

Gender: How does it effect the outdoor education experience?

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Abstract

As the literature about outdoor education grows, it is important that emerging trends are reviewed and the implications for practice discussed. Gender is arguably the most ubiquitous individual difference, and is attracting considerable interest in the outdoor education field. In spite of this trend, critical reviews of the anecdotal and research literature are lacking.

This paper examines the impact of gender on outdoor education experiences in a number of areas, including staffing ratios, participant ratings of outdoor leaders, group processes, and program outcomes. The findings challenge some common perceptions about the role of gender in outdoor education experiences and suggest that new thinking about how to best facilitate the development of both males and females is needed.

Introduction

The purpose of this paper is to review the research literature on the effect of gender on people's outdoor education experiences. Although a reasonable body of research exists, reviews of the research literature which draw on insights from the anecdotal literature are rare.

Asking about the effect of gender on outdoor education experiences, prompts many questions, such as:

- Do males and females have different outcomes for the same programs?
- Are there different psychological, social, or physical processes that occur for males and females during outdoor education programs?
- What influence does the gender of instructors have on outdoor education experiences for participants?
- What does research say about single-sex and co-educational outdoor education programs?

Although a comprehensive understanding of the impact that gender differences have in outdoor education is yet to be developed, answers to such questions are starting to become available. In the light of studies on gender differences, outdoor educators can make appropriate adjustments to their programs. Explaining the findings, however, still looms as a formidable challenge.

Types of Gender Literature in Outdoor Education

Broadly speaking, there are two types of literature on the influence of gender in outdoor education. The first type comprises articles and books largely based on the accumulated experience and anecdotal evidence of outdoor education practitioners. By way of generalization, the authors of the 1960's and 1970's tended to be men and they typically wrote about outdoor education for delinquent boys. Literature from the 1980's, and particularly the 1990's, reveals a shift in emphasis. Typically these works are authored by women and tend to focus on expressing and explaining females' experiences of the outdoors in mixed-sex and single-sex settings.

The second major source of gender literature in outdoor education comprises research studies which use qualitative and/or quantitative methodologies. The majority of these studies do not specifically investigate the role of gender in outdoor education, but include gender as a variable in studies of the processes and outcomes of outdoor education.

Although not all the outdoor education gender literature can be categorized as neatly as presented here, the two sources of literature are distinct and make surprisingly little use of each other. For example, in her introduction to a recent book "Women's Voices in Experiential Education", Angelou (1996) commented that: "I find it noteworthy that no authors in this volume use quantitative justification as a basis for their essays...the experiences and voices of women are the foundation for hypothesis and analysis for contributors to this text" (p.4). On the other hand, the research literature tends to be dry and without colour in its reporting of gender-related outdoor education findings. The results are often presented in a couple of sentences, and the discussions rarely utilise the rich possibilities for explanation from experience-based literature.

Is Gender Really an Issue?

Maccoby and Jacklin (1974, p.6) could have been describing the outdoor education situation when they wrote that:

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A number of the physical differences between the sexes are obvious and universal. The psychological differences are not. The folklore that has grown up about them is often vague and inconsistent. We believe there is a great deal of myth in the popular views about sex differences. There is also some substance...

One way of examining gender myths for substance is through research findings. This approach has the strength of being (arguably) less subject to personal bias, but is limited by the number, range, and quality of research studies available.

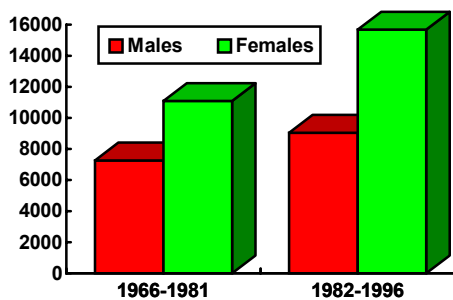
Is it really necessary to look at the research literature? In the “enlightened” 1990’s aren’t we all aware of gender differences and their implications? Unfortunately, this is one of the myths about gender. A research study by Swim (1994) found that people tend towards reasonably accurate estimations or towards underestimation of the actual size of gender differences. There were, however, two areas in which people overestimated gender differences: that men are more aggressive and that women have superior verbal ability. Nevertheless, the stronger tendency towards underestimation implies that outdoor educators need to be better informed about the extent of gender differences.

