

Risking a Debate - Redefining Risk and Risk Management: A New Zealand Case Study

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This paper examines the gulf between the perceptions of risk and risk management of twelve New Zealand outdoor instructors and the definitions and managerial practices surrounding risk and risk management. This gulf is supported by the discursive practices of risk and risk management which privileges objective and rational models of thinking, denying the subjective experience of both the instructor and the student. Broadening the definitions of risk to recognize the opportunities as well as the loss inherent within risk, better reflects the complexity of this phenomenon. This may open the way for discussion about risk as a social process, rather than just a process of rational decision-making. Refocusing the risk debate on the opportunities it provides may allow the discussion to move away from risk being dominated by its management, to focusing on the learning goals and objectives of adventure education.

Introduction

The alignment of rational, objective and linear models of thinking to risk discourse in adventure education¹ is evidenced by the uniform and narrow definitions of risk and risk management used in the adventure education literature. Rational, objective and linear modes of thinking are also reflected in the

research area, which to date, has largely been management focused and prescriptive, rather than investigative and explanation focused (Brown, 1996). The discursive practices of risk and risk management position instructors as rational, all knowing experts, who abstract themselves from their risk and risk management decisions (Bell, 1996). However, it appears that outdoor instructors² have not been asked how they understand risk and risk management and the meanings they attribute to these concepts.

The purpose of this study was to explore outdoor instructors' perceptions of risk and risk management. Integrating the lived experience of instructors into a working definition of risk and risk management for adventure education, locates risk as an opportunity to gain something of value. Positioning risk as an opportunity at the forefront of this article reverses the current privileged understanding within adventure education of risk as the potential to lose something of value. Repositioning risk in this manner not only reflects the lived experiences of outdoor instructors and the place of risk in adventure education, but may also allow the debate around adventure education to move away from being dominated by risk, to being dominated by the achievement of the learning goals and objectives of adventure education.

This article discusses the implications of aligning

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risk in adventure education with technical knowledge. Risk and risk management in adventure education are defined, and risk management in the New Zealand context is discussed. This is followed by a description of the methodology and discussion of the key findings from the research. The article concludes with implications for adventure education practice and suggests areas for future study.

Literature Review

The Discursive Practices of Risk

Douglas and Wildavsky (1982) suggest that risk is much more than rational decision-making within the framework of known probabilities. It is "part of the dialogue on how best to organize social relations" (Douglas & Wildavsky, 1982, p. 8). In organizing social relations some things are considered important and others are not. One of the things considered important in adventure education is risk and risk management (Cosgriff, 1995). This is not to suggest that risk and risk management are not important issues, rather the question is one of "why the discourses of risk management have come to be so centrally positioned and who and what benefits from the maintenance of the 'differentiations' involved in risk management..." (Cosgriff, 1995, p. 68).

Discourse is an "assemblage of statements arising in an ongoing conversation, mediated by texts, among speakers and hearers separated from each other in time and space which take on the credibility of 'truth' and which are constructed as knowledge by the powerful" (Wearing, 1998, p.ix). The process of constructing a 'truth' prevents "other ways in which a topic can be constructed" (Cousins & Hussain, 1984, p. 5). Through deconstructing a discourse it becomes apparent that "knowledge is always partial and incomplete, always produced from a particular perspective" (Nash, 1994, p. 69).

The majority of the research on risk has been generated in the areas of finance, business and health, and focused on utility theories and decision-making under uncertainty (Brown, 1996; Trimpop, 1994). Inherent in this research is the assumption that people make rational decisions about utility, given the information they have and the probability of outcome (Bernstein, 1996). In general, risk assessment has "centered on quantification in terms of probability" (Jackson & Carter, 1992, p. 41).

The emphasis on quantification of risk has found its way into adventure education. This is evidenced by the appearance of equations such as, "Risk = Probabilities x Magnitude + Public Outrage"⁴⁰ (Brown, 1998, p.74), and the development of a range of databases in adventure education organizations tracking incidents and accidents (Brown, 1996, p. 48).

The idea that risk is quantifiable in adventure edu-

cation is reinforced by categorizing risk into real risk and perceived risk³. Not only is "real" risk the risk which "actually" exists, it is also a "convenient way of expressing the fact that some people share a particular, normative view of risk which implies or seeks to suggest that risk can be disentangled from human biases" (Waring & Glendon, 1998, p. 20). A normative view of risk is endorsed through adventure education where risk is segmented into risks in the natural environment and those related to equipment, constituting "natural risks," which further disentangling risk from human biases.

