

# Japanese Students Down- Under: Is Australian outdoor education relevant to other cultures?

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## Abstract

There is very little evidence about the effects of Western outdoor education programs on non-Western participants. This study involved an experimental group of low-achieving Japanese students who participated in an Australian outdoor education program ( $N=32$ ) and a control group of similar students who remained at school in Japan ( $N=40$ ). The 22-day outdoor education program consisted of two week-long wilderness-based expeditions, two English language instruction sessions, and a cultural and tourism experience. Students completed a multi-dimensional self-concept instrument before and after the program, and about half the students also completed a follow-up. Students also rated the quality of their outdoor education experience. Surprisingly, there were no positive self-concept changes, but there were significant reductions for the Peer and Confidence self-concept subscales, and lower than expected ratings of course value and group relations. Various programmatic and cultural explanations for the findings are presented.

## Introduction

There is considerable evidence to suggest the potential of outdoor education to provide effective personal growth experiences for school students (see Neill & Richards, 1998 for an overview). One of the emergent themes from meta-analytic studies (Cason & Gillis, 1994; Hans, 1997; Hattie, Marsh, Neill, & Richards, 1997) and large empirical studies (e.g. Neill, 1999) is that outdoor education program outcomes are surprisingly diverse - between organisations, between groups, and particularly between individuals (Neill, 1998). Despite this, little empirical outdoor education research has explored "self" outcomes in relation to individual difference variables such as gender, academic ability and physical competence. Another potentially important but relatively unexplored area, is the impact of cultural differences. This is of particular concern given the increasingly multicultural nature of Australian society and the growing use of outdoor education in our schooling system. Further, in an age of globalisation and Australia's pursuit of close ties with Asia, an increasingly wide range of Australian outdoor-type experiences are being made available to overseas groups of tourists, students and business personnel. Given these trends, there is a need for further investigation of the responses of non-Western people to Western-type outdoor education experiences.

Cross-cultural psychological research has indicated differences between Western and Asian

students on such attributes as locus of control (e.g., Weisz, Rothbaum, & Blackburn, 1984), self-perception (e.g., Cousins, 1989), cooperative behaviour (e.g., Cook & Chi, 1984), personal relationships (Crystal, Kato, Olson, & Watanabe, 1995), and individualism /collectivism (e.g., Triandis, Bontempo, Villareal, Asai, & Lucca, 1988). Such findings would suggest that outdoor education programs designed to influence similar self attributes of Australian students may not work in the same way for students from Asian cultures.

For instance, the most commonly measured outcome in Australian and American outdoor education research has been self-concept, yet this research has shown little regard to the underlying cultural basis for our conceptions of "self". There is considerable theoretical and empirical literature about the societal differences in notions of self. In particular, this literature focuses on two divergent constructs of the self: *independent* and *interdependent* (Markus & Kitayama, 1991). An *independent* view is characterised by individualism, autonomy and a faith in the inherent separateness of distinct persons. This view of self is commonly associated with people from individualistic societies. An *interdependent* view sees the self as interrelated with the surrounding context which exerts a strong influence on an individual's behaviour (emotional, cognitive, and motivational). The self is seen only in relation to the "other"; there is a fundamental connectedness of human beings to

each other. Thus, the ability to work cooperatively with others and to achieve positive interpersonal relationships are highly valued skills for people with an interdependent view of self. This view of self is exemplified in Asian, African, Latin-American and many southern-European cultures.

