

Running head: UNDERPRIVILEGED YOUTH PARTICIPATION IN NBOR

Motivations, Barriers, and Constraints Affecting Underprivileged Youths' Participation  
in Nature-based Outdoor Recreation

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By

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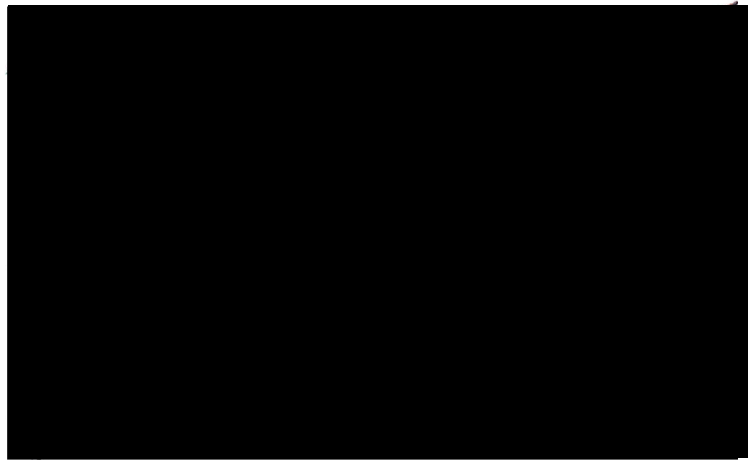
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# UNDERPRIVILEGED YOUTH PARTICIPATION IN NBOR

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## UNDERPRIVILEGED YOUTH PARTICIPATION IN NBOR

### Abstract

*The types of motivations, barriers, and constraints affecting youth participation in nature-based outdoor recreation are researched in this study. The participants represent underprivileged youth affiliated with a drop-in after-school youth program sponsored by a local soup kitchen in an upper-Midwest city. Guided by the Constraints Negotiation Theory and following previous leisure and recreation research on perceived motivations, barrier, and constraints, this study utilizes qualitative techniques to collect data. Results reveal sets of common motivations and constraints affecting underprivileged youths' participation in nature-based outdoor recreation. This information will benefit public and private local and regional organizations that provide and promote nature-based outdoor recreation opportunities for a diverse youth population by helping them to better understand their audience.*

## Chapter One

*“Experiencing nature during childhood engenders both curiosity and the passion to learn that reflects a willingness to give and receive information, facts, and ideas.”*  
-Stephen R. Kellert

### Background

The number of youth nationwide who are participating in nature-based outdoor recreation (NBOR) is shifting (Outdoor Recreation Participation Report [ORPR], 2010), and in many cases has declined (Pergams & Zaradic, 2008). Amongst the many identified unfavorable consequences of decreased time spent being active outside (ORPR, 2010), a prominent one may be a decline in youths’ environmental awareness and connection (Kelly, 2008). Similar to many national efforts that are being conducted to address the significant decrease in youth participation of outdoor activities (Chesapeake Bay Foundation, 2011), there are several local organizations in and around the City of Duluth, Minnesota that strongly support initiatives encouraging outdoor and nature-based activities for all age groups, and especially for youth (Hartley Nature Center, n. d. & Positive Energy Outdoor (ed) Ventures, 2008). Following Constraint Negotiation Theory (Jackson & Rucks, 1995) and the Hierarchy of Constraints Model (Raymore, Godbey & Crawford, 1994), this study aims to build on previous constraints and motivations literature by researching a specific sub-group of the local population: underprivileged youth.

For the purpose of this research study, the term “underprivileged” is used to define youth from low-income families who have fewer opportunities in education, employment, and social life (Education, Youth, and Culture Council, 2008). This term has been identified as an accurate description of attendees at a drop-in after-school

program that offers a safe environment and healthy meals to its participants (L. Sanders, personal communication, March 22, 2011); the same site that was used for data collection for the study. Research shows that underprivileged youth perceive a unique set of barriers and constraints that affect their participation in NBOR (Hellison, 2009; Ries, Gittelsohn, Voorhees, Roche, Clifton, & Astone, 2008).

From a programming perspective, Hultsman (1993), who has conducted research on youth in the outdoors, notes the importance of knowing the characteristics, interests, traits, and constraints of your target audience. Within the scope of this research, the primary audience is underprivileged youth. Understanding what motivates or prevents underprivileged youth from participating in NBOR can translate to an understanding of how to better develop and market programs to meet your particular audience where they are developmentally in relation to the environment. Further, when providing programs to underprivileged youth, understanding the decision-making process within the family unit is important. Based on Outley and Floyd's (2002) research, parents in urban and inner-city neighborhoods regularly play the role of gatekeeper for deciding whether or not a program is acceptable for their children to participate in, despite the child's age. Further, Hultsman (1993) found that youth cited parental influence as a top reason for not joining a new activity, and that Hispanic youth more often cited parental influence than white, black, American Indian, or youth from mixed backgrounds. Program providers will benefit from understanding factors such as interest in certain activities and decision-making power associated with participating in NBOR (Hultsman, 1993; Outley & Floyd, 2002; Flett, Moore, Pfeiffer, Belonga, & Navarre, 2010).

Allison (1996) reports a need for program directors and service providers to be culturally competent when working with racially and ethnically diverse groups. While these groups may experience different activity outcomes and values, Allison (1996) recommends practitioners use their awareness of ethnic differences as a guide, but not as stereotypes. An awareness of different cultural and racial norms can lead practitioners to be more intentional in the delivery of their programs (Allison, 1996; Nygreen, Kwon, & Sanchez, 2006), so as to encourage and motivate those of all races and ethnicities to participate.

According to the ORPR (2010), spending time as a family in natural settings is a major contributing factor in a young person's future participation or interest in NBOR. Further, the role of parents in the decision-making process can be vital to current and future participation in NBOR (Hultsman, 1993). Research that reveals urban youths' perceptions on why underprivileged youth do or do not participate in NBOR will help to create a broader description of the issue. As Kelly (2005) noted in a Minnesota Department of Natural Resources (DNR) ten year forecast report on adult outdoor recreation in Minnesota, the state as a whole is in the midst of an overall decline in outdoor recreation participation. If familial influence is expected to play a major role in outdoor pursuits, then the Minnesota DNR's research may likely predict not only a decline in adult participation, but also in youth participation in NBOR.

The majority of those engaging in NBOR credit family participation while they were young as a main reason for enjoying such activities later in life (Flett et al, 2010; Hultsman, 1993; ORPR, 2010; Van Velsor & Nilon, 2006; West & Merriam, 2009). From a conservation perspective, many organizations believe that concerned and



environmentally aware youth can grow later in life to become concerned and environmentally responsible adults of the future (Hartley Nature Center, n.d.; Van Velsor & Nilon, 2006). It seems then that practitioners can benefit from understanding how to engage underprivileged youth in activities that could lead them to becoming more aware of the environment—including healthy recreation opportunities as well as learning how to care for the earth.

According to Allison (1996), Barnett (2006), Mayeno (2000), Rideout & Legg (2000), and Shores, Scott, and Floyd (2007), minorities participating in interpretive programming and outdoor activities perceive a number of barriers, including racial discrimination. Further, the cost to participate in certain activities or to visit certain recreation sites has also been identified as a barrier to participation (More & Stevens, 2000). Among the four diverse populations included in the Outdoor Recreation Participation Report (2010), for the ages of 13-17, 44% of African American, 53% of Asian/Pacific Islander, 65% of Caucasian/White/Non-Hispanic, and 52% of Hispanic youth report participation in outdoor recreation. Statistics reflecting the American Indian populations were not included the ORPR (2010). While African American youth represent the smallest percentage of participation in the report, their participation rate was the highest among the four groups (ORPR, 2010). Awareness of racial and cultural similarities and differences and their impact on participants' perception of an inclusive atmosphere in outdoor activities can assist practitioners and instructors with providing equal, inviting, and welcoming opportunities to everyone (Allison, 1996; Hellison, 2009; Ries et al, 2008).

## Research Objectives

Compared to adult- and family-focused research, only a small few studies have investigated participation in NBOR from a youth perspective (Flett et al, 2010; Ries et al, 2008). One such report that has been produced annually since 2007 is The Outdoor Foundation's Outdoor Recreation Participation Report (2010). The ORPR will act as a comparison tool for this study. To determine underprivileged youths' motivations, barriers, and constraints affecting their participation in NBOR, this study aims to fulfill two objectives. The first objective is to identify the motivations, barriers, and constraints encountered and/or perceived by underprivileged youth who live in the City of Duluth, Minnesota. Second, it is valuable to understand not only the youths' perceptions and experiences, but also whether they are able to negotiate a way to overcome constraints related to their participation in NBOR.

## Definition of Terms

Youth: Persons 12-17 years of age.

Underprivileged: Having fewer opportunities in education, employment, and social life (Education, Youth, and Culture Council, 2008)

Nature-based outdoor recreation (NBOR): Outdoor activities in natural settings or otherwise involving in some direct way elements of nature—terrain, plants, wildlife, water bodies (Cordell, 2008).

Constraint: Reason(s) for not engaging in a particular behavior that result in altered participation rather than non-participation (Jackson, 1988, as cited by Raymore et al., 1994).

Barrier: Something that inhibits participation (Raymore et al., 1994).

### Limitations of the Study

Due to the small number of participants in this research, this study provides an in depth snapshot of the current motivations, barriers, and constraints that underprivileged youth identify as affecting their participation in NBOR. It is not assumed that the results will be generalized to all youth in the city of Duluth, MN.

### Basic Assumptions

Based on the design of the Kids Cafe program as an after-school program that offers a healthy meal and a safe place for youth, it is assumed that the youth and the families utilizing the service may be categorized as low income and underprivileged. This assumption is based on a description of the youth attendees at Kids Cafe that was provided by the Kids Cafe program coordinator (L. Sanders, personal communication, March 22, 2011).