The quantification of real risk through the safety policies of an organization, as well as accident and incident reports, further legitimizes a normative view of risk. As Brown (1996, p. 41) states, research in risk management must "inform the risk management process so that practitioners can make the most appropriate management decisions based on *facts*⁴ ..." The emphasis on quantification and facts gives credibility to decisions around risk management being "related solely, or in some linear fashion, to technical knowledge" (Fowlkes & Miller, 1987, p.72).

The outdoor instructor is the person with this technical knowledge. The instructor knows the real risks inherent in an activity which situates them as the "rational self (and all) knowing 'skilled,' and 'competent' expert" (Cosgriff, 1996, p.12). In contrast, the students' assessments of risk are their perceptions, which are "subjective, often hypothetical, emotional, foolish and irrational" (Kunreuther & Slovic, 1996, p.116).

One of the central roles of an outdoor instructor is to minimize the levels of real risk in an activity and manipulate the levels of perceived risk to maximize learning for the students (Ewert, 1989b; Priest & Gass, 1997). The notion that the instructors can manipulate the level of risk the student perceives contains the idea that they are the experts with regard to both real risk, as well as a student's subjective experience of risk.

Embedded in the concept of real risk is the notion that everyone interprets real risks in a similar way. There is a body of research which suggests that different groups in society perceive risks differently. Gustafon (1998, p. 807), for example, found that women and men not only express different levels of concern about the same risks, but that "women and men perceive different risk...and gender difference may also be found...in the meanings attributed to the same risks," Brown (1996, p. 56) refers to research which suggests "that white males on average perceive risk to be much smaller and much more acceptable than other people."

Judgment has been identified as a critical skill required by outdoor instructors to manage and manipulate risk (Cain & McAvoy, 1990; Wescott, 1996). A paradox of risk management is that judgment relies on objec-

tivity, astuteness, and rationality. Yet the ability to employ objective knowledge and make objective decisions is based on individual experience, which can only be subjectively interpreted (Bell, 1996). This paradox is dealt with by "abstracting that [instructors] with their own personal history from the context of the situation and its requisite decision" (Bell, 1996, p.145).

Abstracting an instructor's personal history and relying on objectivity, astuteness, and rationality to make risk management decisions may meet the needs of the realm of science (Bicevskis, 1982) and of "European, able-bodied, autonomous, objective, and rational men" (Bell, 1996, p.145), but it does not work to meet the needs of wider society. Issues of value and the role of authority are concealed within this approach to risk (Bell, 1996). It also does "little to explain social/behavioral influences on risk" (Jackson & Carter, 1992, p. 41).

Defining Risk and Risk Management

The existing literature pertaining to risk in outdoor recreation and adventure education is uniform in defining risk. "Risk is the potential to lose something of value. This loss may lead to harm that is physical...mental...social...or financial" (Priest & Gass, 1997, p.19). Writers in other fields have suggested broader definitions of risk. Trimpop (1994, p. 9), for example, defines risk as conscious or non-conscious "behavior with a perceived uncertainty about its outcome, and/or about its possible benefits or costs for the physical, economic or psycho-social well-being of oneself or others."

Risk management in adventure education is the "systematic application of management policies, standards and procedures to the tasks of identifying, analyzing, assessing, treating and monitoring risk" (Brown, 1999, p. 274). This is in order to minimize the exposure to physical, mental, social or financial harm or loss of the clients, staff and the organization (Brown, 1999, p. 274).

The Role of Risk in Adventure Education

Risk is an integral element in adventure education. Learning, including improving one's self-concept, personal growth, leadership, and the opportunity for self-actualization (Ewert, 1989a; Hattie, Marsh, Neill, & Richards, 1997) is enhanced through risk. Adventure education provides opportunities for the individual and the group to solve problems. Ewert (1989a, p.70) suggests that the fear or stress students' encounter in situations they perceive as risky "enhances decision making, discipline and personal awareness." The unfamiliar environment is posited as an equalizer amongst the students "as no one has the outdoor experience to be seen as the 'expert', so preexisting hierarchies may dissolve or be put aside, allowing people to begin to think for themselves" (Priest & Gass, 1997, p. 21).