Gender Literature in Education, Research, and Outdoor Education

There is a noticeable gender bias in the volume of material available. There is a sizable body of literature on female-only programs, some literature comparing males and females on outdoor education programs, and comparatively few contemporary studies on male only programs.

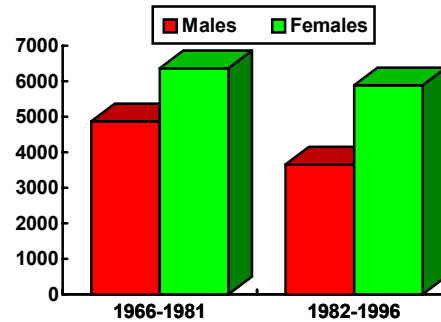
A systematic search of the Educational Resources Information Centre (ERIC) database was conducted to test these observations. The titles, abstracts, and keywords of three decades of educational articles were searched for occurrences of males and females, with the major findings as follows:

Figure 1. Frequency of ERIC citations containing males and females.



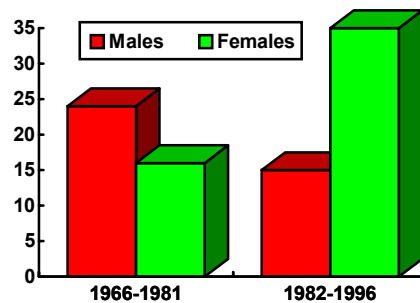
- General ERIC citations: Between 1966 and 1981, there were 53% more ERIC articles mentioning females (11093) than males (7265). Between 1982 and 1996, this rose to 73% more articles mentioning females (15688) than males (9050) (see Figure 1).

Figure 2. Frequency of “Research or Evaluation” ERIC citations containing males and females.



- “Research or Evaluation” ERIC citations: Between 1966 and 1981, there were 31% more “research or evaluation” ERIC articles mentioning females (6367) than males (4872). Between 1982 and 1996, this rose to 61% more “research or evaluation” articles mentioning females (5886) than males (3657) (see Figure 2).

Figure 3. Frequency of “Outdoor Education” ERIC citations containing males and females.



- “Outdoor Education” ERIC citations: Between 1966 and 1981, there were 50% more “outdoor education” ERIC articles mentioning males (24) than females (16). Between 1982 and 1996, this was reversed dramatically, with 133% more “outdoor education” articles mentioning females (35) than males (15) (see Figure 3).

Clearly there is a strong and increasing trend for females to be featured in educational and research/evaluation literature more than males. Early outdoor education literature was focused more on males, but this has been dramatically reversed in educational literature published since 1982.

These results are important, because there are often calls in the anecdotal literature for more attention to be focused on women in outdoor education. While this claim may be warranted, there are far fewer voices calling for the needs and roles of males in outdoor education to be examined.

Let's turn now to a brief review of research on the influence of gender on participation rates, outdoor leaders, outdoor education processes, single-sex and mixed-sex programs, and program outcomes.

Gender and Participation in Outdoor Education

In the 1970's, Richards (1977) was concerned that: although all advertising and publicity indicates that the programs are for both men and women, the overwhelming number of recruits are men. On the average, if all Australian Outward Bound courses were mixed courses, each primary group of 12 would have approximately 10 men and 2 women.

The tide of female participation has turned since 1977. For example, Miner and Boldt (1981 as cited in Hattie, Marsh, Neill, & Richards, in press) reported that 41% of participants in Outward Bound U.S.A. programs were female.

Still more recent statistics indicate that:

more females are participating in outdoor pursuits than ever before. The projections indicate that these trends are likely to continue in the future. For example, Kelly (1987) has projected that by the year 2000, more females than males will be backpacking/hiking...In virtually all aspects of outdoor recreation, the percentage of women participating is increasing faster than men (Henderson, 1992, p.50).

Gender in Outdoor Education Staffing

Gender Ratio of Outdoor Education Leaders

Traditionally, there is no question that leaders in the outdoors have predominantly been males. This has begun to change, but more so in some areas of outdoor education than other areas.

At the 4th National Outdoor Education Conference in Australia, 1983, there were four times more men attending than women (Dawes, 1984). It has been suggested that:

Perhaps the reason for the small percent of female role models in this profession is due to the traditional gender-stereotypes which have influenced the career choices of individuals either consciously or unconsciously. Another possible reason for the male-dominated leader roles is the over-emphasis on the teaching of technical or activity (hard) skills and the under-emphasis on human relation or people skills

(soft and meta skills) in outdoor leadership training programs (Friedrich & Priest, 1993, p.12).