## Chapter Two

*“The safest place around here is in your house.”*

*(Participant response to parental monitoring of children’s recreation in Houston, Texas)*

*-Corliss Wilson Outley and Myron F. Floyd*

### Underprivileged Youth

Several factors compound to characterize what it means to be an underprivileged youth. For example, according to Nygreen et al. (2006), the term urban youth is “a euphemism for underserved, poor, marginalized, ethnic minority youth” (p. 108). These youth reside in socially isolated neighborhoods where poverty and unemployment or low-paying employment are common (Nygreen et al., 2006; Outley & Floyd, 2002; Van Velsor & Nilon, 2006). Extended family units may share responsibility for providing food, supervision, shelter, and the development of children in underprivileged neighborhoods (Outley & Floyd, 2002). Safety, transportation, and economic hardships are regular barriers to participating in nature-based outdoor activities, as well as many other leisure activities for underprivileged youth (Jackson & Rucks, 1995; Nygreen et al., 2006; ORPR, 2010; Outley & Floyd, 2002; Raymore et al., 1994; Ries et al, 2008; Van Velsor & Nilon, 2006). These youth have either experienced for themselves or internalized secondhand from their parents the perceived safety concerns that frequently prevent them from recreating outdoors, whether the perceptions are accurate or not. For example, many children are only allowed to play outdoors within one block of their house (Outley & Floyd, 2002). The Education, Youth, and Culture Council (2008) identified underprivileged youth as those having fewer opportunities in education, employment, and social life.

As Strife and Downey (2009) suggest, more information on racial, ethnic, and socioeconomic differences in youth exposure to nature is needed. While much has been studied about health and developmental advantages, less is known about the social implications surrounding the issue of environmental inequality.

Research shows that knowing your audience will lead to more effective programming (Hellison, 2009; Cushman, 2009; Barnett, 2006; Allison, 1996; Floyd, Taylor & Whitt-Glover, 2009; Hultsman, 1993). Cushman (2009) emphasizes the need to approach teaching underprivileged youth based on the cultural values and identities held by these youth. Additionally, the concept of community-based participatory research as a means of intentionally including community members in programming and activity development can lead to higher amounts of participation and backing (Floyd et al., 2009; Nygreen et al., 2006). Underprivileged youth respond more positively to adult leaders who strive to build authentic relationships and trust through incorporating cultural, racial, and linguistic characteristics into those relationships (Nygreen et al., 2006; Outley & Floyd, 2002).

Urban sprawl and poor urban development contribute to barriers for youth participation in NBOR by increasing distance to natural green spaces and thereby decreasing the likelihood of an individual being able to walk to a green space (Maller, Townsend, St. Leger, Henderson-Wilson, Pryor, Prosser, & Moore, 2009). As a result, more dependency on motorized transportation also decreases physical activity and can contribute to the risk of a child becoming overweight or experiencing other health-related issues (Strife & Downey, 2009; Frumkin, 2005; Louv, 2005).

Shores et al. (2007) studied the links between gender, age, socio-economic status (SES), and race/ethnicity, and found that these constraints are often linked. Further, the researchers found that combinations of statuses as confounding variables can affect constraints to outdoor recreation.

Certain status characteristics such as age, race, gender, education, income, and SES can be labeled as diffuse characteristics (Shores et al., 2007; Jagrowsky, 1996; Yinger, 1993; Szmanka, et al., 1997 as cited in Shores et al., 2007). Diffuse characteristics are used to make judgments on other people's competencies and worth—despite the fact that they may not be relevant to the current situation (Shores et al., 2007). Research shows a connection between these diffuse characteristics and certain types of behavior including social interactions and achievement (Berger & Fisek, 2006; Lovaglia, 2000; Riordan, Griffith, & Weatherly, 2003 as cited by Shores et al., 2007). It would seem then that while sometimes out of the control of the individual, diffuse characteristics may act as barriers to an individual's choice or ability to participate in an activity or to visit a recreation site.

#### Guiding Theoretical Frameworks

The Hierarchy of Constraints model (Crawford, Jackson, & Godbey, 1991) incorporates intrapersonal, interpersonal, and structural constraints. Intrapersonal constraints are psychological and pertain to that one individual; while interpersonal constraints are the result of an interaction or relationship between two or more individuals. Structural constraints stem from “intervening factors” that affect participation (Raymore et al., 1994, p. 102). Negotiation of these constraints can be accomplished through, for example, managing personal emotions and thoughts, having a

partner to participate in an activity with, and eliminating financial- and time-related constraints. Based on the Hierarchy of Constraints model (Crawford et al., 1991), these constraints can stand alone or compile to create a set of constraints. Additionally, Nyaupane, Morais, and Graefe (2002) add that constraints can also vary for one individual from one activity to another. Raymore et al. (1994) investigated the correlations between and among the three levels of constraints and found gender differences as well. Females perceived more intrapersonal constraints than males as well as more constraints overall (Raymore et al., 1994). Further, males were more likely to cite approval from friends as a concern in their choice of activities (Raymore et al., 1994). Results indicated that males and females varied significantly in their levels of self-esteem with females more likely to perceive intrapersonal constraints and more total constraints than males (Raymore et al., 1994). According to Raymore et al., (1994), “People of either gender who have low self-esteem perceive a greater number of interpersonal constraints on leisure,” (p. 114).

The Hierarchy of Constraints model suggests a much more complex web of interwoven constraints that, in some cases, compound atop one another. If the constraints perceived by underprivileged youth in their ability to participate in NBOR are similar to those reported in the research of Raymore et al., (1994), then their negotiation strategies may require multipart solutions.

It should not be assumed that a constraint to leisure will always result in nonparticipation. According to Raymore et al., (1994), “constraints are not considered to be absolute; they can potentially be overcome or reduced, while barriers inhibit participation” (p. 100). Negotiation of constraints is possible and may be facilitated by

both intrinsic and extrinsic motivations (Jackson & Rucks, 1995). For example, time constraints may be overcome by reducing the amount of time an individual participates in an activity rather than ceasing participation or choosing not to participate (Jackson & Rucks, 1995; Kay & Jackson, 1991). Other negotiation strategies may include modifications to non-leisure parts of an individual's life to accommodate the leisure activity.

#### Identified Constraints and Barriers

Social issues that have been identified as barriers to NBOR for underprivileged youth include, among others, low income, racial discrimination, and safety (Mayeno, 2000; More & Stevens, 2000; Outley & Floyd, 2002; Ries et al., 2008). The issue of user fees as a means of discriminating against low-income people is also an area of concern and interest (More & Stevens, 2000). More and Stevens (2000) found that people with lower income more often altered their behavior due to entry fees in relation to visiting nature-based recreation areas; and in some cases stopped recreating altogether due to those fees. Further, they reported that those in the lower income bracket were more likely than high income groups to agree that all taxpayers should share responsibility of financing public lands (More & Stevens, 2000).

Race also has been identified as an influential constraint to NBOR participation (Allison, 1996; Barnett, 2006; Mayeno, 2000; Rideout & Legg, 2000; Shores et al., 2007). African American, Asian/Pacific Islander, and Hispanic youth ages 6-17 who are classified as outdoor participants cited schoolwork as their main reason for not getting outside more often (ORPR, 2010). Additionally, state and federal guidelines such as the No Child Left Behind Act of 2001 have increased pressure on schools to improve



performance on standardized tests, often at the expense of replacing outdoor recess time with more classroom time (Louv, 2005). The original intent of NCLB was to begin to close the achievement gap; however, research shows that resources to do so are often limited for low income students and students of color (Darling-Hammond, 2007). Further, Darling-Hammond (2007) found that these students often had less access to textbooks and extracurricular activities, among other school-related services. At times, low income students and students of color in Darling-Hammond's (2007) article could not even be assigned appropriate homework because there were not enough textbooks for each student to take one home.

In the same report produced by the ORPR (2010), outdoor non-participants of the same age group identified different reasons for not participating. For example, 31% of Asian/Pacific Islander youth reported it was because their parents do not take them outside (ORPR, 2010). Other top reasons included lack of interest, too much schoolwork, and preference for screen media or hanging out with friends instead (ORPR, 2010). As mentioned previously, familial influence is also identified as a factor, both positive and negative, for NBOR participation (Hultsman, 1993; ORPR, 2010). Further, according to Nyaupane et al., (2002), individuals tend to experience different levels of constraints for different activities.

Underprivileged African American youth cite a number of barriers that affect their involvement in recreation both outdoors in parks and natural public spaces as well as at recreational facilities such as community recreation centers and the YMCA (Ries et al., 2008). Ries et al., (2008) found that conditions like bathrooms in good repair enabled extended use of parks and outdoor recreation areas. If facilities were within walking

distance, they were much more often utilized by underprivileged youth, pointing to the ease of recreating when there is no reliance on transportation (Outley & Floyd, 2002; Ries et al., 2008). In Ries et al.'s, (2008) research, young women cited beauty as an attraction to parks, and both males and females cited fun and meeting people as reasons for going to recreational facilities. Ries et al., (2008) also found, however, that the males also preferred to engage in unstructured but competitive sports and would be more likely to go to outdoor recreation areas alone than the females, who were more likely to cite safety concerns, harassment, fights, and other issues as reasons to not go alone. Additionally, both witnessing and hearing about crimes leads to primary and secondary experiences and perceptions on the safety of certain recreational facilities and parks for males and females (Ries et al., 2008).

#### Motivations

Youth ages 6-17 cite “fun” as the most common motivation for participating in outdoor activities (ORPR, 2010; Ries et al., 2008). The age groups outlined in the Outdoor Recreation Participation Report parallel the three stages of youth development described by Kellert (2005). The stages, which parallel other physical, cognitive, and emotional stages of development are: before age six; ages six to twelve; and ages twelve to 18 (Kellert, 2005; ORPR, 2010). Consequently, when comparing Kellert's (2005) stages of development to the motivations identified in the ORPR (2010) for general population youth, one can observe that the two are highly synchronized. For example, in the 6-12 year old group, fun, discovery and exploration, and relaxation are among the top three participation motivators (Kellert, 2005; ORPR, 2010). Kellert (2005) describes this age group as ready to explore and experience the natural world and characterizes the age

group as starting to branch out into nature with less adult supervision as they move through this stage. Further, the top three motivators for the 13-17 year old group are fun, relaxing, and to get away from usual routine. This age group represents Kellert's (2005) third and final stage of development of children's values of nature. During the teenage years, outdoor experiences "offer important opportunities to develop physically and psychologically, to exercise independence and autonomy," (Kellert, 2005, p. 79), which could support reasons why having fun, relaxing, and breaking up their usual routine are at the top of the list for youth. Youth are looking for something more and different than their regular day-to-day lives seem to offer.