Such differences in self constructs have implications for investigating the effects of ethnicity and cultural background on self-concept change in adventure program participants. Western psychology explains that individuals exhibit a self-enhancing bias in relation to attributes that they value highly. In other words, people tend to rate positive attributes as more descriptive of themselves than of others—in other words, Western individuals tend to regard themselves as superior to others (Brown, 1993; Pelham, 1991). However, Markus and Kitayama (1991) argue that this self-enhancing tendency is associated with independent Western cultural constructs of the self. Studies with Japanese participants have shown a tendency towards other-enhancement rather than self-enhancement, particularly when "other" refers to important people such as family and friends (Endo, 1995; Markus & Kitayama, 1991). It appears that Japanese people place more importance on positive relationships and harmony with others, striving to integrate with others "rather than being the nails that stand out and get hammered down" (Endo, 1995, p. 59). Consequently, when asked to evaluate oneself on important personal attributes, there is a tendency to want to enhance the standing of others by being modest about one's own attributes. Such cultural variations in self-rating make it difficult to meaningfully compare self-concept type scores of Western students with Asian students. It is not entirely clear, however, how these biases operate when the key interest is in evaluating the personal and social development impacts of intervention programs. Thus, this is one of the research questions which the current study seeks to address.

### **Outdoor education and personal development in Japan**

A variety of approaches to the "betterment" of oneself have been evident in Japan for many years, despite the psychological evidence for other-enhancement amongst Japanese people. Traditional methods for personal development training have included a range of physical

activities and meditation techniques that have philosophies of well-being as an integral aspect. For instance, martial arts such as karate, judo and aikido are not only concerned with physical conditioning and self-defence; traditionally, they have been just as concerned with the development of self-discipline, self-awareness, control, mind-body harmony, mental strength, conflict resolution and personal development (Konzak & Boudreau, 1984). We were unable to locate literature that reported the results of research into the effectiveness of these traditional methods on the various aspects of personal development of Japanese people (no doubt there is literature available, but it is not written in English). Studies with Western participants do, however, generally conclude that involvement in these traditional Eastern activities is associated with positive gains in personal and mental well-being (Konzak & Boudreau, 1984; Nosanchuck, 1981).

Outdoor education has a long history in Japan and has followed trends in the USA. There was a large number of research papers about residential camping between the 1980s and early 1990s, mainly through the activities of postgraduate students and faculty staff at the University of Tsukuba<sup>1</sup>. There is a Japanese Outdoor Education Society (JOES) which, much like AJOE in Australia, provides a biannual journal, quarterly newsletter and annual conference.

In our literature search, we managed to locate, with some difficulty, several English abstracts about the effects of adventure camps on measures of self-concept (Iida, Imura & Kageyama, 1998), state and trait anxiety (Imura, 1982), locus of control (Sekine, 1994), self-efficacy (Iida & Sekine, 1992), school attendance (Iida, Kobata & Arisaka, 1991) and nature awareness (Tchibana, Kobata, Yorigane, Iida, Yoshioda & Imura, 1991). In the only Japanese outdoor education study which is fully published in English (Iida, van der Smissen, & Imura, 1984), results showed that young adolescents made significant gains in total self-concept scores on the Children's Self-

<sup>1</sup>A trial database of over 3000 publications and articles relating to outdoor activities and outdoor education in Japan can be found at <http://sports.taiiku.tsukuba.ac.jp/imura-cgi-bin/rop/index> (you need a computer with a Japanese language system) (T. Okamura, personal communication, March 3, 1999).

Actualisation Scale. On the four subscales of this instrument, significant gains were noted for achievement motivation and self-effort subscale scores, but not for the self-confidence or perceived self (one's concept of how others evaluate one) subscales.

Another trend in developmental training of Japanese people has been the increasing amount of international travel for a variety of purposes. Stitsworth and Sugiyama (1990) attribute the increase in student exchange programs to a growing belief amongst the Japanese that the future of the country will be better assured by active participation in the world community. The involvement of the Japanese students in the Australian Outward Bound program described in the current study could be viewed as one such attempt at internationalisation, with the focus on the personal and social development of a group of at-risk Japanese high school students.

Specifically, the current study sought to answer two questions: (1) Do Japanese students respond in the same way as Australian students in terms of changes in dimensions of self-concept following participation in an Outward Bound program? (2) Do Japanese students evaluate their Outward Bound experience in the same way as Australian students in terms of its effect on personal development, group cooperation and productivity, and group relations? Also of interest in the current study was the extent to which an Australian program could meet the needs (as spelled out by their school principal) of a group of Japanese students.

