Designing Research to Include Racial/Ethnic Diversity and Marginalized Voices

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Abstract

Environmental education research designs will either exclude or include voices outside the dominant culture. Examining the questions we ask and the data collection techniques we use may enable us to design research that is more sensitive to marginalized voices. This article puts forward several methodological considerations that either draw out the voices of marginalized people or silence them. Research considerations addressed in this article include the delimitations of the study, conceptualizing the research question, ethnocentrism, sample selection, and who should conduct the research.

Résumé

Les modèles de recherche en ERE mènent soit à l'exclusion soit à l'inclusion des discours extérieurs à la culture dominante. L'examen des questions que nous posons et des techniques employées pour recueillir les données pourrait nous permettre d'échafauder notre recherche de sorte qu'elle soit plus sensible aux discours marginalisés. L'article expose plusieurs considérations d'ordre méthodologique qui, d'une part, donnent la parole aux discours marginalisés ou, d'autre part, leur imposent le silence. Les éléments de recherche pris en considération dans le présent article comprennent la délimitation du champ de l'étude, la conceptualisation de la question de recherche, l'ethnocentrisme, la sélection des exemples/échantillons et l'individu qui devrait mener la recherche.

In the last decade, environmental education research journals published in North America have provided insight into environmental perspectives from numerous cultures, including from Kenya (Wane & Chandler, 2002), Japan (Kato, 2002), Norway (Chawla, 1999), and Nlakapamux (Sterling, 2002). However, as an environmental educator seeking information about environmental perceptions of African Americans in the U.S., the first articles I found were not environmental journals, but in *Essence*, "the preeminent lifestyle magazine for today's African-American woman" (*Essence*, 2003, par. 1; see Day & Knight, 1991; Villarosa, 1991). Environmental education journals have recognized the need to include voices of those outside the dominant culture (see Agyeman, 2002). Several authors have addressed inclusive theoretical paradigms for environmental education (Lewis & James, 1995; Saul, 2000; Taylor, 1996), or inclusive pedagogy (Kaza, 2002; Marouli, 2002; Taylor, 1996). However, research actually giving voice to those outside dominant cultures is still rare (James, 1993, 1996; Wane & Chandler, 2002).

Methodologies utilized in environmental education research may be contributing to this problem. The questions asked and data collections methods used may frequently preclude hearing the voices of marginalized people. Samdahl notes that "once we as researchers have framed the question and determined how we will go about collecting data, the answer itself had already been defined" (Samdahl, 1999, p. 120). Our research methods themselves may be silencing those outside the dominant culture. Examining the questions we ask and the data collection techniques we use may enable us to design research that is more sensitive to marginalized voices.

This article will put forward several methodological considerations that either draw out the voices of marginalized people or silence them. The intent of this article is not to criticize researchers in environmental education. As researchers, we need to acknowledge that we will make mistakes as we develop research methods that are inclusive (Henderson, 1998). While inclusive research would be ideal, it may be as unattainable as completely unbiased research. Just as researchers seek to avoid bias, we can also work to avoid epistemological and methodological assumptions that continue to silence marginalized voices. Research considerations addressed in this article include the delimitations of the study, conceptualizing the research question, sample selection, and who should conduct the research.

Delimitations: Environmental Education, Multicultural Environmental Education, or Environmental Justice

One of the first issues faced by a researcher is the definition of the research question. How the question is conceptualized, and the terminology used to discuss the research question, will begin to determine which voices will be heard. Researchers need to be cognizant of the implications of defining their research topic as environmental education, multicultural environmental education, or environmental justice.

Environmental education was "originally conceived as science education regarding the environment" (Marouli, 2002, p. 26). The traditional forms of environmental education have been identified as "ecology, conservation, outdoor education, and biology" (Lin, 2002, p. 211). This traditional interpretation of environmental education may persist. In pre-service teacher preparation in Canada, Lin (2002) found that environmental education "is still being viewed as narrowly focusing on knowledge about natural resources and their management" (p. 211). Lin notes that if her study is replicated, the research procedures should be modified to clearly incorporate sociological and political issues included in a broader understanding of environmental education.

Studies inclusive of sociological and political issues may be more commonly recognized as addressing multicultural environmental education. There is not, however, universal consensus on what constitutes multicultural environmental education. Marouli (2002) found that "two dimensions seem

to be significant in identifying typologies of multicultural environmental education programs: their theoretical framework and the composition of the group they serve" (p. 38). Marouli identified three primary theoretical frameworks:

- cultural pluralism;
- global/local connections; and
- environmental/social justice.

