaser, 1978; Schreiber, 2001; Strauss & Corbin, 1998). By using a set of systematic guidelines for collecting and analyzing data, the researcher strives to build theoretical frameworks that explain the data. In grounded theory, a close relationship exists between data collection, analysis, and theory development. Concepts and properties emerge as the researcher collects, codes, and analyzes data. Throughout the process, analytic interpretations are developed and data collection is further focused, which in turn informs and refines the developing theoretical analyses (Charmaz, 2003). The overall strategies associated with

the grounded theory method include: (a) simultaneous collection and analysis of data, (b) two-step data coding, (c) constant comparative methods, (d) construction of conceptual analyses through memo writing, (e) theoretical sampling, and (f) integration of the theoretical framework.

In grounded theory, the researcher does not begin with an existing theory or predefined concept. Instead, the researcher initiates an investigation in an area of interest and allows the theory to emerge from the data (Glaser & Strauss, 1967). Theoretical categories must be developed from analysis of the collected data and not taken from preconceived disciplinary concepts. Relevant concepts must emerge from the data and earn recognition into the analysis (Glaser, 1978). Because theories are drawn from data and not forced on the data they can provide meaningful insight into the experience of the subjects (Strauss & Corbin, 1998).

Sampling

We collected data using the theoretical sampling approach developed by Strauss and Corbin (1998). Theoretical sampling focuses data gathering on the concepts identified by the evolving theory and maximizes the opportunity to make comparisons between events, incidents, or happenings. It is cumulative in nature; concepts and their relationships accumulate based on the interaction of the data collection and analysis (Strauss & Corbin, 1998).

Interviews were conducted with the 34 participants using open-ended and semi-structured questions. Each interview was approximately 30–45 minutes in length. The interviews were audio taped with the permission of the participants (or their guardians), transcribed, and input into NUD*IST (QSR NUD*IST, 2002). The database facilitated data management during the coding process, which involved naming and labeling the dimensions and properties of the observed data.

The initial interview questions were open-ended and generated a broad range of responses and experiences. For example, we would ask every participant to describe an experience they had had with wildlife. As the study progressed, the questions became more focused to explore areas of special interest and to identify commonalities and variations (e.g., What animals do you like/dislike?). We used a conversational guide to keep the interview focused on the topic and main themes. The interview guide evolved over the course of the interview process and several themes were eventually explored: (a) participants' encounters with wildlife, (b) the physical environment and participants' perception of wildlife and habitat abundance, (c) perceptions and feelings of participants toward wildlife, (d) behaviors associated with wildlife and participant interactions, (e) cultural norms/values associated with the place of wildlife in an urban community, and (f) source of participants' knowledge about wildlife (Van Velsor, 2004).

Data Analysis

Our first step in data analysis identified the dimensions and properties of the data through an open coding process where we conceptualized an observation of a particular event or situation in a more abstract fashion (Kools, McCarthy, Durham, & Robrecht, 1996). We examined the interview transcripts and selected words, phrases, sentences, or stories to identify salient dimensions evident in the text (Creswell, 1998). A dimension is an abstract concept that depicts any idea or object under consideration (Schatzman, 1991). Dimensions are reference points for properties of the data (Kools et al., 1996). For example,

if the dimension is ethnicity the properties are African American, Latino, Asian, Native American, or White.

We used the dimensions and their assigned properties to focus the analysis by organizing questions around the general concepts developed in the initial coding of interviews. For example, a concept that emerged early in the analysis involved the participants' encounters with wildlife. Based on the general encounters concept, we developed questions to capture more specific dimensions and properties (e.g., type of encounter—conflicting, threatening, emotional; source of the encounter; location of the encounter). This process enables us to explore issues associated with participant/wildlife encounters and advance the complexity of the analysis.

During the final or differentiation analysis stage we identified the relative importance of the individual dimensions. In this stage, we limited the process of expanding the data and focused our data collection and analysis on differentiating the identified set of dimensions and properties. We identified a key perspective or central dimension that offered the most compelling explanation for the relationship among all of the dimensions. We then developed an explanatory matrix to configure the salient dimensions into a meaningful conceptualization for the overall phenomenon (Schatzman, 1991).

Explanatory Matrix

The explanatory data matrix was based on the work of Schatzman (1991). Five conceptual components were used. The *central perspective* of the explanatory matrix was the most central dimension in developing theory; the *context* consisted of the boundaries or parameters of the situation; the *conditions* were considered the most salient dimensions in relation to the central perspective; the *processes* were the actions and interactions that were driven by the specific conditions; and the *consequences* were the outcomes of the processes that had been prompted by specific conditions.