## Method

### Participants

Participants in the study attended a coeducational, all boarding school in Japan that catered for students aged from 13 to 18 years. There was a strong international focus in the school; for example, there were five teachers whose native language was English and the school had enrolled students from seven sister schools around the world. One of the aims of the school was "To give opportunities for international understanding in the 21st century" and one of a variety of club activities listed for Senior students was "International Club".

Two groups of Grade 10 (15-16 year old) students from this school participated in an Outward

Bound program on separate occasions. The programs for the two groups were identical and were conducted by the same Outward Bound instructor. The same school staff accompanied each of the groups to Australia.

In total, there were 30 students (28 males and 2 females) who participated in the outdoor education programs. These students were not typical of the rest of the school population. Most of them had come from other schools where they had been labelled as trouble-makers or low-achievers (despite apparent average ability). They were perceived by staff as students who had lost interest in school and who had a very low concept of their abilities in a range of areas, including academic, peer, and family relationships. They were, however, perceived to have reasonable levels of self-concept of physical ability because most of the students in this group excelled in at least one sport. The principal saw it as a challenge to the school to work with these students to change the negative feelings they had about themselves, and to develop within them a greater sense of cooperation and responsibility towards others. Most of these students were described as being alienated from their families. Their parents had placed them in a boarding school because they did not know how to deal with them at home.

The principal believed in the notion of "growth through overcoming difficulties" and had seen the Outward Bound program as providing an opportunity for students to be personally challenged in a supportive environment. In discussion about the nature of the Outward Bound program and what the school hoped would be the impact upon participating students, the principal explained that the main aim was to "improve the self-concepts" of the students.

A control group of 42 Grade 10 (39 males and 3 females) students was used to provide a point of comparison of changes in self-concept that might be attributed to the Outward Bound program. Although students in the control group also were described as low achievers, they were not perceived to be difficult students in any sense. Students in this control group were involved in 'standard' school sporting activities, but none were identified as excelling in any one sport.

### The program

There were two components to the course undertaken by the participants: a language development component; and a wilderness experience component. The aims of the language component were twofold: (a) to teach vocabulary essential for effective functioning during the wilderness experience; and (b) to develop confidence in using English for oral communication in general. The language component was conducted in two segments: two half-days at the beginning of the total course; and three full days in-between the two week-long wilderness experience segments. As well as these specifically dedicated times for language activities, the wilderness experience component of the program was conducted in English and evening activities included a continuation of the sorts of language games that students had been introduced to during the first segment of the language program. The language program was conducted by a trained ESL teacher who had experienced two previous Outward Bound school programs as an accompanying teacher.

The wilderness experience component was conducted in two week-long segments, separated by the three-day language program. The second segment was similar to the first in terms of the activities undertaken, but it was at a more advanced level. Students engaged in bushwalking, rock climbing, abseiling, rafting, high and low ropes confidence courses, and bush cooking. The course instructor used a range of interpersonal techniques such as group discussions, personal reflections, forward planning sessions, goal setting, management team systems, and debriefings to foster growth in students' personal, social, and intellectual maturity. The instructor was an Australian-born female whose first language was English. She was a reasonably fluent speaker of Japanese although interactions with students were conducted mostly in English. Other accompanying adults included two Japanese teachers from the participating school, and one Australian teacher who taught English at the school.

Students slept under "bivvies" whilst on expedition. During the first segment of the language program, students stayed in shared-room accommodation in a hotel, and during the language program in the middle of the course they stayed in cabins at a bush retreat in the south-west of Western Australia.

At the completion of the Outward Bound experience, the group travelled to Perth where they spent three days engaging in cultural and recreational activities before returning to Japan. In total, the students spent 22 days in Australia.

### The instruments

Two instruments were used to assess changes in students' self-concepts and in their responses to the Outward Bound experience.

The Song and Hattie self-concept instrument, *About Myself* (Hattie, 1992), contains five items for each of seven identified dimensions of self-concept: Classroom, Ability, Achievement, Peer, Family, Confidence in Self, and Physical Self-Concept. The respondents rate themselves on each statement on a 6-point scale, from 1 (Strongly Disagree) to 6 (Strongly Agree).