Each of these frameworks appears to have emerged from a distinct school of thought, and each gives greater voice to a different group.

One form of multicultural environmental education appears to have arisen from the multicultural education movement within primary and secondary education (see Banks 1981, 2000; Bennett, 1995). This form of multicultural education was a response to diversity within previously segregated school systems. Educators recognized a need to reform educational curriculum that focused on the values and achievements of white males. Initial efforts to make curriculum multicultural were limited to what Taborn (1991) characterizes as the "Four F's Approach" to multicultural education: adding information about food, fairs, festivals, and folklore of people of colour. This form of multicultural education evolved from simply addressing content to recognizing that learning styles and value systems were influenced by culture and gender. The process of learning and the ways in which knowledge is constructed and verified have become the focus of recent multicultural education curriculum. Key components of these programs may include recognition and affirmation of cultural differences, process-oriented learning, and environmental education as a unifying component of multicultural education. Programs originating from this perspective may be based primarily in the formal elementary and secondary school systems. Multicultural environmental education arising from this perspective emphasizes the learning process, and works to develop content that values cultural influences shaping this process. This form of multicultural environmental education includes voices of many that had previously been marginalized within elementary and secondary school education.

A second form of multicultural environmental education emphasizes international differences in environmental values and communication across borders. This form of multicultural environmental education recognizes cultural influences in the relationships between humans and nature. Recognizing these differences can enrich environmental education and our ability to resolve environmental issues that cross international boundaries. Examining environmental views of other cultures may enable us to integrate their insights into the dominant environmental views. For example, Wane and Chandler (2002) suggest that their case study of environmental views of women in rural Kenya may enable us to "borrow from African women's philosophy in order to create balance in our worlds" (p. 96). Rixecker (1999) presents an entirely different purpose in examining her experience as a U.S.-trained political scientist

teaching in New Zealand: to minimize "imperialistic intervention in environmental education" (p. 226). By appropriately incorporating other cultural views into one's own and avoiding the imposition of one's views on another, environmental educators may enhance cross-cultural communication needed to resolve trans-boundary environmental issues. Research in this form of multicultural environmental education helps to include voices from many countries in dialogues about international environmental issues.

The third form of multicultural environmental education developed as an outgrowth of the environmental justice movement. Two studies have been identified as the seminal works for this movement. The first was Bullard's (1983) study of the locations of municipal landfills and incinerators in Houston, Texas. This research found that since the 1920s, all five of Houston's landfills and six of its eight incinerators were located in black neighbourhoods. A subsequent national study of neighbourhoods in which hazardous waste sites in the United States are located found that race was more significantly correlated to sites than socioeconomic status (United Church of Christ Commission on Racial Justice, 1987), and coined the term environmental racism to describe the observed pattern of placing locally undesirable land uses in communities of colour. This pattern has been described in community after community (see Bullard, 1990). Recognition of this as a national pattern led to the First National People of Color Environmental Leadership Summit, in Washington, DC, in October of 1991, which drew more than 600 African, Latino, Asian, and Native Americans from every U.S. state and citizens of several other countries. The purpose of the summit was to "build a unified national voice and an effective agenda for environmental justice action" (United Church of Christ Commission for Racial Justice, 1991, p. 3). The term environmental justice replaced environmental racism as the focus of this movement shifting from protesting a pattern of discrimination to working toward greater equity in environmental quality.

Multicultural environmental education arising from the environmental justice movement recognizes that education is an essential component of community advocacy to redress environmental inequities. Emphasis is placed on local community issues, but within the context of a larger pattern of inequity. Key components of these programs may include measures of:

- environmental equality;
- deleterious impacts of environmental degradation, inequity, and racism in environmental policy;
- community involvement and partnerships;
- activist practices, public policy formation, and politics.

These programs often equip students with both the environmental knowledge and the advocacy skills required to change environmental policy. Multicultural environmental education arising from this perspective emphasizes the

process required for effective community advocacy and may model curriculum on this process. This form of multicultural environmental education seeks to draw out and strengthen the voices of those who have historically endured the negative impacts of environmental inequities and their allies.