This latter explanation for gender differences in outdoor education staffing is supported by Jordan (1996) who observes that for a long time technical skills were more highly valued, until relatively recently when it has been recognised that both interpersonal and technical skills are important for outdoor leaders. This shift in emphasis is likely to have encouraged and valued more females as outdoor educators.

Evidence for a more equal representation of females as outdoor leaders is starting to appear. During an Outward Bound Australia staff recruitment campaign in early 1996, 531 inquiries were received, 56% from males and 44% from females. One hundred and seventy applications were received, 54% from males, and 46% from females. Following the staff selection process, five females and four males were selected to be trained as instructors (Warner, 1996).

However, organisations with less emphasis on interpersonal skills, may not be able to boast such an even representation. A recent study of nine elite Sydney private school outdoor education programs reported nineteen male and eight female outdoor education staff teaching approximately equal numbers of male and female students (Huxley, 1995).

The question about the relative advancement of males and females through outdoor education hierarchies must also be asked. The few statistics that are available (Ball, 1986), indicate that, like the rest of Western society, most outdoor organisations still have much progress to be made towards equal gender representation throughout their organisational structures.

Gender Perceptions of Outdoor Education Leaders

Are there any differences between the characteristics of male and female outdoor instructors? Hendy (1975) used Cattell's well-known Sixteen Personality Factor profiles with twenty-five instructors at the North West Outward Bound School. Overall, he found more similarities in personality characteristics of male and female instructors than he found differences. The differences were that female instructors were more reserved, introverted, serious, and self-directed than their male counterparts.

Jordan (1989) surveyed participants enrolled in Colorado Outward Bound School courses about their perceptions of outdoor leaders. These prospective participants expressed a preference towards having a male leader. Male respondents were more stereotypical about their perceptions of male and female leaders, whereas female respondents focused more on the competence of the leader and less on the leader's gender. It is important to note that Jordan's

research was conducted before participation in the Outward Bound program. She recommended that further research needed to be conducted to determine if and how the reported gender biases actually exist in the field.

Field testing of gender differences in the perception of outdoor education leaders has been conducted by Neill and Richards (1996). They evaluated a database of 3664 instructor evaluations collected over a 10 year period on management programs, adult programs (for over 30 year olds), and standard programs (for 17 to 29 years). The instructor evaluations are summarized using the following eight scales:

- Course Organisation
- Course Value
- Course Effect on Personal Development
- Instructor as an Educational Exemplar
- Instructor/Participant Rapport
- Instructor Abilities and Skills
- Group Cooperation and Productivity
- Group Relationships

Overall, the findings show that the pre-course preferences for male leaders reported by Jordan (1996) were not in evidence at the end of Outward Bound programs. The differences between participant's evaluations of male and female instructors were small. The tendency was, if anything, towards higher ratings for female instructors in the areas of Course Value and Instructor/Participant Rapport.

When the database was analysed by the gender of participants, however, much larger differences were revealed. Female participants in Outward Bound programs gave higher ratings of instructors than did male participants for seven out of the eight scales.

This finding is in contrast to the findings of Jordan (1996), however it is consistent with Powell and Butterfield's (1982) review of research on gender and leader evaluations which stated that:

- female leaders are not evaluated or perceived differently from male leaders when engaging in the same behaviour;
- differences in ratings of male and female leaders tend to diminish as raters learn more about the leaders;
- female raters evaluated leaders more highly than male raters.

Mixed-sex and Single-sex programs

There is little research which directly tackles the vexed question of the relative outcomes of mixed-sex and single-sex programs. A major reason for this is the difficulty of achieving true experimental designs in outdoor education settings.

With a lack of specific studies addressing this issue, the most valuable source of evidence is meta-analysis,

a method of statistically summarizing many different studies. Such a study was conducted by Hattie, Marsh, Neill, and Richards (in press) and it found no differences in outcomes for single-sex and mixed-sex groups for outdoor education studies in Australia. It is possible, however, that differences between single-sex and mixed-sex programming occur for specific outcomes. An example is the study by Marsh, Richards, and Barnes (1987) of long-term changes in multi-dimensional self-concepts following participation in Outward Bound 26-day courses. Only one of thirteen aspects of self-concept measured in the study changed differently for mixed-sex and single-sex groups. The measure was Opposite-Sex Relations, for which participants in mixed-sex groups predictably reported a greater improvement than participants in single-sex groups.

