EXAMINING JOB EMBEDDEDNESS SURVEY ITEMS FOR AN ADVENTURE EDUCATION POPULATION

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Abstract

Dysfunctional voluntary employee turnover is an issue that leads to major direct and indirect costs (e.g., Sagie, Birati, & Tziner, 2002). Although job satisfaction has classically been the predominant construct used to explain turnover, recently a new construct, job embeddedness, has been relatively successful at helping explain additional variance in turnover beyond the traditional constructs, such as job satisfaction (Mitchell, Holtom, Lee, Sablynski, & Erez, 2001). In contrast to job satisfaction which is an attitudinal construct focusing on an individual’s orientation toward his or her job, job embeddedness is a construct looking at the connections that bind individuals to their job, organization of employment, and community. Therefore, job embeddedness’ focus is larger than job satisfaction’s and job embeddedness is more than just an attitudinal construct. From the practitioner perspective, this construct suggests multiple turnover reduction strategies (e.g., Holtom, Mitchell, & Lee, 2006). However, authors such as Holtom, et al. (2006) recommend that managers need to understand how and to what extent their employees are currently embedded in order to most effectively design and implement job embeddedness based retention strategies.

A number of survey items have been used to measure job embeddedness with previous populations of workers. This collection of survey items has resulted in strong construct and criterion validation evidence; however, the literature has reported very little content validation evidence (Mitchell, Holtom, Lee, et al., 2001).

It is the original study’s (Mitchell, Holtom, Lee, et al., 2001) survey item’s lack of content validation evidence with any similar types of workers that raises questions about
the validity of using these items to measure job embeddedness in an adventure education (AE) instructor population.

This study used an expert panel and multiple waves of cognitive interviews. These methods resulted in evidence that supports the hypothesis that the original set of survey items fail to accurately measure the most important parts of the job embeddedness domain for seasonal AE instructors. A preliminary set of seasonal AE instructor items were developed.
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Chapter 1

Introduction

This study intends to contribute to the improvement of adventure education (AE) student experiences by providing some evidence to improve a survey which may help reduce instructor turnover. More directly, this survey provides validation evidence for a scale measuring the construct of job embeddedness in seasonal AE instructors. This study also shows how job embeddedness manifests differently in seasonal AE instructors compared to previous groups of workers. These findings are useful to academics studying turnover in AE and more broadly to anyone using the construct of job embeddedness. This dissertation reports the use of multiple methods, including expert panel and cognitive interviews, techniques that are designed to provide content validation evidence for survey items measuring job embeddedness in a seasonal AE instructor population.

Turnover is the act of employees separating from an organization of employment. The type of turnover that this study examines is voluntary employment (employees quitting rather than getting fired). Turnover is a major problem in many parts of the economy due to the high associated costs (McKinney, Bartlett, & Mulvaney, 2007; Sagie, et al., 2002). Moreover, the remote working conditions and apprenticeship training systems common in America, (Garret, 2003) coupled with the extraordinarily high level of turnover in AE compared to the rest of the economy (Beeson, 2008; Frankel, 2009) makes turnover a more important issue for AE organizations compared to organizations in many other industries. Classically, most of the recommendations for reducing turnover focused on job satisfaction (Hoppock, 1935; Mobley, 1977; Vroom,
1964); however, job satisfaction has failed to consistently explain a majority of variance in employee turnover (Griffeth, Hom, & Gaertner, 2000; Hom & Griffeth, 1995). Beyond this failure in predictive validity, work on the Unfolding Model of Turnover found that relative job dissatisfaction was not the primary catalyst in most cases of voluntary turnover (Lee & Mitchell, 1994; Lee, Mitchell, Holtom, McDaniel, & Hill, 1999).

The failure of the primary construct in turnover research, job satisfaction, to satisfactorily explain the issue of voluntary turnover fostered the development of a new construct, job embeddedness. Job embeddedness is conceptualized as an aggregate of all the connections that attach employees to their job and community (e.g., fit between an employee’s skills and the organization’s needs, social and professional relationships in the organization and the worker's community) (Mitchell, Holtom, Lee, et al., 2001). Studies using job embeddedness as an explanatory variable (Crossley, Bennett, Jex, & Burnfield, 2007; Cunningham, Fink, & Sagas, 2005; Fletcher III, 2005; Holtom & Inderrieden, 2006; Lee, Mitchell, Sablynski, Burton, & Holtom, 2004; Mallol, Holtom, & Lee, 2007; Mitchell, Holtom, Lee, et al., 2001) have found that job embeddedness consistently explain variance in turnover above and beyond job satisfaction and other control variables. This consistent marginal explanation has led to the development of employee retention strategies based on the job embeddedness construct (e.g., Holtom & O’Neill, 2004). However, in order to implement such job embeddedness based retention strategies, employers need to first understand how their particular group of employees is currently embedded (Holtom, et al., 2006) because, “…different people become enmeshed in different ways” (Holtom & O’Neill, 2004, p. 224).
The population of interest for this study is seasonal AE instructors. AE primarily consists of 1 to 3 week long expeditionary courses often set in remote wilderness environments. These courses use adventure activities (e.g., hiking, rock climbing, sea kayaking) to help students achieve educational outcomes. Large AE organizations in the U.S. include Outward Bound, NOLS (National Outdoor Leadership School), and the Wilderness Education Association. The intensive seasonal nature of most AE instructional employment means that this group of workers can be classified as a nontraditional contingent worker (U.S. Bureau of Labor Statistics, 2005b).

Most of the eight empirical studies that have measured levels of job embeddedness in various groups of employees have used some form of Mitchell, et al.'s (2001) original 40 survey items\(^1\) (Crossley, et al., 2007; Cunningham, et al., 2005; Fletcher III, 2005; Holtom & Inderrieden, 2006; Lee, et al., 2004; Mallol, et al., 2007; Mitchell, Holtom, Lee, et al., 2001). These studies provided a great deal of construct, and criterion validation evidence; however, with the exception of the original study (Mitchell, Holtom, Lee, et al., 2001) the published studies have not reported any evidence from the direct examination of the question and answer process or any content validation evidence. Content validation evidence is an essential type of validation evidence indicating whether or not the survey items accurately gather information about the most important aspects of the construct. The lack of content validation evidence in the literature sheds doubt upon the validity of the job

\(^1\) See appendix A for a list of which items were used by each study
embeddedness construct. This perspective is particularly troubling given previous warnings (Mitchell, Holtom, Lee, et al., 2001) that the particular manifestation of job embeddedness may differ among groups of workers whose demographics of work situation are dissimilar. Chapter two presents evidence that this is the case for seasonal AE instructors. This group of workers’ demographics (younger, more educated, etc) and work experience (seasonal, remote working location, intensive work schedule, etc.) differs from previous validation samples of employees (Table 2.4). These differences lead to serious concerns about the validity of using the original set of job embeddedness items (Mitchell, Holtom, Lee, et al., 2001) with a seasonal AE instructor population.

Given the value that a job embeddedness based turnover reduction strategy may have in AE, it is imperative to understand the ways in which seasonal AE instructors are embedded. From this a set of survey items to measure job embeddedness in seasonal AE instructors can be developed. Although content, construct, and criterion validation evidence are all essential types of evidence to suggest the validity of using a set of survey items with a particular population, this study focuses on providing content validation evidence. This study used the three data collection methods recommended by Crocker & Algina (1986) for gathering content validation evidence; a thorough review of the literature, an expert panel, and a series of cognitive interviews.

**Research Questions**

There are two research questions that guided this research.
1. Does the original set of job embeddedness survey items (Mitchell, Holtom, Lee, et al., 2001) accurately measure the most important aspects of job embeddedness for seasonal AE instructors?

   In their original article on the construct, Mitchell et al. (2001) stated that different groups of employees may be embedded in very different ways. The literature review demonstrates that previous validation samples differed from seasonal AE instructors (Table 2.4). The most relevant differences are demographic differences (e.g., education, age) and differences in work conditions (e.g., seasonality, expeditionary, nonprofit). These differences suggest that, while the essential abstract character of the job embeddedness construct may be important in the AE context, the ways that job embeddedness manifests in seasonal AE instructors may be very different compared to how it has manifested in previous populations of workers. These differences may result in the current set of job embeddedness items not accurately sampling the most important aspects of job embeddedness in a seasonal AE instructor population.

2. If seasonal adventure education instructors do not interpret job embeddedness items in the intended manner, then how can these items be modified to shift respondents toward the intended interpretation?

   Although the current items may validly measure job embeddedness in adventure educators, the demographics and working conditions of adventure educators are different enough compared to previous validation samples to raise the possibility that these items may need to be altered. Many authors have made some minor semantic changes to the items when they have used them (e.g., Mallol, et al., 2007), and at least one other study has revised the survey items in a substantial manner (e.g., Crossley, et
This history of revisions sets a precedent that the job embeddedness survey items may need to be altered to accurately measure the most important aspects of job embeddedness within a given population of workers. It is expected that the seasonal and expeditionary aspects of AE instructors’ work and the fact that AE employees are likely to be younger and more educated than previous validation samples of workers may make it necessary to alter the original set of survey items (Mitchell, Holtom, Lee, et al., 2001) in order to validly measure job embeddedness in a population of seasonal AE instructors.

**Significance of the study**

This study is significant for both academic and practitioner audiences. Academics may find value in the manner in which this study extends the study of job embeddedness to a new population, provides additional content validation evidence for the job embeddedness construct, is the first application of cognitive interviewing in AE research, and offers a modified set of survey items for researchers studying AE turnover. AE practitioners may benefit from the modified set of job embeddedness items. These items can help them understand how their seasonal AE instructors are currently embedded. This knowledge can help guide these practitioners to use job embeddedness based reduction strategies, such as those listed in chapter five of this dissertation.

Based on Colquitt & Zapata-Phelan’s (2007) taxonomy of the theoretical contribution of empirical organizational studies, this study would be considered a “tester” study. They defined “tester” studies as studies which have made significant contributions to testing different aspects of empirically understanding a theory, but did
not make additions to the theory itself. In their survey of over four decades of *Academy of Management Journal* articles, “tester” articles had approximately one-third more citations than the average theory based empirical article. Moreover, in comparison to the other types of articles, “tester” articles have continued to be published as a steady percentage of all empirical articles during the entire four decade sample. Finally, the value of “tester” article derives from this type of article’s emphasis on strengthening existing theory rather than continually advancing new ideas which may lead to construct over-proliferation or theoretical redundancy (Colquitt & Zapata-Phelan, 2007). Therefore, it seems that “tester” studies, such as this one, are important to furthering the development of the study of voluntary employee turnover.

Part of the process of strengthening existing theory is increasing the body of validation evidence for the construct. Given that the job embeddedness construct was introduced less than a decade ago (Mitchell, Holtom, Lee, et al., 2001) and has been the focus of only eight empirical studies (Appendix A) it is not surprising that the current body of validation evidence for the construct is not complete. Currently, there is nearly a complete absence of evidence from the direct study of the question and answer process and content validation evidence. This study will strengthen the validity of measuring job embeddedness by providing some of this necessary validation evidence.

This study is significant because it introduces a tool to improve the most common data collection method in AE research, surveys. Judging by the first edition of the *Journal of Experiential Education* (JEE) published in 2009, surveys are currently the dominant data collection method in experiential education research, as 11 out of the 14 studies in that issue used some type of survey instrument. Forty-three percent of those
11 studies used a survey that was identified as being developed by the researcher for the purposes of the study. Thirty-six percent of the surveys used originated from outside of experiential education. And 21% of those studies used surveys that were previously developed within the experiential education discipline.

In that issue, Seaman characterized surveys as focusing on providing “evidence” as opposed to “authenticity” (2009). Seaman suggests that while surveys collect more generalizable data, this strength comes at the cost of a loss of potentially important contextual variables. Although Seaman presented his argument in a rather novel manner, the lack of contextual evidence is a commonly cited weakness of surveys (e.g., Patton, 2002). This study uses cognitive interviewing methods to increase the contextual evidence for the use of a set of survey items with a seasonal adventure education instructor population.

The tradeoff between “evidence” and “authenticity” can be illustrated with the example of the surveys developed outside of the experiential education context. The externally developed survey instruments increase the ability of researchers to compare their findings to groups outside of experiential education; however, this ability to make comparisons has certain limitations. Previous samples of research participants used to develop the survey may have shared certain characteristics that are not common in the experiential education context. The survey items developed by external researchers could therefore make assumptions that would lead to errors if the survey is used with an experiential education population. Survey errors could be caused by participants not interpreting the items in the expected manner, not recalling the information correctly, not mapping their answers correctly on the response format provided, or it may be that the
items are not sampling the most important part of the construct domain for the particular population in the study (Tourangeau, 1984; Willis, 2005).

In contrast to inappropriate contextual assumptions, survey instruments that are specifically developed for a study may be more “authentic” for the chosen population of research participants, but these sets of items that are specifically designed for the current study limit the comparison of the research data with previous studies. Moreover, these tailored sets of items may not be phrased in such a manner as to elicit the desired information from the study participants. Sibthorp (2009) highlighted this issue by using a quote from the noted industrial efficiency expert Deming (n.d.), “If you do not know how to ask the right questions, you discover nothing”. The researchers that created these tailored sets of survey items often defend the validity of such a set of items by describing the use of a pilot study. In these pilot studies the researchers asked participants to retrospectively provide feedback about any confusing survey items. This approach may help to highlight confusing items; however, such procedures fail to understand how participants actually interpret the items. The pilot study’s participants’ interpretations of the question stem and use of the response format could be very different from what was intended by the researcher (Willis, 2005). Moreover, particular contextual factors may mean that the survey items are not measuring the most important aspects of the domain for the population of interest. In other words, the particular survey items that were chosen may not be the “right questions”.

The study presented here uses cognitive interviewing, a technique that can be used to either understand if imported survey items are “authentically” measuring the construct of interest or to improve researcher developed survey items (Willis, 2005).
The principle investigator reviewed and adapted the most commonly used set of survey items intended to measure job embeddedness, a construct recently incorporated into employee turnover research that has not previously been utilized in experiential education research. A preliminary set of survey items were developed for use with a seasonal adventure education instructor population.

Although this study is complete unto itself, this study fits into the paradigm of science that science is the accretion of knowledge by many actors over time. Therefore, this research is clearly based on previous research and is the prologue to future research. First, this study introduces the cognitive interviewing method to AE researchers. This introduction could lead other AE researchers to use cognitive interviewing to develop, refine, or adapt other sets of survey items. For example, cognitive interviewing can be used to further understand and refine processes for working with the response-shift bias that plagues longitudinal AE studies (J. Sibthorp, Paisley, Gookin, & Ward, 2007). Second, this study will provide a customized set of items with higher levels of content validation evidence for use with an AE population. This set of items could then be used to look at how adventure educators’ level of job embeddedness changes across time, geography, or type of work schedule or assignment.

This study further develops a tool to help academics and practitioners understand turnover. An increased understanding of the turnover of seasonal AE instructors may suggest further strategies to managers about how to minimize employee turnover. Given the major direct and indirect costs of turnover, any knowledge that helps to minimize employee turnover is valuable.
**Definition of terms**

This section will give operational definitions for some of the key terms used in this study.

**Adventure education** is an activity that is freely chosen in order to gain subjectively perceived benefits where the pedagogy includes non-negligible perceived potential costs (risks) and primarily uses wilderness expeditions as an educational medium (Bisson, 1996; Ewert & Hollenhorst, 1989; Guthrie, 2002; Hopkins & Putnam, 1993; Priest & Gass, 1997; Prouty, Collinson, & Panicucci, 2007).

**Cognitive interviewing** is a technique that is based on the Cognitive Aspects of Survey Methodology theory (Tourangeau, 1984) and is often used to reduce response error in survey research. Cognitive interviewing is a semi-structured interviewing technique that has the participants either verbally explicate the process that they use to answer questions (think-aloud interviewing) or uses researcher generated questions (verbal probes) to further understand the survey response process (Willis, 2005).

**Job satisfaction** is an affective or attitudinal construct that is based on an individual’s assessment of their employment (Gaertner, 1999).

**Job embeddedness** is a construct comprising the connections between an individual employee, his or her organization of employment, and his or her community. Job embeddedness has classically been conceptualized as having six dimensions: organizational links, community links, organizational fit, community fit, organizational related sacrifice, and community related sacrifice (Mitchell, Holtom, Lee, et al., 2001).
Seasonal workers are individuals who are employed during a defined season that repeats annually (Feldman, 2006).

Turnover is the process of employees separating from an organization of employment. Operationally, voluntary turnover is defined as the percentage of employees that worked in the previous season which chose to not work in the current season.

Limitations

The limitations of this study derive from the chosen methods of the study. This includes the limits of cognitive interviewing and the web-based presentation of survey items that is part of the interviews.

Assumptions of Cognitive Interviewing

Reactivity.

Although it is acknowledged that participants may have slightly changed their responses to survey items as a reaction to the cognitive interviewing process, it is assumed that those changes were minor and do not overly affect the data (Willis, 2005).

Lack of Self-Awareness.

In contrast to observations or some other methods, in order for the cognitive interviewing processes to work, participants have to be aware of their own cognitive processes. It is assumed that the participants have varying levels of self-awareness; however, the higher than average rates of educational attainment of adventure educators (Birmingham, 1989; Marchand, 2006; Wilson, 2007) and the verbal nature of
the job indicate that there may be a higher than average rate of self-awareness in this population compared to the general population of workers.

**Inability to Verbalize.**

Participants may be aware of their own processes that they use to respond to survey items, but they may not be able to verbalize these processes to the researcher. Again, this population of AE instructors has a higher than average rate of educational attainment which suggests that this may not be an inordinately large issue. Even so, it is likely that participants may have some difficulty at times to fully verbalize their response processes. Therefore, verbal probes were used to help participants more fully verbalize their survey response processes.

**Survey Methods**

**Literacy.**

Surveys require that individuals can understand the vocabulary and grammar used in the items. Given the high rate of education shown in previous samples of AE employees, it seemed likely that participants had a literacy level high enough to understand the survey items. The actual interviews found that while all of the individuals could read and respond to the written survey items, dyslexia and perhaps other issues suggested that some individuals needed to expend more effort to understand the survey items than other individuals.

**Web-based survey.**

Since the survey was web-based, individuals needed to have sufficient skills to use an internet browser and electronic mail program in order to: read and respond to an
e-mail message, click a link in an e-mail message to connect with the on-line survey, and be able to use a keyboard and mouse in order to scroll through and respond to items posted in the internet survey program. It is assumed that practically all of the intended population have these skills and have access to a computer connected to the internet. Although web-based survey methods may decrease participation in some samples, there is some evidence that with young and educated populations, such as AE instructors, web-based survey techniques may increase participation (Cole, 2005; Dillman, 2007).

Delimitations

This study used three methods; literature review, expert panel, and cognitive interviews; to gather content validation evidence for a seasonal AE instructor job embeddedness scale. The focus of this study is content validation evidence rather than construct or criterion validation evidence; therefore, choices were made based on currently accepted content validation evidence data collection methods.

Sample Size Constraints

Two direct data collection methods were used, an expert panel and two waves of cognitive interviews. For each of these data collection methods a limited number of research participants were utilized.