Delimitations: Race and Ethnicity

Researchers also need to clearly delimit which voices are included in their study. It is critical to remember that racial and ethnic categories are socially constructed and change over time (Fleras & Elliott, 1992; Tatum, 1997). Changes in economic, political, and historical contexts have been reflected in terminology used to refer collectively to diverse racial and ethnic groups, as the accepted terminology in the United States moved from "minorities" to "people of colour." Terminology to distinguish racial and ethnic groups has not seen a clear evolution. Instead, researchers in environmental education have at times used the terms race and ethnicity interchangeably. A thorough discussion of the social construction of race, ethnicity, and culture is beyond the scope of this article, however, some clarification of this terminology is offered.

The concept of race can itself be a subject of study, however "in popular discourse, racial groups are viewed as physically distinguishable populations that share a common geographically based ancestry" (American Sociological Association, 2003, p. 5). An ethnic group is "a group pf people who perceive themselves and are perceived to share cultural traits such as language, religion, family customs, and preferences in food" (Chavez, 2000, p. 180). Identifiers used to determine ethnicity are not consistent across studies. For example, some studies may use geographically based ancestry to identify Mexican Americans, while another distinguished between U.S. and Mexican nativity, and still others incorporate distinctions based on language preference. Clearly, this limits opportunities to make cross study comparisons.

It is also important to note that none of these terms are universally accepted. The distinction between race and ethnicity can be significant within an individual's personal identity. Tatum (1997) notes that "one may recognize the personal significance of racial group membership (identifying as Black, for instance) but may not consider ethnic identity (such as West Indian) as particularly meaningful" (p. 16). Conversely, one may identify more strongly with an ethnic identity (Cambodian) but consider a racial identifier (Asian) essentially meaningless.

Conceptualizing the Research Question

Conceptualizing the research question requires framing a question that is meaningful to both the researcher and the research subjects. One simple example of this is conceptualizing questions about the environment. Is nature only found outside the city in "pristine" environments? Or can the environment be studied and protected within urban settings? Russell (1999) notes that "equating nature solely with wilderness and environmentalism solely with

protection of nature may do a disservice to environmental education" (p. 125). Conceptualizing the environment as pristine natural areas may also silence voices of those with little opportunity to experience such settings.

A study by Blahna and Toch (1993) illustrates challenges in framing a research question. Their study provided a comparative analysis of environmental reporting in "two culturally specific magazines . . . and . . . a general-circulation magazine [in the U.S.]" (p. 23). At the time of the study, the authors found one nationally published magazine that was "owned and operated by Hispanics" (p. 24) and published in both Spanish and English. The other two magazines selected were considered to be relatively comparable to this magazine based on the 1998 Standard Rate and Data Service information on three criteria: circulation (U.S. national), number of editions published annually (monthly), and editorial policy (general interest). The magazines selected for comparison were *Nuestro* (published in Spanish and English), *Ebony*, and the *Saturday Evening Post*. This research design provides an insightful means of comparing environmental information presented in the media.

However, it also illustrates the importance of developing a level of familiarity with the groups under study prior to conceptualizing the research question. For this study, it appears the researchers were either unfamiliar with or unable to consider the target age demographic of each magazine. The average age of *Saturday Evening Post* readers is more than 15 years older than the average age of *Ebony* readers. This difference in age demographic may be an important consideration in the coverage of environmental issues. In this way, the data collection may have defined the answer to the research question.

Researchers who are not members of the cultural group under study are clearly faced with the question of how to achieve familiarity with the group to be studied. In this instance, marketing data such as that provided by the Standard Rate and Data Service or Mediamark Research can provide the needed information about the target age demographic. Researchers may need to invest time immersing themselves in the culture to be studied, either through direct interaction or indirectly, through reading academic literature (including ethnic studies, sociology, and political science), popular media, biographies, and even fictional literature by ethnic authors. Key informants or research collaborators who are members of the culture to be studied may also help shape the research question.

Conceptualizing Positivist Research Questions

Positivist research addressing cultural variations in the factors influencing environmental attitudes and behaviours illustrates the progress and challenges in framing meaningful research questions. Before environmental education began to address issues of diversity, the topic was investigated by researchers in outdoor recreation. Several studies have documented that outdoor recreation participation is one of the leading factors among significant life experiences contributing to developing a personal environmental ethic (Chawla, 1998,

1999; James, 1993; Tanner, 1980), including studies addressing people of colour in the United States (James, 1993), so research in this field will be included as a precursor to environmental education research.