Results

Analyses of the dimensionalized data suggested that the *varied experience with wildlife* dimension reflected the central perspective for explanation of the relationships among the dimensions (Figure 1).

Conditions

Contact with natural places in childhood influences how people value nature (Chawla, 1998; Palmer, Suggate, Robottom, & Hart, 1999; Palmer & Suggate, 1996). Adults and the media play influential roles in shaping a child's environmental orientation (Bousé, 2003; Champ, 2002; Chawla, 1998; Corcoran, 1999; DeRuiter & Donnelly, 2002; Hepburn, 1998; Kane, Tabu, & Hayes, 2000).

We identified four conditions as salient dimensions for African-American and Latino adolescents' wildlife experiences: (a) demographic characteristics, (b) socialization, (c) place of residence, and (d) wildlife encounters. These general interdependent conditions formed the basic framework for the urban adolescents' wildlife experiences in our sample, and played a critical role in shaping the processes associated with the wildlife experience. Because each participant had a different set of life experiences, the conditions and their associated properties interacted in different combinations to shape the participant's overall experience with wildlife. The conditions, processes, and outcomes provided the framework

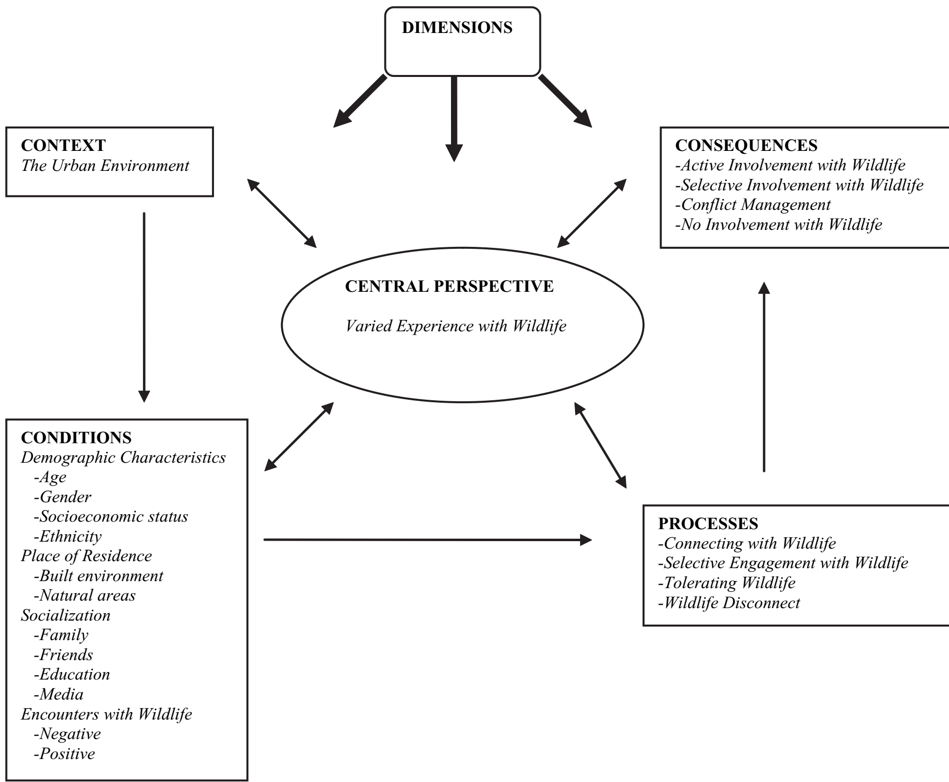

Figure 1. Explanatory matrix. We coded the interview data into dimensions and properties, analyzed the data, and the central perspective was identified. All remaining relevant dimensions were configured in the matrix in positions of context, condition, processes, or consequences.

for understanding and describing the African-American and Latino adolescents' experiences (Table 1).