The expert panel in this study originally intended to include six individuals with expertise in one or more of the following areas; adventure education, employee turnover, and survey research. However, 50% more individuals agreed to participate as members of the panel than was originally forecasted. This resulted in nine expert panel
participants who all had expertise in AE. Beyond their expertise in AE, participants also
had either extensive knowledge of employee turnover or survey research.

The number of participants in the cognitive interviews also exceeded the original
minimum number of participants. This study originally intended to follow the current
standard in the literature of 5-15 interviews per wave for cognitive interviews and limit
the sample to two waves of 10 interviews in each wave, for a total of 20 interviews. In
reality, the response rate was higher than expected and 21 participants participated in
interviews.

**Sample Delimited to Seasonal Adventure Education Instructors**

The cognitive interviewing sample was delimited to individuals with recent
experience seasonally instructing for an American AE organization. At a minimum,
participants were required to have worked at least two AE courses in the last 12
months. However, the participants were required to work not more than 6 months for
this organization in order to be considered seasonal workers. The sample was limited
to American institutions in order to limit the heterogeneity of how AE is implemented in
different national settings.

**60 Minute Interviews**

Due to potential respondent fatigue issues, the requested interview time was only
60 minutes. After approximately 55 minutes the interviewee was informed that they had
nearly reached the agreed upon length of time and were asked if they would like to
continue. A majority (76%) of interviews exceeded the intended 60 minute interview
period due to continued interviewee interest.
**Single Interviewer**

A single interviewer was used for all interviews.

**Summary**

Turnover is an issue for many work organizations, but it appears to be particularly troublesome in AE (Beeson, 2008; Birmingham, 1989; Frankel, 2009). Job embeddedness is a relatively new construct that may offer insight about turnover in AE and may lead to new ways of minimizing dysfunctional turnover. This study collected content validation evidence for the original (Mitchell, Holtom, Lee, et al., 2001) set of ob embeddedness survey items and a proposed set of modified seasonal AE instructor survey items. This study has direct implications for academics who study turnover and is part of the validation process for a set of survey items that can be directly used by academics and practitioners with a seasonal AE instructor population.
Chapter 2

Literature Review

This study was designed to understand if the original set of job embeddedness survey items (Mitchell, Holtom, Lee, et al., 2001) accurately measures the most important aspects of the job embeddedness construct in seasonal adventure education (AE) instructors. If the original set of survey items was not found to accurately measure the aspects of the job embeddedness construct domain most pertinent to a seasonal AE instructor population, then the intention was to modify the original survey items and collect content validation evidence for their use with a seasonal AE instructor population.

This section will begin with a review of the concept of turnover and then provide evidence about the importance of turnover as a topic of scholarly interest. Next, the research of turnover in AE and the related field of camping education will be reviewed. Next, the two major constructs, job satisfaction and job embeddedness, will be discussed. The review of job embeddedness will begin with a review of the Unfolding Model of Turnover, which was partially responsible for the development of the job embeddedness construct. The theoretical dimensions of job embeddedness will then be described along with validity issues involved in the measurement of job embeddedness with survey items.

Turnover

Turnover is the process of an employee or group of employees separating from a work organization. This section will further define turnover and then look at why the
issue is an important topic to study. The literature looking at the issue of instructor turnover in AE and the related field of camping education will then be presented.

**Dysfunctional voluntary employee turnover.**

The term “turnover” is often used in this dissertation. Unless otherwise specified, the term is referring to the dysfunctional voluntary turnover of employees. There are five key aspects to how this term is used that will be introduced.

First, it must be recognized that the term is based on the perspective of the organization rather than the employee. Therefore, the type of turnover that this research is concentrating on is dysfunctional turnover, turnover which hinders an organization’s abilities to fulfill its mission. Although, some cases of individuals voluntarily separating from the organization can help an organization meet its mission (problematic employees that impair the organization’s ability to meet its mission voluntarily leaving), the type of turnover that is primarily of concern is dysfunctional turnover (employees leaving that are not helping the organization meet its mission).

Second, there is a difference between voluntary turnover (quitting) versus involuntary turnover (getting fired) (Jamison, 2003). Although it may be interesting to look at why people are fired, all of the literature reviewed in this paper deals with voluntary turnover. The relatively strong emphasis on voluntary turnover is due to preeminence of the organizational perspective in the literature. Involuntary turnover is normally functional (helps the organization to be more effective or efficient), while voluntary turnover is rarely as beneficial to the organization. It is assumed that a majority of AE turnover is voluntary. The only report of the degree of voluntariness was
Birmingham (1989) who reported that less than 1% of turnover in her sample of turnover at the Colorado Outward Bound School was involuntary.

In order to fully understand the idea of an employee voluntarily leaving, the question of avoidability must be addressed. Avoidable turnover is voluntary turnover that occurs for reasons that are under the control of the organization, whereas unavoidable turnover would mean that the organization could not influence the choice of an employee to quit (Abelson, 1987; Barrick & Zimmerman, 2005). To further parse the terminology, if an organization was aware of how to avoid an employee separation, but chose to not take the actions required to retain the employee, then it would be difficult to classify that separation as an entirely voluntary action by the employee since it was highly conditioned by actions that the organization could have taken.

Third, although this dissertation could consider the turnover and retention of any group of individuals that are important to an organization (e.g., volunteers, customers), this dissertation focuses on the group of individuals that are most often discussed in the practitioner and academic turnover literature, employees. This focus on employees is not meant to imply that embeddedness is not important to the study of other groups of individuals; however, these groups are simply outside the scope of this current research proposal.

Fourth, the term turnover is often treated as the obverse of retention. Some scholars take umbrage with this use of the term (e.g., Waldman & Arora, 2004) and instead reserve the term “retention” to refer to specific groups of people who stay and use the term “turnover” to talk about overall rates of separation in the organization. Rather than use the terms differently, this research will use the two terms as the
opposite of one another and the unit (e.g., a certain cohort, female employees) will be specified when necessary.

Fifth, turnover can refer to a behavior, actual turnover (i.e., the behavior of separating from the organization); or an attitude, turnover intent (i.e., attitudinal orientation towards the behavior of turnover) (N. P. Podsakoff, LePine, & LePine, 2007). Whereas, actual turnover behavior is what is practically most important, changes in attitudes help to show how changes in circumstances impacts subsequent turnover behavior (N. P. Podsakoff, et al., 2007). The term turnover will be reserved for reference to the behavior of turnover and the term turnover intent will be reserved for the attitude.

In summary, this dissertation will prefer the organizational perspective. Turnover will be used as shorthand to refer to dysfunctional voluntary employee turnover. Turnover will refer to the actual behavior of an employee voluntarily separating from an organization in such a way as to be relatively dysfunctional for the organization. Turnover is operationalized as the number of AE instructors that worked in the previous season that did not work in the current season divided by the total number of instructors in the previous period. This operational definition prefers the inter-seasonal rate of turnover over the intra-seasonal rate.

**Importance of turnover.**

Dysfunctional voluntary employee turnover is expensive (e.g., Bliss, 2004; Buck & Watson, 2002; Mitchell, Holtom, & Lee, 2001), which is the reason why it has been such a dominant and persistent topic in the organizational research literature. The
typology of turnover costs has two dimensions: who bears the costs and the degree to which the costs are direct and financial compared to indirect and intangible.

The two major parties bearing the cost of voluntary employee turnover are the employee and the organization (Mitchell, Holtom, & Lee, 2001). The organizational cost is normally determined by the impact of changes on the organizational mission. Therefore, this impact could occur directly by the loss of access to the knowledge, skills, abilities and other competencies (KSAOCs) that the employee takes with him, but it can also impact the organizational mission indirectly through decreases in the productivity of the employees that remain with the organization that occurs due to the employee separation (Kacmar, Andrews, Rooy, Steilberg, & Cerrone, 2006). Conversely, the separated employee loses the tangible and intangible rewards he or she would have gained if he or she had remained in position. Previously, a majority of the research has concentrated on the costs borne by organizations (e.g., Barrick & Zimmerman, 2005). This paper will continue in this trend and focus on the organizational side of the turnover cost equation.

The costs of turnover can differ in the degree of the costs’ tangibility as well as how direct the connection is between the turnover behavior and the costs. Intangible costs include decreases in the commitment of the employees that remain with the organization (Kacmar, et al., 2006) and decreases in the feeling of security of the remaining employees (Iverson & Deery, 1997). In contrast, the more tangible costs are more easily quantified and are driven by activities such as exit interviews, job applicants solicitations, screening candidates, selecting the right candidate, and then finally training the candidate (Barnes, 2001; Mitchell, Holtom, Lee, et al., 2001). These
examples of tangible costs are also direct costs because they can be directly attributed to the event itself. In contrast, overall decreases in the value and volume of production of the existing employees would be an indirect cost of turnover. For example, Kacmar et al. (2006) found that the turnover of management employees at Burger King had a significant effect on the turnover of frontline employees, which in turn significantly decreased the efficiency and effectiveness of the remaining front-line employees. This negative correlation between turnover and employee effectiveness is consistently found in the literature (e.g., Koys, 2001; Stovel & Bontis, 2002).

Voluntary employee turnover is an important topic to discuss because of the large costs borne by both organizations and employees. The relatively high cost of turnover can vary in its degree of tangibility as well as in the degree that it can be directly attributed to the turnover behavior (Kacmar, et al., 2006; Koys, 2001; Stovel & Bontis, 2002). Now that the term has been specified and the importance of the issue has been presented the discussion will look at the research of turnover in the discipline of AE.

**Turnover in Adventure Education.**

The rate of turnover in AE is significantly higher than the rate of turnover of employees in the U.S. economy (U.S. Bureau of Labor Statistics, 2008). Moreover, the nature of how AE is structured may make it particularly vulnerable to some of the negative effects of turnover.

**Turnover rate.**

Figure 2.1. Comparison of Turnover in AE Versus the U.S. Average
Nationally, the average rate of turnover in 2006 was about 3% (U.S. Bureau of Labor Statistics, 2008). This is approximately one-tenth of the 28.8% level of turnover that Birmingham (1989) reported 20 years previously for her Colorado Outward Bound sample (Figure 2.1). More recently, NOLS (Beeson, 2008) reported an annual average of 26% turnover in the 2005-2008 period and Outward Bound (Frankel, 2009) experienced a 33% rate of turnover of field staff in 2008. These figures for turnover in two of the largest American AE institutions are approximately ten times the national rate of average turnover of employees in America (U.S. Bureau of Labor Statistics, 2008). It is difficult to directly compare the national rate of turnover with the AE organizational rates of turnover due to the fact that the AE is seasonal, while the national rate is based primarily off organizations that are not. Therefore this comparison has the potential for being misleading; however, this comparison is intended to highlight the relatively high rates of inter-seasonal turnover in AE compared to the annual rates elsewhere in the economy.
Impact of turnover in AE.

Not only does AE have a relatively high rate of turnover, but the nature of how AE is conducted suggests that this high rate of turnover may likely have direct and indirect impacts on the quality of the AE student experience. Empirical studies have repeatedly found a positive correlation between instructors’ abilities to effectively deliver educational outcomes and instructors’ tenure (Aguiar, 1986; Riggins, 1985). Although these findings are based on individual levels of tenure, overall levels of tenure could also have negative effects on the overall ability of the AE institution to deliver educational outcomes.

AE might be particularly susceptible to the negative effects of turnover due to some of the unique aspects of how AE is conducted. AE instructors often operate in remote locations with two or fewer other AE field staff members. During these expeditions, instructors operate with little or no managerial oversight. Previous research has shown that instructors enjoy this high degree of autonomy inherent in these work situations (Wilson, 2007); however, this system relies on the assumption that each instructor pair has the knowledge, skills, abilities, and other competencies (KSAOCs) necessary to keep the students safe and help them achieve their educational outcomes. AE has traditionally relied on a mixture of formal training and on-the-job apprenticeships to develop instructors’ knowledge and skills (Garret, 2003; Miner, 2002; Ringholz, 2000). This system fails if there isn’t a critical mass of experienced instructors to train new instructors. Therefore, high rates of turnover leads to a relatively low level of experience in instructor pools, which may directly or indirectly lead to decreases in the students’ educational outcomes and safety.
Direct cost of turnover in AE.

Beyond effectiveness, turnover has often been associated with large direct organizational costs. A study from the parks and recreation literature estimated that the average organizational cost (as opposed to employee cost) for replacing an entry-level employee varied between $4,208 to $14,464 per employee (McKinney, et al., 2007). This range represents a similar range of values as is found in other industries with similarly high rates of turnover (e.g., Woods, Heck, & Sciarini, 1998). It is unclear how the direct organizational range of costs for replacing entry-level parks and recreation employees compares to the direct organizational costs for AE turnover. The costs of replacing AE instructors may be lower because AE employers are often contracted for a limited period of time (per course). Therefore, it could be argued that the system is built around the assumption of high rates of turnover. Conversely, American AE instructors are required to have a minimum of an 80 hour medical course certification, they operate without managerial oversight for a majority of their work time, they have much greater risk management and educational responsibilities than many entry level parks and recreation employees, and they work much more intensive schedules. These work requirements suggest that AE turnover costs may be higher than the estimate reported for entry-level recreational workers.

Variables in AE turnover research.

The effects of turnover have motivated AE scholars to study the issue. The study of AE turnover has included the use of a number of different psychological constructs and other variables. The three groups of variables that have been previously used in
empirical studies include demographic factors, satisfaction constructs, and attachment constructs.

**Demographics.**

The less abstract variables addressed in the AE turnover literature are primarily demographic variables such as gender, education, and student status, but have also included some economic variables. Birmingham (1989, 1991) found that an increased reliance on AE as the individual’s primary income source was negatively correlated with turnover. Unfortunately for the sake of turnover, AE employees’ reliance on AE based income seems to be relatively low. Only about 23% of Outward Bound staff were recently found to have more than 75% of their income coming from the institution (Outward Bound, 2006). Similarly, only 41.5% of staff received more than 50% of their income from the institution (Outward Bound, 2006). Given this relatively low financial reliance on the AE institution, it seems that this connection between income concentration and tenure may be weak. Therefore, a greater financial reliance on the institution may be linked to decreased income, but there is some evidence that the reliance on income seems to be relatively low.

Other categorical variables that have found to be positively correlated with turnover include being female, having a higher level of education, being a student, and having other employment (Birmingham, 1989, 1991). Allin and Humberstone (2004) found in their British sample that women in AE do not have many role models and may separate due to an inability to see a career path that they can follow. Although these more concrete economic and demographic variables may be easy to define, they have
not led to much explanation of the variance of turnover; therefore, satisfaction and attachment constructs have been utilized.

*Satisfaction constructs.*

Similar to the larger body of literature looking at turnover, satisfaction constructs, such as job satisfaction and burnout, have often been found to explain statistically significant amounts of variance in employee turnover (Swagar, 1997). Different aspects of job satisfaction such as role clarity (Birmingham, 1989, 1991; Swagar, 1997), job security in the case of injury or illness (Birmingham, 1989, 1991), and satisfaction with pay and benefits (Birmingham, 1989, 1991; Wilson, 2008b) have all been inversely correlated with turnover. Using multi-level modeling as part of sequential mixed method research design, Wilson (2008b) found that among all of the themes that emerged from the instructor interview data, the only predictor that significantly explained variance in daily instructor job satisfaction was instructor satisfaction with pay.

Not only have instructors expressed a strong connection between pay satisfaction and overall job satisfaction, but organizations are acting on that connection. For example, the National Outdoor Leadership School (NOLS) recently increased pay in an explicit effort to increase instructor retention (Beeson, 2007). This may be a wise move if NOLS’ staff pay satisfaction was similar to OB’s staff where only one-third of OB staff reported that they were satisfied, or very satisfied with their current level of pay (Outward Bound, 2006). This low level of satisfaction with pay is similar to levels of pay satisfaction found in adventure therapy (Marchand, 2006).
Other than job satisfaction, burnout has continued to be a construct brought up in the practitioner literature (Dawson, 1979; Gray & Birrel, 2003; Priest & Gass, 1997). Priest & Gass (1997) reported in their popular AE text, *Effective Leadership in Adventure Programming*, “The very features that often attract individuals to becoming outdoor leaders often lead to professional burnout when not properly addressed” (p. 299). Moreover, Dawson (1979) argued that burnout was a major reason for AE instructor turnover. Unfortunately, no empirical AE studies have used burnout to study turnover.

While both of the satisfaction constructs, job satisfaction and burnout, have been addressed in the AE literature, only job satisfaction and its components have been used in empirical studies. In contrast to the use of satisfaction in the AE literature there has been relatively little quantitative research looking at attachment constructs, such as organizational commitment, job involvement, and job embeddedness. However, Birmingham (1989, 1991) did find that increased organizational commitment and/or perceived sense of community was related to decreased turnover.

Unfortunately, there is a paucity of literature looking at the issue of turnover in the AE literature. A two year search of journal articles, dissertations, theses, and books resulted in only the limited number of AE studies on turnover that are presented here. A majority of this research is, or derives from student research (theses and dissertations). This is not surprising given that a majority of academic AE research looks at student

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2 Gray & Birrel's (2003) argument is based on adventure therapy instructors rather than AE instructors.
outcomes rather than instructors (e.g., Goldenberg, McAvoy, & Klenosky, 2005; Sheard & Golby, 2006; Yoshino, Hayashi, & Cashel, 2004); therefore, this review was expanded to include another branch of outdoor education literature, camping education.

**Turnover in camping education.**

Camping education, like AE is a type of outdoor education; therefore, this section presents a review of camping education turnover research. However, the impulse to generalize the turnover findings in camping education to AE must be limited by some key differences about how camping education is conducted compared to AE, as well as differences between AE and camping education staff and participants. Compared to AE, the empirical turnover literature in camping education is older and more extensive. Organized camping, and particularly summer camps, is a very North American concept with over 1.2 million summer camp employees in the U.S. alone (Bocarro, 2005).

First, although camping education may use similar methods as AE, there are some key differences between how AE and camping education are conducted (Bisson, 1996). First, camping education generally does not rely on the expeditions essential to the pedagogy of AE. This means that staff and participants are more often geographically co-located with one another in camping education. Second, camping education generally uses activities with a lower level of associated physical risk. This implies that AE choices in staffing and the development of systems in AE require a greater focus on risk mitigation.

Second, any generalizations from camping education research to the AE context must consider differences between staff and participants. While summer camps are
primarily aimed at youth, AE serves the spectrum of ages (for example, OB and NOLS have no maximum age for students). More than just camping education participants, camping education staff are also relatively youthful. While AE institutions normally require that instructors are at least 21 years old (e.g., OB & NOLS), camp counselors can be much younger. Mcneely & Ferrari’s (2005) median age for their sample of camp counselors was 15.7 years old. In contrast, Bolden’s (2005) sample of religious camp counselors had a median age of 23 years old. However, even 23 years old is four or five years younger than the median age reported in previous AE and adventure therapy studies (Birmingham, 1989; Marchand, 2006; Wilson, 2007). Therefore, among many other differences, AE instructors are generally older than camp counselors.

Given the aforementioned differences between AE and camping education, it is hoped that the findings from camping education turnover research will help contextualize AE turnover research findings. Similar to AE research, both satisfaction and attachment constructs are found in camping education turnover literature. Moreover, there is a strong relationship between the on- and off-the-job spheres of life for both AE and camping education staff. Becker (1983) stated,

“Job satisfaction plays a significant role in camp counselor retention. Unlike a person who has a ‘normal’ nine-to-five job, a camp counselor eats, sleeps, and works in a residential situation for six to ten weeks and then has ten months off.” (p. 17).