Early research addressing racial diversity and outdoor recreation was based on the premise that people of colour were disproportionately under-represented. In fact, recreation in national parks and natural areas was perceived to be limited to affluent whites (Hunt, 1969). One of the first attempts to explain low participation rates in outdoor recreation by people of colour was based on mythological association. This explanation referenced the Garden of Eden mythology, noting that it is "not cultural property of either African or American Indian traditions [and therefore concluding that] . . . . It is thus no wonder that the great national parks created by white men [sic] in Africa and American have always been difficult for natives of both places to understand" (Meeker, Woods, & Lucas, 1973, p. 5). This assertion was never tested by empirical research. It was discounted by Dolin (1988), who noted that many people of colour in the United States "belong to religious groups that use the Bible and, therefore, subscribe to the Garden of Eden myth" (p. 19). The concept of mythological association is included in this summary as a reminder of how much our perceptions have evolved and of the dangers of untested assertions.

Throughout the next decade, outdoor recreation researchers tested a variety of theories explaining the "under-representation" of people of colour in outdoor recreation. The two competing theories researchers found most credible were the marginality theory and the ethnicity theory (see McDonald & Hutchinson, 1986; Floyd, 1998). The marginality theory attributes differences in participation to limited economic resources, often as a result of persistent impact of historical and ongoing patterns of discrimination. This theory links the lack of access to transportation, underdevelopment of program availability, and the lack of program sensitivity to meet the needs and interests of participants with being socially marginalized (Chavez, 2000). The ethnicity theory attributes differences as reflecting divergent values, norms, and social organization between cultural groups, although typically studies of the ethnicity theory were actually based on racial classifications. Several researchers made comparative tests of these theories, but their results were inconsistent. Some studies found socioeconomic status to be far more predictive of recreation participation than race (Yancey & Snell, 1976), some studies found less correlation between recreation participation and socioeconomic status than race (Irwin, Gartner, & Phelps, 1990; Stamps & Stamps, 1985), and others found that differences between races persisted when socioeconomic status is held constant (Antunes & Gaitz, 1975; Dwyer, 1994; Hutchinson & Fidel, 1978; McMillen, 1983; O'Leary & Benjamin, 1981; Washburne, 1978).

When researchers recognized the distinction between race and ethnicity, research began to measure ethnic variations based on "ancestral origins and generational status [immigrant, first or second generation in the U.S.]" (Carr & Williams, 1993, p. 29). Studies that measured ethnicity at this level refined the

ethnicity theory into the acculturation theory. The acculturation theory is based on the premise that individuals and immigrant groups will selectively adopt traits and values of the dominant culture (Chavez, 2000). Acculturation has been measured by "language used in various situations" (Carr & Williams, 1993, p. 26) or "English proficiency . . . and a 4-item acculturation scale" (Schultz, Unipan, & Gamba, 2000, p. 24). This theoretical perspective has been applied to research in outdoor recreation and environmental education.

Ethnocentrism

Floyd (1998) notes both the marginality and ethnicity theories "are undergirded by biased ideological assumptions . . . Both explanations contain an Anglo-conformity bias" (p. 7). Both theories assume that all population subgroups will adopt the values and norms of the dominant culture, although each specifies different barriers that must be overcome to attain this. Whether the barriers are economic or cultural differences that might be mitigated with time, both assume the dominant norm should and will be adopted. The Anglo-conformity bias, as Floyd terms this, would be more commonly referred to as an example of ethnocentrism. Ethnocentrism involves not only "thinking one's own group's ways are superior to others . . . . [but also] making false assumptions about others' ways based upon our own limited experience. The key word is assumptions, because we are not even aware that we are being ethnocentric" (Barger, 2002, par. 2-3). This highlights one of the easiest mistakes researchers addressing diverse populations can make: failing to recognize their own assumptions. Three ways to increase one's awareness of this potential are:

- to seek sources written from other cultural perspectives which will help increase awareness of unquestioned assumptions (see Kato, 2002);
- to read critiques identifying assumptions others have made; and
- to cultivate an ongoing dialogue with colleagues who can constructively point out one's assumptions and biases.

The theories of mythological association, marginality, and ethnicity summarized above illustrate how ethnocentrism can be embedded into the theoretical perspective on which a study is based. It is difficult to avoid this bias in research that only considers the norms and the values of one culture. Research can challenge theoretical perspectives that claim to be culturally blind or immune to cultural variations. Instead, assessments can be developed to measure different cultural values within an overall environmental assessment.