In addition to reviewing stages of development and their related motivations, it is valuable to also consider research conducted by Manfredi, Driver, and Tarrant (1996) regarding the Recreation Experience Preferences (REP) scale for leisure activities. The 19 domains included in the REP scale can be used "to determine motivations for or the psychological outcomes desired from leisure" (Manfredi et al., 1996, p. 204). Included in the 19 domains are themes such as spending time with others, enjoying time in nature, risk-taking, and learning and teaching skills, among others. Many of the responses included in the ORPR could be further categorized into the 19 REP scale themes for further evaluation of the types of motivations youth and adults identify when discussing their NBOR participation.

#### Diversity in Outdoor and Environmental Education

In 2007, the National Association for Environmental Education (NAEEE) adopted a Diversity Commitment as part of their efforts to diversify the organization and

to act as a role model to the field of environmental education (NAAEE, 2007). The Diversity Commitment states,

NAAEE recognizes the integral connections between environmental concerns and wider questions of social needs, welfare, and economic opportunity. It also acknowledges the need for greater emphasis on equity and celebration of diversity within NAAEE and in the field of environmental education.

As the field of environmental education moves forward, and as the fields of outdoor education and NBOR move with it, practitioners are left with the question of how to achieve diversity in a way that is respectful and encouraging to all audiences (Allison, 1996; NAAEE, 2007; Mayeno, 2000; ORPR, 2010). According to Mayeno (2000) “people of color have been underrepresented in the environmental education field, which has tended to exacerbate their lack of input in shaping environmental education programs” (p.1). Keeping the environmental education field abreast of common NBOR trends may be a way to encourage overall increases in diversity across the various fields of environmental, outdoor, adventure, and leisure education.

Much research has been conducted in the realm of outdoor recreation that identifies recreation activities as leisure activities. For example, West and Merriam (2009) suggest common characteristics of outdoor recreation. These characteristics give the impression that outdoor recreation must occur outside of the regular day-to-day routine, apart from normal social interactions; require a means of financial wherewithal; and take place away from one’s home-base living area. If these characteristics were to act as the guide for defining outdoor recreation, then indeed many may be excluded that may not have the financial or transportation means to experience outdoor recreation. However, by employing a more inclusive definition of NBOR, such as that used by Cordell (2008),

which defines NBOR as outdoor activities in natural settings or otherwise involving in some direct way elements of nature—terrain, plants, wildlife, water bodies, we as a field and a society may be more encouraging and welcoming.

#### Trends in Participation and Physical Activity

It is no secret that there is a nationwide shift within NBOR (Cordell, 2008; Louv, 2005; ORPR, 2010; Pergams & Zaradic, 2008). At first glance, it appears that participation in NBOR, as shown in multiple bodies of research, is decreasing, especially for youth (Chesapeake Bay Foundation, 2011; Kelly, 2005; ORPR, 2010). Though some have reported an increase in NBOR, those reports have largely focused on adults (Cordell, 2008). Further, Pergams and Zaradic (2008) identified a decline in nature-based recreation as determined through a decline in national park visitation.

Reports such as those from Pergams and Zaradic (2008), Cordell (2008), and the ORPR (2010) are useful to the field of NBOR for understanding on a national level how adults, family units, and youth choose to participate in NBOR. Additionally, these types of studies may lend useful information to solving such issues revealed by the Minnesota DNR that not only indicate past declines in adult and youth participation in NBOR, but forecasts future declines as well (Kelly, 2005).

Perhaps another channel in the community that may be of help in solving the crisis of lack of youth participation in NBOR is formal school physical education. Physical education and physical activity provide opportunities for holistic approaches to development for underprivileged youth by teaching conflict resolution, decision-making, goal-setting, leadership skills, and incorporating youths' personal strengths and interests into activities that engage the entire body. Fitness and cognitive development can work

together to provide these youth an opportunity to move forward in life. Hellison (2009) stated that instructors who spend time in low-income neighborhoods, schools, and organizations will have greater success in interacting with lower-income youth. Further, to complement the holistic approach to helping these youth develop, Hellison (2009) cited a need for professionals from various disciplines to work together, rather than each in their own discipline.

For both adults and youth, there is a correlation between an increase in facilities and an increase in physical activity (Ries et al., 2008). Research has shown that there are collectively fewer recreational opportunities in communities of higher minority populations, leading to yet another correlation of lower physical activity among racial and ethnic minorities (Ries et al., 2008). According to Ries et al. (2008):

Research identifying facility characteristics that impact use is limited, especially for minority youth, who are underrepresented in the research literature on the environment and physical activity. It is important to identify characteristics that are relevant to minority youth because they may experience their environment differently as a result of age and cultural differences (p. 44).

#### Sense of Place

Place identity and sense of place are terms used to characterize a place as one that adds meaning and purpose to life (Proshansky, 1978, as cited by Williams, 2002).

Williams (2002) shares his view on leisure activities and their relation to his sense of place, stating:

For me the outdoor recreation resources was not some kind of supermarket of trails and trees, rivers and rocks to be arranged by recreation programmers and managers for consumption as leisure experiences, but a collection of places, each with its own unique set of histories, rituals, and meanings (p. 353).

A further developed sense of place often leads to a sense of belonging (Williams, 2002) and even attachment. The type of place can vary to include both natural and constructed settings. Development of sense of place in a natural setting, however, is not necessarily intuitive nor are equal opportunities for doing so perceived as available. Barriers such as transportation (Hultsman, 1993) and concerns of racial discrimination (Rideout & Legg, 2000) may prevent youth from developing a strong sense of place and a connection to the natural world, regardless of whether or not it is a developed natural space such as a city park or an undeveloped wilderness area.

Hersey et al. (1978, as cited by Mayeno, 2000) found that African American and Caucasian children shared the same level of concern for the environment until the students reached the fourth grade, where students' levels of concern about pollution became more divided. For example, the Caucasian children's concern level increased while the African American children's concern levels decreased. Through interviews with teachers, parents, and youth, Mayeno (2000) found that developing programming based on concerns, values, and interests of the community can lead to increased community support and engagement among African Americans (Mayeno, 2000). By listening to the local community, Mayeno (2000) found there was greater support and enthusiasm for developing a new environmental education program when community members understood that it would also support the local community socially and economically. Based on Mayeno's (2000) findings, which parallel other research on African American's views of the human-nature connection (Caron, 1995; Meeker, 1973, as cited in Mayeno, 2000), African Americans support and often prefer environmental education programs that weave together human and wildlife systems and the

interdependence of these systems (Mayeno, 2000). If this holds true for environmental education programs, perhaps the concepts of community involvement and engagement can be applied to support NBOR as well.

To further the value of developing a sense of place, Lindholdt (1999) describes students who are more likely to develop their sense of place as also being more likely to become “scholars and post-graduate professionals” (p. 6), and can be empowered to shape the future as a result of their place-based attachments. Thus, we see the need for helping youth develop such attachments early in life so that they continue to develop values associated with those attachments.

#### Familial and Social Influences

Many have studied the influence of family on participation in NBOR activities (Flett et al., 2010; Hultsman, 1993; ORPR, 2010; West & Merriam, 2009). The 2010 ORPR indicated that the top five groups that influenced youth ages 6-17 to participate in outdoor activities included: parents; friends; brothers, sisters, or other relatives; school programs; and community programs such as Boy Scouts, YMCA, and neighborhood programs (ORPR, 2010). Based on Flett et al.’s (2010) research of nature-based physical activity as a catalyst for connecting children and family with nature, youth and their parents cite varying reasons for why they do or do not take part in nature-based physical activity. Barriers to nature-based physical activity mentioned by both youth and their parents include perceptions of safety, insects, extreme weather for both summer and winter, and a general lack of comfort. According to Flett et al. (2010) discomfort with outdoor activities seems to focus on issues such as conveniences like staying clean or not getting dirty, no access to technology, and “not enjoying the feelings of being active or



sweating,” (Flett et al., 2010, p. 295). Interestingly, Flett et al. (2010) also showed that youth “preferred” activities that meant they got to be with their friends, rather than meeting new people (Flett et al., 2010). Among the preferred activities cited by the youth in Flett et al.’s (2010) study were those that were generally lower in intensity but also those that involved competition.

In synch with Flett et al.’s (2010) research, Hultsman (1993) earlier reported reasons for why youth participate, do not participate, or cease participating in recreational activities. Hultsman’s (1993) findings indicated parental influence as being ranked in the top five reasons for why youth do not participate in a new activity. Hultsman (1993) also found that boys were more likely to cite parental influence than girls, as were Hispanic students as compared to Caucasian, African American, American Indian, or mixed ethnic groups. Girls cited activity leaders for school sports, non-sports activities, and community-based activities as reasons to not join in a new activity. Moreover, the tendency for youth to cite parental influence for any of the three choices of participation generally decreases as youth progress through adolescence (Hultsman, 1993). Similar to the ORPR (2010) the top three reasons cited by Hultsman (1993) for early adolescents not joining an activity included cost, parental influence, and lack of transportation. However, the top three reasons for this same group to cease participation in an activity were cost, decreased interest in the activity, and relocation (Hultsman, 1993). Cost ranked highest among perceived constraints for both starting a new recreation activity and discontinuing a recreation activity (Hultsman, 1993). A comparison of these two sets of answers shows some similarities and differences in how to get youth involved and how to retain them.

Interestingly, based on the Outdoor Foundation's ORPR (2010), media, mentors, and outdoor education programs ranked lowest among 6-17 year olds as influential and motivating factors. This finding suggests that while the fields of Outdoor and Environmental Education work to expand their influence and program offerings, the ability to influence and build connections continues to be strongest among family members and friends (Van Velsor & Nilon, 2006; West & Merriam, 2009).

Based on Hultsman's (1993) findings, how a program is marketed to the public could depend on the age of the youth. For example, programming for youth under 14 years of age should perhaps be targeted at the mothers of those youth, since they are perceived to have a great influence and final decision on the youths' choice to participate. When youth are further into adolescence, they seem to report a lower perception of parental influence and instead become more direct consumers, choosing for themselves whether or not to participate (Hultsman, 1993).