**Satisfaction constructs.**

Similar to most turnover research, job satisfaction is a popular satisfaction construct in camping education turnover research. One aspect of job satisfaction, perceived levels of personal or professional development, has been the variable that has consistently been reported as having the strongest connection with job satisfaction of camp counselors (Becker, 1986; Bocarro, 2005; Magnuson, 1992). Perceived personal or professional development was positively correlated with overall job satisfaction.

Interestingly, the attributed causes of job satisfaction have been found to vary between genders and change over time (Becker, 1986; Bolden, 2005). In the case of gender, female counselors reported deriving more satisfaction from the development of job related skills versus males who reported that their satisfaction derived more from personal development. Becker (1983, 1986) helped to partially explain this by reporting that female counselors’ intended occupations used skills which were perceived to be more similar to those skills used in camping education in comparison to males’ intended occupations. Second, the attributed causes of job satisfaction may change over time. For example, Bocarro (2005) found that over time professional development became a more important attributed cause of satisfaction for camp counselors. Therefore, professional development has been consistently found to be positively correlated with counselor job satisfaction; yet, counselor satisfaction with professional development varies across gender and tenure.
Attachment constructs.

Community is the attachment construct that is most often used in the camping education literature (Bocarro, 2005; Farmer, 2006; McCole, 2005; Roark, 2005). Community is most often defined as the instructor evaluation of the presence of an interpersonal connection between a group of individuals and the values that the group of individual associate with a literal or metaphorical place. This literature has often found a strong link between a sense of community and summer camp staff retention (Bocarro, 2005; Farmer, 2006; McCole, 2005; Roark, 2005). This sense of community seems to be a mix of work and non-work connections. However, this line is blurred since counselors live and work with the same people.

Although AE instructors and camp counselors are different, it is interesting to compare the two literatures. Both the AE and the camping education research has consistently used satisfaction constructs, particularly job satisfaction, in the research; however, camping education literature has tended to concentrate more heavily on the attachment construct of community (e.g., McCole, 2005). Perhaps the fact that camping education counselors are more often co-located with one another has increased the importance of community among camp counselors, while the geographical disbursement caused by expeditions has resulted in fewer opportunities for community development in AE. On the other hand, both of these groups of literature tend to include some form of a satisfaction construct, primarily job satisfaction, even when the author concludes that an attachment construct is more important.

Now that the history of research in turnover in AE and the related field of camping education have been reviewed, the discussion will move more specifically to
the two constructs that are dominant in the satisfaction and attachment categories of constructs, job satisfaction and job embeddedness.

**Job Satisfaction**

Job satisfaction is reviewed here in order to provide some historical context for job embeddedness and to contrast job satisfaction with job embeddedness. Job satisfaction was previously defined as an affective or attitudinal construct that is based on an individual’s assessment of their employment (Gaertner, 1999). The previous discussion has shown that job satisfaction is normally conceptualized as a composite (MacKenzie, Podsakoff, & Jarvis, 2005) of an individual’s satisfaction with different aspects of the job including pay (Wilson, 2008b) and the opportunity for development (Becker, 1986; Bocarro, 2005; Magnuson, 1992).

Job satisfaction has historically been and continues to be one of the most popular constructs in the turnover literature (Griffeth, et al., 2000; Harman, Lee, Mitchell, Felps, & Owens, 2007). Unfortunately, attitudinal constructs, such as job satisfaction, have failed to consistently explain more than 4-5% of turnover on average (Griffeth, et al., 2000; Hom & Griffeth, 1995). This failure to predict turnover behavior has motivated researchers to find better explanations for turnover. That quest led to the development of the new construct, job embeddedness.

**Job Embeddedness**

The story of the development of the job embeddedness construct begins with a team of researchers developing a new theory about how employees separate from organizations, the Unfolding Model of Turnover (Lee & Mitchell, 1994). This next
section will briefly review the highlights of the Unfolding Model in order to show how it led to the development of job embeddedness. This explanation will then segue into a description of job embeddedness itself and how it has been measured.

**Unfolding Model**

The Unfolding Model is a classificatory typology that retrospectively defines voluntary leavers of employment based on their decision process (Morrell, Loan-Clarke, Arnold, & Wilkinson, 2008). The Unfolding Model is based on image theory (Beach, 1990). Image theory says that individuals compare their present situation to who they think of themselves as being and these comparisons result in attitudinal changes which lead to behavioral changes.

The Unfolding Model defines four paths that individuals use to voluntarily exit organizations. Moreover, the final path is further bifurcated into two separate paths\(^3\). These four paths are differentiated based on four conditions (see Table 2.1). The first condition is concerned with the event that first initiated the withdrawal process. This could either be a sudden shock or slowly accumulating level of job dissatisfaction. A shock is a jarring event that makes the employee reconsider his or her present employment situation. A shock can be positive, negative, or neutral; it can originate from within the workplace or outside of it; and it can be expected or unexpected. An unexpected negative shock could be an argument with a co-worker while an expected

\(^3\) Really there are 5 paths; however, the literature has consistently referred to the number of paths as 4 with an \(a\) and \(b\) split for the final path.
positive shock could be admittance to law school. The shock is then compared to the employee’s own image of her or himself and her or his own values, career aspirations, and overall goals.

Table 2.1. Unfolding Model’s Paths of Voluntary Turnover

<table>
<thead>
<tr>
<th>Path</th>
<th>1: Following a plan</th>
<th>2: Leaving without a plan</th>
<th>3: Leaving for something better</th>
<th>4a: Dissatisfied so leaving without a plan</th>
<th>4b: Dissatisfied so found work elsewhere</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiating event</td>
<td>Shock</td>
<td>Shock</td>
<td>Shock</td>
<td>Job Dissatisfaction</td>
<td>Job Dissatisfaction</td>
</tr>
<tr>
<td>Script</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Relative job dissatisfaction</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Active job search</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Once the initiating event occurs, individuals may engage a script. A script is a preformed or habitual plan. The plan could be based on personal or vicarious experience. The script could be that a particular employee decided that when she was eight months pregnant she would quit work, or it could be that a different employee always quits his job and travels abroad when he makes enough money to do so. A relative amount of job dissatisfaction may or may not be caused by a comparison of the alternatives and/or as the result of the shock. The relatively low job satisfaction could be based on evaluations of social, intellectual, emotional, physical, and/or financial
benefits and costs of the job. Last, the final criterion of the typology is whether an individual has engaged in a job search before they leave. This job search occurs in the minority of paths; however, not all paths are equally tread upon as can be seen in Table 2.2.

Given that all of the paths, with the exception of the first, eventually lead to relative job dissatisfaction, this model builds on previous theories that held job satisfaction as the central concept in explaining turnover (e.g., March & Simon, 1958). However, the Unfolding Model differs in that it shows that dissatisfaction does not necessarily initiate the process of withdrawal.

Table 2.2. Paths That Leavers Take

<table>
<thead>
<tr>
<th>% of leavers taking each path</th>
<th>1: Following a plan</th>
<th>2: Leaving without a plan</th>
<th>3: Leaving for something better</th>
<th>4a: Dissatisfied so leaving without a plan</th>
<th>4b: Dissatisfied so found work elsewhere</th>
<th>Total Classified*</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Lee, et al., 1999)</td>
<td>2.8%</td>
<td>3.3%</td>
<td>64.2%</td>
<td>3.8%</td>
<td>25.9%</td>
<td>92.6%</td>
</tr>
<tr>
<td>(Donnelly &amp; Quirin, 2006)</td>
<td>7.1%</td>
<td>26.2%</td>
<td>21.4%</td>
<td>35.7%</td>
<td>9.5%</td>
<td>77.8%</td>
</tr>
<tr>
<td>(Morrell, et al., 2008)</td>
<td>0.7%</td>
<td>0.0%</td>
<td>42.4%</td>
<td>0.4%</td>
<td>56.5%</td>
<td>77.0%</td>
</tr>
<tr>
<td>Average</td>
<td>3.6%</td>
<td>9.8%</td>
<td>42.7%</td>
<td>13.3%</td>
<td>30.6%</td>
<td>82.5%</td>
</tr>
</tbody>
</table>

*Note. The authors mention that there is some slight variance in how turnover motivations are coded suggesting that there may need for refinement of the model.

*The final column denotes the total percentage of individual classified, but the denominator used to calculate the percent of leavers going on different paths is the total of classified cases. Therefore, the percentage of employees that left on paths other than the four specified range from 7.4% to 23.0%.
Another remarkable finding from this model is the relative diversity of paths that individuals take to leave the firm. Table 2.2 outlines the relative percent of followers that took each path in previous empirical samples. The percentage of leavers taking different paths varies by research sample. Morrell et al. (2008) explained that this is caused by the different job markets that the employees in the different samples operated in (e.g., nursing vs. accounting).

The major findings of the Unfolding Model are that job dissatisfaction was not what precipitated turnover in all cases and, given the same stimulus, individuals varied in how much they maintained the status quo of their present position versus leaving the organization. This variance in how strongly individuals maintained the status quo led to research about on-the-job and off-the-job factors that cause employees to retain themselves.

**The job embeddedness construct.**

Job embeddedness is a construct comprised of the connections between an individual, his or her organization of employment, and his or her community. As opposed to job satisfaction, job embeddedness has been conceptualized as being less of an attitudinal measure and more of a measurement of the level of attachments. Moreover, while job satisfaction is specific to on-the-job variables, job embeddedness includes off-the-job factors.

Job embeddedness has consistently been able to explain variance in turnover (criterion validation evidence) beyond job satisfaction. The unparalleled success of job embeddedness to explain turnover variance has led to a relatively large number of
journal articles concerning the construct. Colquitt and Zapata-Phelan (2007) reported that in the *Academy of Management Journal* alone, there have been 40 articles that have cited the original Mitchell et al. (2001) job embeddedness study. These 40 citations are about one-third more citations than the average empirical article received in the AMJ study. This is surprising given that the construct was only first introduced in 2001, and Colquitt and Zapata-Phelan’s (2007) sample included a 40-year sample of articles. Therefore, although job embeddedness has only been around a very short time in relation to the lifespan of the journal, it has quickly become a very popular notion. This is even more surprising given that there is often at least a couple year lag between the inception of turnover studies and when they get published due to the need to allow time to transpire before measuring turnover behavior.

**Theoretical structure of job embeddedness.**

Job embeddedness is a, “broad cluster of ideas” (Holtom & Inderrieden, 2006, p. 438). It is an aggregate of ideas about how a web of connections secures individuals to their communities\(^4\) and their work organizations. The term job embeddedness is perhaps more specific than its actual use (Feldman & Ng, 2007; Ng & Feldman, 2007). It may be more appropriate to say that the term touches aspects of job, organization, occupation, and community embeddedness.

\(^4\) It is unclear how the boundaries of *community* are defined in the previous body of job embeddedness literature. The current study has some evidence about how the sample of AE instructors defined it.
As stated in the introduction in this dissertation, job embeddedness is a composite construct with six dimensions. The assumption is that all of the items are additive by dimension and job embeddedness is an aggregate of the average of the six dimensions (Mitchell, Holtom, Lee, et al., 2001). Each of these six dimensions is assumed to be the average of all of the items per dimension. Although these procedures currently enforce strict parity between the dimensions, authors have suggested that each dimension, and each aspect within each dimension of job embeddedness, will be relatively more or less important to different groups of individuals' level of job embeddedness (Kristof-Brown, Zimmerman, & Johnson, 2005; Mitchell, Holtom, Lee, et al., 2001). Similarly, some authors (e.g., Mallol, et al., 2007) have found that either the on- or off-the-job set of dimensions may be better at explaining turnover. Regardless of this potential methodological quandary, it is sufficient to say that all authors, with the exception of Crossley et al. (2007) who conceptualized job embeddedness as a common construct with reflective indicators, have described the construct as being a composite of six dimensions measured by formative items (MacKenzie, et al., 2005). As is shown in Figure 2.1 there is an organizational (on-the-job) and community (off-the-job) aspect of job embeddedness and each of these sides is further split into fit, links, and sacrifice.

Metaphorically it may be helpful to think of job embeddedness as relationship of a tree to the ground that it lives in and upon. In this metaphor, the tree could be thought of as an employee. The tree’s roots are sunk both into the substrates of the organization in which the individual works and into his or her community. The size and
number of those roots are links. How well those roots connect to the substrate below is fit. Finally, sacrifice is what it would cost an individual to pull out those roots.

*Organizational fit.*

Fit to the organization is the compatibility between the employee’s career goals, future plans, and values; and the organizational values and opportunities (Mitchell, Holtom, Lee, et al., 2001). Metaphorically, this is how well an individual’s roots in his or her work organization and community connect to the soil of their work organization and community. For example, a Western Red Cedar may *fit* better in a riparian zone on the West coast rather than in a high desert in the Southwest. Fit is also a match between the personality of the individual and the corporate culture (Kristof-Brown, et al., 2005). Interestingly, a fit with organization itself has been shown to be a better predictor of embeddedness than a fit with the job itself (Kristof-Brown, et al., 2005). This may be important in the adventure education context given the relative fluidity of work responsibilities. On a more specific level, the KSAOCs that the employee possesses and the needs of the organization must match in order to have a strong organizational fit (Kristof-Brown, et al., 2005). However, if the employee’s KSAOCs are generalizable to other organizations or occupations it may increase mobility between organizations (i.e., increase turnover from the individual organization’s perspective) (Feldman & Ng, 2007).

*Community fit.*

Fit to community is generally the compatibility between an individual and the social, cultural, and natural environment of the community. On the social side, there is a question of whether there are amenities in the area (e.g., sports, opera) that the
employee enjoys. Moreover, there is the question of whether the employee feels that the community accepts or supports his or her political, religious, or cultural beliefs. Similarly, fit to community would be increased if the natural environment supports the outdoor activities that the individual enjoys (i.e., pleasant weather for walks, opportunities for wildlife watching, etc.) and provides the aesthetic qualities that the individual prefers (i.e., sun, rain, beach, etc.).

Organizational links.

Links are the social, psychological, and financial connections between an individual and his or her work organization and community (Mitchell, Holtom, Lee, et al., 2001). Metaphorically, these are the roots that employees establish at work and in the communities that they live in. In the organizations, these links include formal and informal connections. Formal links include membership in work groups and the professional contacts that an individual develops within the organization and across the industry. Informal links include groups of friends and acquaintances at work. Interestingly, links within the organization may help to embed individuals in the organization while a strong network across the occupation may enhance mobility within the occupation, but not necessarily embed the employee in the individual organization (Feldman & Ng, 2007).

Community links.

Community links are primarily the family and friends of the employee that are in their local community. Family connections that are theorized to increase embeddedness include a spouse and children (Mitchell, Holtom, Lee, et al., 2001).
Similarly, if an employee is not married, then the opportunity for romantic partnerships may be a strong embedding factor (Giosan, 2007). In the case of AE, where a majority of individuals are not married (Birmingham, 1989; Wilson, 2007), perhaps it is this opportunity for coupling rather than being married which may affect embeddedness. Friends can also strongly embed someone in the local area. However, if these friends are transient, such as is the case with AE, then this may decrease job embeddedness when these friendship groups move on.

*Organizational sacrifice.*

The third set of dimensions, sacrifice, is the perceived costs of leaving a job, organization, or community (Mitchell, Holtom, Lee, et al., 2001). Returning to the metaphor, this would be what the employee would perceive it would cost her if she pulled her roots out of her work organization and community. These costs may be financial or psychological. These sacrifices include the value that the employee finds in her organization or community that she does not feel will be available at the next organization and community.

On-the-job, these sacrifices could include the loss of the corner office, family care on-site, or personal use of company equipment, such as vehicles or rock climbing equipment. It could also include the recognition from the employee’s peers who have a positive image of the employee. Finally, any seniority benefits may be lost. Seniority benefits lost could include job protection, an opportunity to take a sabbatical, or first dibs for which courses to teach. In AE, the reputation of being a good instructor may be lost if a person leaves an organization. Similarly, an individual who wishes to switch employment between AE organizations will likely be faced with a decrease in pay.
Community sacrifice.

Like many of the community embeddedness aspects, community related sacrifice has been primarily an issue if relocation is an issue. However, given that AE employees’ community may be the same people as the individuals that they work with, this implies that leaving the organization of employment would be equivalent to also leaving his or her community. The losses involved in switching communities may be the loss of all of the time and energy poured into finding an attractive, safe community to live in and time spent building a network of individuals in that community (Mitchell, Holtom, Lee, et al., 2001). Community sacrifices could also include financial losses, such as a loss on the sale of house, and knowledge costs, such as not knowing which mechanics charge a fair price for quality work in the new area that he or she is moving to. Even if relocation to another community is not required, there may be a sacrifice due to the reduced opportunity to connect with valued members of the community due to a changed work schedule or increased commute time.

There are six dimensions to the job embeddedness construct; organizational fit, community fit, organizational links, community links, organizational sacrifice, and community sacrifice. Although each dimension has been briefly outlined above, the items listed in Appendix A may also be helpful to understand how each of the dimensions has been operationalized in the past.

Job embeddedness in an AE context.

One of the major questions of this research is what, metaphorically, do AE employees’ embeddedness roots look like? When looking at these dimensions in
relation to AE staff, especially field staff, it is obvious that the community and organizational dimensions are highly overlapping in comparison to other occupations. Similar to what Becker (1983) stated, AE employees work and play with the same people. Individuals often do not often have family in the area because they have to relocate to the AE site. They may not socialize with members of the community outside of the organization very much because they are intensively working 24 hours a day in a remote location. Finally, due to a number of factors, they may not have any major non-portable assets, such as a house, in the area. Rather, they socialize and work with the same people. This is important because it seems to have both the effect of eliminating a whole set of connections that normally embed individuals to their job (outside community) and makes individuals more vulnerable to turnover in their work organization since this is also their community (organizational turnover reduces both organizational and community links). However, from an AE manager’s perspective the overlap between work and community offers opportunities that are not available to the same degree for many managers in other industries. Rather than the tangential connection between an employee’s on- and off-the-job spheres of life, the two are intimately connected. This raises the possibility that AE managers may have a greater ability to embed AE employees into the community than managers in other fields.

This overlap between the employee's on- and off-the-job spheres of reality may also have some implications about the measurement of job embeddedness. Currently, a majority of the job embeddedness items (Mitchell, Holtom, Lee, et al., 2001) are focused on the three on-the-job dimensions. However, the higher assumed degree of overlap in the AE field compared to previous samples may imply that there needs to be
fewer items to effectively measure both the community and organizational sides of the domain.

**Validating Job Embeddedness.**

Now that the conceptual framework for the construct has been laid out, the question remains about whether job embeddedness can help explain the turnover of AE employees. In previous studies, job embeddedness has consistently explained a significant amount of variance in turnover beyond other variables such as job satisfaction. Table 2.3 exhibits the correlations that previous research has found with turnover and what control variables were used.

Beyond just turnover, Table 2.3 displays all of the results of previous job embeddedness validation studies. Almost all of these studies use slight variations of the original set of job embeddedness items.