The *Student Evaluation of Course* is based on the *Participants' Evaluation of Program and Instructor Quality* (PEIPQ-B) (Richards & Neill, 1995). There are five subscales of this instrument: (a) course effect on personal development (five items); (b) course value (five items); (c) group cooperation and productivity (five items); (d) group relations (three items); and (e) group general (one item). Each item is rated on an 8-point scale ranging from 1 (definitely false) to 8 (definitely true). In addition, participants are asked to write a brief, qualitative evaluation of their course experience.

Following established guidelines for the collection of data across cultures (Brislin, 1986; Hui & Triandis, 1985; Wesley & Karr, 1966), both instruments were translated into Japanese by a bilingual, bicultural teacher in Australia. The instruments were then back-translated by a second bilingual, bicultural teacher in Australia and by the Japanese principal of the participating school (who was a competent user of English). No modifications were made to the Japanese version of the instruments as a result of back-translations.

### Data Collection and Analysis

Experimental and control group students completed the self-concept instrument, *About Myself*, two weeks prior to departure to Australia. The instrument was completed under the supervision of one of the teachers at the school who subsequently accompanied the experimental group to Australia. Two days after the

completion of the Outward Bound program (during the three day recreational period in Perth), the experimental group again completed *About Myself*. They also completed the *Student Evaluation of Course* instrument. At the same time, the control group completed *About Myself* in Japan under the guidance of a classroom teacher. Six weeks after their return to Japan, the experimental group completed *About Myself* for a third time. Unfortunately, some of the follow-up surveys were lost in transit to Australia. A within-subject multivariate repeated measures design (see, for example, Tabachnik & Fidell, 1989) was used to assess the maintenance effects of the program for 13 students in the experimental group for whom follow-up measures were available.

Interpretation of change scores was based on the findings of previous meta-analytic studies that have reported average effect sizes (ESs) for outdoor education programs with school students, of .21 (228 effect sizes, Hattie et al., 1997) and with adolescents, of .31 (43 studies, Cason & Gillis, 1994)<sup>2</sup>. More specifically, a comparison with Australian participants in Outward Bound school programs is an ES of .26 (n=542, Neill, 1999).

A between-subjects multivariate repeated measures design (see, for example, Tabachnik & Fidell, 1989) was used to compare changes in self-concept subscale scores of the experimental and control group students. ESs were used to compare students' scores on the subscales of the *Student Evaluation of Course* instrument with the mean scores of 238 Australian Year 9 students who had completed a 9 day Outward Bound program.

## Results

### Self-Concept

Table 1 presents the pre-test and post-test means for the self-concept subscales for the experimental and control groups. The statistical significance of the differences between the means of the two groups was determined by doing a two-way (Treatment Group x Time) analysis of variance for each of the seven self-concept scales. A

statistically significant F ratio for the interaction effect indicates that the pretest-posttest difference for one group is reliably greater or less than the pretest-posttest difference for the other group. Two significant F ratios were obtained. On both the Confidence and Peer subscales, the mean scores for the experimental group were *lower* after the program than they were before it, whereas there were no significant changes in the mean scores of the control group. Pre-post ESs for the experimental group for Confidence and Peer self-concepts were -.41 and -.50 respectively, as shown in the last column of Table 1. All other ESs were negligible.

Full data (pre-, post-, and follow-up scores) was available for only 13 students. Predictably, the only two significant differences revealed by the repeated measures analysis of variance were for the Confidence and Peer subscales ( $F(2, 24) = 3.46, p < .05$ ; and  $F(2, 24) = 6.41, p < .01$  respectively). For both subscales, following the marked decrease in scores immediately following the Outward Bound program, there was an upward trend in the follow-up scores, although neither attained pretest levels.

### Course Evaluation

Students' evaluations of their course experience are summarised in Table 2 and presented together with summary statistics for a comparison group of Year 9 Australian students. This group consisted of 238 students from four schools who had participated in a 9-day Outward Bound school program. Except for the negligible difference between the two groups for Personal Development (ES = .06), the mean scores for the Japanese students on the other four subscales were noticeably less than their Australian counterparts, as indicated by the small to moderate negative ESs.