Gender and Program Outcomes

General

Although there are a number of outdoor education outcome studies which report analyses by gender, a far greater number of studies fail to do so. This means that the available literature is likely to be subject to the same bias that occurs in broader psychological and social research: that gender non-differences tend to go unreported and unpublished, while gender differences are readily reported and published. This signals the importance for all outdoor education research to report results for males and females, regardless of the findings.

Thirty-nine outcomes from thirty-two studies were categorized, as shown in Table 1, to provide an overall picture of the findings. The criteria for inclusion of studies was that they reported separate outcomes for males and females who participated in equivalent outdoor education experiences.

The breakdown of outcomes by gender differences in Table 1 is revealing. It implies that outdoor education mostly achieves similar change scores for males and females (19 outcomes) or larger change scores for females (17 outcomes), but rarely achieves larger change scores for males (3 outcomes). Space restrictions preclude detailed descriptions of each of the outcomes in Table 1, but the general categories are discussed.

Table 1. Outdoor education research reporting outcomes for males and females

Studies reporting either no differences in change scores or an overall mixture of differences in change scores for males and females	Year	Outcome Measure
Bertolami (cited in Hattie, Marsh, Neill, & Richards, 1996)	1981	Self-Esteem Locus of Control
Brusdal and Force (cited in Hattie, Marsh, Neill, & Richards, 1996)	1983	not reported in citation
Ewert & Heywood	1991	Group Development
Gray & Patterson	1995	Self-Esteem School Life
Hendy	1975	Personality
Koepke	1974	Self-Concept Anxiety
Marsh & Richards	1989	Sex-role attributes
Marsh, Richards, & Barnes	1987	Multidimensional Self-Concept Locus of Control
McDonald	1996	Self-Esteem
Mitchell & Mitchell	1989	Multidimensional Self-Concept
Morrison	1996	Social Co-operation
Owen	1990	Ropes Course Impact
Owens	1984	Personality
Raze	1990	Outdoor Attitude
Young & Ewert	1992	Fears
Studies reporting predominantly greater change scores males		
McDonald	1996	Self-role attributes
Richards	1987	Physical Self-Concept
Van Gelder, Richards, & Neill	1993	Trait Anxiety
Studies reporting predominantly greater change scores for females		
Burrus-Bammel, & Bammel	1986	Environmental Knowledge
Fersch (cited in Richards, 1977)	1972	Multi-dimensional Self-Concept
Finkenber, Shows, & DiNucci	1994	Multidimensional Self-Concept
Fraser, et al (cited in Hattie, Marsh, Neill, & Richards, 1996)	1991	Vigour Personal Relations
Galpin	1989	Self-Concept Hardiness
Henderson, & Bialeschki	1982	Self-Concept of Staff
McIntyre	1987	Multidimensional Self-Concept
Mitchell & Mitchell	1989	Locus of Control
Neill & Heubeck	1995	Mental Health
Neill & Richards	1996	Course Evaluation
Nussbaumer	1988	Physical Self-Concept
Richards	1996	Group Process Observation Scale
Simson (cited in Abbott, 1987 and McIntyre, 1990)	1981	Wilderness Attitudes
Sveen	1995	Self-Esteem
Van Wilt & Klocke (cited in McIntyre, 1987)	1971	not reported in citation

Outcome Studies showing no Gender Differences or a mixture of Gender Differences

Personality studies have produced the strongest findings for no gender differences in change scores following outdoor education experiences. Hendy (1975) found a similar pattern of male and female personality changes for 107 16 to 19 year old students on Outward Bound Standard courses in the United States, as did Owens (1984) on Outward Bound Standard Courses in Australia.

The other strong evidence for no gender differences in change scores is from multidimensional self-concept studies of Outward Bound Standard Courses. On New Zealand programs, male and female participants had similar change scores in Verbal, Physical Ability, Physical Appearance, Emotional Stability, and General Self self-concepts. The two self-concept scales which produced gender differences were the Honesty scale (more change reported by males) and the Problem Solving sub-

scale (more change reported by females) (Mitchell & Mitchell, 1989). Marsh, Richards, and Barnes (1987) found no gender differences in change scores for any of the multidimensional self-concept scales (cf. Fersch, 1972, as cited in Richards, 1977; Finkenbreg, Shows, & DiNucci, 1994; McIntyre, 1987).