All of the previous validation studies have focused on providing statistical evidence to provide construct and criterion validation evidence. First, nearly all of the studies provide a Cronbach’s coefficient alpha measure of internal consistency for each of the dimensions. The presentation of this measure of internal consistency is done more as a matter of form rather than substance, because all of the authors, with the exception of Crossley et al. (2007), conceptualized the job embeddedness construct as a composite construct with formative indicators rather than a common construct with reflective indicators (MacKenzie, et al., 2005). Therefore, while all present the

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5 Please see Appendix A for a list of which items were used in each of the eight empirical studies,
coefficient alpha (as dictated by convention), almost all of the authors have questioned
the appropriateness of the convention given the composite nature of the construct.

Table 2.3. Job Embeddedness Validation Results

<table>
<thead>
<tr>
<th>Factor Analysis</th>
<th>Reliability</th>
<th>Construct Validity</th>
<th>Criterion Validity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFA</td>
<td>F.78, .79</td>
<td>L.77, .50</td>
<td>S.61, .59</td>
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<tr>
<td></td>
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Table 2.3. (continued)

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<th>Factor Analysis</th>
<th>Reliability</th>
<th>Construct Validity</th>
<th>Criterion Validity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Com</td>
<td>Org</td>
<td>Converg</td>
</tr>
<tr>
<td>(Cunningham, et al., 2005)</td>
<td>CFA</td>
<td>6 factor solution</td>
<td>Dropped 3 items to improve fit</td>
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<tr>
<td></td>
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<td></td>
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<tr>
<td>(Fletcher III, 2005; Hassell, 2005)</td>
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### Table 2.3. (continued)

<table>
<thead>
<tr>
<th>Factor Analysis</th>
<th>Reliability</th>
<th>Construct Validity</th>
<th>Criterion Validity</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Com</td>
<td>Org</td>
<td>Converg</td>
<td>Discrim</td>
</tr>
<tr>
<td>(Holtom &amp; Inderrieden, 2006)</td>
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</tr>
<tr>
<td>(Crossley, et al., 2007)</td>
<td>F.86</td>
<td>F.87</td>
<td>JobSat $r=.45^{***}$</td>
<td>JobAlt $r=-.15$</td>
</tr>
<tr>
<td></td>
<td>L.58</td>
<td>L.68</td>
<td>OrgCm $r=.34^{***}$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S.70</td>
<td>S.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Mallol, et al., 2007)</td>
<td>F.84</td>
<td>F.83</td>
<td>TOinten</td>
<td></td>
</tr>
<tr>
<td></td>
<td>L.74</td>
<td>L.64</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>S.66</td>
<td>S.88</td>
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</tbody>
</table>

^ Statistically significant at $p<.10$
* Statistically significant at $p<.05$
** Statistically significant at $p<.01$
*** Statistically significant at $p<.001$
s Statistically not significant
?? Significance not reported

Com Community
Org Organization
F,L,S Fit, Links, Sacrifice
JE Job Embeddedness
JEorg Organizational (on-the-job) Embeddedness
JEcom Community (off-the-job)
TO Voluntary Turnover
Tointen Intent to Turnover
Absence Volitional Absence
JobPerf Job Performance
OrgCit Organizational Citizenship
OrgCm Organizational Commitment
JobAlt Job Alternatives
JobSrch Job Search
JobSat Job Satisfaction
GJE Global Job Embeddedness
In contrast, the appropriateness of convergent and discriminant validation evidence (construct validation evidence) are not debated in the literature. These measures show that job embeddedness exhibits the expected significant positive correlation with job satisfaction and organizational commitment, and is negatively correlated with job search behaviors and the availability of job alternatives. These correlations provide strong construct validation evidence.

Perhaps, the most interesting part of Table 2.3, especially compared to the previous failure of job satisfaction to consistently explain much variance in turnover (Hom & Griffeth, 1995), is that job embeddedness consistently explains a statistically significant amount of variability in turnover behavior and other criterion variables beyond the variability explained by job satisfaction, organizational commitment, and other control variables. Note that in all cases, with the exception of Cunningham et al.'s (2005) full model with five control variables, job embeddedness was able to explain a statistically significant additional amount of variance beyond the control variables.

In contrast to the consistently strong construct and criterion validation evidence, there is very weak content validation evidence presented in the literature. Therefore, the conclusion that the original set of job embeddedness survey items adequately samples the most important aspects of each dimension of the domain of job embeddedness for different groups of workers is based on limited data from a single study (Mitchell, Holtom, Lee, et al., 2001).

Crossley et al. (2007) suggested that Mitchell, et al.’s (2001) original items may not adequately emphasize the most important aspects of the job embeddedness domain. These concerns led Crossley et al. to radically shift the conception of the job
embeddedness construct from a composite construct (assumption that the measured level of the construct changes in direct relationship to changes in the items) to a common construct (assumption that all items change in direct relationship to changes in the construct). Crossley et al. insisted that shift would allow respondents to better emphasize the aspects of the construct that were most meaningful for them. While some may question whether the choice of conceptualizing job embeddedness as a common or composite construct is too abstract to be meaningful for this study it has major implications for the content validation evidence of job embeddedness.

Crossley et al.’s (2007) scale conceptualizes job embeddedness as a common construct with reflective indicators (items). The difference between Crossley et al.’s scale and the other scales is its assumptions about the direction of causation between the items and the construct. For common constructs, such as how Crossley et al.’s conceptualized job embeddedness, changes in the construct are seen as causing changes in the items (reflective indicators). Metaphorically, this can be thought of as a cloud (common construct) where the amount of rain hitting the ground at different locations (indicators or survey items) reflects how much the cloud is raining (the level of the construct). In contrast, the direction of causality runs the opposite direction for composite constructs, as job embeddedness was originally conceptualized by Mitchell et al. (2001). Metaphorically, this is more akin to a sandwich. The size and composition of the sandwich (composite construct) depends on the amount of cheese, meat, vegetables, and condiments (measured level of each of the dimensions using the formative indicators). This difference is graphically depicted in Figure 2.2.
Practically, whether or not job embeddedness is considered a common or a composite construct strongly conditions the type and number of items necessary to measure the construct (MacKenzie, et al., 2005). If the items are assumed to be reflective items that are measuring a common construct, then all of the items are assumed to covary with changes in the underlying construct of job embeddedness. In contrast, formative indicators do not necessarily need to covary. This assumption is
why a measure of Cronbach’s alpha coefficient is not appropriate validation evidence from composite constructs, but is appropriate for common constructs.

For example, in Mitchell et al.’s (2001) original set of formative items the following two items were both used to measure fit to community.

1. The weather where I live is suitable for me.
2. This community is a good match for me.

Although these two items are both looking at the fit to community, they do not necessarily need to covary. The first question is asking about the respondent’s compatibility with the natural world, while the second item focuses on the social environment. It is possible that the respondent may be compatible with one, but not the other. Or they could evaluate both items as being high or low. This is an example of formative indicators which do not necessarily need to covary due to the assumption of the direction of causality. This assumption that the fit dimensions are themselves multi-faceted was supported by a recent meta-analysis (Kristof-Brown, et al., 2005).

In contrast, the reflective indicators of a common construct theoretically covary. The following are three of Crossley et al.’s (2007) items.

1. I feel attached to this organization
2. It would be difficult for me to leave this organization.
3. I’m too caught up in this organization to leave.

As opposed to the previous example with one item looking at the natural environment and one item looking at the social environment, it is intuitive that these items may
measure similar things since all of Crossley et al.’s (2007) items are designed to basically be the same question with slight semantic differences. It would be interesting to use cognitive interviewing to see how potential respondents interpret all of these different items; however, that is not the emphasis of this study.

Crossley et al.’s (2007) radical shift from conceptualizing job embeddedness as a common rather than a composite construct means that fewer items are needed to measure the construct because it is assumed that there is a single dimension rather than six. Moreover, Crossley et al. suggested that treating all six dimensions equally may fit the assumptions of classical test theory, but is incompatible with the reality that people are embedded in different ways. They argue that the less specific reflective measures they promote in their article are better at allowing respondents to emphasize those aspects of job embeddedness that are most important to their overall level of job embeddedness. This shifts the burden of trying to determine the most important parts of the domain from the researcher to the respondent.

This shift of the onus of responsibility may be appropriate if the respondent has previously thought about the issue and can balance all aspects of the construct when responding; however, this may be an irresponsible abdication of responsibility by the researcher if respondents are not aware of all aspects of each of the questions and can compare all of those aspects simultaneously while responding to the item. Regardless of the validity of conceptualizing of job embeddedness as a common construct, it does offer the desirable quality of decreasing the number of items necessary to measure the construct. This decrease is practically desirable because it decreases respondent burden which may better enable researchers to gain access into organizational settings
and increase response rates by decreasing the perceived associated respondent fatigue.

Even though Crossley et al.’s (2007) shift in the conceptualization of job embeddedness as a common rather than a composite construct simplifies the operationalization of the construct, it is the only case of a published study doing so. Moreover, there is meta-analytical evidence to, at least partially, undermine the credibility of this conception (Kristof-Brown, et al., 2005). Therefore, this study will assume that job embeddedness is a composite construct that needs to be measured with formative indicators.

For the purposes of content validation, this means that the generalizability of the use of any set of items to measure job embeddedness in a particular population must be tested because each population might be embedded in very different ways (Mitchell, Holtom, Lee, et al., 2001). Therefore, cognitive interviewing will be used to see how AE employees may be embedded in ways that differ from how previous validation samples were.

**Comparing Validation Samples.**

One of the assumptions implicit in the research questions is that Mitchell, et al.’s (2001) original job embeddedness items may not validly measure job embeddedness because job embeddedness may manifest differently in seasonal AE instructors compared to previous validation samples. This assumption is derived from two facts. First, as previously stated, researchers (e.g., Mitchell, Holtom, Lee, et al., 2001) have stated that the importance of different job embeddedness factors may vary across
different groups of employees. Second, the samples used in previous validation studies are very different from seasonal AE instructors in their demographic characteristics and work conditions.

Table 2.4 shows the demographics and work conditions of previous empirical samples. These samples tend to have vastly different demographics and working conditions than seasonal AE instructors. The previous samples appear to have been almost wholly composed of individuals who work standard full-time positions and none went on expeditions as part of their average work experience. Moreover, seasonal AE instructors are younger and have higher rates of educational attainment compared to previous validation samples (Birmingham, 1989; Marchand, 2006; Wilson, 2007).

In contrast with AE instructors, it may be contended that the samples used to previously validate the job embeddedness instrument may be relatively more isomorphic to the administrative staff in AE institutions. Unfortunately, there is no published research with demographic information about AE administrators. However, it is likely that even the AE administrative staff differ from the previous validation samples. The AE institutions are in the private nonprofit sector, while all of the previous samples were likely from the private for-profit sector. Previous research has found that nonprofit employees have higher levels of formal education attainment and are demographically different than for-profit employees (Leete, 2006). These significant differences in education may suggest meaningful differences in the motivations and worldview of the AE employees which subsequently impacts how individuals become embedded in their communities and places of work.
### Table 2.4. Empirical Job Embeddedness Samples

<table>
<thead>
<tr>
<th>Industry</th>
<th>Sample Size</th>
<th>Average Age (Years)</th>
<th>Gender (Female)</th>
<th>Married</th>
<th>Tenure (Years)</th>
<th>Education</th>
<th>Race (White)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grocery</td>
<td>n=177</td>
<td>37.57</td>
<td>77%</td>
<td>38%</td>
<td>Position=6.15</td>
<td></td>
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<tr>
<td>(Holtom &amp; O'Neill, 2004;</td>
<td>RR=33.1%</td>
<td></td>
<td></td>
<td></td>
<td>Organization =7.00</td>
<td>Industry=9.94</td>
<td></td>
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<tr>
<td>Holtom, Lee, et al., 2001)</td>
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<tr>
<td>Hospital</td>
<td>n=208</td>
<td>43.10</td>
<td>84%</td>
<td>60%</td>
<td>Position=6.22</td>
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</tr>
<tr>
<td>(Lee, et al., 2004)</td>
<td>RR=41.6%</td>
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<td></td>
<td></td>
<td>Organization =7.92</td>
<td>Industry=16.83</td>
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</tr>
<tr>
<td>Financial Institution</td>
<td>n=829</td>
<td>34.2</td>
<td>75.3%</td>
<td>6.6</td>
<td></td>
<td>Some College=48.3%</td>
<td></td>
</tr>
<tr>
<td>(Cunningham, et al., 2005)</td>
<td>RR=51%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bachelor’s =25.1%</td>
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<tr>
<td>College Softball Coaches</td>
<td>n=213</td>
<td>33.73</td>
<td>89%</td>
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<tr>
<td>(Cunningham, et al., 2005)</td>
<td>RR=43%</td>
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<tr>
<td>College Athletic Staff</td>
<td>n=189</td>
<td>39.42</td>
<td>40.2%</td>
<td></td>
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<td>(Fletcher III, 2005; Hassell,</td>
<td>RR=47%</td>
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<td>2005)</td>
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<tr>
<td>Air Force Mainten.</td>
<td>n=224</td>
<td>29</td>
<td>14.9%</td>
<td>63.5%</td>
<td>10</td>
<td>&lt;4 year degree=89.6%</td>
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</tr>
<tr>
<td>(Fletcher III, 2005; Hassell,</td>
<td>RR=92%</td>
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<td></td>
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<td></td>
<td>4 year degree=8.6%</td>
<td></td>
</tr>
<tr>
<td>2005)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Graduate degree=1.8%</td>
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</tr>
<tr>
<td>GMAT test takers, various</td>
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<td>58%</td>
<td>72.5%</td>
<td>5.5</td>
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<tr>
<td>industries</td>
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<tr>
<td>(Holtom &amp; Inderrieden, 2006)</td>
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Table 2.4. (continued)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Sample Size</th>
<th>Average Age (Years)</th>
<th>Gender (Female)</th>
<th>Married</th>
<th>Tenure (Years)</th>
<th>Education</th>
<th>Race (White)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Crossley et al., 2007) Midwest Assisted Living Workers</td>
<td>n=318 RR=51%</td>
<td>42.2</td>
<td>80%</td>
<td>5.6</td>
<td></td>
<td></td>
<td>83%</td>
</tr>
<tr>
<td>(Mallol et al., 2007) Banking</td>
<td>n=422 RR=35%</td>
<td>37.5</td>
<td>79%</td>
<td>54%</td>
<td>7.1</td>
<td></td>
<td>37.3%</td>
</tr>
</tbody>
</table>

Summary

This review of past research has sought to establish that the awesome cost of turnover to organizations and employees justifies the amount of research effort poured into studying this phenomenon. Past research has focused on using job satisfaction as the primary explanatory construct with limited success. This failure to adequately explain the turnover process motivated the development of the Unfolding Model of Turnover. This model found that a majority of paths that employees take to leave an organization are not initially paved by a lack of job satisfaction. Moreover, the model suggested that the influences of catalytic factors were being mediated by another factor. Mitchell et al. (2001) developed a multi-dimensional composite construct they called job embeddedness to help explain employees' varying tendencies to maintain the status quo of employment. Previous validation studies have resulted in adequate to strong construct and criterion evidence, but there has been no content validation evidence offered beyond the limited amount in the original study (Mitchell, Holtom, Lee, et al., 2001). This issue has been complicated by the fact that job embeddedness is normally
conceived of as a composite construct where the most important parts of the domain may differ with different groups of employees. This lack of content validation evidence and the potential for job embeddedness to manifest itself differently in different groups of employees motivated the methods that have been chosen for this study.
Chapter 3

Methods

The intent of this study was to understand if job embeddedness manifests itself differently in seasonal adventure education (AE) instructors compared to previous populations and if the original set of job embeddedness items accurately measured the most important aspects of job embeddedness for AE instructors. In other words, does the original set of job embeddedness survey items (Mitchell, Holtom, Lee, et al., 2001) accurately measure the most important parts of the construct for this population of workers. This objective was predicated by warnings from previous job embeddedness researchers (e.g., Crossley, et al., 2007; Mitchell, Holtom, Lee, et al., 2001) that the importance of different embedding factors may vary considerably between different populations of workers. If the current set of items were found to not accurately measure the most important aspects of job embeddedness for this population, then the charge was to modify the current set of items in order to more validly measure levels of job embeddedness in AE instructors.

Of the three types of validation evidence described by Collins (2003), almost all of the validation evidence reported in the literature on job embeddedness has been statistical evidence. In contrast, there has been no experimental evidence or structured reports of the direct study of the question and answer process. According to the classic psychometrics typology for validation evidence (Crocker & Algina, 1986), there has been a wealth of construct and criterion validation information reported, but only a scant amount of content validation evidence reported in the initial study (Mitchell, Holtom, Lee,
et al., 2001). Therefore, the purpose of the methods used in this study was to provide content validation evidence to help fill in part of this identified gap in validation evidence.

Content validation is a process of affirming that all parts of the construct domain have been sufficiently and accurately measured (Crocker & Algina, 1986). Content validation evidence is entirely qualitative and results from methods such as literature reviews, expert panels, focus groups, and individual interviews (Crocker & Algina, 1986). Therefore, this study utilized a review of the literature (chapter 2), an expert panel, and two waves of cognitive interviews.

**Expert Panel**

The use of an expert panel was intended to provide expert opinions about potential sources of error in the set of survey items. This information provided an etic (external) perspective that differed from the emic (internal) perspective of the sample of seasonal AE instructors that participated in the cognitive interviews.

It was assumed that an expert panel review with expert knowledge of AE would be especially valuable given that the set of original job embeddedness items had not previously been used with an AE instructor population. Therefore, all of the members of the expert panel were required to have either a high level of experience as a practitioner in AE, academic knowledge of AE, or both a high level of experience and knowledge. Beyond expertise in AE, individuals with expert knowledge in survey methodology were sought out to give a methodological perspective; however, given that the set of original items had previously been reviewed by many other experts in methodology this was seen as being less important. Finally, individuals with an expert knowledge of employee
turnover were located, although, again, many other experts in turnover research had reviewed the original set of survey items; therefore, this domain of knowledge seemed potentially less important at this step compared to AE specific knowledge.

Nine experts were recruited and provided data in written and verbal form. The data from the panelists highlighted potential problems with using the original survey items to measure job embeddedness in seasonal AE instructors. These data were used to create structured probes for the cognitive interviews. Furthermore, a subset of the expert panel participants reviewed the preliminary modified set of survey items and provided further information concerning their views about potential issues with these modified items before these items were tested in the second wave of cognitive interviewing.

**Sample.**

The goal of the expert panel was to include individuals with an expert academic or practitioner knowledge of AE that also had either deep experience with or an expert knowledge of either turnover or survey research methods.

The number of AE academics and high level practitioners in the United is a fairly small and well connected group of individuals. As an insider to this group, the researcher contacted known AE academics and high level practitioners and asked if they, personally, would be willing to participate in the research and if they knew of any other experts with the desirable knowledge to participate as well. Recommendations from Dillman (2007) were used to guide the recruitment process. An initial contact was a recruitment e-mail asking if they would like to participate (Appendix B). If a response
was not received from the expert within two days of the initial e-mail contact, then a second e-mail was sent. If that e-mail was not responded to within two days a final recruitment e-mail was sent. The two day lag between recruitment e-mails is slightly more compressed than Dillman’s recommended two and seven day lags. The more compressed time schedule was chosen because Dillman’s method is based on postal mail and not e-mail. It was thought that the reduction of the third reminder from seven to two days was more appropriate for the more instant nature of e-mail compared to postal mail. Out of the 11 individuals that were contacted to participate in this study, nine participated. The two both provided contact information for other potential participants, but stated that they did not have enough time to participate.