### Chapter Three

*“Listening to these children will not only help us to better understand adolescence as a developmental period, but will also help us in the future to create meaningful policies and interventions concerning their leisure experiences.”*

*-Corliss Wilson Outley and Myron F. Floyd*

#### Setting

The setting for this study was the Kids Cafe, a partner program of the Damiano Center in Duluth, MN. This is one of approximately 1,500 drop-in after-school Kids Cafe programs nationwide that provides free meals and snacks to low-income youth (Feeding America, 2011). Kids Cafe was open for youth to attend between 4 p.m. and 5:30 p.m. Monday through Wednesday. Snacks were available throughout the afternoon and supper was typically served around 4:45 p.m. Informal indoor and outdoor activities were coordinated by staff and volunteers and occurred whenever youth showed interest in participating. For confidentiality and decreased audio interference, interviews took place in a conference room down the hall from Kids Cafe.

#### Observation and Researcher Acculturation

Prior to the start of data collection, the researcher spent a minimum of one afternoon per week for four weeks at the Kids Cafe as a volunteer. Leading up to the formal interviews, participant observation occurred. At times, the researcher joined in an activity or discussion for a short period of time when it appeared doing so would benefit data collection without detracting from the activity or discussion. Field notes were recorded shortly after the interaction occurred. This enabled the researcher to begin a trust-building process by attending regularly and having consistent positive interactions with the youth as recommended by Nygreen et al. (2006). This regular attendance also

helped in understanding the daily schedule in order to conduct formal interviews at times that were convenient and welcoming to the youth and program coordinator.

### Participants

The City of Duluth is characterized by a predominantly Caucasian population, with Caucasians making up 90.4% of the population in 2010. The next highest racial groups are the American Indian and Alaska Native population, accounting for 2.5% of the population, African Americans at 2.3%, and Asians at 1.5% (U.S. Census Bureau, 2010). These statistics represent self-identified race and do not account for individuals who identify with more than one racial or ethnic group. The median household income in Duluth in 2005-2009 after being adjusted for inflation was \$39,602 and 11.2% of families and 20.1% of individuals were reported to be below the poverty level (U.S. Census Bureau, 2010). The poverty guidelines (2011) updated periodically in the *Federal Register* by the U.S. Department of Health and Human Services under the authority of 42 U.S.C. 9902(2) indicate a poverty threshold for a family of four is \$22,350.

In comparison to city-wide Census data, racial demographics at the Kids Cafe are nearly inversed. According to the Damiano Center Kids Cafe 2010 Annual Report, of the 426 youth served, 35% were American Indian, 20% were African American, 16% were Caucasian, 1% were Asian, 1% were Latino, 17% were mixed with two or more, and 10% were unknown. Of those participants, there was a near even split between males and females, with males accounting for 49% of the youth served and females accounting for 51% (L. Sanders, personal communication, March 22, 2011).

Participants for this study were seven youth from Kids Cafe and the Kids Cafe coordinator. To be eligible to participate, youth must have been between the ages of 12 and 17. Participants were selected on the recommendations from the program coordinator based on age and the youths' willingness to participate. All youth who attend the Kids Cafe are required to have a blanket permission slip signed by a parent or legal guardian, which, in addition to providing consent for the child to attend Kids Cafe, also provides consent for data collection (See Appendix A). Prior to data collection, youth participants were provided and read aloud a Child Assent Form (See Appendix B) to confirm that they: a) understood the nature of the research; b) were given the opportunity to ask any questions they may have; c) understood they may choose to not participate; and d) they could discontinue the study at any time without any negative consequences.

The ages of the seven youth participants ranged from 13 to 16 with a median age of 14. Of the seven youth, five were American Indian, one was Caucasian, and one was originally from Ecuador. Four youth participants were female and three were male. The program coordinator was female, Caucasian, in the age range of 55-65, and was a long-time employee of the Kids Cafe at the Damiano Center.

#### Data Collection

Data collection for this study occurred in late May 2011. Qualitative interviews were used to collect data to identify the perceived motivations, barriers, and constraints related to underprivileged youths' participation in NBOR. A total of seven interviews with eight participants—seven youth and one adult program coordinator—were conducted. These were formal semi-structured interviews (Patton, 1990) lasting no longer than 30 minutes for all youth participants and 60 minutes for the program coordinator. A

list of guiding questions that allowed for multiple prompts was used during formal interviews with the youth participants (see Appendix D).

In addition to collecting data from youth participants, a formal interview and occasional informal question and answer sessions with the program coordinator served to provide further information about the study participants. During the two week period of data collection, the program coordinator was phasing out of her position and into retirement while a new program coordinator was training in. An Adult Consent form was provided to the program coordinator (see Appendix C). A list of guiding questions that allowed for multiple prompts was used during the formal interview with the program coordinator (see Appendix E).

#### Data Analysis

Data was analyzed using standard interpretive methods following Goetz and Le Compte (1984). All interviews were audio recorded and transcribed. Analytical induction was employed whereby data was coded one line at a time. Coding was guided by the constructs within the Constraint Negotiation Theory (Jackson & Rucks, 1995), the Hierarchy of Constraints (Crawford et al., 1991), the ORPR (2010), and the REP Scale (Manfredo et al., 1996), as well as pre-identified concepts in the barriers, constraints, and motivations literature. Data coding resulted in a total of 73 initial codes for two sets of data—37 constraints/barrier codes and 36 motivations codes. These 73 initial codes were collapsed into themes based on the guiding frameworks. Similar to the findings of Crawford et al. (1991), three final categories of data were evaluated: Intrapersonal, Interpersonal, and Structural.

The Hierarchy of Constraints model (Crawford et al., 1991) and the Constraint Negotiation Theory (Jackson & Rucks, 1995) guided the development of 36 constraints/barriers codes. The 36 codes were then sorted into 11 sub-categories based on Jackson and Rucks' Constraint Negotiation Theory (1995). The 11 sub-categories were then grouped further into three primary categories based on Crawford et al.'s Hierarchy of Constraints (1991). The final three categories are, in order of negotiation principles, Intrapersonal, Interpersonal, and Structural.

Using responses included in the ORPR (2010) and domains from the Recreation Experience Preference (REP) Scale (Manfredo et al., 1996) as a guide for coding the interviews for motivations, 37 codes were developed. These 37 codes were then sorted into 12 of the 19 REP Scale domains identified by Manfredo et al. (1996), and two additional sub-categories developed by the researcher as a result of the coding process. These 14 domains were then grouped further into three primary categories—Intrapersonal, Interpersonal, and Structural—based on Crawford et al. (1991) Hierarchy of Constraints.

## Chapter Four

*“If I had transportation ...my mom usually gives me a ride ...but sometimes no gas money to get out there and back. ”*

*—Brian, 16, formal interview response to why he doesn't spend more time outdoors at the Lac Courte Oreilles Reservation*

### Results

Five themes were identified from the formal interviews with the youth and the program coordinator. At times, these themes paralleled previous research on motivations, constraints, and barriers, and other times revealed new insights into why this participant group does and does not participate in NBOR.

The following themes occurred the most frequently throughout all the data collected from participants. It is important to interpret the frequencies with caution because the frequency counts conducted by the primary researcher did not account for the fact that a single individual may have mentioned a certain theme several times while other participants may have mentioned it only once or not at all. Regardless, the frequencies allow additional understanding of the data and can be used to guide future investigation and research focus. Because, as it happened, five of the seven youth participants were identified as American Indian, and, at times, provided responses different from the non-American Indian youth participants, the researcher felt it too valuable to simply tabulate all youth responses together without providing a second set of data representing the American Indian participants' responses when particularly of interest to the field.

### Constraints

From a total of 540 responses coded as constraints, nearly half (47%) were identified as Structural constraints. Intrapersonal constraints accounted for 33% of the



responses and Interpersonal constraints accounted for 20% of the total responses.

Crawford and Godbey (1987) suggested that participants first encounter Intrapersonal constraints. Then, when the activity requires at least two people, Interpersonal constraints may occur. Finally Structural constraints are the last to be encountered and include external variables (Crawford & Godbey, 1987; Nyaupane et al., 2002).

Within the 11 constraint sub-categories, the top five most frequently identified constraints/barriers were, in descending order by weight: Geographical Accessibility (22%), Problems with Interpersonal Relationships (19%), Lack of Interest (16%), Cost/Lack of Money & Facilities (12%), and Commitments and Time (9%). The other six categories were: Mental/Emotional Limitations, Lack of Knowledge, Weather/Climate, Health and Physical Fitness, Lack of Skills, and Culture.

Within the original 36 initial codes for constraints/barriers (Appendix G), the top five most frequent responses were, in descending order by weight: Preference for other activities—outdoors (7.96%), Proximity/Location (7.6%), Transportation (6.67%), Preference for other activities—indoors (6.67%), and Lack of Knowledge/Lack of Awareness (6.29%).

The data show that the most frequent four Constraint responses represent not only Intrapersonal and Structural constraints, but specifically constraints related to *Lack of Interest* and *Geographical Accessibility*. Previous research suggests a progression from Intrapersonal to Interpersonal to Structural constraints, the same progression used to measure types of motivation in this study (Crawford & Godbey, 1987). Results suggest that these participants have negotiated Intrapersonal and Interpersonal constraints and are currently most often experiencing Structural constraints related to NBOR. Youth

participants identified the same most frequent four Constraint responses as those indicated by the sum of the Youth and Program Coordinator responses as well as those specific to the American Indian participants.