Although written evaluations (in Japanese and subsequently translated into English) were obtained from students, they were not very detailed. Most comments were, however, positive, and students indicated that they had valued the experience and felt that they had gained from it, as shown in such comments as:

<sup>2</sup> Generally in the social sciences, an effect size of .20 is defined as small, .50 as moderate, and .80 as large (Cohen, 1988).

**Table 1**

**Pre- and Post-Test Means and Standard Deviations, and Univariate F Tests on the Self-Concept Scales for Experimental and Control Groups**

Self-Concept Scale	Pretest				Posttest				F (60, 1)	ES (Exp)
	Experimental		Control		Experimental		Control			
	M	(sd)	M	(sd)	M	(sd)	M	(sd)		
Ability	14.00	(5.41)	14.00	(4.67)	14.80	(5.49)	13.35	(4.16)	2.91	.15
Achievement	12.56	(4.92)	13.00	(4.22)	12.56	(5.25)	12.81	(4.77)	0.04	.00
Class	19.32	(3.16)	18.77	(4.06)	19.04	(3.13)	18.00	(3.66)	0.88	-.09
Confidence	18.04	(4.32)	17.65	(5.08)	16.44	(3.40)	18.11	(4.75)	4.62*	-.41
Family	20.92	(5.41)	22.87	(4.95)	21.48	(4.34)	23.57	(5.80)	0.02	.12
Peer	17.80	(4.69)	17.70	(4.22)	15.48	(4.60)	17.38	(4.99)	4.62*	-.50
Physical	16.72	(4.59)	13.68	(3.90)	16.96	(3.18)	14.24	(4.31)	0.12	.06

Note. \*p = .05; n (experimental) = 25, n (control) = 37.

**Table 2**

**Means and Standard Deviations, and Univariate F Tests on the Student Evaluation of Course Questionnaire Scales for Experimental and Australian Comparison Group**

	Experimental	Comparison	Effect Size
Personal Development	5.91 (1.25)	6.19 (1.40)	-.06
Course Value	5.61 (1.35)	6.11 (1.64)	-.30
Group Cooperation/Productivity	5.73 (1.38)	6.16 (1.23)	-.43
Group Relations	5.52 (1.51)	5.90 (1.46)	-.26
Group General	5.63 (1.56)	6.05 (1.74)	-.24

Note. n (experimental) = 30, n (comparison) = 230;

*"It was extremely helpful for self-development."*

*"I'm glad I attended this course."*

*"It was a really good experience."*

As well, several interesting phenomena emerged. The results from the self-concept questionnaire indicated that students had decreased in Confidence and Peer self-concepts immediately following the Outward Bound program. On the other hand, however, there was an emphasis in students' written comments on the need for cooperation and positive relationships with

peers--comments that indicated a need for improvement, such as:

*"I should have acted with much more consideration for others."*

*"I learned I shouldn't be self-centred and wilful."*

*"After returning to Japan, I will try to think about group activity much more deeply."*

The comments indicated a positive impact of the program in this area, such as:

*"Before we came, our class was not united, but after the course it is."*

*"I believe I made deeper ties with my peers thanks to this course."*

*"I established relationships among peers with whom I haven't spoken before, and became very close."*

*"I thought this course was very helpful for developing cooperation amongst the group, so I was very happy to be a part of it."*

The comments of some students also bear witness to a growth in confidence, as for example in the following:

*"Going through this course required effort and a willingness to do it, and I think it helped to build confidence."*

*"I overcame my fear of heights."*

*"I can speak English a little better."*

*"I was proud when I was able to climb a high place."*

## Discussion

The most interesting finding from this study is the apparent lack of evidence for improvement in any of the self-concept subscales following the Outward Bound experience of the Japanese students. Of particular concern is the apparent decrease in the Confidence and Peer subscales--two dimensions of self-concept that one might reasonably have expected to have improved following a program specifically designed to enhance self-confidence and cooperation with others.