If the individual indicated that she was willing to participate, then a minimum of two attempts at phone contact were made. During this phone contact, the participant was thanked and the purpose of the research was restated (beyond what was in the initial e-mail). It was emphasized that the participant should read each item and only answer any of the item specific questions that they saw as a potential issue with using that particular item with a seasonal AE instructor population. Experts were told they did not need to comment on items that did not have any recognizable potential issues. Finally, they were asked if they had the contact information for anyone else who may want to participate as a member of the expert panel or participant in the cognitive interviews.

This recruitment strategy resulted in nine panel participants. One-third of the participants were female. Two of the participants were primarily AE academics, five were currently AE managers, one no longer worked as a manager but still worked in
AE, and one had recently switched to a different field. All but one of the individuals had or was currently serving as a manager in an American AE organization that conducted educational expeditions as a primary educational medium. These organizations included the two largest international AE organizations (Outward Bound and the National Outdoor Leadership School) as well as smaller regional organizations, nonprofit and for profit organizations, co-ed and single gendered organizations, and an organization associated with a higher education institution. The range of AE experience that the participants self identified as having was between 5 to 35 years with a mean of 15 years working and/or researching in the field.

Seven of the panel participants had previously taken at least one research methods class in graduate school that had included using surveys. Out of this seven, three of the participants had published survey instrument development studies. One of these individuals had previously been labeled as an “expert” in instrument development by peers in the AE field.

Eight of the participants had or currently were serving as managers for an AE institution where at least part of their responsibilities dealt with human resources. All but one of these participants was directly responsible for hiring and firing AE instructors. One participant who was no longer directly working for an AE organization was the President and CEO of an organization that specialized in human resources consulting.

**Data Collection.**

Participants were given two options for submitting their data. First, each participant was mailed an expert panel survey (Appendix C) which they were asked to
fill out and e-mail back within a seven day period. Second, each of the participants was given the option to expand on their answers verbally over the phone or in person.

The expert panel survey (Appendix C) presented each of the original survey items (Mitchell, Holtom, Lee, et al., 2001) by dimension. The survey began with an expression of thanks for participation and definition for job embeddedness. Moreover, before each group of items a short description of the dimension was provided.

The participants were asked to evaluate each of the items based on the following questions:

1. Do you believe that the question measures the intended theoretical dimensions of job embeddedness?
2. Do you think the question is appropriate for an adventure education population?
3. Do you think that the question could be confusing or misinterpreted?
4. Do you think that the wording of the question may bias the results?
5. What suggestions do you have for improving the question?

The first four questions required simple dichotomous responses. These four questions were intended to act as a checklist of possible issues for the participants in order to improve the participant’s response to the fifth question.

Following all of the items for a given dimension the following two questions were asked:

1. Is there any part of this dimension that additional questions may be necessary to measure?
2. Are there any questions that you would recommend adding to help measure this dimension?
After the individuals had evaluated all of the questions three more questions were asked.

1. Do you have any other recommendations?

2. Are there any aspects of how adventure education instructors become embedded that do not seem to be covered with the previous survey questions?

3. After the first round of individual cognitive interviews may I contact you to discuss some of the findings?

Finally, a question about expertise was asked in order to acquire some information about expert’s perspective.

All but one of the expert panel participants submitted a written analysis of the items. The one individual who did not submit a written report stated that he would rather submit his answers orally over the telephone. Beyond this participant, four other panel participants took the opportunity to further explicate their thoughts orally.

The expert panel participants were also given the opportunity to review the initial set of modified items after the initial wave of cognitive interviews. Five of the expert panel participants submitted further data about the modified set of items that was coded and developed into prepared verbal probes for the second wave of cognitive interviews.

**Data analysis.**

The intent of the expert panel was to highlight potential issues that may cause errors in using the original items to measure the level of job embeddedness in seasonal AE instructors. First, the expert panel was coded based on a modified form of Tourangeau’s (1984) Cognitive Aspects of Survey Methodology (Appendix D). This coding structure highlighted the potential errors that may be introduced when AE
instructors attempt to respond to the survey items. Second, these issues were compiled by item, dimension, or overall observations. Third, the coded potential issues were translated into a series of prepared verbal probes for the individual cognitive interviews. These prepared verbal probes were then added to the list of prepared verbal probes that were previously created based on the literature review (Appendix E)

Cognitive Interviews

Cognitive interviewing is a semi-structured interviewing method that uses a mixture of techniques that are based on findings from cognitive psychology (Willis, 2005). The goal of cognitive interviewing is to provide an emic perspective from potential respondents about possible issues that could decrease the validity of any conclusions from the survey response data. Therefore, while the expert panel provides an outsider (etic) perspective about possible ways that error could be introduced, cognitive interviews show how errors are actually introduced into the survey data.

Sample.

Cognitive interviews provide qualitative data about potential issues with survey items. Cognitive interviewing is not intended to result in generalizable results (e.g., X% of respondents will fail to correctly respond to item #3 because of Y issue), rather the goal is to discover the range of potential issues that could introduce respondent error. Therefore, a random sample was not required. Instead, a mixture of techniques; snowball sampling, cluster sampling, purposive sampling; were employed in order to get a convenience sample of cognitive interviewing participants (Patton, 2002). Initial contact information was provided in two ways. First, seasonal AE instructors that the
author had met through conferences, work experiences, and recreational experiences were contacted and asked via e-mail if they and if some other seasonal AE instructors that they knew would participate. Second, administrators at four AE organizations were contacted and asked if they could supply a list of e-mail contact information for seasonal AE instructors that met the minimum criteria. All four of these organizations provided lists of individuals. From this initial pool of potential participants, a sample of individuals was chosen that would maximize the diversity of gender, institution, tenure, and geographic distribution (Patton, 2002).

   The sample consisted of individuals who had worked seasonally for an American AE organization long enough to be familiar with the use of the jargon and the norms of the organization. A search of the literature in AE did not find any literature that estimated how long an employee needed to work for an organization before she understood the jargon and organizational norms; however, in order to provide a minimal criterion for this study, it was determined that an employee would need to have worked a minimum of two AE courses as an instructor with an American AE institution in the last 12 months. This minimum work period is based on the assumption that some minimum amount of contact with the organization is required for an individual to knowledgeably respond to questions about AE. Moreover, individuals with more recent experiences are desirable in order to determine contemporary interpretations; therefore, the minimum two courses were required to have occurred within the last 12 months. Second, in order to be considered a seasonal instructor the maximum amount of time that an instructor could work for a particular organization was six months.
There were two different waves of interviews. Willis (2005) stated it is normal to have five to 15 participants per wave of cognitive interviewing. Similarly, Presser & Blair (1994) reported they used 10 to 12 interviews per wave of data collection. The total number of interviews for all of the waves of interviews in a study are reported in the literature as normally ranging between 20 to 28 interviews (e.g., Conrad, Blair, & Tracy, 1999; Murtagh, Addington-Hall, & Higginson, 2007; Ouimet, Bunnage, Carini, Kuh, & Kennedy, 2004); however, as many as 48 interviews have been reported (Napoles, 2006).

Based on these recommendations and the number of interviews reported in previous studies, it was planned that two waves of 10 interviews would be conducted for a total of 20 interviews. Although this was a rather large number of interviews considering that all of the previous research was conducted by large research teams rather than an individual researcher, it was felt that this number of interviews would be necessary to sample a diversity of individuals and to maintain a sample size that was similar to previous studies that have used cognitive interviewing.

A total of 21 individuals participated in cognitive interviews. Ten individuals participated in the first wave and 11 participated in the second wave. One more individual was included in the second round than was originally expected. This was because an additional individual was asked to participate just in case an individual dropped out at the last moment; however, no one did. Forty-three percent (n=9) of the participants were female. Twenty-nine percent (n=6) of the participants were married or in a committed partnership. The participants had worked an average of 3.40 seasons (1 to 25 seasons) for the organization that they identified as their primary AE organization.
(the AE organization they had worked the most for in the last 12 months). Participants reported working for between one and six AE organizations in the previous twelve months. Participants identified seven different organizations as their primary AE organizations.

Individuals were originally contacted by e-mail (Appendix F) either directly or through a participating AE organization. Similar to the expert panel, a modified Dillman (2007) format was used to increase participation. If a response was not received from the participant within two days of the initial e-mail contact, a second e-mail was sent requesting her participation. If that e-mail was not responded to, a final e-mail was sent four days after the initial e-mail emphasizing the purpose of the research and the limited opportunities to respond.

When an individual responded that she would like to participate, then the individual was sent an e-mail asking when she would like to schedule a 60-minute long period of time for the interview. The interview (Appendix F) was then conducted via Skype, an internet telephony service that can contact individuals through their phone or through their computer, as the respondent concurrently responded to a web-based (Surveymonkey) version of the original 40 items (Mitchell et al., 2001) or the modified set of items in the second wave of interviews. The interview began with the researcher asking the participant if it would be ok if the interview was taped. None of the participants objected to this request. The interviewer then reminded the participant that the interview was expected to take about 60 minutes, but they could quit at anytime. This was followed by a brief explanation about the structure of the interview and how to use the think-aloud interviewing process and verbal probes. Finally, the participants
responded to a brief collection of items collecting demographic data (gender, age, geographic location, AE experience, and student status).

This study did not include any financial incentives for participation. Although Dillman (2007) recommended that a small incentive would increase participation based on social exchange theory, Baruch and Holtom (2008) recently found that material compensation did not positively affect participation rates in organizational research. These findings were potentially applicable given that some of the participants were contacted through AE organizations and the subject of the surveys concerned the respondents’ work situation. Moreover, since a large representative random sample was not required, the response rate was less of an issue than is the case when generalizable results are desired.

Data collection.

The two primary cognitive interviewing techniques used were the think-aloud interviewing technique and verbal probes. Both of these were used to understand how the respondents understood the item, recalled the information for the item, and then mapped their answer onto the web-based format (Krosnick, 1999; Presser & Blair, 1994; Presser, et al., 2004; Willis, 2005). Each of the individual interviews was conducted via Skype, an internet telephony service. Audio recordings were made of each of these conversations using Tapur telephony digital recording software. The first round of interviewees’ audio recordings was transcribed verbatim. The second round was intensively reviewed and selected portions were transcribed.
Participants were asked to use the think-aloud interviewing technique to discuss their internal response process; moreover, verbal probes (Appendix E) were used to discover additional information about the question and answer process. Think-aloud interviewing is the technique where participants explicate their thought processes as they interpret and respond to the survey items. The prepared verbal probes were based on the coding structure (Appendix D) and expert panel responses.

Although it was the respondents’ right to end the interview at any time, a 60-minute maximum interview time was requested. This intended interview duration seemed to be an appropriate balance between providing enough time to intensively review the items and still be sensitive to the issue of respondent fatigue (P. M. Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). A 60-minute interview duration is similar in length to the longest interview durations reported in the literature. Napoles (2006) reported using 60-minute interviews and Ouimet et al. (2004) stated that their interviews were 30 to 45 minutes in length. Most of the interviews went longer than the originally estimated 60 minute period of time. The average interview was just under 1.25 hours (1 hour, 14 minutes, 40 seconds). Interview durations ranged from over 25 minutes to over 102 minutes.

A mixture of both the think-aloud interviews and probes were chosen in order to triangulate the strengths of the methods (Collins, 2003; Willis, 2005). Think-aloud is driven by and is more cognitively difficult for the participant, while probes are conversely driven by and are more difficult for the interviewer to use skillfully. Think-aloud interviews allow the participant to discuss certain parts of the survey that the researcher may not have previously thought about, while probes allow the interviewer to be more
precise about gaining data on desired topics. Moreover, a think-aloud technique may be different than how the participants normally think an interview should proceed, whereas probes are more in line with the expected format for an interview (Carspecken, 1996).

In the interviews, the respondents were given an example of the think-aloud technique. They were then asked to use this technique as they responded to each of the items. Moreover, they were told that the interviewer may ask some further questions (verbal probes) after they had verbally explicated how they had responded to each item. A majority of interviews proceeded in this manner, with the respondent talking about her internal response processes and was then asked a few further questions. However, there were a couple of cases that did not fit this format. On one extreme, in two cases, the respondents so thoroughly explicated their processes that the verbal probes would be redundant to employ. On the other extreme, the participant’s responses to both the think-aloud interview technique and the verbal probes were often limited to a couple of words.

**Data analysis.**

The coding for the data analysis was driven by the two research questions and was based on the Cognitive Aspects of Survey Methodology which specifies that respondents must understand, recall information, judge the recalled information, then map the response onto the options given (Conrad & Blair, 1996; P. M. Podsakoff, et

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6 The coding structure is attached in appendix E.
The researcher began the analysis by taking notes during the interview. Following each interview, the researcher immediately reviewed the audio recording and took additional research notes. The recording was then transcribed verbatim. Additional notes were taken during this transcription process. This transcription was then coded based on the researcher notes and the coding structure (Appendix G). Comparisons within and across cases occurred throughout the process using thematic coding (Charmaz, 2006; Strauss & Corbin, 1998); however, such analysis was especially intensive at the end of each of each wave of cognitive interviews.

The coding process also included three individuals coding the data using the same coding structure (Appendix D) in order to increase the credibility of the coding process through triangulation of coders (Charmaz, 2006; Denzin & Lincoln, 2003; Patton, 2002). All of the individuals coding data for this study had previously coded data for published qualitative studies. The primary investigator coded a single interview as an example for the peer coders and then gave each of these coders a different interview to code. The peer coders were requested to identify all of the survey response issues in the interview transcript. The issues identified by the peer coder were then compared to the issues identified by the primary researcher. This comparison found that the peer coders did not identify any issues with each item beyond the issues already identified by the primary researcher. This comparison process provided affirmation that the primary researcher’s coding of the other eight transcripts was sufficiently exhaustive to identify potential issues.
After the first round of cognitive interviews, all of the coded data from the expert panels and cognitive interviews was compiled by item and by dimension. The researcher then used these data to either modify the existing items, create new items, or eliminate troubled items. These potential changes were then sent to members of the expert panel who agreed to be contacted after the first round of interviews. After the expert panel participants submitted their feedback, a modified set of items were prepared for use with the second wave of cognitive interviews.

Rather than analyzing full transcripts of the second round of interviews, the audio recordings of the second round of interviews were intensively reviewed and annotated in the aforementioned manner. Quotes from the second round of interviews were selectively transcribed in order to capture pieces of the interviews that either supported or conflicted with earlier assumptions about the items.

The second wave interviews were subjected to an intensive analysis after every interview. The first three rounds resulted in the following changes: one item was eliminated due to redundancy, one item was added, and multiple items were reworded to increase clarity. The last eight interview participants all interpreted the items in the intended manner.

Finally, the data from the expert panel and cognitive interviews was analyzed for emergent themes using Grounded Theory (Charmaz, 2006; Strauss & Corbin, 1998). This analysis identified structural differences between the work circumstances of previous job embeddedness validation samples and the current sample.
Summary

The methods chosen for this study were intended to provide content validation evidence for a set of items to measure the level of job embeddedness in adventure educators. Beyond the literature review, two sets of data collection techniques were used, an expert panel and cognitive interviews. The cognitive interviews provided further validation information about the question and answer process. Two waves of cognitive interviews were conducted that had 10 and 11 participants respectively. Data was analyzed based on the coding structure attached in Appendix D.
Chapter 4

Results

As noted in the previous chapter, the data from the cognitive interviews were intensively analyzed after the first wave of cognitive interviews and after every interview in the second wave. The data here is presented in an abbreviated manner. A more detailed report of results is in Appendix G. Similarly, the qualitative results from the interviews analyzing the preliminary set of modified items are listed in Appendix H. This section is a summary of the data that were gathered to answer the two research questions. Therefore, the summary data are organized based on the two research questions.

Original Survey Items and a Seasonal AE Instructor Population

The first research question asked if the original set of job embeddedness survey items (Mitchell, Holtom, Lee, et al., 2001) accurately measure the most important aspects of job embeddedness for seasonal AE instructors. None of the previous authors that have used the job embeddedness items have described which groups of workers are appropriate to use the items with and which groups of workers are not appropriate (see table 2.4). Therefore, the literature contains an implicit assumption that the original (Mitchell, Holtom, Lee, et al., 2001) survey items will validly measure job embeddedness in all populations of workers.

The results from this study dispute the implicit assumption that this set of items are appropriate for all groups of workers. The cognitive interviews gathered data that
suggest that almost all of the items may not validly measure the actual level of job embeddedness in this population of workers.

It is important to note that the results from cognitive interview are qualitative. Therefore, the distribution of each of these issues across the sample is generally not reported (i.e., 28% of respondents reported X issue item Y). This is because cognitive interviewing is intended to highlight potential issues not to show the pervasiveness of these issues in the population of interest. What is important is what the issues were in each of the items. Table 4.1 provides an overview of the problems that were identified in each item and Appendix G give a more thorough explanation of the problems.

Table 4.1 Issues with Original Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Terminology</th>
<th>Context</th>
<th>Importance</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>How long have been in your present position?</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>How long have you worked for this company?</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>How long have you worked in this industry?</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>How many coworkers do you interact with regularly?</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>How many coworkers are highly dependent on you?</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>
Table 4.1 Issues with Original Items (Continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>Terminology</th>
<th>Context</th>
<th>Importance</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many work teams are you on?</td>
<td>×</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many work committees are you on?</td>
<td>×</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you currently married or living with a significant other?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If you are married does your spouse work outside the home?</td>
<td></td>
<td>×</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many of your family members live nearby?</td>
<td></td>
<td></td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>How many of your close friends live nearby?</td>
<td>×</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My family roots are in the community I live in.</td>
<td>×</td>
<td></td>
<td></td>
<td>×</td>
</tr>
<tr>
<td>Do you own the home you live in?</td>
<td>×</td>
<td></td>
<td></td>
<td>×</td>
</tr>
<tr>
<td>I like the members of my work group.</td>
<td>×</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My coworkers are similar to me.</td>
<td>×</td>
<td></td>
<td>×</td>
<td></td>
</tr>
</tbody>
</table>
Table 4.1 Issues with Original Items (Continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>Terminology</th>
<th>Context</th>
<th>Importance</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Definition</td>
<td>Wording</td>
<td>False</td>
<td>Simple</td>
</tr>
<tr>
<td>I like the authority and responsibility I have at this organization.</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>My values are compatible with the organization’s values.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can reach my professional goals working for this organization.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel good about my professional growth and development.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job utilizes my skills and talents well.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel like I am a good match for this organization.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I fit with the company’s culture.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I really love the place where I live.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think of the community where I live as home.</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>The community is a good match for me.</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>
Table 4.1 Issues with Original Items (Continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>Terminology</th>
<th>Context</th>
<th>Importance</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>The weather where I live is suitable for me.</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>The area where I live offers the leisure activities I like.</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>I would sacrifice a lot if I left this job.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The perks on this job are outstanding.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The benefits are good on this job.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The health care benefits provided by this organization are excellent.</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>The retirement benefits provided by this organization are excellent.</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>I feel that people at work respect me a great deal.</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>The prospects for continuing employment at this organization are excellent.</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4.1 Issues with Original Items (Continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>Terminology</th>
<th>Context</th>
<th>Importance</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Definition</td>
<td>False</td>
<td>Not</td>
<td>Recall</td>
</tr>
<tr>
<td>I have a lot of freedom on this job to</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>decide how to pursue my goals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My promotional opportunities are</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>excellent here.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am well compensated for my level of</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>performance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leaving this community would be very</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>hard.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People respect me a lot in my community.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My neighborhood is safe.</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>29</td>
<td>5</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There were three major types of issues; terminology, context, and importance; that were identified in the original set of survey items. Moreover, there were some less prevalent issues including variability in recall strategies, ambiguous response formats, and one interpretation of an item as a double-barreled question.
Terminology.