**Table 1**  
**Frequency of Constraint Responses by Category**

	Youth			Adult	All
	American Indian (n=5)	Non-American Indian (n=2)	All (n=7)	Program Coordinator (n=1)	(n=8)
<b>INTRAPERSONAL</b>					
Lack of skills	6	1	7	3	10
Health and Physical Fitness	7	4	11	1	12
Lack of Knowledge	13	10	23	11	34
Lack of Interest	40	22	62	25	87
Mental/Emotional Limitations	3	5	8	27	35
<i>Sub total</i>	69	42	111	67	178
<b>INTERPERSONAL</b>					
Problems with Interpersonal Relationships	31	16	47	58	105
<i>Sub total</i>	31	16	47	58	105
<b>STRUCTURAL</b>					
Commitments and Time	16	1	17	32	49
Geographical Accessibility	45	17	62	54	116
Cost/Lack of Money - Facilities	18	6	24	43	67
Weather/Climate	5	4	9	15	24
<i>Sub total</i>	84	28	112	144	256
<b>CULTURAL</b>					
Culture	1	0	1	0	1
<i>Sub total</i>	1	0	1	0	1
<i>Total</i>	185	86	271	269	540

## Motivations

From a total of 624 responses indicating Motivation, Intrapersonal Motivations (37%) and Interpersonal Motivation (35%) responses were nearly equal. Structural Motivations (24%) and Cultural Motivations (5%) accounted for the final 28 percent.

Within the 14 identified sub-categories, the top five most frequent motivation responses were, in descending order of frequency, Similar People (25%), Risk Reduction (17%), Learning (13%), Achievement/Stimulation (11%), and Family Togetherness (10%). The other nine categories were: Culture, Risk Taking, Enjoy Nature, Financial, Equipment, Escape Personal-Social Pressure, Physical Rest, Nostalgia, and New People.

Within the initial 37 codes for Motivation (Appendix H), the top five most frequent responses were, in descending order of frequency, Location/Proximity (12.18%), Be with Family (9.13%), Fun/Cool (8.81%), Time with Friends/Peer Influence (7.85%), and Activity Leader/Parent-led (6.57%).

Among the 294 responses from the American Indian participants, in the original 37 codes for Motivation, the top five most frequent responses related to Motivation varied from the overall response. For the five American Indian participants, the top five most frequent responses for Motivation were, in descending order of frequency, Be with Family (16.33%), Location/Proximity (15.99%), Time with Friends/Peer Influence (9.86%), Tradition (6.8%), and Organized Group and/or Activity (6.12%).

**Table 2**  
**Frequency of Motivation Responses by Category**

	Youth			Adult	All
	American Indian (n=5)	Non-American Indian (n=2)	All (n=7)	Program Coordinator (n=1)	(n=8)
<b>INTRAPERSONAL</b>					
Achievement/Stimulation	26	11	37	33	70
Risk Taking	2	0	2	28	30
Learning	16	12	28	51	79
Enjoy Nature	17	1	18	5	23
Nostalgia	4	0	4	0	4
Physical Rest	2	0	2	8	10
Escape Personal-Social Pressures	8	1	9	5	14
<i>Sub total</i>	75	25	100	130	230
<b>INTERPERSONAL</b>					
Family Togetherness	52	5	57	4	61
Similar People	69	23	92	65	157
New People	1	1	2	0	2
<i>Sub total</i>	122	29	151	69	220
<b>STRUCTURAL</b>					
Risk Reduction	56	16	72	34	106
Equipment	5	3	8	7	15
Financial	3	3	6	14	20
<i>Sub total</i>	64	22	86	55	141
<b>CULTURAL</b>					
Culture	33	0	33	0	33
<i>Sub total</i>	33	0	33	0	33
<i>Total</i>	294	76	370	254	624

## Themes

The following five themes represent relationships among participant responses in connection to their NBOR participation.

### Theme 1: Value of Family

Based on their responses, the American Indian youth participants consider a sense of community, family togetherness and cultural tradition as primary motivations for participating in NBOR. This response to family togetherness parallels the ORPR's (2010) findings that family togetherness is a strong motivation for NBOR.

Responses in this study differ from the ORPR (2010) in that for the American Indian youth, family togetherness was often mentioned in combination with culture and tradition—participating in pow wows—as well as spending time with siblings, extended family, and parents. June (female, age 13) mentioned hiking at a local park with her mom, siblings, cousins, and uncle as well as playing at the park while babysitting siblings and cousins. John (male, age 14) mentioned enjoying a day at a park with his family while celebrating his brother's birthday and he responded yes when asked if spending time with family makes him want to spend time outdoors (formal interview).

Similar to ORPR (2010) results of youth citing parents as a reason for why they don't participate more often, there are times when family support can be a challenge for the youth at Kids Cafe. According to the program coordinator, “many parents of the youth at Kids Cafe are simply focusing on survival—ensuring they and their kids are fed and safe” (formal interview). Other instabilities in home life may also exist for these youth. Bouncing from one family member or friend's home to another and so forth can affect, among other things, the ability to get required permission slips signed (formal

interview). Youth participants occasionally mentioned they sometimes would rather be doing something than stay home. When asked the question *What makes you want to spend time outside?*, John (male, age 14) stated, “there’s really nothing to do in my house,” and June (female, age 13) stated, “I’m not really at home. I’m usually outside or at my friend’s house...” (formal interviews).

## Theme 2: Peer Influence

Responses from all eight participants suggest that peer influence is a strong motivation for NBOR participation. This includes spending time informally with friends as well as with friends and peers in organized groups and activities. Similar to Flett et al.’s (2010) findings, participants did not want to participate in NBOR with new people but rather with their friends.

For example, to the question *What would convince you to do a new activity?* John (male, age 14) responded, “Like if my friends were doing it.. my cousins, my brother, my sister,” (formal interview). Anika (female, age 13) and Cayla (female, age 13), who were interviewed together, agreed that to try a new outdoor activity, their friends would first have to be doing it, “If we all decide to do it, we all do it,” (formal interview). Natalia’s (female, age 14) response was one of the strongest, “I wouldn’t do anything on my own. That would be too scary. I would rather go with the group.. like they tried it and I see it’s ok, then I would,” (formal interview). John’s (male, age 14) responses to most questions were quite short, but most often still focused around friends and family. John (male, age 14) responded with “friends” to nearly every question posed about NBOR participation—what he does, why he chooses to do it, why he wouldn’t do it, why he would try a new activity, and so on (formal interview). Brian (male, age 16) went so far

as to suggest ways that he and others could be more enabled to participate in NBOR.

“Probably if it was more like community things like cookouts or gatherings or festivals...” (formal interview).

The program coordinator cited numerous examples of the positive and negative effects of peer influence on the youth at Kids Cafe. Examples included pressure to take part in, ceasing, or not taking part in various activities offered through Kids Cafe. One example provided involved one male youth convincing another male youth not to participate in a field trip so that he could instead meet up with an acquaintance known for selling drugs. However, that caused an opening on the field trip and allowed another youth on the waiting list to participate in the field trip (formal interview).

### Theme 3: Geographical Accessibility

Throughout the interviews, participants clearly stated the value of proximity in their choices of activities. Most often, a park located just a few blocks from Kids Cafe was mentioned as their choice outdoors location. For example, June (female, age 13) stated “Fourth Street Park ... I sit there with my friends and have so many memories there,” (formal interview). Nearly all participants also cited spending time at the beach and lake walk along Lake Superior in warmer months (formal interviews).

Another convenient outdoors location was the park located adjacent to the school that some participants attended. Natalia (female, age 14) explained, “I usually spend my time at the school’s park because that’s where like a lot of kids are and stuff,” (formal interview). Her response indicates not only convenience in location but also preference for being around her peers. Natalia was the only youth participant who also discussed safety as a factor in her NBOR location choices.



Geographical accessibility also includes access to transportation. Many participants identified transportation constraints and barriers, and some were able to explain how they negotiated those constraints. “Yeah, transportation is like a big problem. Especially here because like everywhere there’s like hills and stuff” (Natalia, female, age 14, formal interview).

Brian (male, age 16), discussed his interest in spending time with his dad fishing on a reservation about 90 miles away from Duluth. He said that he “doesn’t get to do it as much as he would like” and identified transportation and cost constraints. “If I had transportation.. .my mom usually gives me a ride.. .but sometimes [there’s] no gas money to get out there and back,” (formal interview). Brian (male, age 16) also explained how he sometimes has to choose between buying a bus ticket to visit friends or buying milk and bread (formal interview). His responses reflect the reality that constraints can compound to create more a complex set of constraints (Raymore et al., 1994).

However, Brian and other participants identified principles of constraint negotiation by describing their use of public transportation. “You know the DTA has been like a great help in getting me where I want to go,” (Brian, male, age 16). When asked *What are your typical ways of getting around town? How do you get to places?* John (male, age 14) also responded, “City bus.” Anika and Cayla (both female, age 13) said they believed “they could take a bus or ride their bikes to get to a park or location that is further away from home,” (formal interview).

For the participants in this study, *Geographical Accessibility* was the most frequently mentioned limitation to participation in NBOR. The ORPR (2010) reported the response “There aren’t places for outdoor activities near me” as the second highest

constraint and fifth highest barrier for Hispanic youth ages 6 to 17, but this response was much lower in all other groups of youth in the ORPR for both constraints and barriers. This parallels a response from the program coordinator related to this group of youths' non-participation in ice skating, a fairly common recreational activity in northern Minnesota. However, the Fourth Street Park, which was most frequently mentioned outdoor location by the participants in this study, no longer has a skating rink. Therefore, access to a skating rink that was free and offered free skate rentals is no longer available (formal interview).

#### Theme 4: Culture and tradition

With five of seven participants identified as American Indian, a strong culture and tradition theme emerged from the interviews. In response to what they do with their family outdoors, three of the five American Indian participants described their participation in pow wows. A fourth participant did not mention pow wows but was the brother of another participant who described attending pow wows regularly as a family throughout the summer. Minnesota and Wisconsin are home to 22 American Indian reservations, all within a day's drive of the study site ([native-languages.org](http://native-languages.org), 2011).

Participants who mentioned pow wows as a form of NBOR offered similar descriptions of activities and traditions that they take part in while attending this nature-based outdoor activity. Brian (male, age 16) explained, "Well, it's a native gathering, I guess. And you know we go there to practice our traditions and have a good time. [we] dance, sing, eat, and we just you know ... talk with people you haven't seen in a while. And just chillax." The female participants also mentioned jingle dresses and taking part in traditional dances. "A pow wow is a native gathering where all natives get together.

We have special outfits for dance and then songs that the boys drum ... And then after you're done and out of your outfit you can run around ... and then sometimes there's a lake by it so we can swim and stuff. And we camp out," (Cayla, female, age 13).