Some writers have questioned the positive effect

risk has on learning. For example, Beedie (1994, p.13) asked if it is "the successful outcome of taking a risk which is important or is it enough to undergo the process of risk taking." Estrellas (1996) also questions whether risk taking enhances or jeopardizes physical and emotional safety. Contrary to Priest & Gass (1997), she states that rather than promoting the growth of an individual and the development of a team, the manipulation of risk can be dysfunctional when the risk is too great, as this can cause high levels of stress, which in turn, may impact negatively on individuals and groups.

Risk Management in the New Zealand Context

Within the New Zealand context of adventure education, risk management is commonly associated with the Risk Analysis and Management System (RAMS), developed by Grant Davidson in 1992 (Davidson, 1992). The RAMS is both a process and a form to be completed prior to outdoor activities. The RAMS process involves identifying all of the possible risks associated with an activity. The causal factors for each risk are grouped around people, equipment and the environment, and then documented. The management of each causal factor is specified and corresponding emergency procedures identified. Relevant industry standards, policies and guidelines, and the skills required by staff, are also documented. Finally, a decision is made by the organization whether or not to proceed with the activity, considering the risks, the available resources, and the management strategies available to minimize the risks.

Methodology

A qualitative approach was used to investigate a group of outdoor instructors' perceptions of risk and risk management. The research sought to describe the instructors' subjective experience. Twelve instructors⁵ participated in the research. Six instructors were from the Outward Bound Trust of New Zealand (OBS) and six were from the Sir Edmund Hillary Outdoor Pursuits Center of New Zealand (OPC).

OBS and OPC are the largest not-for-profit adventure education organizations in New Zealand. OBS was established in 1962 and focuses on personal development courses mainly for people between 17 and 27 years of age. The courses range in length from weekend to twenty-two day courses. OPC has been in operation since 1973, running five-day courses for secondary school students, and teaches outdoor and leadership skills to adults. Both organizations have well-developed safety management systems and Standard Operating Procedures (SOPs). They also employ up to twenty-five instructors at any one time. This potentially offered diversity in terms of instructor training paths, levels of experience and a range of perceptions around risk and risk management.

Each instructor was interviewed individually. The interviews were in-depth and semi-structured, allowing the instructors to talk about the aspects of risk and risk management that were relevant to them, yet ensured that all of the interviews traversed similar terrain. The research questions covered three broad areas. The first area was concerned with the messages instructors had received about risk as they grew up, how they defined risk and the role risk played in their own lives. The second area focused on how they defined risk in their work, the role risk played in adventure education and how the organization for which they work viewed risk. Thirdly, they were asked to define risk management, to describe the factors which they thought were important in managing risk and to reflect on whether these had changed over time. They were also asked to comment on any risk management models they used in their work and how they applied them.

The interviews ranged in length from forty minutes to one hour and twenty minutes. All of the interviews were audio-taped and then transcribed. The three areas covered in the research questions framed the data analysis. Initially, the data were grouped within this framework and themes that emerged from each group were then compared and contrasted with each other and the literature. This article is only concerned with the definitions of risk and risk management and the role of risk and risk management in adventure education.

The Instructors

Three of the instructors from each centre were women, and three were men. The women had from eighteen months to five years of outdoor instructing experience. Five women had worked at other outdoor centres within New Zealand. The sixth woman had led school camps when a secondary school teacher. The men had from nine months to four years of experience instructing. Only one had worked at another outdoor centre. All of the men had worked as freelance instructors, in secondary schools, or as part of tourist operations within New Zealand and overseas. Ten of the instructors had completed a two-day risk management course and six had completed a five-day course. Two women had co-instructed on risk management courses and one woman was instructing risk management at the time of the study.

The instructors in this study were well educated, with seven of the twelve having completed an undergraduate degree. For five of the instructors, their degree contained some components related to outdoor recreation or adventure education. At the time of this study, no undergraduate degree in adventure education was available in New Zealand. Of the five instructors who were trained teachers, three had received some training in adventure education at the College of Education.

Five of the instructors had completed Polytechnic⁶ adventure education courses which ranged in length from ten weeks to one year. All six of the men and three of the women identified personal trips and expeditions in the outdoors as an integral part of their training. Personal experience was the only training three of the men had in adventure education prior to the on-the-job training they had received at the outdoor centre at which they were employed.