The most frequent problem with the items was terminology issues. This section will give examples of the two major types of terminology issues. First, there were multiple, and sometimes conflicting definitions assumed by the interview participants for important terms and phrases in 29 of the items. This variability in interpretation may cause artificial variability in survey responses, which could lead to false statistical conclusions or decreased statistical power. Second, five of the items included phrases or words that the respondents found objectionable. This issue could lead to survey respondents not completing the survey or providing extreme protest answers.

Although a majority (63%) of the items suffered from at least one issue with terminology, a single item will be reviewed to illustrate the problem of multiple definitions. In this first item, “How long have you been in your present position?” there were two phrases that showed significant variability in interpretation, “how long” and “present position”.

The phrase, “how long,” was included in the question stem for all three items measuring employee tenure. This phrase was troublesome for all three items. However, for the purposes of brevity, the discussion will be limited to the first item, “How long have you been in your present position?”

The first issue with this phrase was that participants varied in which types of activities they referenced when responding to the item. To understand this issue one must understand the types of sites at which seasonal AE instructors work. Seasonal AE instructors primarily conduct educational expeditionary courses in back country settings. This term is normally used to refer to the remote ocean, desert, and mountain settings
that most courses use as classrooms. However, most AE instructors also spend at least some time working in front country settings, such as an office, preparing all of the educational and logistical details of the course.

This difference in work settings was important to some of the interview participants. When answering, “How long…” some of the seasonal AE instructors only included the time that they spent instructing in the back country. In contrast, the other interview participants included both the time they spent working in the back country and the time that they spent working in front country settings.

This difference in which types of work were included would cause artificial variability in the survey response data from this population. For example, assume two seasonal AE instructors that individually worked 2 weeks in a front country setting and 10 weeks in a back country setting. Second, assume that one of the instructors did not include her front country time, when responding to this item, but the other instructor did. Therefore, even though the actual work time is the same, one instructor’s response would be 20% higher than the other.

This variability violates the correspondence theory of truth (Kline, 1998). The variability in the responses is not a reflection of the variability of the actual experiences of the instructors. This difference may only cause reduced statistical power if instructors randomly choose whether to report their front country time or not; however, if the variability in type of work referenced was associated by another variable, such as organizational affiliation or gender, then this variation in interpretation may result in artificial statistical conclusions about the difference in tenure by group.
Another issue with the phrase, “How long,” in this particular item was that some individuals only referenced the time they were actually employed by the organization (under contract), while other individuals implicitly interpreted the question as asking, “How long since you first started working for the organization?”

This difference in interpretation strategies could lead to very different responses. For example, if an individual worked 10 weeks per season for three seasons and they interpreted the question as asking about the actual days worked, then the respondent would respond that she had worked 30 weeks for the organization. However, if she used the latter interpretation strategy, then she would respond that she had worked for 3 years. This heterogeneity in the interpretation of the question stem would have led to an artificial variability of responses by a factor of more than five\textsuperscript{7}.

If the distribution strategies were randomly used across all groups of instructors, then this variance would simply reduce the power of any statistical conclusions. However, the interpretation strategies did not seem to be randomly distributed across all groups of respondents in this limited sample. For example, all of the seasonal AE instructors who had primarily worked with N.O.L.S. uniformly interpreted the question as asking for how many weeks they had worked, while all of the instructors working for Outward Bound used the latter interpretation strategy of years or seasons. Therefore, the difference in how the phrase, “How long,” was interpreted may likely lead to false

\textsuperscript{7} If an individual actually worked 30 weeks, but had reported working for 3 years, then the 3 year response could have been interpreted as meaning 156 weeks, which is 5.2 times as long as 30 weeks.
statistical conclusions about differences in the tenure of instructors across organizations.

Another example of a terminology issue in the question stem of the first item was the phrase, “present position”. This phrase was problematic because some instructors had a difficult time understanding what “position” the question was referencing. Some of the respondents had worked for multiple organizations in the previous year. These individuals that had worked for multiple organizations were confused about which, of the positions that they had worked in the previous year, was being referenced by the phrase, “present position”.

Moreover, the timing of the interview was an issue. It is logistically very difficult to conduct this type of interview with seasonal AE instructors while they are in the field. AE instructors are often in remote settings and need to work all of their waking hours. Therefore, all of the interviews were conducted with individuals who were not, at the time that they were responding to the survey items, in the field. Second, since almost all organizations employ seasonal AE instructors based on a contract for those days that they are in the field (or a brief period of front country time before and after the course), all of the interviewed individuals were not, by definition, working as seasonal AE instructors at the moment that they were participating in the interviews. They may have been working the day before, and may have worked the day after, but at that moment they had no “present position” in the strict sense of the term. This was presumably either not an issue for previous populations of workers that were surveyed with the job embeddedness items or previous researchers failed to account for this issue. However, the discrete nature of seasonal AE contract employment and the fact
that none of the individuals were working as seasonal AE instructors at the exact moment of their interview made the phrase “present position” ambiguous to some respondents.

“Present position” caused similar issues for individuals that had served in multiple roles within a single organization. This was compounded by the fact that some individuals reported experiencing fluidity between roles. In this case it was unclear whether they should reference their title or the role of the actual work they had done. While some thought of “position” as a title, others interpreted it as a sphere of responsibility. This was further complicated by the fact that some individuals reported that they got paid to do the same activities sometimes, but volunteered to do it at other times. When responding to the item, some respondents included both paid and volunteer time, while others included only paid time.

The heterogeneity of interpretation of “present position” may likely lead to false variability in survey responses. This false variability in survey responses can be illustrated with the example of an individual who had instructed for two organizations. Assume that the individual had volunteered for Organization A for 10 weeks and then been hired to do similar work for an additional 20 weeks at the same organization. Moreover, assume that this individual worked sequentially an additional 20 weeks for Organization B, and was then promoted (to a higher level of instructor) at the end of these 20 weeks. On the one extreme, this individual may report that he had worked 0 weeks in his present position since he was currently off-contract, and hence had no position at present. Similarly, if the individual had thought the question was only referencing his current position (higher level of instructor) at Organization B, he may
respond 0 weeks because he was recently promoted and therefore had not worked anytime under his new position title. On the other extreme, this same individual could have reported that he had worked for 50 weeks if he included both the time he was paid and the time he volunteered, the time he worked for both organizations, and the time that he worked under different titles as an AE instructor. This example illustrates how the variability of how the phrase, “present position”, could lead to a large degree of artificial variability in survey responses to the first survey item.

Beyond the issue of ambiguity, some of the cognitive interview participants objected that the terms in some of the items were inappropriate to describe their situation. This was a much more limited issue compared to the ambiguity issue. Interview participants objected that words or phrases were objectionable or inappropriate in six items.

Dillman (2007) warns that such objectionable items could lead to missing data if survey respondents quit responding because of an emotional reaction to the wording of an item. For example, after reading and responding to the item, “I like the authority and responsibility I have at this organization.” one of the interview participants shifted from a light, jovial tone to a more serious and low-key way of expressing himself. He sighed deeply a few times and then continued with obvious emotion.

“Um… I have an interesting relationship with the authority and responsibility that I have there at the organization. It’s one of seriousness, but it can’t be taken seriously. … I would click right down the middle, because while I like the opportunity to explore that dichotomy that relationship,… that opportunity to explore that relationship, but not gaining from it. And not gaining from it on an
ego level, you know… And to use it as little as possible. To use it only when necessary.”

In this quote the interview participant was making a distinction between being accountable versus using positions of authority for egoistic reasons. The egoistic leadership issues raised in this quote, can be partially illustrated by a quote from an individual that worked in a different organization.

“Well, the frustrating thing for me is that it is a little bit of an ego thing. Um, you know I’m atypical for an outdoor educator and I have had a lot of responsibility in my previous life, and then when I have someone second-guessing me it’s like, I think I know what I’m doing thanks.”

This item resulted in a change of paraverbal communication for at least three interview participants. The issue in all cases was in regards to egoistic authority. In contrast, individuals generally positively responded to having the ability to influence decisions, the creative freedom to design and implement different elements of the courses, and the responsibility of being accountable for those choices. The potential that the current phrasing may be objectionable suggests that this item should either be presented as one of the last items, the wording should be changed to be less emotional, or the item should be dropped.

Similarly, survey respondents may stop responding because the wording of an item implies to them that they are not part of the target population of the survey. The most common term in this category was “company.” The term, “company,” occurred in two items, “How long have you worked for this company?” and “I fit with the company’s
Members of the expert panel and interview participants described “company” as sounding too “corporate” and felt that this term did not describe their organization very well. This interpretation of “company” as being more appropriate to describe organizations in the private for-profit sector is echoed by common dictionary definitions of “company” (Farlex, 2009; Miller, 2009). When queried, interview participants felt that “organization,” a term that was also used in the original set of items, was more inclusive of AE groups from all three sectors of the economy. Other terms that were found to be objectionable or inappropriate included “work teams”, “work committees”, and “prospects”.

The two terminological issues were ambiguous terms and objectionable or inappropriate terms. Both of these issues could lead to false variability and/or missing data. The next most prevalent type of issue was the failure of items to assume the proper context for seasonal AE instructors.

**Context.**

The context issue is similar, in some ways, to the inappropriate term problem. In contrast to the terminology issues relating to the inappropriateness of a single term or phrase, the context issues are cases where the entire item falsely makes assumptions about this group of workers. In six items, the assumption in the item was false because the question assumed a specific context that was not generally true for this group of workers. In 16 items, a simple context was assumed while respondents reported a more complicated context.
**False specific context assumed.**

In some cases items implicitly assumed a specific reality that was not true for this group of workers. For example, the item, “How many coworkers do you interact with regularly?” can be used to illustrate this issue. This item assumes that regular interaction builds social and professional organizational links; however, this item assumes that the coworkers referenced by this item will continue to be with the organization and hence continue to embed the respondent in the organization. Unfortunately, this assumed reality is often not the case in many AE organizations which suffer from high rates of turnover (Beeson, 2008; Frankel, 2009). If the assumption of the item was modified based on the current reality of high rates of turnover that many AE organizations are currently experiencing, then these strong links with current coworkers would lead to reduced job embeddedness (Feldman & Ng, 2007).

Interview participants reported a similar incongruity between the assumptions of the original job embeddedness items and the reality of seasonal AE instructors when responding to the item, “How many coworkers are highly dependent on you?” Seasonal AE instructors work in pairs or small groups in remote back country settings. Therefore, for many participants, they only counted this person as being “highly dependent” on them. However, AE educational expeditionary courses are also discrete. At the end of the course the dependency between instructors dissolves. Therefore, the embedding links assumed by this item also terminate at the end of a course. This reality implies that measuring this type of dependency is not appropriate for this group of workers at the level of the individual employee.
Incongruity between assumptions of a simple and a complex reality.

 Implicit in the phrasing of the original 40 items was the assumption that the survey respondents had one place that they lived (community) and another place that they worked (organization). In contrast, this assumption often did not fit the nomadic reality of this sample of seasonal AE instructors. The entire sample of cognitive interview participant reported that they had lived and worked for multiple organizations and in multiple locations in the previous 12 months.

 Items that made this implicit assumption of a single community included, “I think of the community where I live as home.” and, “Leaving this community would be very hard.” In both of these cases the term “community” was problematic. Many of the participants had lived in multiple locations so the simple single residence assumption inherent in the item was inappropriate given the complex reality of seasonal AE instructors.

 Context complexity.

 Many of the original job embeddedness items contained assumptions about the context of the respondent lives that were not true for this group of workers. In some cases, the assumed specific reality was not true. And in other cases, an item assumed a simple reality when this group of workers’ actual reality was more complex.

 One final example will be used to illustrate how a single item could include both types of context issues. The item, “Do you own the home you live in?” assumes a simple reality that is fundamentally different from that experienced by seasonal AE instructors and, at the same time, simpler than the one reported by many of the seasonal AE instructors in this sample. This item assumes that the ownership of such a
large non-portable asset, a house, would embed an individual in their community. The assumption is two-fold. First, it is assumed that the worker would feel more invested in the community if they owned a major asset in that community. Second, it was assumed that the costs (time and money) involved in selling a house would be a barrier to exiting a community.

These assumptions about the relationship between home ownership and job embeddedness often did not hold in the case of this sample of seasonal AE instructors. Most of the seasonal AE instructors in this sample reported that they did not live in the same location throughout the year. Therefore, even if an instructor were to own a house, the impact of the house on the instructor’s level of embeddedness would be dependent on the location of the house. If the house was located in the individual’s off-season location, then it would theoretically increase the instructor’s relative embeddedness in her off-season location. In a simple sense, this relative increase of the degree of embeddedness in the off-season location would result in a relative decrease in the level of embeddedness in the seasonal AE location.

This assumption is also undermined by a basic benefit that is provided by seasonal AE instruction. Seasonal AE instructors live in the field while they are working. Moreover, some major AE organizations, such as Outward Bound, provide seasonal shelter to their instructors, even when their instructors are between contracted courses. Therefore, if an instructor is a renter, she could simply stop paying rent and
not have to pay for shelter during the AE season\(^8\). In contrast, a home owner would need to keep making mortgage payments during the AE season or suffer the loss of all previous investments in the house. Therefore, the renter would get a basic benefit (the money not paid in rent or a mortgage) that the homeowner would not receive. Therefore, the inflexibility of home ownership would cause home owners to be relatively less embedded as seasonal AE instructors rather than being more embedded, as was originally assumed.

Beyond this basic false assumption, there were problems with the term “home”. This issue may at first seem to be an ambiguous term issue; however, the term was only ambiguous because of the complexity of living situations reported by many seasonal AE instructors. Participants asked if they could consider a car or a tent as a home, or if the item was only referring to a more sedentary structure such as a house or an apartment. Moreover, many of the interview participants had lived in multiple locations in the recent past. These interview participants were confused as to which of these locations they should reference when responding to this item.

On an even more basic level, one of the interviewee responses undermined the basic assumption of the item that all workers have a home. Before entering his response into the survey about home ownership, an interview participant stated,

\(^8\) Assuming that she was not locked in with a lease agreement.
“That’s a good question, I was just thinking about that. It’s easy to say my truck, but I also might say I’m homeless. Because I drive around and live all over the place, or I have a lot of homes. I don’t know.”

There were two basic types of context issues. First, some of the items contained a simple assumption that did not hold true for the sample of seasonal AE instructors. Second, some items assumed a simple assumption when the actual experience of instructors was more complex. The next issue will discuss the related issue of the importance of a particular item for the overall level of job embeddedness for seasonal AE instructors.

**Importance.**

Beyond the issues with terminology and context, there were also four items measuring issues which may have been important for previous validation samples, but did not appear to be important embedding factors for this population. For example, family connections did not appear to be an important embedding factor. Two items touched on this issue, “How many of your family members live nearby?” and “My family roots are in the community I live in.”

Proximity to family or family roots was almost universally reported by interview participants as being not important to their own level of job embeddedness. One participant stated that her choice to enter the industry was coupled with an assumption that she would not be geographically close to her family. This participant and two other participants stated that although they were very close to their family members, they used electronic media (e.g., cell-phones, e-mail, internet social networking sites) to maintain those familial connections.
Conversely, respondent comments sometimes highlighted that the original set of job embeddedness items did not attempt to measure some most of the most important aspects of their embeddedness. For example, one instructor talked about her loyalty to her students as one of the primary factors that kept her embedded in her organization.

**Other issues.**

Most of the issues with using the original set of job embeddedness items were either terminology, context, or importance issues; however, there were other issues that did not neatly fit into these categories. These included differences in recall strategies, ambiguous response formats, and one interpretation of an item as a double-barreled question.

First, there was variability in the ways that individuals recalled requested duration information, and the confidence they expressed in the accuracy of these responses. Variation in the heuristics used to recall information may systematically bias survey responses (P. M. Podsakoff, et al., 2003).

The first item, “How long have you been in your present position?” will be used as an example. Some individuals recalled their tenure in weeks while others did not. When asked if they could recall their tenure in weeks, individuals that did not normally think of their tenure in terms of weeks often stated that recalling their tenure using weeks as a unit of measurement would be inaccurate or “rough”.

There were also some indications that some individuals had a difficult time recalling data. For example, some respondents had difficulty recalling accurately when they experienced a change in position. It is unclear whether this issue is limited to this
population of workers or could be a larger issue that affects the recall for many other
groups of workers.

Second, for this same item, the preferred response format varied between
individuals. This seemed to be at least partially a result of how their primary AE
organization quantified their experience. Preferred units of measurement included
weeks, years, and seasons. Each of these formats had potential weaknesses. Some
individuals spoke about years; however, most of these individuals had only worked a
limited number of weeks during these “years” of employment. Similarly, if individuals
chose to report their time in seasons, the length of the season often dramatically
differed between individuals. Weeks may be the most precise of the preferred response
formats; however, this may lead to false precision since it was difficult for individuals
that did not normally think of their tenure in weeks to recall their tenure in the unit of
weeks over a multi-year period.

Last, there was one item that was interpreted as being a double barrel question.
“I have a lot of freedom on this job to decide how to pursue my goals.” The item was
interpreted as a double barrel question by only one of the respondents. She felt that it
was asking her to not only evaluate her freedom, but also to judge her ability to pursue
her goals, which she saw as two different things. Even though pervasiveness of a
problem is not necessarily a test of the severity of a problem, this last issue was only
mentioned by a single participant. Moreover, it is a basic item construction error that
would likely have been addressed by previous researchers that had used the scale⁹.

This contrasts with some earlier issues that were identified in multiple items.

**Summary.**

Regardless of the degree of pervasiveness, the results from the first wave of data collection show the cornucopia of threats to validity that were identified. The breadth and depth of threats to the validity of the use of the original set of items were both extensively spread across almost all of the items and intensively involved many aspects of the survey item response process. It is likely that additional issues may be discovered if additional interviews were conducted (Beatty & Willis, 2007; Blair, Conrad, Ackermann, & Claxton, 2006); however, the data shows that this set of items clearly does not accurately measure the most important aspects of the job embeddedness domain. After this data was collected and subjected to an initial analysis, another wave of cognitive interviews was conducted to address the second research question.

**Results from a Preliminary Modification of the Job Embeddedness Items**

Table 4.2 below shows a comparison of the number of original job embeddedness items versus the preliminary number of seasonal AE instructor items. The number of items from the original instrument (Mitchell, Holtom, Lee, et al., 2001) are compared to the number of modified preliminary items for seasonal AE instructors proposed by this study (Appendix I). These items are organized based on the

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⁹ This assumes that they gathered some type of content validation evidence, which has shown to not be generally true beyond the first study (Mitchell, Holtom, Lee, et al., 2001).
theoretical dimension and sub-dimension of the job embeddedness construct. Note that
the preliminary set of modified items includes a skip logic that allowed individuals that
indicated that they were married or had a committed partner to answer items from the
Community Links: Social sub-dimension that were semantically different for married
versus single individuals.