After further discussion, it was learned that Cayla and June go camping only when they go to pow wows, which suggests a direct link between attending that cultural and traditional event and their participation in NBOR through camping and other outdoor activities. June also mentioned bowing in late Fall or early Winter with her father and extended family and canoeing with her father while ricing. Both of these are further examples of NBOR that are influenced by native cultural traditions. Further, despite the mention of ricing being "hard," June still considered it and bowing to be "fun" activities. Based on these examples: pow wows, ricing, and bowing, one can identify a number of motivations and enabling factors that affect these American Indian youths' participation in NBOR: being with family, spending time with friends, tradition, and culture.

#### Theme 5: Lack of Interest

A lack of interest or preference for other non-NBOR activities was voiced by every participant in this study. Additionally, the program coordinator emphasized the need for adventure and a sense of risk as key motivators for youth to take part in NBOR. The participants' preference for other activities included both indoor and outdoor preferences and were widely variable, ranging from Cayla's response, "I just want to stay inside and sleep ... and watch movies." to John's response of rollerblading at the skate park. Others, including the program coordinator, mentioned organized sports such as basketball, softball, and football as preferences for other outdoor activities. Indoors activities that were mentioned included going to the mall and watching TV.

When asked about what these participants may do in their free time to relax, the program coordinator emphasized the danger of too much free time as an opportunity to experiment with drugs, which were noted to be easily accessible, and the “easy high” associated with that experimentation.

Kids like adventure. And they like stimulation. And they like escape. And so, unfortunately for a lot of these kids, the easiest form of that is not to go to the climbing wall ... The easiest form is in some pain or shootin' up ... The challenge is, after they've had that very easy high, is then to come up with something else that meets that high.

In general, while it may be a combination of lack of knowledge, interest, and access, participants did not identify a wide variety of NBOR activities that they were interested in, nor were motivated to partake in. Some even said they thought there should be more to do. “It’s not, like for teens, I wouldn’t say there’s too much stuff, like outdoors just made for teens. We just find our own stuff like swimming, just to be outside” (Brian, male, age 16). All youth in the ORPR (2010) cited a lack of interest as their primary or secondary barrier to NBOR participation. The next most common barrier in the ORPR (2010) was too much schoolwork, a topic that was not even mentioned by participants at the Kids Cafe or the program coordinator.

## Chapter Five

*“It is important to identify characteristics that are relevant to minority youth because they may experience their environment differently as a result of age and cultural differences.”*

*—Amy V. Ries, Joel Gittelsohn, Carolyn C. Voorhees, Kathleen M. Roche,  
Kelly J. Clifton, Nan M. Astone*

## Summary &amp; Conclusion

The purpose of this study was to reveal the motivations, barriers, and constraints affecting participation in NBOR for a small group of underprivileged youth in the Northland region of the upper Midwest. What we have learned is that for this group of participants Structural constraints parallel Intrapersonal and Interpersonal motivations. This means that factors such as location, cost, time, and weather greatly impact these underprivileged youths’ opportunities for NBOR. Further, because they are still youth, many of these are constraints that may require assistance to negotiate (Jackson & Rucks, 1995; Nygreen et al., 2006; Outley & Floyd, 2002; Raymore et al., 1994; Ries et al., 2008; Van Velsor & Nilon, 2006). This is quite revealing to the fields of NBOR and intercultural studies to the extent that it seems that for these youth collectively, participating in NBOR is less a matter of *what* the activity is and more a matter of *where* it is happening and *who* is taking part. Further, this study encourages practitioners and educators to continue to be aware of important motivations and constraints such as location, peers, family, and culture when working with underprivileged youth in an NBOR context. Practitioners and educators who understand these motivations and constraints have a greater likelihood of creating an inclusive atmosphere in outdoor activities where they may provide equal, inviting, and welcoming opportunities for all (Allison, 1996; Hellison, 2009; Ries et al., 2008).

The five themes that were identified as a result of this study are: Value of Family, Peer Influence, Geographical Accessibility, Culture and Tradition, and Lack of Interest. The first theme, Value of Family reinforces previous studies that found family to be both a motivation and a constraint to NBOR participation (Flett et al., 2010; Hultsman, 1993; ORPR, 2010; West & Merriam, 2009). The second theme, Peer Influence, is related to the role that interpersonal relationships play in these underprivileged youths' NBOR participation (Crawford et al., 1991; Manfredi et al., 1996). This group of youth is most heavily positively influenced to participate in NBOR by their peers and family (ORPR, 2010; Hultsman, 1993). The third theme, Geographical Accessibility was identified as a constraint by every participant in this study. When evaluating the minimal resources available to underprivileged youth specifically, a number of constraints multiply and lead to geographical challenges (Nygreen et al., 2006; Outley & Floyd, 2002; Van Velsor & Nilon, 2006). The fourth theme, Culture and Tradition, is directly associated with responses from the American Indian youth in this study. The American Indian youth participants indicated a sense of community, family togetherness, culture, and tradition as motivations for participating in NBOR. While previous research has mentioned the influence of family, this finding suggests a stronger emphasis placed on family togetherness by the American Indian youth in this study than other reports that included research on family influence such as the ORPR (Hultsman, 1993; ORPR, 2010). Further, the combination of culture and family have enabled some participants to take part in NBOR by going camping, an activity they did not identify as being independent of traditional gatherings. The fifth and final theme identified in this study, Lack of Interest, is a theme that continues to be a growing concern to the fields of outdoor recreation and

outdoor and environmental education, and, in this study, was often associated with a Lack of Knowledge, including examples of participants being unaware of available NBOR opportunities in the form of resources, activities, and locations (Louv, 2005; ORPR, 2010).

Based on the sampling of youth included in this study, and these youths' responses, this study reveals two weaknesses in the ORPR. First, the American Indian population is not acknowledged in the ORPR (2010). Information regarding this population would be particularly valuable for practitioners with a greater likelihood of serving higher concentrations of American Indian youth because of the value placed on understanding one's audience.

Second, this study alludes to the influence of Culture on choosing to participate in certain NBOR activities. This suggests that, based on several cultural and traditional responses in conjunction with NBOR, urban American Indian youth participate in NBOR differently than urban non-American Indian youth. Investigating the impact of ethnicity and culture on leisure preferences was recommended by Godbey, Crawford, and Shen (2010) in research that evaluated the current state of the Hierarchy of Constraints model. Godbey et al. (2010) suggest that culture is intertwined in all three levels of constraints, rather than as a potential fourth category separate from Intrapersonal, Interpersonal, and Structural constraints. Based on results from the American Indian and Non-American Indian participants, Constraint/Barrier responses related to Culture were limited, which may support Godbey et al.'s (2010) suggestions that Culture is in fact not a factor to be evaluated separately from the three established levels of constraints.

## Recommendations

The results of this study revealed five themes related to underprivileged youths' participation in NBOR. In the process of identifying these themes, it was found that American Indian youth are underrepresented in research related to NBOR. Future research regarding both urban and non-urban American Indian youth will be a valuable addition to the current body of knowledge on this topic. Other recommendations for future research include further investigation of underprivileged youth in Duluth and surrounding areas through a larger study related to NBOR. Lastly, localized research that investigates connecting all youth in Duluth to NBOR opportunities would be useful to practitioners.

From this study we can also learn that the original 19 domains of the REP scale (Manfredo et al., 1996) act as a valuable starting point for assessing leisure motivations. Based on the conclusion from Manfredo et al. (1996) that the REP scale does not claim to be a complete list of motivations and that it may in fact be expanded, this study recommends a domain be added to the REP scale: Culture. The addition of this domain shows the importance of diversity and a respect for tradition as motivators for NBOR participation. Results from this study show that Culture is a motivator for American Indian youth to participate in NBOR, while in line with Godbey et al.'s (2010) findings, Culture is not shown to be an influential constraint to NBOR participation.

The five themes identified in this study relate to motivations and constraints that may affect underprivileged youths' participation in NBOR and may be used as a guide for educators and practitioners interested in offering effective NBOR programming to this population. The perspectives of the seven youth and their adult program coordinator



are a valuable addition to the existing body of literature related to underprivileged youth, NBOR participation, and, more specifically, American Indian youths' participation in NBOR.

## References

- Allison, Maria T. (1996). The challenge of diversity: Embracing those on the fringes. *Journal of Experiential Education, 19*, 122-126.
- Barnett, L. A. (2006). Accounting for leisure preferences from within: The relative contributions of gender, race or ethnicity, Personality, Affective Style, and Motivational Orientation. *Journal of Leisure Research, 38*, 445-474.
- Chesapeake Bay Foundation, (2011). No Child Left Inside. Retrieved from <http://www.cbf.org>
- Cordell, H. K. (2008). The latest on trends in nature-based outdoor recreation. *Forest History Today*, 4-10.
- Crawford, D. W. & Godbey, G. (1987). Reconceptualizing barriers to family leisure. *Leisure Sciences, 9*, 119-127.
- Crawford, D. W., Jackson, E. L., & Godbey, G. (1991). A hierarchical model of leisure constraints. *Leisure Sciences, 13*, 309-320.
- Cushman, K. (2009). SAT Bronx: A collaborative inquiry into the insider knowledge of urban youth. *Theory Into Practice, 48*, 184-190. doi: 10.1080/00405840902997287
- Darling-Hammond, L. (2007). Race, inequality and educational accountability: The irony of 'No Child Left Behind'. *Race Ethnicity and Education, 10*(3), 245-260.
- Education, Youth, and Culture Council. (2008). Ministers to focus on safer internet and underprivileged youth. *European Social Policy, 184-190*. Retrieved from: <http://find.galegroup.com.libpdb.d.umn.edu:2048/gtx/infomark.do?&contentSet=IAC- Documents&type=retrieve&tabID=T002&prodId=AONE&docId=A180344395&source=gale&srcprod=AONE&userGroupName=mnauduluth&version=1.0>
- Feeding America. (2011). *Kids Cafe*. Retrieved from <http://feedingamerica.org/how-we-fight-hunger/programs-and-services/child-hunger/kids-cafe.aspx>
- Flett, M. R., Moore, R. W., Pfeiffer, K. A., Belonga, J., & Navarre, J. (2010). Connecting children and family with nature-based physical activity. *American Journal of Health Education, 41*(5), 292-300.
- Floyd, M. F., Taylor, W. C., & Whitt-Glover, M. (2009). Measurement of park and recreation environments that support physical activity in low-income communities of color: Highlights of challenges and recommendations. *American Journal of Preventive Medicine, 36*, S156-S160. doi:10.1016/j.amepre.2009.01.009