Findings and Discussion

Defining Risk

There was a great deal of commonality in how the instructors defined risk both in their own lives and in their work. For the majority, risk was the potential to lose something of value, which is congruent with the adventure education literature (Brown, 1998; Ewert 1989a; Haddock 1993; Jack 1994; Miles & Priest, 1999; Priest & Gass, 1997; Robinson, 1992). Two of the instructors defined risk in adventure education as an opportunity for adventure and self-discovery. The three instructors who had no formal training in adventure education tended to use different language when they spoke about risk. For example, one talked about risk in terms of thinking "about what could come up, the possible issues during the trip." This close alignment in the definitions of risk is not surprising considering the instructors of this study shared a number of similarities. The majority of the instructors were well educated and many had formal training in adventure education. All of them had considerable personal experience in outdoor recreation, and lived at their place of work.

The uniformity with which the instructors defined risk may also be indicative of how pervasive the current risk discourse is in adventure education. This may be symptomatic of risk discourse not only constructing a truth about risk, but also preventing other ways in which risk can be understood. Rayner (1987, p. 208) suggests that, "we have reified the concept of risk to the extent that we have lost sight of many aspects of this multifaceted phenomenon in pursuit of . . . assessments of probabilities and magnitude [which] is important for engineering choices not societal choices." Reifying the concept of risk may have occurred to facilitate a shared understanding needed within adventure education, but the partial nature of this shared understanding becomes apparent when the instructors describe the role of risk in their own lives and in adventure education.

The Role of Risk in the Instructors' Lives

All of the instructors said risk had a positive, if not essential role in their lives. One stated, "I need to take risks to stay motivated and fresh, refreshed, sharp, to gain some of my potential." Another commented, "Risk

is healthy. It makes you look at yourself. It allows you to totally focus on the now." A third instructor put it most succinctly when he said, "the risk is fun."

The only reference the instructors made to potential loss, in terms of their own risk taking, was in relation to the level of risk in which they chose to engage. This is illustrated by the following comment: "I do take risks, but not big risks. Little risks with consequences is something I am prepared to accept."

The Role of Risk in Adventure Education

All of the instructors identified risk as a defining element of adventure education. Several examples highlight this notion. One instructor said, "It [risk] is empowering. They [the students]⁷ make a conscious decision... It makes them more aware of themselves, pushes their comfort zones, extends their boundaries." Another recounted a situation which one of her groups perceived as risky and the impact this had on them: "It wakes them up and energizes them. It makes them look outside of the bubble... They are 'chuffed' [very pleased] with themselves and with each other." A third instructor highlighted that risk provided "a sense of realness. The kids see the consequences...[and they] are immediate. It helps them focus on their role in the group and what they can do to change outcomes. And that they do make a difference."

As with risk in their own lives, the instructors' definition of risk in adventure education was only a partial and incomplete description of their lived experiences. Loynes (1995, p. 4) suggests that "we still do not have a widely understood language with which to discuss risk." Perhaps the situation in adventure education is a lack of language with which to discuss risk (Lopes, 1987), rather than a lack of a widely understood language.

Real Risk and Perceived Risk

Both the instructors and the literature referred to the concepts of real risk and perceived risk. Only one instructor made the same distinction as the literature did between these two concepts (Haddock, 1993; Priest, 1990). He said, "I believe in the principles that real risk can't be really determined...I can only try and make my perceptions as close to the real risk, but that can never be defined." He did go on to indicate, that, "having been an instructor and having incidents, I think my perceptions are close to those of the organization in terms of the outcome of the things that my group has experienced. I would like to think I was close."

For the other instructors, real risk was the risk they knew to exist, whereas perceived risk was a student's subjective assessment and judgment of risk. This was illustrated when one instructor stated that it was important to "provide information [to the students] on real risks. These are quite often very different from what the

clients see." Another echoed the sentiments of a number of instructors when he said he assessed "how much [risk] is perceived [by the students] and how much is real."

Current risk discourse, in which the instructors are the experts on real risk (Cosgriff, 1996), positions them as the arbiter of what is risky to the student. As one instructor commented: "I am making judgments of someone else's capability. I choose a level of risk that is appropriate for them. There is the balance of boredom if there is too little challenge and putting them through extremes of challenge they may not be able to handle."