Table 4.2. Number of Original versus Preliminary Items

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Sub-Dimension</th>
<th># of Original Items</th>
<th># of Preliminary Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Links</td>
<td>Tenure</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Social</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Psychological</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Financial</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Community Links</td>
<td>Place</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Social</td>
<td>4</td>
<td>9 married, 8 Single</td>
</tr>
<tr>
<td></td>
<td>Financial</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Psychological</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Organizational Fit</td>
<td>Employees</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Values</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Future</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Demand for KSAOCs</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Culture</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Table 4.2 (continued). Number of Original versus Preliminary Items

<table>
<thead>
<tr>
<th>Community Fit</th>
<th>Place</th>
<th>2</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Social</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Activities</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Organizational</td>
<td>Holistic</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sacrifice</td>
<td>Non-Portable Benefits</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Status</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Overall Job</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Work Situation</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Advancement</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Pay</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Community Sacrifice</td>
<td>Leaving</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>40</td>
<td>68 married, 67 single</td>
</tr>
</tbody>
</table>

The items in Table 4.2 are organized based on the original theoretical structure of the job embeddedness construct (Mitchell, Holtom, Lee, et al., 2001).

All except one of the items were either modified or eliminated. The only item that was not modified was, “Are you currently married or living with a significant other?” Respondents universally saw the item inquiring about marriage or living with a significant other as having no terminology issues (as modified by Cunningham, Fink, & Sagas (2005)), being appropriate for the seasonal AE context, and possibly being important to the level of job instructor’s level of embeddedness. In contrast, the first wave of cognitive interviews found this to be the only item that was not laden with such issues. Therefore, an initial set of modified items was created based on the data in the
first wave of cognitive interviews that focused on the original set of job embeddedness items.

By intent, this modified set of items does not always measure the exact same aspects of job embeddedness as the original items. This goes back to the issue of importance. In some cases, certain issues in the original set of items were evaluated by the expert panel and interview participants as not being an important determinant in the level of seasonal AE instructors’ level of embeddedness. In other cases, the expert panel and first wave of cognitive interviews highlighted aspects of the domain that were potentially more important to seasonal AE instructors’ embeddedness.

This small shift is not surprising given statements by previous authors (e.g., Mitchell, Holtom, Lee, et al., 2001) that since job embeddedness is a composite construct not all aspects of the construct would be equally as important to different groups of workers. Therefore, although the focus of some of the items shifted from the original modifications, the modified items do continue to follow the originally theorized structure of the construct (Mitchell, Holtom, Lee, et al., 2001).

The modifications to the original set of job embeddedness items were based on the issues elaborated on earlier in this chapter. The basic result from the 11 cognitive interviews in the second wave of interviews was that the modified items were not hindered by the plethora of issues that harried the original set of items. After some slight semantic changes following the first three interviews, no potential causes of respondent error were identified in the rest of the interviews in the second wave of interviews. Please see Appendix H for a more detailed summary of the results of this wave of cognitive interviews.
Summary.

Cognitive interviews resulted in data that conflicted with the implicit assumption in the literature that the original set of job embeddedness items are valid for all groups of workers. All but one of the original items were found to have issues that would likely negatively impact the veracity of survey responses. Most of these issues can be classified as either problems with the terms in the items, the implied context, or the importance of the subject of the item to seasonal AE instructors’ level of embeddedness. Based on these issues a set of embeddedness items were modified and tested using a second wave of cognitive interviews. In contrast to the first round of cognitive interviews looking at the original job embeddedness items, the second wave of cognitive interviews found very few issues with the modified set of items.
Chapter 5

Discussion

The results presented in the previous chapter summarized some of the potential threats to validity if the original set of job embeddedness survey items were used to measure seasonal adventure educational (AE) instructors’ level of embeddedness. The extensive and intensive nature of these issues highlights the lack of validity that would likely be associated with responses from the original items with this population.

This chapter looks at some of the structural differences between seasonal AE instructors and previous validation samples of workers. These differences have implications for both practitioners and academics.

Structural Differences between Adventure Education Instruction and Previous Validation Work Situations

The cognitive interviews and expert panel identified many instances where the original set of job embeddedness survey items failed to validly measure job embeddedness in the sample of seasonal AE instructors. In some cases this was because the language was very different than was commonly used in AE; however, the primary difference was that there are major structural differences which either made the question not applicable or unimportant for the seasonal AE instructor situation. In other cases, even if the question was applicable and important (i.e., “Are you married or currently living with a significant other?”), the structural differences between seasonal AE instructors and former validation samples of workers meant that the issue highlighted by a particular item had the opposite effect on job mobility as was originally
Theorized. The primary identified structural differences between the seasonal AE instructors' work circumstances and the previous validation samples of employees' include the seasonal nature of the work, the concentration of private nonprofit organizations in the industry, and the expeditionary nature of AE instruction.

**Seasonal nature of work.**

The seasonal nature of the work complicated implicit assumptions in the original items (Mitchell, Holtom, Lee, et al., 2001) concerning location and effect. First, the original set of items assumed a single organization of employment and single community of residence. This was not true for any of the individuals in this sample because they all worked and lived in multiple locations. Some of the interviewed instructors lived or worked at more than six different distinct locations and all worked in at least two different locations. Second, the assumption was that increased levels of embeddedness in both the organization that an individual works in and the community that she or he lives in should subsequently increase retention. This assumption is highly complicated because of the multiple locations that the participants lived and worked in. The interview participants' responses indicated that it wasn't the individual’s *absolute* level of embeddedness in any one location or organization, but the level of embeddedness in the AE organization *relative* to the level of embeddedness in all other organizations and communities that the individual is involved with that is important for embedding.

Instructors mentioned many embedding factors developing in their off-season communities. These included romantic relationships, community commitments, and financial commitments. One instructor who spoke about his “full life” outside of his
seasonal AE instruction said, “I mean people make great sacrifice to be there, the pay isn’t great. I mean you have to uproot, and sacrifice to be there.” Another instructor spoke about the negative impact that being gone for a couple of months took on the “balance” he worked hard to create with his wife and community. Finally, when a recently married instructor was asked how getting married affected her choice to continue working in AE she stated,

“Well it hinders it because now I actually miss somebody (chuckle). Whereas before, I didn’t really give a crap. And so there’s, I feel like I have to consider him in my decisions. I can’t just leave for three months without considering the impact on him.”

Therefore, job embeddedness must be thought of as a concept that is tied to geographical locations and organizations. And when those geographical locations and organizational ties vary across seasons, the relative level of connections to those locations and organizations is an important variable when determining the absolute level of embeddedness for employees at any single organization.

Nonprofit.

The previous groups of samples of employees with which the job embeddedness survey items were validated were concentrated in the private for-profit sector (i.e., medical, grocery, finance) (Holtom & O’Neill, 2004; Lee, et al., 2004; Mitchell, Holtom, Lee, et al., 2001). There was one study in the public (military) sector (Fletcher III, 2005; Hassell, 2005) and one that used a sample from a private nonprofit sector.
(Cunningham, et al., 2005); however, neither of these reported gathering any content validation evidence.

It is difficult to definitively state what portion of AE organizations are in the private for-profit versus private non-profit sectors since the Bureau of Labor Statistics does not use AE as one of the standard industrial classifications; however, there seems to be some evidence that seasonal AE instructors are concentrated in the private nonprofit sector. To start with, the two largest AE organizations, Outward Bound and NOLS, are both private nonprofit organizations. Moreover, only one of the seven organizations that interviewees worked with in this sample was a private for-profit organization.

On a conceptual level, private nonprofit organizations may be interested in embeddedness at a different level compared to private for-profit organizations. Feldman & Ng (2007) argued that employees can be embedded at the level of the job, organization, or occupation. They defined occupational mobility as switching to a new function that required an entirely different set of KSAOCs (knowledge, skills, abilities, and other competencies). In contrast to the name of the construct, job embeddedness, the original set of items focuses on embeddedness at the organizational level. Indeed, the primary criterion used with job embeddedness, turnover, is most often defined in a similar manner as it is in this study, as employees separating from the organization (e.g., Abelson, 1987; Birmingham, 1989; Kacmar, et al., 2006). Given all of the associated direct and indirect costs of turnover listed in the introduction of this dissertation, it seems appropriate to focus on embeddedness at the organizational level. However, while both private for-profit and private non-profit organizations both need to efficiently manage their resources in order to effectively continue their operations, the
two sectors missions are focused at different levels. The private for-profit sector’s focus on profit is necessarily at the organization level. In contrast, the private non-profit sector’s focus is often focused beyond the organizational level (Brown & Yoshioka, 2003). If a private for-profit organization is earning a profit then it has met the litmus test of success for the sector. Whereas, a nonprofit organization can find itself managing its resources in such a way that it is covering all of the organizational costs and even acquiring surplus revenue; however, if it is not achieving its more socially focused mission, then it cannot be thought of as being successful. This difference means that the AE organization’s concentration in the nonprofit sector is interested in employee embeddedness at an organizational level, but also at a mission level.

For example, part of Outward Bound USA’s mission states, “To inspire character development and self-discovery in people of all ages and walks of life.” NOLS mission is to teach, “…wilderness skills and leadership that serve people and the environment.” This focus on the mission was often reported to be very important to the instructors in this study. One instructor with three years of experience at her primary AE organization stated, “Well that’s why I’m with <Primary AE organization>. That’s why I’m working for <Primary AE organization> instead of <a different AE organization>.” Moreover, an instructor working for that other AE organization, said nearly the same thing about why she was working for her organization. The relatively larger focus on the mission in the nonprofit sector and the reoccurring centrality of the mission as one of the important embedding factors for the interviewed instructors suggests that the level of embeddedness that should be focused on should not be just at an organizational level, but should also be at a mission level.
Most AE organizations appear to be concentrated in the private non-profit sector. This is different than organizations in previous samples of workers. This difference is important because organizations in different sectors may value embeddedness at different levels (job, organization, mission, or occupation) differently.

**Expeditions.**

The definition of AE used in this study stated that educational expeditions needed to be a primary element of the experience. These educational expeditions are usually self contained groups that take care of their own needs as they travel through the outdoor environment. The instructors are responsible for both the educational as well as the health and safety needs of students on these educational expeditionary courses. AE instructor’s use of expeditions results in intensive work schedules, job responsibilities that don’t overlap between courses, and remote living situations. These factors make AE work situation different from the work circumstances of previous validation samples of employees.

The original set of items assumed that employees go to work, work a period of time, and then return home to sleep. This seems to have been a reasonable assumption for the previous samples of employees who likely worked 40 or 50 hours a week at a work site and then normally slept at a “home” site. Even in the case of nurses or grocery store workers, the hours worked may have deviated from a standard 8 to 5 schedule; however, they likely go to some other place than their workplace at the end of their shift to eat dinner (or breakfast for the graveyard shift) and get some sleep. In contrast to the 40 to 50 hour work week, AE instructors are often in the field working with AE participants every hour of the week (168 hours) for the extent of the educational
expedition. The time intensiveness of working expeditions is markedly different than the work circumstances of groups of employees in the previous job embeddedness studies.

Most of the instructors reported that the participants on the educational expeditions they led were mutually exclusive. The exceptions to this situation are organizations that have multiple expeditions with the same group of participants. For example, Passages Northwest conducts a program with multiple discrete outings called Girls Rock. However, Girls Rock appears to be an exception. Most educational expeditions are intensive, reoccurring, projects with mutually exclusive participants. Instructors, especially those at larger organizations, often reported that most, if not all, of their employee responsibilities to the organizations end at the completion of the contracted course. This situation differs sharply compared to the work situation of nurses or accountants that may work on many different projects that are daily interrupted with a return to the employee’s residence. One of the interviewed instructors contrasted his former work situation in marketing where he had multiple, overlapping projects that lasted for indefinite periods of time compared to the more discrete AE educational expeditions he instructed.

“You don’t get projects that linger for two and a half years <at the AE organization>. You know, the <Outdoor gear organization> brand book does not linger around the <AE organization> base camp for two years. The courses are prep, during and post. They’re finite. “

While the “finite” quality of educational expeditions may be appealing to instructors it also means that many of the more common “organizational” elements of the original set of job embeddedness items do not have the same continuous embedding force for
seasonal AE instructors as they have had with previous groups of employees. An example of this was the dependency issue reported in the results chapter.

Finally, a majority of the instructors interviewed led educational expeditions that were based out of remote wilderness locations. Many of these instructors reported living on the organizational location before, after, and in between instructing educational expeditions. Rather than having one location for their residence and one for their work, the two locations were merged. Interview participants reported finding not only their work needs from the organization, but also their community needs.

**Summary.**

This study found that both the topics that were focused on and the wording of the original job embeddedness survey items often failed to be interpreted and responded to by the participants in the intended manner and in some cases did not appear to have the same effect on embeddedness as was originally theorized (Mitchell, Holtom, Lee, et al., 2001). This result largely stems from a dramatically different work structure between the original validation samples that were used to construct the original set of job embeddedness survey items and the work circumstances of the sample of seasonal AE instructors in this study. These differences include seasonality, concentration in the nonprofit sector, and the expeditionary quality of the work.

**Limitations**

This study fits with the assumption that science is a process of accretion of knowledge. The preliminary set of survey items for measuring job embeddedness in a seasonal AE instructor population represent the first steps at providing a survey
instrument to measure the relatively new construct of job embeddedness for a seasonal AE instructor population.

This preliminary set of items involved balancing multiple trade-offs. While the modification to the items often improved the ability of researchers to interpret the survey results, they also resulted in an increased number of items and words per item. These changes may likely increase the cognitive burden leading to higher levels of respondent fatigue experienced by survey participants (Dillman, 2007; Willis, 2005). Increased respondent fatigue can lead to increased early quits and decreased quality of responses. This problem would only be magnified if the items were coupled with another set of items intended to measure job satisfaction or some other construct of interest.

This issue is balanced by the assumption that further studies focusing on providing construct and criterion validation evidence may eliminate some of the current items. Moreover, some of the additional items may end up gathering demographic data (e.g., tenure at current AE organization(s)) that would likely need to be gathered anyway.

Finally, this study did not address some of the limitations of the instrument that have been previously mentioned. For example, this study did not address the current potential issues between the incongruity of some of the response formats and the classical test theory assumptions about the parity of items.

Implications

The results of this study have implications for both academic and practitioner audiences. Since this is an instrument development study the implications for the use
of survey instruments by academics may be more obvious. However, the structural differences between the work situation of this group of workers and those of previous workers suggests that retention strategies based on job embedded concepts may need to be modified to be effective for seasonal AE instructor populations.

**Academics.**

There are two major implications for academic audiences. First, the study highlights the need for content validation evidence beyond the initial study developing a construct. Second, the study has implications for the conceptualization of the job embeddedness construct.

This study highlights the need to understand what the “right questions” are before they are used. Although many bits of data could have been gathered by simply surveying a sample of seasonal AE instructors with the original set of items, it would have been an infamous example of the adage, “garbage in, garbage out.” This example raises the need for the gathering of content validation evidence if survey items that were previously validated on groups outside of AE are being used with an AE population.

Similarly, researchers and other experts may create survey items that are actually interpreted in a manner that is substantially different than how the researchers originally intended for them to be interpreted. These possibilities highlight the need for researchers to go beyond the traditional pilot test, and gather further content validation evidence using techniques such as cognitive interviewing when creating new surveys.

This study also has implications for how academics conceptualize and operationalize the job embeddedness construct. Due to the composite nature of the construct academics need to understand how job embeddedness manifests in their
intended population. For example, this study found that the original items contained multiple assumptions that were not true for this sample of workers. The original set of items were assumed a more limited geographical location, a greater concentration in the private for-profit sector, and a less intensive working schedule than was true for this sample of seasonal AE instructors.

**Practitioners.**

The seasonal nature of the work, the concentration of AE organizations in the private nonprofit sector, and the centrality of educational expeditions all have implications for practitioners. These major structural differences not only impact how job embeddedness should be measured in this group of employees, but it also affects the preferred turnover management strategies.

Scholars have made very thorough lists of employee retention strategies based on the job embeddedness construct (i.e., Holtom, et al., 2006; Holtom & O'Neill, 2004). However, the structural differences between seasonal AE instructors compared with previous validation samples of employees suggest that these strategies may need to be altered. As Holtom and colleagues state, “Employee competencies vary across business strategies, and it is likely that their needs, desires and values also vary. Thus, practices that promote retention for one firm may not be as effective for another” (Holtom, et al., 2006, p. 317). Rather than repeat a previously stated exhaustive array of suggestions, listed below are three employee retention strategies that derive directly from the structural differences found between how seasonal AE instructors are embedded compared to other groups of employees.
**Hiring.**

Given the strong shared interest that both seasonal AE instructors and nonprofit AE organization have in the organization’s mission, especially at the beginning of the employee’s tenure (Wilson, 2008a), it is important to hire employees that strongly identify with the mission of the organization (Bocarro, 2005). This reinforces other research in the nonprofit sector that shows that mission attachment is especially important for employees who don’t work traditional full-time work schedules (Brown & Yoshioka, 2003). After a basic understanding of whether or not the individuals have the knowledge, skills, abilities, and other competencies required by the organization, interviewers should seek to understand the candidate’s commitment to the mission.

After the initial interview, realistic job previews need to be provided so that the candidate understands the circumstances under which she or he will be working and the participants she or he will be working with. While some individuals may have already experienced extensive outdoor recreation expeditions or may have even been a student on an AE educational expedition, interview participants reported that it was different leading educational expeditions compared to being a participant. While many participants talked about the joy they had working with students, others spoke of colleagues who became bitter or burnt out from so much intensive contact with participants in the field (Balfour & Neff, 1993). Another interview participant talked about feeling disconnected from the modern world. He reported feeling “dumb” after being out of touch with the national media for months at a time. Although realistic job previews is not a new strategy (Branham, 2005; Holtom & O’Neill, 2004), it is perhaps even more important for hiring seasonal AE instructors who don’t have previous AE
instructional experience. Instructing extended educational expeditions is an experience that differs from most modern experiences and there is a real potential for a candidate to have false expectations based on his or her experience as an AE participant or his or her experience on recreational expeditions. Although a verbal job preview may start this process during the interview process, this task could be accomplished more experientially through an initial intensive training experience with other new staff.

**Witnessing changes.**

As previously noted, most of the instructors in this sample worked with different groups of AE program participants for each educational expeditionary course they taught. Many of the instructors reported that one of the factors compelling them to come back every season was a desire to continue to impact program participants’ lives. For example, one instructor stated, “Being able to share that with young people, is I believe one of my reasons for being here on the planet. So that’s why I feel comfortable volunteering so much of my time, because, you know, payment is more than a paycheck.”

This impact may be difficult to see in a single episode. During the educational expeditionary courses the instructors are consistently in contact with students. The changes that occur for some students may be gradual and some of the major changes may only be apparent to the student only after they return to their home environment. In contrast, some of the interview participants that worked with course participants across many episodes reported wanting to come back in order to see the development of their previous participants. Similarly, some instructors reported staying in contact with former participants with social networking sites. For those organizations where it is difficult for
instructors to see the fruits of their labor, organizations can help facilitate this embedding factor by working to have the same participants participate on multiple educational expeditions over time so that instructors can witness changes that they have helped facilitate in the AE program participants.