- Frumkin, H. (2005). Health equity and the built environment. *Environmental Health Perspectives, 113*, A290-A291.
- Godbey, G., Crawford, D. W., Shen, X. S. (2010). Assessing hierarchical leisure constraints theory after two decades. *Journal of Leisure Research, 42*(1), 111-134.
- Goetz, J. P. & LeCompte, M. D. (1984). *Ethnography and qualitative design in education research*. Orlando, FL: Academic Press.
- Hartley Nature Center. (n.d.) *Our mission*. Retrieved from <http://www.hartleynature.org/about/mission.html>
- Hellison, D. (2009). Engaging Urban Youths: A youth development perspective. *The Journal of Physical Education, Recreation & Dance, 80*(8), 27-29.
- Hultsman, W. (1993). The influence of others as a barrier to recreation participation among early adolescents. *Journal of Leisure Research, 25*(2), 150-164.
- Jackson, E. L. & Rucks, V. C. (1995). Negotiation of leisure constraints by junior-high and high-school students: An exploratory study. *Journal of Leisure Research, 27*(1), 85-105.
- Kay, T. & Jackson, G. (1991). Leisure despite constraint: The impact of leisure constraints on leisure participation. *Journal of Leisure Research, 23*, 301-313.
- Kellert, S. R. (2005). Nature and childhood development. In Kellert, S. R. (Ed.), *Building for life: Designing and understanding the human-nature connection*. (pp. 63-89). Washington, DC: Island Press.
- Kelly, T. (2005). Ten-year forecasts of adult outdoor recreation participation, 2004-2014. *Minnesota Department of Natural Resources, 1-48*.
- Kelly, T. (2008). 2007 Minnesota state parks research summary report. *Minnesota Department of Natural Resources, 1-55*.
- Lindholdt, P. (1999). Writing from a sense of place. *Journal of Environmental Education, 30*, 4-10.
- Louv, R. (2005). *Last child in the woods: Saving our children from nature-deficit disorder*. Chapel Hill, North Carolina: Algonquin Books.
- Maller, C., Townsend, M., St. Leger, L., Henderson-Wilson, C., Pryor, A., Prosser, L., & Moore, M. (2009). *Healthy parks, healthy people: The health benefits of contact with nature in a park context*. The George Wright Forum, *26*(2), 51-88.

- Manfredo, M. J., Driver, B. L., & Tarrant, M. A. (1996). *Measuring leisure motivation: A meta-analysis of recreation experience preference scales*. *Journal of Leisure Research*, 28(3), 188-213.
- Mayeno, A. S. (2000). *Environmental education needs and preferences of an inner city community of color*. (Dissertation, San Francisco State University). Retrieved from ERIC Database.
- More, T. S., & Stevens, T. (2000). Do user fees exclude low-income people from resource-based recreation? *Journal of Leisure Research*, 32(3), 341-357.
- Native Languages of the Americas. (2011). Retrieved from <http://www.native-languages.org>
- North American Association for Environmental Education. (2007). *NAAEE's diversity commitment*. Retrieved from <http://www.naaee.org/programs-and-initiatives/diversity/naaee-adopts-diversity-policy/>
- Nyaupane, G., Morais, D. B., & Graefe, A. (2002). A comparison of leisure constraints among three outdoor recreation activities: Whitewater rafting, canoeing, and overnight horseback riding. *Proceedings of the 2002 Northeastern Recreation Research Symposium*, 152-157.
- Nygreen, K., Kwon, S. A., & Sanchez, P. (2006). Urban youth building community. *Journal of Community Practice*, 14(1), 107-123. doi: 10.1300/J125v14n01\_07
- Outdoor Foundation. (2010). *Outdoor recreation participation report*. Boulder, CO: The Outdoor Foundation, 1-68.
- Outley, C. W. & Floyd, M. F. (2002). The home they live in: Inner city children's views on the influence of parenting strategies on their leisure behavior. *Leisure Sciences*, 24, 161-179.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods (2nd ed.)*. Thousand Oaks, CA: Sage Publications, Inc.
- Pergams, O. R., & Zaradic, P. A. (2008). Evidence for a fundamental and pervasive shift away from nature-based recreation. *Proceedings of the National Academy of Sciences of the United States of America*, 105(7), 2295-2300. doi: 10.1073/pnas.0709893105
- Positive Energy Outdoor (ed)Ventures, (2008). *Our mission*. Retrieved from <http://www.outdooredventures.org/>

- Raymore, L. A., Godbey, G. C., & Crawford, D. W. (1994). Self-esteem, gender, and socioeconomic status: Their relation to perceptions of constraint on leisure among adults. *Journal of Leisure Research*, 26(2), 99-118.
- Rideout, S., & Legg, M. H. (2000). Factors limiting minority participation in interpretive programming: A case study. *Journal of Interpretation Research*, 5, 53-58.
- Ries, A. V., Gittelsohn, J., Voorhees, C. C., Roche, K. M., Clifton, K. J., & Astone, N. M. (2008). The environment and urban adolescents' use of recreational facilities for physical activity: A qualitative study. *American Journal of Health Promotion*, 23(1), 43-50.
- Sanders, Laurel. (2011). Damiano Center Kids Cafe Annual Report. Email communication.
- Shores, K. A., Scott, D., & Floyd, M. F. (2007). Constraints to outdoor recreation: A multiple hierarchy stratification perspective. *Leisure Sciences*, 29, p. 227-246. DOI: 10.1080/01490400701257948
- Strife, S. & Downey, L. (2009). Childhood development and access to nature: A new direction for environmental inequality research. *Organization & Environment*, 22(1), p. 99-122.
- U.S. Census Bureau. (2005-2009). *American community survey 5-year estimates*. Retrieved from <http://factfinder.census.gov>
- U.S. Department of Health and Human Services. (2011). *The 2011 HHS poverty guidelines: One version of the [U.S.] federal poverty measure*. Retrieved from <http://aspe.hhs.gov/poverty/11poverty.shtml>
- Van Velsor, S. W. & Nilon, C. H. (2006). A qualitative investigation of the urban African-American and Latino adolescent experience with wildlife. *Human Dimensions of Wildlife*, 11, 359-370. doi: 10.1080/10871200600894944
- West, P. C. & Merriam, L. C., Jr. (2009). Outdoor recreation and family cohesiveness: A research approach. *Journal of Leisure Research*, 41(3), 351-359.
- Williams, D. R. (2002). Leisure identities, globalization, and the politics of place. *Journal of Leisure Research*, 34(4), 351-367.

**Appendix A**

**KIDS CAFE PARENTAL CONSENT FORM**

**KIDS CAFE PERMISSION TO PARTICIPATE**

*A SEPARATE FORM MUST BE COMPLETED FOR EACH CHILD* by the child’s parent or legal guardian in order for the child to participate in Kids Cafe activities. RETURN AS SOON AS POSSIBLE.

PLEASE PRINT

Child’s Full Name \_\_\_\_\_

Child’s Date of Birth \_\_\_\_\_ Child’s Age \_\_\_\_\_

Child’s School \_\_\_\_\_ Child’s Grade \_\_\_\_\_

Does Your Child Attend Preschool? YES or NO Which One? \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Parent’s Name(s): \_\_\_\_\_

Phone Number During Kids Cafe \_\_\_\_\_ Second Phone Number \_\_\_\_\_

Secondary/Emergency Contact:

Name \_\_\_\_\_ Relationship to Child \_\_\_\_\_

Telephone number \_\_\_\_\_

Child’s Race/Ethnicity (circle all that apply):

African-American Asian/Pacific

Hispanic

American-Indian European/White

Multi-Racial

Consent & Release:

I give permission for my child to participate in Kids Cafe at the Damiano Center in Duluth, MN. In case of injury, my child will be transported to the nearest medical facility. I give permission to contact the emergency contact should the need arise and I am unavailable.

**\*IMPORTANT\***

Please describe any food allergies, medical needs, physical limitations, child custody orders or information that may affect your child’s participation in Kids Cafe. Use the back side if necessary. \_\_\_\_\_

Damiano is authorized to use photos of my child in public relations materials prepared for and distributed by Damiano of Duluth, Inc. Check here  to withhold authorization.

Damiano is authorized to verify my child’s qualification for free or reduced school meals through his/her school’s lunch program. Check here  to withhold authorization.

Damiano is authorized to include my child in surveys and other data gathering in relation to the Kid’s Cafe program. Check here  withhold authorization.

\_\_\_\_\_  
Signature of Parent or Guardian

\_\_\_\_\_  
Date

## Appendix B

### CHILD ASSENT FORM

At the University of Minnesota - Duluth we are doing a study about why youth choose to spend their free time outdoors and why they don't. We want to see what things might make youth want to spend time outdoors and what might make youth not want to spend time outdoors. This information could help us to learn how and why youth choose to spend their free time and how to better offer programs and activities that you could potentially be a part of. Because you attend the Kids Cafe, which also provides some after-school activities, we are asking if you would like to be a part of this study.

If you agree to participate in this study, we will ask you to answer some questions about the kind of activities you might do outdoors and how often you might do those activities. If you like, you can answer questions with a small group of your friends who also choose to participate in the study.

If you choose not to participate, you can still come to Kids Cafe, you will still be able to take part in all Kids Cafe activities, and no one will be mad at you for choosing not to participate. If you decide you do want to be in the study, but change your mind later, you can stop doing the study and no one will be mad at you. You will also still be able to take part in all Kids Cafe activities.

If you have any questions, you can ask the researcher (Jessica) at anytime. If you think of questions later that you want to ask, you can ask the researcher (Jessica) at any time.

Signing this paper means that you have read it or had someone read it to you, and you are willing to participate in this study. If you do not want to participate in the study do not sign. Being in the study is completely up to you, and no one will be mad at you if you choose not to be in the study or decide later to stop being a part of the study.