Processes and Outcomes

By identifying and describing the general processes associated with the wildlife experience of the study participants, we uncovered the dynamic interactions of the sustaining conditions and speculated on the participants' long-term interest in and appreciation for wildlife and wildlife-related activities (Table 1). We identified four general processes with respect to our study participants' experience with wildlife: (a) connecting with wildlife, (b) selective engagement with wildlife, (c) tolerating wildlife, and (d) wildlife disconnect. These four processes illustrated the range of wildlife experience existing among the participants. Each process and associated combination of conditions and properties reflected different outcomes ranging from a robust appreciation for the value of wildlife and active involvement in wildlife-related activities (i.e., connecting with wildlife process), to an intense aversion to wildlife and avoidance of any contact with wildlife (i.e., wildlife disconnect process). All 34 participants described experiences that positioned them somewhere on the process continuum (Table 1). Most participants were associated with the

Table 1
Conditions, processes, and outcomes associated with subjects' perceptions of wildlife[1]

Conditions ⟶	Processes ⟶	Outcomes
Socialization • valuing messages Encounters • positive Place of residence • natural areas • built environment	Connecting with wildlife	Deepening connection to wildlife Appreciation of all wildlife species Active involvement with wildlife
Socialization • warning messages • valuing messages Encounters • limited (negative, positive) Place of residence • built environment Demographic characteristic • ethnicity • gender	Selective engagement	Aversion to certain species Attraction to certain species Selective involvement with wildlife
Socialization • devaluing or absent messages Encounters • negative • conflictual/harassment Place of residence • built environment Demographic characteristics • gender	Tolerating wildlife	Aversion to wildlife Management of conflict Limited involvement with wildlife
Socialization • devaluing messages Encounters • negative • threatening Place of residence • built environment	Wildlife disconnect	Avoidance of wildlife No connection with wildlife No involvement with wildlife

[1]The life conditions experienced by the study participants interact in different combinations that shape the developmental processes associated with their wildlife experience, resulting in outcomes unique to the particular set of life conditions.

"selective engagement with wildlife" process, with approximately 15% of the participants positioned toward either end of the continuum.

Connecting with wildlife. Individuals in this category had positive attitudes toward most wildlife species shaped by positive experiences in natural settings generally under the guidance of a supportive adult(s). The following excerpt from an interview with Fran illustrates these conditions:

> *Special Place*
>
> I was raised having a big garden. I could just run up and down the hill and pretty much do anything. In my old house where I use to live, there were a lot of butterflies because there was open space and a big yard. Our house was near the Missouri River and a turtle came. We always had rabbits. We use to catch them in little strawberry baskets.
>
> *Mother as Mentor*
>
> My mother is an open person, where you learn many different things. When I was very young she brought me in the yard and we looked at different books, about how animals would react to us being there and how they live in their habitat versus ours.

Involvement with wildlife and nature at a young age can foster positive feelings about wildlife, reward curiosity, and promote further explorations and connections with wildlife. Instructive and supplemental guidance from adults important in the participant's life contributed to positive experiences that broadened the individual's understanding and connection with wildlife.

Selective engagement with wildlife. Our data indicated that place of residence (i.e., built environment), encounters with wildlife (i.e., limited encounters, negative & positive encounters), and socialization (i.e., warning messages, positive messages) were the primary conditions and properties that were most salient in the "selective engagement with wildlife" process. Individuals associated with this process had both positive and negative attitudes toward wildlife shaped primarily by information they received through socialization (i.e., family, school, media). These individuals had minimal direct encounters with wildlife and limited involvement with wildlife-related activities (e.g., fishing, hunting, bird feeding). Encounters with wildlife were limited to the urban community, which is populated by many of the animals that the participants perceived as threatening. Individuals experiencing the "selective engagement with wildlife" process had intensely negative attitudes and perceptions toward wildlife species that they perceived as threatening or dangerous (e.g., raccoons, snakes), and positive attitudes toward species that they perceived as non-threatening (e.g., birds, rabbits). The following excerpt from the interview with Marta offers a glimpse of her experience:

> *Watch Out for Snakes*
>
> We have a conversation about snakes when we do the laundry. When we put the laundry out to dry we talk about that there might be snakes crawling on your feet. But they say the snakes are not poisonous. I don't know, but if I saw a snake I would scream and run. My mother said to grab the snake from the back and just throw it away. Just throw it as far as you can.
>
> *Tortillas for a Squirrel*
>
> One time we gave some tortillas to a squirrel and he was eating it from our hands, but he didn't bite or anything. We were just sitting there giving him tortillas and he was just eating them.

Ethnicity may play a role in shaping this process because involvement in consumptive wildlife-related activities (e.g., fishing, hunting) seemed be an unaccepted practice for the Latino female participants (n = 7). None of the Latino females in our study participated in

consumptive wildlife-related activity. This was not the case, however, with the majority of African-American females associated with the “selective engagement with wildlife process.”