The instructor does not work in isolation in determining what real risk is. This is legitimized and institutionalized by the organization they work for. In most cases this occurs through the philosophy of the organization, and through its practices and procedures, such as the SOPs and the RAMS. Far from being an equalizer (Priest & Gass, 1997), risk privileges first the instructor as the rational, all knowing expert and, second, it privileges white men, who tend to perceive risks as smaller and more acceptable than other groups of people (Brown, 1996).

Instructors often find themselves in the position of expert, which has led Estrellas (1996) and Warren (1996), for example, to argue that the students should be the arbiter of what is risky to them, not the instructor. For this to occur, there needs to be a shift in the way the instructor's role and the student's experience are understood. It may be time to review the contribution that categorizing risk into real risk and perceived risk makes toward our understanding of adventure education. In particular, how this categorization privileges the instructor's knowledge of real risk over the students' perceptions of what is risky to them.

Risk Management

Nine of the instructors framed risk management in terms of managing the dangers to minimize the real risk and reduce the potential for loss. As with the definition of risk, the definition of risk management given by the instructors was only a partial description of the processes they engaged in their risk management strategies.

Eleven instructors identified group functioning as an important factor in their risk management. This is illustrated by the following comment: "I monitor how the group is coping with the activity. Stress levels; is it too much risk emotionally, mentally; how they are coping physically; their energy levels." Seven instructors said the environment and the weather conditions were important considerations. Six instructors identified the potential consequences and the benefits of the activity as central to their risk management decisions. Personal well-being, and personal skill-level were factors five instructors took into consideration in their risk management strategies. Five of the instructors talked about risk

management as being more than a set of rules and something they often did without thinking. One instructor's description of risk management as "seeing, looking, feeling what the situation is... It is not just a set of rules. It is a feeling of what is going on," encapsulated this.

Risk management is an evolving process, with nine of the instructors stating that the factors they took into consideration in their risk management had changed over the time they had worked as outdoor instructors. As they became comfortable with the physical environment and the operational systems of the organization their focus shifted to the students. A number of the instructors also talked about how their approach to an activity changed with experiences they had had in the field. This is illustrated most clearly when one instructor stated that; "Ignorance is bliss. You don't know what you are not doing right and learn from your mistakes...There is a lot of luck that they don't end up being a crisis—you say 'holy s---;' next time I'll do it differently...Have a spirit or guide or whatever you want to call her standing there."

Only two of the instructors mentioned RAMS, SOPs, or industry standards amongst the factors they took into consideration in their risk management decisions. This may be indicative of how deeply immersed the instructors were in an adventure education environment, with RAMS and SOPs taken as a given. It may also be a reflection of the confusion a number of the instructors expressed with regard to the role of these. One instructor stated that she did not really understand what RAMS were for: "They [RAMS] are good when you first write them to go through the process; after that they become worthless, they get filed." Another expanded on this by saying, "RAMS etc. are a paperwork activity filled in by management...Whereas, I believe a RAMS form is a tool to be used individually and confidentially to sort out your own thought processes...They are like a mind map." A third suggested that, "there is no good part to them [RAMS]-- they are so complicated; can't get my head around them. I have to look up the definitions each time I use them." One instructor commented, "a lot of decisions are made through SOPs... I find it frustrating that I can't make decisions myself." Another found this to be disempowering, as organizational policies did not take into account the context of the situation. A third instructor stated that in addition to providing boundaries for practice, one of the limitations of RAMS and SOPs is that you can hide behind them.

Five of the instructors said that at times they do operate outside of policies. All indicated they only did this when they felt totally comfortable and thought what they were doing was acceptable. Their motivation for stepping outside of SOPs was either to achieve learning goals for the group or for practical and logistical reasons.

The points made by these instructors are summarized in the following comment: "I ask how astute is the organization's perception of the risk; how much difference is there between my view and theirs? I come to a decision of whose perception is more astute. If I believe my perception of risk is lower and I am sure that I can handle the situation I am in, then I will break policy sometimes, because of the context and the gains that can be made for the clients... I weigh these things up seriously... There are so many policies and so much to remember; can't always remember what the boundaries are. Rely on judgment. Would hate to see policies and guidelines replace judgment and a person's ability to manage risk." Four of the five commented that they were very aware that once they stepped outside of SOPs they no longer had the protection of the organization they worked for.