Signature of Participant (Youth): \_\_\_\_\_

Date: \_\_\_\_\_

Investigator Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Appendix C

### ADULT PARTICIPANT CONSENT FORM

University of Minnesota Duluth  
Department of Health, Physical Education, and Recreation

Motivations, Barriers, and Constraints Affecting Underprivileged Youths' Participation  
in Nature-Based Outdoor Recreation

Principal Investigator: Jessica Schiff

I have been invited to participate in a research study regarding the motivations, barriers, and constraints that affect underprivileged youths' participation in nature-based outdoor recreation. The study is being conducted in fulfillment of the M.Ed. Environmental Education thesis requirements and is supervised by the principal investigator's advisor, Mark Zmudy, Ph.D., Department of Health, Physical Education, and Recreation, University of Minnesota Duluth.

I have been selected to participate in this study because of my involvement with the Damiano Center Kids Cafe program.

#### **Background Information**

The purpose of this study is to determine the motivations, barriers, and constraints that affect underprivileged youths' participation in nature-based outdoor recreation. Information obtained in this study may allow organizations to design programs to meet the needs of these youth.

#### **Eligibility Requirements**

I am eligible to participate in this study because of my direct involvement with and relationship to the attendees at the Damiano Center Kids Cafe.

#### **Procedures**

If I agree to participate, I will take part in up to 2 formal interviews, each lasting no longer than 60 minutes. Additionally, I may be asked informal questions related to the study during regular Kids Cafe programming.

#### **Risks and Benefits of Participation**

Risks: The study has a risk that is considered minimal. I may experience some minor fatigue while answering interview questions.

Benefits: There is no direct benefit for participation in this study.



**Confidentiality**

All information obtained in this study will remain confidential, to the greatest extent possible on the part of the principal investigator. When results of the study are presented publicly, I will not be identified. Research records will be stored securely and only the principal investigator and her advisors will have access to the records.

**Voluntary Participation**

My participation in this study is completely voluntary. I may withdraw at any time without penalty. My participation in the study, or my withdrawal from the study, will not affect current or future relations with the University of Minnesota Duluth or the Kids Cafe. If I decide to participate, I am free to not answer any question or to withdraw at any time without affecting that relationship.

At the end of the study, the principal investigator will answer any questions I may have.

**Contacts and Questions**

If I have questions, I am encouraged to contact Jessica Schiff at [schif089@d.umn.edu](mailto:schif089@d.umn.edu). I may also contact the research advisor Mark Zmudy, Ph.D., 124 SpHC, 1216 Ordean Court, Duluth, MN 55812, (218) 726-6861, [mzmudy@d.umn.edu](mailto:mzmudy@d.umn.edu).

If I have any questions or concerns regarding this study and would like to talk to someone other than the researcher, I am encouraged to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650.

**Statement of Consent**

I have read the above information and have discussed it with my son/daughter. I have had the opportunity to ask questions and have received answers to the questions I have asked. My signature below indicates that I agree to allow my son/daughter to participate in this study.

Participant Name: \_\_\_\_\_ Date: \_\_\_\_\_

Participant Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Investigator Signature: \_\_\_\_\_ Date: \_\_\_\_\_

***Please keep the attached copy of this form for your records.***

## Appendix D

### GUIDING QUESTIONS FOR FORMAL YOUTH INTERVIEWS AND FOCUS GROUPS

*Questions are based on the Constraint Negotiation Theory, the Hierarchy of Constraints Model, Cordell's (2008) definition of nature-based outdoor recreation, and Ries, et al's (2008) qualitative study of adolescents' use of recreational facilities.*

#### Introduction:

Natural spaces are places like parks and waterways where there are grassy areas, trees, plants, and/or a body of water like a lake, pond, river, or creek. Sometimes you may even have a natural space at or near your home, like a yard. Many parks in Duluth have these features, but also have things like basketball courts and playground equipment. So, for our discussion today, we're going to try to focus on the natural spaces that don't include the blacktopped or built structures.

#### Questions (\* multiple prompts allowed):

1. Does anyone have any questions about certain places or areas and which category they might fit into?
2. Can you describe the places that you spend your time outdoors?
3. Can you explain why you go to those places in particular?
4. What would make you spend more time in these places?
5. Are there some parks or natural places you know of that you don't go to? Think both locally here in town and further away out of town.
6. Can you explain why you don't go there?
7. What are some activities you know of others doing outdoors but that you don't do yourself?
8. Can you explain why you don't do them?
9. What changes would have to be made for you to do a new activity outdoors?
10. Can you recall a time when you wanted to do an activity outdoors that seemed impossible, but you were able to find a way to do it anyway?
11. Can you explain why you wanted to do that activity?
12. What did you have to do to be able to participate in that activity?
13. Do you have anything else you would like to add about spending time outdoors in natural areas?

#### Conclusion:

Thank you for your cooperation and participation today. If you think of other answers to any of these questions, or related to this topic, feel free to talk with me about them during Kids Cafe. I will be here most afternoons until the beginning of June.

## Appendix E

### GUIDING QUESTIONS FOR INTERVIEW WITH PROGRAM COORDINATOR

*Questions are based on the Constraint Negotiation Theory, the Hierarchy of Constraints Model, Cordell's (2008) definition of nature-based outdoor recreation, and Ries, et al's (2008) qualitative study of adolescents' use of recreational facilities.*

#### Introduction:

Natural spaces are places like parks and waterways where there are grassy areas, trees, plants, and/or a body of water like a lake, pond, river, or creek. Sometimes you may even have a natural space at or near your home, like a yard. Many parks in Duluth have these features, but also have things like basketball courts and playground equipment. So, for our discussion today, we're going to try to focus on the natural spaces that don't include the blacktopped or built structures.

#### Questions (\* multiple prompts allowed):

1. Does anyone have any questions about certain places or areas and which category they might fit into?
2. Can you describe the places that the older youth in the program might go to spend their time outdoors?
3. Can you explain why you think they go to those places in particular?
4. What do you think would make or enable them to spend more time in nature-based places?
5. Are there some parks or natural places you know of that they don't go to? Think both locally here in town and further away out of town.
6. Can you explain why they don't go there?
7. What are some activities you know of others doing outdoors but that these youth would not do themselves?
8. Can you explain why they wouldn't or don't do them?
9. What changes would have to be made for them to do or try a new nature-based activity outdoors?
10. What are the primary constraints these youth face in participating in nature-based recreation? Remember to consider all four seasons of the year.
11. Do you know of ways that these youth are able to overcome any of those constraints?
12. Can you explain any scenarios in which you know of a youth overcoming a constraint and thereby resulting in some sort of participation in the nature-based activity?
13. What motivates these youth to participate in nature-based recreation?
14. Do you have anything else you would like to add about spending time outdoors in natural areas?

#### Conclusion:

Thank you for your cooperation and participation today. If you think of other answers to any of these questions, or related to this topic, feel free to talk with me about them during Kids Cafe, call me, or send me an email.

**Appendix F****Letter of support for research conducted by Jessica Schiff at the Kids Cafe**

To: The Institutional Review Board (IRB)

This is a letter to support the work of Jessica Schiff, a graduate student at the University of Minnesota, Duluth for her study of “Motivations, Barriers, and Constraints Affecting Underprivileged Youth’s Participation in Nature Based Outdoor Recreation” to take place in late May of 2011.

Her proposed method will be to conduct focus groups with Kids Cafe attendees to gather data about their perspectives on NBOR. Regular snacks and meals will be provided in accordance with regular Kids Cafe programming. We (the program coordinator) will ensure a safe, quiet meeting space is available as needed for the duration of the study. Kids Cafe will also ensure that parental consent forms are current and on file for all potential participants. We are glad to partner with her in this interesting research.

Sincerely,  
Laurel Sanders, Program Coordinator

## Appendix G

### Initial Constraint Codes

1. Safety
2. Cost/Money/Financial decisions
3. Transportation
4. Lack of knowledge/Lack of awareness
5. Need for specialized equipment/Equipment in bad repair/Equipment not provided
6. Parents/Guardians (both as gatekeepers)
7. Activity leader or lack thereof
8. Weather
9. Natural settings/things (bugs, mud, etc.)
10. Need someone to participate with (friends, family, organized group.)
11. Time
12. Other responsibilities: Babysitting, Managing Food/Shelter/Care
13. Personal/Physical limitations (out of shape, etc.)
14. Preference for other activities—outdoors (basketball, football, etc.)
15. Preference for other activities—indoors (computer, TV, video games, etc.)
16. Lack of interest
17. Discrimination
18. Culture
19. Lazy
20. Lack of (specialized) skill
21. Lack of places to go
22. Scary/Fear of the unknown
23. Lack of self esteem/motivation/confidence/personal feelings
24. Proximity/Location
25. Conflict with other things going on
26. Tired
27. Don't like or want to being with certain people
28. Age
29. Not allowed to participate (disciplinary action, bad grades, etc.)
30. Funding/Budget cuts
31. Utilitarian instead of leisure
32. Registration process/Paperwork
33. Survival mode—struggling with daily life to survive
34. Unpredictable/Unstable home and/or family life
35. Substance Use/Abuse
36. Inability to take initiative
37. Peer Influence

## Appendix H

### Initial Motivation Codes

1. Fun/Cool
2. Relaxing
3. Change from routine
4. Time with friends (“hanging out”)/Peer Influence
5. Meet new people
6. Try new things (explore, i.e. places)
7. Try new things (experience, i.e. activities)
8. Be with family
9. Did it as a kid/when younger
10. Free/No cost/Low cost
11. Challenges
12. Culture
13. Tradition
14. Beauty
15. Convenience
16. Routine
17. Activity leader/Parent-led (Adult Family Member)
18. Organized group and/or activity
19. Location/Proximity
20. Reassurance from friends, peers, family (support)
21. Marketing/Ads
22. Familiarity
23. Sense of adventure
24. Knowledge of/about a place
25. Get out of the house/ Nothing to do at home/Bored
26. Special occasion
27. Sense of danger
28. Good weather/Sunny/Warm/Moderate for the season
29. Enjoy being outdoors
30. Reward for doing something good/Result of accomplishment
31. Can use equipment provided by organization (school, etc.)
32. To feel like a part of the “in” group
33. Parent support
34. Sense of independence & accomplishment
35. Exposure to activities/opportunities
36. Donations/Grants