The “selective engagement with wildlife” process fosters a situation where individuals avoid circumstances where they may encounter wildlife that they perceive to be threatening and pursue experiences with preferred wildlife species in both consumptive and non-consumptive wildlife-related activities. However, because their negative attitudes and perceptions tended to be more affectively salient, the “selective engagement with wildlife” process may result in a reduction in opportunities for positive encounters with wildlife, which could then erode the development of a broadened appreciation for wildlife. We anticipate that these individuals are likely to maintain a conditional interest in wildlife and will tend to prefer wildlife activities that focus on structured settings, such as zoos and aquariums.

Tolerating wildlife. We identified negative encounters with wildlife, socialization (i.e., absent or devaluing messages), and moralistic beliefs as the most salient conditions and properties associated with the “tolerating wildlife” process. Participants experiencing this process generally had negative attitudes toward wildlife shaped by the negative encounters that they had with wildlife on a somewhat regular basis. These encounters tended to be associated with animals that invade the participant’s personal space (e.g., opossums in the trash) and occurred primarily in the participants’ neighborhood and around their homes. Participants associated with the “tolerating wildlife” process gained information about wildlife primarily through personal experience alone and received little information from other sources (i.e., family members, school, or media). The participants also shared a moral belief that animals have a right to exist. Gender may also be an important factor in this process because some of the conflict situations resulted from harassment activities (e.g., catching and killing snakes) engaged in by the male participants, a behavior associated primarily with males (Arluke, 2002). Donnie’s comments highlight the conditions contributing to the “tolerating wildlife” process:

> *The Bird Attack*
>
> My friend and I knocked down a bird’s nest and the momma came and tried to peck me in the head. I was in the tree messing with the nest and it fell and the bird came and started pecking. I ran home and stayed there the whole day because I thought the bird was going to get me.
>
> *Messing with an Opossum*
>
> I had a thing with a possum. I am scared of them. It was my first time messing with one. I was playing with it and stuff. It was right there in my trash can and I was trying to get it out. It started to run at me, so I backed up and went in the house and told my uncle and he got it out. He grabbed the trash can and threw it off the balcony and the possum ran into the weeds. I hate the mothers because they are always in my trash. I don’t kill them though because they are God’s creatures.

Through the “tolerating wildlife” process, participants continue to experience conflict from problem animals but can not solve the problem, and so they must just tolerate the conflict.

Wildlife disconnect. Participants associated with the “wildlife disconnect” process generally had negative attitudes and perspectives toward wildlife shaped by negative experiences with wildlife and negative messages from adults important in their lives.

Participants in this category viewed wildlife as having little value in their lives and preferred to have no association with wildlife. Threatening experiences with wildlife at a young age accompanied by either minimal support from adults or shared messages of anxiety and fear contributed to shaping the participant's perspectives of particular wildlife species. A lack of positive experiences with wildlife and access to only negative messages and misinformation promote feelings of separation or disconnect from wildlife. Janet's statements demonstrate her feelings toward wildlife:

> *Attacked by a Raccoon*
>
> We were at home and everybody was sleeping and I heard something like rattling at the door. I thought it was somebody coming because it was real late. So I went up to check and when I turned on the back porch light the trash had tipped over and the next thing I knew a raccoon had come out of the trash can. I ran in the house and tried to jump on our wooden table. Before I new it I had slipped and fallen. I busted my head and I was like just out. After that I don't know what else happened. I don't know how they got the raccoon out or nothing. All we have had are horrible experiences with wildlife, no good experiences.
>
> *Rabbits in the Yard*
>
> We have a fence but the rabbits still get in the yard somehow. The rabbits are not scared. I mean you can walk really close to a rabbit and it will not run. As long as they don't hop on me it's cool. I don't mess with them. I try to get in my car real fast. I don't like no kind of animals. We don't have cats, dogs, nothing.

As the participants associated with the "wildlife disconnect" process age, continue to have negative experiences with wildlife and receive negative and warning messages about wildlife, their negative feelings toward wildlife deepen. We anticipate that this process will likely foster a long-term aversion to and avoidance of wildlife and wildlife-related activities.

Summary and Implications

Our study used a qualitative approach to investigate how African-American and Latino adolescents experience wildlife in the urban environment. We found evidence to suggest that the urban adolescents in our study had varied experiences with wildlife. No single variable or condition alone was responsible for overall perspectives toward wildlife. These adolescents experienced wildlife in a variety of ways and under different circumstances. However, we did identify a combination of general social and environmental conditions in their lives that we theorize contributed to the formation of processes that ultimately influenced their overall interest and appreciation for wildlife.