We put forward two general categories of explanation for this finding. These explanations are not mutually exclusive and quite possibly there are elements of both at work in these results. The first explanation is that the results are a true indication that the students' self-concepts were not enhanced overall and were in some areas diminished. Thus, it could be concluded that the program failed to achieve what it set out to do and we need to consider how such a program might be improved. A second explanation, however, is that the results do not

truly reflect the impact that the program had on the Japanese students. We discuss possible problems in the research methodology and make suggestions for the design of future studies in this area. In both types of explanation, cultural issues are pertinent, if not paramount. Our emphasis is on how cultural issues could have impacted on the program design, facilitation, and on the research methodology.

First, let's consider the obvious: that the program didn't "work". Although the rhetoric associated with the personal development impacts of outdoor education is generally positive, there is also less well-known evidence of non-positive outcomes. This was highlighted in the Hattie et al. meta-analysis which showed that approximately 15% of ES outcomes were near-zero or negative. In addition, as in many other areas of research, significantly negative or non-significant results have a tendency to be suppressed by researchers, organisations and publishers, even though common sense would suggest that it is in the collective interest for such results to enter the public domain. Reporting of such outcomes can encourage critical examination and lead to improvements in educational delivery and research design.

Thus, it is worth considering possible weaknesses in this intervention program. These were the first programs of this type run by Outward Bound in Australia; thus, while other results for this organisation have been particularly strong (Hattie et al., 1997; Neill, 1999), it may have been that logistical factors such as food, communication, and running new activities interfered with program efficacy. In the overall design, although the program length of 22 days is considered "long" when compared with more typical 5 to 10 day outdoor programs with school students, it could be that with a client group of Japanese at-risk youth in a foreign country, an even longer program is needed to effect real self-concept change. The more entrenched a negative conception of self has become, the greater the force required to effect positive change.

It could also be that breaking the expedition in the middle for three days of language instruction was not optimal for personal development. Traditionally, Outward Bound expeditions have tended to be continuous journeys. On the other hand, there has been a highly successful example of a combined outdoor and academic bridging

program conducted by Outward Bound Australia in the 1980s for underachieving males (Marsh & Richards, 1988). This program removed students from their family and school environments into a residential bush location where academic studies were integrated in a supportive, experiential and outdoor learning environment for 6 weeks. The academic and self-concept outcomes from this program were unique in the outdoor education literature--among the highest ever reported (Hattie et al., 1997). Thus, it is clear that a well-designed and -facilitated program with underachieving students can indeed help to unlock their potential, but it may require a greater investment in time and educational intensity. The importance of a longer program may be particularly relevant when students are from another country and faced with additional cultural challenges, such as speaking in a non-native language, unfamiliar natural environments, different cultural practices, and so on.

Even small components of the program created cultural difficulties for the Japanese students--such as swimming in a river, and dressing and undressing near fellow students in a coeducational setting. Students, on the whole, were somewhat reticent about becoming fully physically engaged in activities such as abseiling or being actively involved in group communication and planning exercises--and these are the very processes through which participants receive feedback about themselves and their capacities. Despite a high level of student-perceived challenge, Outward Bound staff saw this program as somewhat "soft" in terms of the physical challenge during the expedition and the overall program intensity which had "time-out" (English language instruction and recreational days in the city) from the traditional Outward Bound expedition component.

It is interesting to consider the possible role of language in the personal development outcomes. It may be that the aims of English language instruction and self-concept enhancement worked against each other. For example, by conducting the course predominantly in English, students' capacity to express their emotions and process the experience were more limited. Perhaps the two aims of self-concept enhancement and English language instruction might have been better met through separate intervention programs. For example, conducting the outdoor experience in a

Japanese environment might have allowed participants to focus more closely on their personal qualities and interpersonal relations, rather than focusing on personal adaptation to cultural differences. Using Japanese as the language of instruction could allow for deeper levels of interpersonal communication and deeper cognitive processing. A recreational school visit to an English-speaking country could then perhaps have better met the school's aims of cultural encounter and learning to speak English.