Outcome Studies showing Greater Change Scores for Males

There were a few studies reporting greater change scores for males. Van Gelder, Richards, and Neill (1993) found a greater reduction in trait anxiety scores for males participating in an Outward Bound 26-day course. McDonald (1996) found greater gain scores for males in positive masculine and feminine characteristics following Outward Bound programs for schools students.

The most extensive study reporting larger gain scores for males was conducted by Richards (1987). Physical self-concept change scores for a total of 800 male and female adolescents and adults who participated in Outward Bound programs were reported. The findings showed greater physical self-concept change scores for adult males and adult females, with a smaller gain for adolescent males, and no gain for adolescent females. Richards (1987, p.20) speculated:

it may be that 10 days is sufficiently strong a program for boys at adolescence with their strong physical self-concept but not for girls with their characteristically lowered physical self-concept at this age. It may be that the program is simply more suited and designed for males, and consequently is less relevant (and therefore less effective) for females than males, or is simply perceived as more threatening for females before they arrive on the course and requires too much coping energy over the short ten day program to allow girls to move to growth and confidence.

Richards (1987, pp.20-21) went on to make an important point that:

regardless of the reasons for these results, without asking the questions it would have been too easy to carry on with the same type of programming, assuming effectiveness, and treating any adverse feedback from girls as aberrations to be essentially ignored...

As a result of this study, changes were made to Outward Bound programs in Australia which produced larger physical self-concept change scores for adolescent female participants (Nussbaumer, 1988; Richards, 1987).

Outcome Studies showing Greater Change Scores for Females

There is a sizable body of research studies favouring the interpretation that outdoor education

is achieving greater gain scores on a wide range of measures for female participants. This may surprise some people and appears to challenge the popular myth that outdoor education is largely conducted to suit males and does not address the needs of females. The important issue here is: Why better results for females?

McIntyre's (1987, p.88) study with school students on an outdoor education program found better outcomes for females and he grappled with the issue:

The sex differences observed tend to reinforce the earlier results of Vander Wilt & Klocke (1971), Smith (1971) and Koepke (1973), all of whom noted that males tended to score higher than females, but that the latter showed greater change. Is this perhaps...[that] the females have the lower initial score, and hence exhibit the greater change? This would appear not to be the case, as the females of class 10E, despite their initially higher score, still exhibit a greater change than the males in the same class.

McIntyre's (1987) evidence that higher gain scores are not necessarily associated with lower initial scores is useful. This argument, however, runs against findings in the broader psychological literature, where it is typically found that gain scores are negatively correlated with initial scores (H.W. Marsh, personal communication, October 9, 1996).

Another possible methodological factor which could influence the findings in favour of better outcomes for females is a gender bias in program drop-outs. This is rarely reported in the research literature, yet anecdotal evidence suggests that females are more likely than males to withdraw before the completion of outdoor education programs. If this is the case, then the research samples will tend to be biased towards reporting results for those females who are attracted to outdoor education and who find themselves able to cope with what it offers.

These methodological explanations are important for researchers to consider, but do not directly help practitioners improve the quality of their programs. Two other possible explanations are presented here, with the caveat that they both require further investigation. One possible explanation is that there are differences in the motivations of males and females who participate in outdoor education, and the other possible explanation is that the gender differences in outcomes may be caused by the underlying sex-role framework of most outdoor education programs.

Gender Motivations

Is it possible that males and females have difference objectives, and consequently derive

different outcomes from their outdoor education experiences? Early evidence for this view comes from Koepke (1973) who reported that females participating in an Outward Bound course had higher ideal self-concepts than males, even though females' actual self-concepts were similar to males. This may, in part, be due to a self-selection bias. In other words, it may be that only females with particularly high ideal self-concepts are motivated to participate in outdoor education programs.

Henderson (1992, p.51) explores this motivation explanation:

Females seem to choose outdoor activities because of the "journey" and empowerment, reasons that may not always be as important to males. Some of Simpson's (1991) initial work suggests that the difference between the "quest" traditionally associated with the male experience in the outdoors and the "journey" associated with female involvement may relate to the process and product of the outdoors. In other words, women may take part in outdoor activities because of the inner journey of learning about themselves and overcoming self-doubt...

If Koepke (1973) and Henderson (1992) are correct, then it appears that women who choose to participate in outdoor education programs may be a self-selected group who have higher ideal self-concepts and are more motivated towards personal development than their male counterparts and women who choose not to participate.