Based on our analyses, we identified four primary conditions that were most salient in the wildlife experience of the urban African-American and Latino adolescents in our study: (a) demographic characteristics, (b) socialization, (c) place of residence, and (d) wildlife encounters. These four general conditions formed the basic framework and played an important role in shaping four key processes associated with the wildlife experience: (a) connecting with wildlife, (b) selective engagement with wildlife, (c) tolerating wildlife, and (d) wildlife disconnect. Using these four general processes, we fashioned a set of potential outcomes (i.e., active engagement with wildlife-related activities, conditional or selective interest in wildlife, limited interest in wildlife or wildlife-related

activities, disengagement with wildlife) that could be used to help understand and explain the study participants' experience with wildlife.

Wildlife professionals often attempt to instill in children an interest in and appreciation for wildlife. The conditions we identified that shape the "connecting with wildlife" process would most closely facilitate this goal for the adolescents we interviewed. Consequently, we developed the following mid-range grounded theory: "children who have access to and spend time in urban green spaces and natural areas while growing up; receive positive and supportive messages about wildlife from adults important in their lives; and have opportunities to participate in a variety of wildlife related activities in a supportive environment; will likely become adolescents who appreciate and value the multiple benefits of wildlife."

This study may have important theoretical and applied implications because the data highlight the importance of the social and environmental context with respect to a person's experience with wildlife and the multidimensional conditions and processes associated with the environmental and social situations encountered. Because a person's general attitudes and value orientations are shaped by the broader conditions that they encounter in society, our data underscore the importance of constructively influencing the developmental processes that help to form values toward wildlife. There was some evidence of family members and teachers taking action to foster a connection to wildlife, but the majority of participants in our study had limited opportunities to experience wildlife in positive and safe situations and received minimal formalized information about wildlife from natural-resource professionals. It is our concern that if urban adolescents continue to have minimal opportunities for positive experiences with wildlife, as in the case of the participants in our study, and do not develop an appreciation for wildlife or value wildlife as important in their lives, they will be less interested in the fate of wildlife.

We contend that if an objective of urban wildlife conservation is to foster an appreciation in urban African-American and Latino adolescents for the multiple values of wildlife, several conditions should be present in a developing child's life. First, children should be given access to wild places in both urban and non-urban settings where they can experience nature in their day-to-day life. Bixler et al. (1994) recommend that frequent and direct experiences in natural environments provide formative experiences for children and encourage the development of accurate perceptions of wild places and the animal inhabitants. Second, children should receive supportive mentoring from adults important in their lives. Wildlife professionals should strive to provide risk-free opportunities for urban youth to learn about and experience wildlife by utilizing the existing social structure of urban communities like extended kin networks and neighborhood institutions like schools, churches, and community centers (Outley & Floyd, 2002). Third, children should be given the opportunity to interact with wildlife in a variety of situations beginning at a young age before they develop fears, apprehensions, and negative perceptions of animals. Children are naturally curious beings and if given the opportunity they will investigate the natural world and welcome encounters with animals like worms, toads, snakes, and various other small creatures. Sobel (1995) suggests that by cultivating a relationship with animals, children will foster an empathy with animals that they will carry into adolescence and adulthood. Wildlife professionals can help foster an enduring interest in and connection to wildlife by developing programs and materials that reach urban children and their parents and that focus on the day-to-day environments where most of our participants encountered wildlife. Our data suggest that it is not so much the type of activity that is important as it is the nature (e.g., safe, positive, exciting) and frequency of the encounters.

Future Research

Although our grounded theory suggested that a combination of key conditions should be present in a child's life to foster an interest in and appreciation for the value of wildlife, our research did not identify the degree of interdependence among the conditions or the specific contribution that each condition might play in shaping an adolescent's experience and perceptions toward wildlife. Our findings highlighted the importance of urban green spaces and natural areas in shaping the wildlife experience for urban adolescents. Additional research is necessary to investigate particular strategies that might facilitate a close relationship to nature and its wildlife inhabitants in relation to the specific role adult's play in shaping a child's perspective on wildlife. Research questions might include, At what age and under what conditions should children be introduced to natural areas, under what type of mentoring, and at what degree of frequency? Or, Does information from teachers and other professionals carry the same influence as family members, peers and/or media, and if not, how does frequency of message and type of wildlife experience offset those influences?

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