Sample Selection

Small sample sizes are a persistent problem, especially in comparative studies. Smaller sample size increases the margin of error. Percentages and ratios based on small sample sizes are sensitive to increases and decreases based upon

a few individual responses. The impact of a few outlying responses in larger samples is minimized. For example, a researcher attempts to assess the impact of a specific program and compares 100 individuals from the dominant culture with 15 individuals from a cultural subgroup. If the program has no impact on either group, percentages or ratios calculated from these groups would remain constant. If, however, three individuals from each group double their score on the assessment scale, the impact of this on the percentage of possible points would be far greater for the cultural subgroup. Can one then conclude that the program is significantly more effective for the cultural subgroup?

The power of inferential statistics lies in the sample's size. Subgroup comparisons are only possible if each group contains at least the minimum required by the assumptions of the statistic. To meet this requirement, data identifying distinct racial or ethnic groups is sometimes combined into one category. Occasionally this conglomerate is even identified by recognizably problematic terminology such as "Non-white" or "other." While the larger subgroup size increases the power of the statistic, the data used in the statistical analysis has lost its intended meaning.

Who Should Conduct the Research?

One question often raised about research addressing diverse populations and environmental attitudes, behaviours, and education is who should conduct the research? Can a researcher adequately research racial or ethnic groups other than their own? Five important considerations in addressing this issue are:

- the need for all researchers to minimize cultural biases;
- the availability of researchers;
- the criteria for setting a research agenda;
- where responsibility for change lies; and
- asymmetric power within research relationships.

Ideally, all researchers will be aware of the cultural lens through which their research is conducted. When studying a cultural group different from the researcher's culture of origin, the researcher's cultural lens will enlighten researchers to some aspects of the culture while masking other aspects of the culture. Of course, prerequisite to implementing any study is a thorough review of existing knowledge. For example, prior to studying perceptions of environmental justice issues among Latinos, one would familiarize oneself with literature on environmental justice and ethnic variations within the Latino population. Ideally, one would also know some of the language and some of the forms of non-verbal communication one might anticipate in this population.

The prevalence of members of the dominant culture in academia must also be considered. Most research is conducted by academics. Currently, there is a persistent dearth of diversity in higher education. Insisting that research

on people of colour be conducted by people of colour creates a double-edged sword. Environmental educators are forced to wait until there is greater representation of people of colour in the research community. At the same time, inordinate responsibility for resolving racial disparity in environmental education is placed on people of colour in academia.

Henderson (1998) points out the repercussions of limiting research about people of colour to studies conducted by researchers who are people of colour. This would in effect predetermine "the social science agenda for individuals based on their physical and social characteristics" (p. 162). Few have questioned whether women are qualified to conduct research about men, or whether a gay researcher can study heterosexual people, yet this question has been raised with respect to race and ethnicity. The issue is not whether the researcher is qualified, but whether the researcher can relate to the perspective of the research subjects. Often, this requires the researchers be cognizant of their experiences of being "the outsider." While the researchers' experience may not replicate experiences of racial discrimination, awareness of these experiences will increase the researchers' understanding of disempowerment.

Restricting research to members of the culture under study also absolves researchers from the dominant culture of responsibility for redressing the status quo. Lincoln (1993) notes that "only by taking part in reproducing these narratives for public consumption will the research community be able to redress the systemic imbalance of perspectives embedded in previous research" (p. 36). The responsibility for conducting inclusive research addressing environmental concerns must be shared by researchers of all cultural groups.

Finally, it is important for researchers to remember the asymmetric power relationships in research.

> "Detached" researchers are representing the highest form of privilege. At the very least, detached researchers need to recognize their assumption of privilege, the potential inability to establish rapport, and the possibility of inaccurate interpretation. (Henderson, 1998, p. 167).

This privilege is not limited to the individual researcher. Research in many fields has long ignored culturally diverse populations. In this way, the asymmetric power of research is reinforced by research that only validates one cultural perspective.

Conclusion

Research designs used in environmental education research will either exclude or include voices outside the dominant culture. The sensitivity of environmental education research to marginalized voices can be increased by examining the questions we ask and the data collection techniques we use. This article discussed the implications of the delimitations of the study, the conceptualization of the research question, ethnocentrism, sample selection, and the researcher's identity.

Awareness of the impact of cultural variations in the factors influencing environmental attitudes and behaviours has increased substantially in the last 30 years. Research designs have evolved to be more sensitive to racial and ethnic diversity, but we must remember many aspects of the research design are fraught with potential errors. The greater errors for environmental education would be to fail to recognize cultural diversity in our research and thereby silence the voices of those outside the dominant culture.

Notes on Contributor

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