Overall, several potential weaknesses in this intervention program have been identified, including its pilot nature, the wilderness component length, adaptation of students to unfamiliar cultural practices, relatively easy level of challenge, using English as the language of instruction, and the reticence of participants to actively engage in activities.

Having identified some possible program weaknesses, we turn our attention to the research methodology. This study used a standard experimental design for evaluating the effects of the intervention program. In fact the inclusion of a control group makes the design sounder than the majority of quasi-experimental outdoor education studies. The limited number of participants gave the study low power, but this was somewhat overcome by reporting ESs. The choice of self-concept instrument was based on its appropriateness for this age group, its short length and the simple language which made it ideal for translation and multiple administrations. Nevertheless, the *About Myself* instrument has not been widely used as a tool for assessing change, so it is difficult to know about its sensitivity to change. Further, although self-concept is the most commonly stated and measured outcome for outdoor education, it is not clear that it should be. In their meta-analysis, Hattie et al. (1997) found an overall ES for Self-Concept of .28, which was lower than for the five other major categories of outcomes (Leadership, Interpersonal, Academic, Personality and Adventurousness). Although self-concept may not be the ideal outcome measure, in this study we used a psychometrically sound self-concept instrument and standard experimental design in order to provide comparative outcomes for a group of Japanese participants. Clearly the evidence here is that the Japanese students' self-concepts were not enhanced anywhere near the level of what is

typically achieved by outdoor education programs.

We have identified possible programmatic explanations, addressed some methodological issues, and now turn to our original intention which was to do with developing a better understanding of Japanese students' self-concepts in the context of outdoor education. Perhaps the most important consideration in this respect relates to the interpretation of "self" in different cultures. In the introduction, two divergent constructs of self were presented--*independent* and *interdependent*. People with an interdependent view of self value highly their ability to work cooperatively and have positive interpersonal relationships. Traditionally, Japanese people have been viewed as having an interdependent self. Thus, a primary aim is to fit in, to engage, to belong, or to become part of the relevant social relationships (Markus & Kitayama, 1991). On the other hand, a self-deprecatory tendency (Takata, 1987), a non self-serving bias (Pelham & Swann, 1989), or a modesty bias (Endo, 1995) discourages Japanese people from publicly acknowledging positive aspects of self. Thus, students in this study may not have reported positive changes in self (as characterised in the subscales of the *About Myself* instrument), because it would not have been seemly to do so. In other words, it is possible that aspects of self may have been enhanced as a result of the program but because of modesty the students might not have wished to endorse publicly such self-enhancing beliefs. This phenomenon may have been accentuated with respect to behaviours relating to peer relationships (for instance, as assessed by Peer self-concept, and the group effectiveness subscales of the Course Evaluation Questionnaire) because these behaviours have particularly high cultural value. The Japanese students, therefore, may have set a higher standard of expectation with regards to their cooperation and having positive interpersonal relations.

An issue related to cultural variations in interpretations of "self" is that of response to disequilibrium. The methodology of Outward Bound-type courses is to facilitate disequilibrium in personal social well-being by placing high levels of group challenge in the programs. The educational justification for such an approach is that by doing so, individuals can learn about themselves as agencies of change, and be

encouraged to take leadership and show initiative in order to solve personal and group problems. Perhaps, however, this methodology of creating disequilibrium in group relations is rather more confronting to the Japanese psyche than the Western psyche. Experiencing states of social unrest (which are intended as transitional, transformational states) may have some more lasting effects for Japanese students, particularly as their sense of group well-being is more interdependent with their sense of self well-being.

### Concluding comment

The results of this study support the argument that Australian outdoor educators operating with non-Australian participants need to pay closer attention to the cultural relevance and impact of the activities and methods they use. We also need to consider carefully the methods of evaluation used. This may involve identifying (or creating) and using more culturally sensitive instruments to assess changes in "self" constructs. Thus, the major contribution of this study has been to highlight the embedded assumptions about Western constructs such as self-concept and the effect these assumptions may have on Outdoor Education practice in Australia.

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