Masculine and Feminine Frameworks in Outdoor Education

A second, and related, explanation for gender differences in outcomes is that males' and females' sex-role characteristics may be challenged and developed in different ways by outdoor education programs. This is not a new explanation, "Van Wilt and Klocke (1971) suggested that females show greater change than males because the physically and psychologically stressful environment forces them into a different and unfamiliar role" (McIntyre, 1987, p.88). This "different and unfamiliar" role for females in the outdoors may result from females' socialization away from the outdoors as they grow up:

Males receive an experiential base of knowledge and understanding out of the outdoors, which allows them to develop outdoor competencies earlier in life than females. As they grow older, female teenage girls have had limited outdoor experience, so they are often restricted from participating in the outdoors...Much of the socialization that females receive result in traits that remain apparent through their adults lifetimes (Nolan & Priest, 1993, p.15).

Despite a nominal "feminisation" of outdoor education through a greater emphasis on interpersonal activities such as debriefing and a decreased emphasis on aspects such as physical endurance, it is still generally accepted by the public and practitioners that outdoor education is a "masculine" thing to do. This view is supported by much of the anecdotal literature (e.g. Humberstone & Lynch, 1991; Nolan & Priest, 1993) and it is also supported by research findings (Marsh & Richards, 1989; McDonald, 1996) which show greater gains in positive masculine characteristics than positive feminine characteristics, during Outward Bound programs.

If the view that participation in outdoor education involves development of more masculine characteristics than feminine characteristics is combined with the evidence that outdoor education tends to achieve larger change scores for females, then an intriguing hypothesis can be offered.

Could it be that females stand to learn a lot through the challenge of a masculine type outdoor education experience? On the other hand, could it be that exposing males to masculine-style outdoor education may not challenge their ideas, behaviours, feelings to the same extent, and hence result in males reporting less growth?

This explanation runs contrary to the dominant argument that outdoor education experiences do not meet the specific needs of females and are therefore not effective for females. People asking for a shift away from masculine outdoor education and towards feminine outdoor education for females may not be aware that, according to the research evidence, outdoor education is working comparatively well for females.

If the hypothesis put forward here has some truth to it, then males may benefit from outdoor education experiences which challenge their sex-role orientations and facilitate the development of positive feminine characteristics. Achieving growth for males in their positive feminine characteristics through outdoor education is quite feasible, as shown by the Marsh and Richards (1989) androgyny study.

What would a feminine model of outdoor education for males would look like? It could be very different from the outdoor education we are used to seeing. Perhaps a start could be made by looking at the female-only programs that have been developed. This would only be a starting point, however, because the unique needs of males, such as those put forward by the "men's movement" of the 1990's, could also need to be addressed.

Meanwhile, what can be done for females? Although the research evidence suggests that female participants tend to be getting the same or

larger change scores than male participants, this is not to say that things shouldn't be improved. Perhaps, the nature of changes needed for females, however, are such things as instructor training on gender differences, minimizing female dropouts, and modifying programs to attract females who are put off by the typically masculine models of outdoor education.

Where can gender inquiry in outdoor education go from here? It is clearly cause for concern that the experience-based and anecdotal literature is not particularly well-informed about findings from research studies, while the research studies are rarely designed to specifically address questions about the influence of gender. Outdoor education studies have yet to make use of sophisticated modeling techniques (such as path analysis) to help identify the patterns of gender influence on process and outcome variables. Such research studies could considerably advance our understanding, particularly if they tap into the rich information available in the experience-based and anecdotal literature.

Summary and Conclusion

Gender plays a greater part in outdoor education than is commonly realised. Understanding the influence of gender can provide useful insights into broader issues in outdoor education. Gender differences are observed in the focus of the outdoor education literature towards females. This bias is reflected in the overall finding that research on outdoor education program outcomes shows that higher gain scores tend to be found for females.

Outdoor education can no longer naively carry on thinking that optimal personal growth is being achieved for males, nor can be said that outdoor education is meeting the needs of a wide range of females.

Methodological explanations for the gender differences in change scores can be offered. Further, differences males and females motivations for taking on the challenges of outdoor education may cause the differences in outcomes. Or could it be that the masculine orientation of the majority of outdoor education programs impels females into greater growth than males?

If further investigation supports these ideas, then outdoor education will face a dilemma: to continue perpetuating its gender myths or to come out of the closet and reveal its true identity.

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