The greatest value of RAMS identified by the instructors was when they applied it to a specific activity and group, and they took half an hour to sit down and think the activity through. One instructor said, writing it down you find the little things that aren't obvious...Usually show it to someone else to get feedback on what you write; that is where the learning comes from.

Bell (1996) argues that outdoor instructors are abstracted from risk management decisions when they are required to make objective and correct decisions, which deny their personal history and subjective experience. The empirical findings of this study suggest that these instructors do place themselves and their experience in their risk management decisions. Rather than denying that this occurs in risk management, it may be time to consider a conceptual space for subjective decision-making.

The abstraction of self did occur in relation to SOPs and RAMS. In the experience of these twelve instructors, RAMS was seen as a form in a filing cabinet, rather than a process that moved into the field with them. In addition to the instructors seeing RAMS as a product rather than a process, the risk identification process is carried out in the context of a generic student group, devoid of a student voice. The generic fashion in which RAMS are used may be a factor contributing to the confusion expressed by the instructors with regard to the purpose of RAMS.

RAMS and SOPs have been developed to increase safety in adventure education programmes, but reducing the decisions people are required to make can reduce the variety of ways they respond and may increase the level of risk (Douglas & Wildavsky, 1982). As a number of instructors pointed out, SOPs did not allow them to use their judgment, and even provided a mechanism to hide their lack of judgment and decision-making. This is not an argument for the abolition of SOPs, rather, that meticulously completed RAMS and SOPs are not necessarily

an indication of safe practice.

The sometimes unclear and contradictory nature of the instructors' comments around risk does not necessarily reflect a lack of depth or rigor in their thinking about risk. Instead, it reflects the complexity of risk and highlights that it is a social enterprise "that is not objective or even predominantly rational in the formal sense, but is influenced by non-epistemological factors..." (Jackson & Carter, 1992, p. 49).

Conclusions

Implications for Practice

The gulf between the definitions of risk and risk management used in adventure education and the lived experiences of the instructors in this study suggests that the definitions used are only partial definitions. The emphasis is currently on loss and the avoidance of loss, whereas the lived experience of the instructors in the study suggests their emphasis is equally on the positive outcomes of the activities and the processes for maximizing these outcomes. Conceiving risk as something with an uncertain outcome with potential benefits alongside the potential to lose something of value allows a wider discussion about risk. Broadening the definition and the discussion of risk in adventure education may allow greater recognition of the complexity of risk, and also that risk is a social process as much as a process about rational decision-making.

With regard to the concerns raised about RAMS in this research, it may be timely to consider strategies that reposition RAMS from a generic document for all groups for an activity, to a planning tool that outdoor instructors apply to specific groups and activities. It may also be timely to position instructors in a more central role in their risk management decisions and recognize the subjectivity that does occur in their decision-making. This is not only more reflective of the practice of the instructors, but it may also provide a means whereby some of the tensions and confusion currently expressed about the risk management process are alleviated.

Future research

The central position of risk and risk management in adventure education and the linear, rational way in which these concepts are understood currently privileges the instructor over the student when it comes to defining what is risky for a student. Further qualitative research on the meanings both the students and outdoor instructors give to their adventure education experience may facilitate the student's experience in relation to risk becoming central to adventure education, rather than the expert knowledge of the instructor or the organization.

Notes

- 1 The term "adventure education" describes activities that primarily take place in the natural environment, where the emphasis is on experiential learning and on interpersonal and intrapersonal relationships (Priest & Gass, 1997).
- 2 The participants in this study all worked at adventure education centers in New Zealand. The findings have a wider application to all areas of adventure and experiential education.
- 3 "Real risk is the true potential for loss" (Priest, 1999, p.113). It is only after the event, once the outcome of the activity is known, that real risk can be known with certainty. Perceived risk is the "best estimation of real risk" (Priest, 1999, p.113). Priest (1999) argues that through experience one gains a more astute perception of risk.
- 4 My emphasis.
- 5 The terms outdoor instructors, or instructors, refer to the participants who volunteered for this study.
- 6 Polytechnics may also be known as Community Colleges or Technical Colleges.
- 7 "Students" refers to the clients on an adventure education program.

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