*Scheduling.*

Due to the relative importance of social connections for the embeddedness of instructors, the organization should do everything in its power to support the creation and maintenance of social bonds between staff within the organization. As discussed in the results chapter, the non-overlapping episodic nature of expeditions in AE limits the degree of professional compulsion that AE instructors may feel to not let their teammates down, because at the end of the course, the professional team dissolves. This makes social bonds even more important in AE compared to the previous industries studied in the job embeddedness literature. Interviewed instructors talked about the “double-edged sword” or friendships in AE. They spoke of having intensive experiences working in the field with another individual, but then being sucked away by the seasonal lifestyle and remote courses and not having opportunities to maintain those friendships. An instructor reported that in his organization it was possible to go the whole season without seeing other instructors working that same season because their breaks between courses did not coincide. Given the apparent importance of social embeddedness to overall embeddedness in AE, it may behoove organizations to schedule courses in such a manner as to allow the maximum number of individuals to be out of the field at the same time. During these periods, the organization could
provide socializing opportunities to reinforce organizationally centered community embeddedness.

**Career Building.**

Since the type of work studied here is seasonal, by definition, employees need to find something else to do when they are not working for the organization. This off-season career is important to AE organizations, because it may be that instructors’ turnover intentions may develop during the off-season when faced with the associated challenges of finding off-season work. While some organizations may be able to offer year-round work in the organization it may be more practical for other organizations to help employees find off-season work. Ideally, this work would have a season that complements the AE organization’s season and similarly contributes to the mission of the AE organization.

Finally, organizations should help instructors think about how their time in the organization fits with their long-term goals. Following a period of initial training, individuals need to understand the career options available to them both inside and outside of the organization. Internally, individuals need to understand the possible trajectories available to them. Many of the interview participants spoke of their chagrin that after the first couple of years, the only promotions available to them would take them out of the backcountry. Another mentioned colleagues that became bitter about continuing to promote AE program participant growth and development, but not receiving that same level of development for themselves. One interviewed instructor believed this was because instructors often do not understand how their needs will change and need assistance planning a career within and beyond “the field”. Some
individuals may have a relatively long career in AE. For example, multiple individuals in the group of employees had worked for their primary organization for over a decade. These individuals mentioned that they had received promotions that had allowed them to stay in the field. However, the relatively flat structure of many organizations may not make it possible to promote individuals and allow them to stay in the field. In these cases, it may be best to facilitate the promotion of the individual outside of the organization.

There are multiple reasons for organizations to support an instructor’s career trajectory outside of the organization. From a mission perspective, it may be desirable to encourage and support individuals to develop their careers in such a way as to continuing supporting the objectives of the AE organization’s mission, whether that is increasing the general level of knowledge of environmental ethics or inspiring human potential. From an organizational perspective, organizations want instructors to be enthusiastic about their time working for the organization in order to increase word of mouth participant and staff recruitment and increase the potential of long-term donations from former instructors.

**Future Research**

In the first chapter of this dissertation, it was mentioned that this study was based on previous studies and is a prologue to future research. There are a couple of areas for future research that are suggested by this study.

First, further validation evidence needs to be collected for the preliminary set of modified items. Although this study provides a large amount of content validation
evidence, further construct and criterion validation data are required to further develop and provide evidence about the validity of the set of items.

Second, This study is a response to previous authors (e.g., Mitchell, Holtom, Lee, et al., 2001) who suggested that job embeddedness may not uniformly manifest itself in all groups of workers. This study has found reasons why job embeddedness does not manifest itself in the same manner in this sample of seasonal AE instructors as in previous groups of workers. This raises the question of whether this group of workers is just an isolated case or if the original set of items (Mitchell, Holtom, Lee, et al., 2001) would also fail to accurately measure the most important aspects of job embeddedness in other groups of workers that makeup the 15% of all American workers who work contingent or alternative work arrangements (U.S. Bureau of Labor Statistics, 2005a). Further research is needed in this area so that researchers know which of the assumptions inherent in the original set of job embeddedness items (Mitchell, Holtom, Lee, et al., 2001) hold true for different groups of workers.

**Summary**

The preliminary set of items for measuring seasonal AE instructor embeddedness requires further validation evidence to be collected. However, the content validation evidence in this study does support the notion that the original set of job embeddedness items does not accurately measure the most important aspects of job embeddedness for seasonal AE instructors. This study summarizes the issues and the potential roots of some of these issues that make seasonal AE instructors different from previous validation samples of workers and offers a preliminary set of item to more validly measure embeddedness in seasonal AE instructor populations. These results
have implications for how job embeddedness based retention strategies are applied, how surveys items are used, and how the job embeddedness construct is conceptualized.
## Appendix A. Items Used to Measure Job Embeddedness

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<td>I really love the place where I live.</td>
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<td>The weather where I live is suitable for me.</td>
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<td>This community is a good match for me.</td>
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<td>I think of the community where I live as home.</td>
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<td>The area where I live offers the leisure activities that I like.</td>
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<td>I like the family-oriented environment of my community.</td>
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<td>The job was located in the area where I wanted to live.</td>
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<td>I feel compatible with where I live. (global item)</td>
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<td><strong>Fit to Organization</strong></td>
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<td>I like the members of my work group.</td>
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<td>My coworkers are similar to me.</td>
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<td>My job utilizes my skills and talents well.</td>
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<td>I feel like I am a good match for this company.</td>
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<td>I fit with the company's culture.</td>
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<td>I like the authority and responsibility I have at this company.</td>
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<td>X</td>
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<td>My values are compatible with the organization's values.</td>
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<td>I can reach my professional goals working for this organization.</td>
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<td>I feel good about my professional growth and development.</td>
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<td>I feel personally valued by (name of organization).</td>
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<td>I like my work schedule (e.g., flextime, shift).</td>
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<td>This was the kind of work I was most interested in doing.</td>
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</tr>
<tr>
<td>I could use the skills I learned in graduate management school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel compatible with my organization. (global)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Links to Community</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you currently married?</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>….or living with a significant other?</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>If you are married, does your spouse work outside the home?</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Do you own the home you live in?</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>My family roots are in the community I live in.</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many family members live nearby?</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
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<td>----------------------------</td>
<td>--------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>How many of your close friends live nearby?</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>How old are you?</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many children are you a parent or guardian for?</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel a strong link with the community. (global)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Links to Organization</strong></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How long have you been in your present position?</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>How long have you worked for this company?</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>How long have you worked in this industry?</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>How many coworkers do you interact with regularly?</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
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<td>------------------------------------------------------------------</td>
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<td>---------------------------------</td>
<td>-------------------------------</td>
<td>--------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>How many coworkers are highly dependent on you?</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>How many work teams are you on?</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>How many work committees are you on?</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>The quality of people who worked for the company was good.</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel a strong link with my organization. (global)</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Community Related Sacrifice</strong></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leaving this community would be very hard.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>People respect me a lot in my community.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>My neighborhood is safe.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
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</tr>
<tr>
<td>I would sacrifice a lot if I left this community. (global)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization Related Sacrifice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have a lot of freedom on this job to decide how to pursue my goals.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>The perks on this job are outstanding.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>I feel that people at work respect me a great deal.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>I would sacrifice a lot if I left this job.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
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</tr>
<tr>
<td>My promotional opportunities are excellent here.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>I am well compensated for my level of performance.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>The benefits are good on this job.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>The health-care benefits provided by this organization are excellent.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>The retirement benefits provided by this organization are excellent.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>The prospects for continuing employment with this company are excellent.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>The compensation package was good.</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The opportunities for stock options were good.</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
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<tr>
<td>The bonus program was good.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>The job offered flextime options.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The job offered family-friendly benefits.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>The job offered telecommuting opportunities.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>The company has good growth prospects.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would have to give up many benefits if I left this community.</td>
<td>X</td>
<td></td>
<td></td>
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<td>----------------------------------------------------------------</td>
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<tr>
<td>Reflective items</td>
<td></td>
<td></td>
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<tr>
<td>I feel attached to this organization.</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It would be difficult for me to leave this organization.</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I’m too caught up in this organization to leave.</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel tied to this organization.</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I simply could not leave the organization that I work for.</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It would be easy for me to leave this organization.</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am tightly connected to this organization.</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
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</table>
Appendix B. Expert Panel Initial Contact E-mail

<Jane Doe>,

<X> suggested that you may be willing to participate in my doctoral study looking at <AE staff, staff retention, or modification of an existing set of survey items>. You are being contacted because you have been identified as having expert knowledge of <AE, HR, or SM>.

This study is focusing on the issue of adventure education staff retention. This study will do multiple waves of interviews with adventure education staff about retention issues, but first I would appreciate it if you would provide your expert opinion about how these questions may need to be modified for this group of employees.

Please e-mail me (jadwilso@indiana.edu) to indicate whether you would be willing to participate and a phone number I can contact you at. Moreover, if you know of anyone else with expertise in adventure education, human resources, or survey methods that may want to participate in an expert panel; or individuals that have worked for adventure education institutions in the last year that may agree to be interviewed, then please e-mail me (jadwilso@indiana.edu) their contact information.

I appreciate your help in this research project seeking to <improve AE, reduce adventure educator turnover, or modify a set of survey items for this exciting new application>.

Sincerely,

Jackson Wilson
jadwilso@indiana.edu
(812)202-1553
Doctoral Candidate
Adventure Education
Indiana University
Appendix C. Expert Panel Survey

Expert Panel Survey

Thank You for participating as a member of the expert panel for my doctoral dissertation study. Feel free to contact me (jadwilso@indiana.edu, (812)202-1553) with any comments or questions.

This document is split into six parts. These six parts focus on each of the six dimensions of job embeddedness. Before each set of survey questions pertaining to that particular dimension is a brief description of the dimension. Below each question is a set of questions about the survey question. Please read the survey question and only respond to the survey question if you feel that you have something to say about the survey question.

This research is modifying a set of previously developed survey questions for use with adventure education instructors. Job embeddedness is the psychological concept (construct) of interest and is composed of the connections between an individual, his or her organization of employment, and his or her community. Job embeddedness is the web of connections that make it more difficult for an employee to quit their job.

Please insert your answers into this document and e-mail the document to me by <one week from the date sent to the participant>.

Thank you for your help. Please begin on the next page.
Organizational Links are the connections with individuals and groups that an instructor has in their work organization. Metaphorically, if you think of an adventure education instructor as a tree, then the links are the size and number of roots that she has sunk into her adventure education organization. These connections include relationships with other instructors and logistics staff, as well as supervisors and other administrative staff.

1. **How long have you been in your present position?**
   Do you believe that the question measures the intended theoretical *dimension* of job embeddedness?

   Do you think the question is appropriate for an *adventure education* population?

   Do you think that the question could be confusing or *misinterpreted*?

   Do you think that the way the question is being asked could *bias* the results (i.e. implies that one answer is more correct than another)?

   What suggestions do you have for improving the question?

2. **How long have you worked for this company?**
   Do you believe that the question measures the intended theoretical *dimension* of job embeddedness?

   Do you think the question is appropriate for an *adventure education* population?

   Do you think that the question could be confusing or *misinterpreted*?

   Do you think that the way the question is being asked could *bias* the results (i.e. implies that one answer is more correct than another)?

   What suggestions do you have for improving the question?

3. **How long have you worked in this industry?**
   Do you believe that the question measures the intended theoretical *dimension* of job embeddedness?
Do you think the question is appropriate for an *adventure education* population?

Do you think that the question could be confusing or *misinterpreted*?

Do you think that the way the question is being asked could *bias* the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

4. **How many coworkers do you interact with regularly?**
   Do you believe that the question measures the intended theoretical *dimension* of job embeddedness?

   Do you think the question is appropriate for an *adventure education* population?

   Do you think that the question could be confusing or *misinterpreted*?

   Do you think that the way the question is being asked could *bias* the results (i.e. implies that one answer is more correct than another)?

   What suggestions do you have for improving the question?

5. **How many coworkers are highly dependent on you?**
   Do you believe that the question measures the intended theoretical *dimension* of job embeddedness?

   Do you think the question is appropriate for an *adventure education* population?
Do you think that the question could be confusing or misinterpreted?

Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

6. How many work teams are you on?
   Do you believe that the question measures the intended theoretical dimension of job embeddedness?

   Do you think the question is appropriate for an adventure education population?

   Do you think that the question could be confusing or misinterpreted?

   Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

   What suggestions do you have for improving the question?

7. How many work committees are you on?
   Do you believe that the question measures the intended theoretical dimension of job embeddedness?

   Do you think the question is appropriate for an adventure education population?

   Do you think that the question could be confusing or misinterpreted?
Do you think that the way the question is being asked could *bias* the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

**Overall questions for Organizational Links**

1. Is there any part of *organizational links* that does not seem like the existing questions are addressing?

2. Are there any questions that you would recommend adding to help measure this dimension?
Organizational Fit is how well an adventure educator’s skills, goals, and preferences match with the needs, opportunities, and culture of the adventure education organization. Metaphorically, you can imagine that if the employee is a Western Red Cedar, then she would fit better in a riparian zone on the West coast rather than in a high desert in the Southwest. The following survey questions ask the respondent to indicate their agreement to the question based on a seven point Likert scale.

8. I like the members of my work group.
   Do you believe that the question measures the intended theoretical dimension of job embeddedness?
   Do you think the question is appropriate for an adventure education population?
   Do you think that the question could be confusing or misinterpreted?
   Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?
   What suggestions do you have for improving the question?

9. My coworkers are similar to me.
   Do you believe that the question measures the intended theoretical dimension of job embeddedness?
   Do you think the question is appropriate for an adventure education population?
   Do you think that the question could be confusing or misinterpreted?
   Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?
   What suggestions do you have for improving the question?

10. My job utilizes my skills and talents well.
    Do you believe that the question measures the intended theoretical dimension of job embeddedness?
Do you think the question is appropriate for an adventure education population?

Do you think that the question could be confusing or misinterpreted?

Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

11. I feel like I am a good match for this organization.
   Do you believe that the question measures the intended theoretical dimension of job embeddedness?

   Do you think the question is appropriate for an adventure education population?

   Do you think that the question could be confusing or misinterpreted?

   Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

   What suggestions do you have for improving the question?

12. I fit with the company’s culture.
   Do you believe that the question measures the intended theoretical dimension of job embeddedness?

   Do you think the question is appropriate for an adventure education population?
Do you think that the question could be confusing or *misinterpreted*?

Do you think that the way the question is being asked could *bias* the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

---

13. **I like the authority and responsibility I have at this organization.**
   Do you believe that the question measures the intended theoretical *dimension* of job embeddedness?

   Do you think the question is appropriate for an *adventure education* population?

   Do you think that the question could be confusing or *misinterpreted*?

   Do you think that the way the question is being asked could *bias* the results (i.e. implies that one answer is more correct than another)?

   What suggestions do you have for improving the question?

---

14. **My values are compatible with the organization’s values.**
   Do you believe that the question measures the intended theoretical *dimension* of job embeddedness?

   Do you think the question is appropriate for an *adventure education* population?

   Do you think that the question could be confusing or *misinterpreted*?
Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

15. I can reach my professional goals working for this organization.
Do you believe that the question measures the intended theoretical dimension of job embeddedness?

Do you think the question is appropriate for an adventure education population?

Do you think that the question could be confusing or misinterpreted?

Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

16. I feel good about my professional growth and development.
Do you believe that the question measures the intended theoretical dimension of job embeddedness?

Do you think the question is appropriate for an adventure education population?

Do you think that the question could be confusing or misinterpreted?

Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?
Overall questions for Organizational Fit

1. Is there any part of organizational fit that does not seem like the existing questions are addressing?

2. Are there any questions that you would recommend adding to help measure this dimension?
Organizational Sacrifice is what the adventure education instructor believes would be lost if she quit her job and left the organization. Sacrifices could include a loss of perks or seniority benefits that she enjoys in her organization. It could also be the cost of reestablishing what she can do in a new organization.

17. I have a lot of freedom on this job to decide how to pursue my goals.  
Do you believe that the question measures the intended theoretical dimension of job embeddedness?

Do you think the question is appropriate for an adventure education population?

Do you think that the question could be confusing or misinterpreted?

Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

18. The perks on this job are outstanding.  
Do you believe that the question measures the intended theoretical dimension of job embeddedness?

Do you think the question is appropriate for an adventure education population?

Do you think that the question could be confusing or misinterpreted?

Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

19. I feel that people at work respect me a great deal.
Do you believe that the question measures the intended theoretical *dimension* of job embeddedness?

Do you think the question is appropriate for an *adventure education* population?

Do you think that the question could be confusing or *misinterpreted*?

Do you think that the way the question is being asked could *bias* the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

20. I would sacrifice a lot if I left this job.
   Do you believe that the question measures the intended theoretical *dimension* of job embeddedness?

   Do you think the question is appropriate for an *adventure education* population?

   Do you think that the question could be confusing or *misinterpreted*?

   Do you think that the way the question is being asked could *bias* the results (i.e. implies that one answer is more correct than another)?

   What suggestions do you have for improving the question?

21. My promotional opportunities are excellent here.
   Do you believe that the question measures the intended theoretical *dimension* of job embeddedness?
Do you think the question is appropriate for an adventure education population?

Do you think that the question could be confusing or misinterpreted?

Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

22. I am well compensated for my level of performance.
   Do you believe that the question measures the intended theoretical dimension of job embeddedness?

   Do you think the question is appropriate for an adventure education population?

   Do you think that the question could be confusing or misinterpreted?

   Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

   What suggestions do you have for improving the question?

23. The benefits are good on this job.
   Do you believe that the question measures the intended theoretical dimension of job embeddedness?

   Do you think the question is appropriate for an adventure education population?
Do you think that the question could be confusing or *misinterpreted*?

Do you think that the way the question is being asked could *bias* the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

**24. The health-care benefits provided by this organization are excellent.**
Do you believe that the question measures the intended theoretical *dimension* of job embeddedness?

Do you think the question is appropriate for an *adventure education* population?

Do you think that the question could be confusing or *misinterpreted*?

Do you think that the way the question is being asked could *bias* the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

**25. The retirement benefits provided by this organization are excellent.**
Do you believe that the question measures the intended theoretical *dimension* of job embeddedness?

Do you think the question is appropriate for an *adventure education* population?

Do you think that the question could be confusing or *misinterpreted*?
Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

---

26. The prospects for continuing employment at this organization are excellent.
   Do you believe that the question measures the intended theoretical dimension of job embeddedness?

Do you think the question is appropriate for an adventure education population?

Do you think that the question could be confusing or misinterpreted?

Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

---

Overall questions for Organizational Sacrifice
   1. Is there any part of organizational sacrifice that does not seem like the existing questions are addressing?
2. Are there any questions that you would recommend adding to help measure this dimension?
**Community Links** are the connection with individuals and groups of people that an adventure education instructor has in the community that they live in. These include family, friends, and acquaintances that they recreate or socialize with.

27. **Are you currently married or living with a significant other?**
   Do you believe that the question measures the intended theoretical *dimension* of job embeddedness?

   Do you think the question is appropriate for an *adventure education* population?

   Do you think that the question could be confusing or *misinterpreted*?

   Do you think that the way the question is being asked could *bias* the results (i.e. implies that one answer is more correct than another)?

   What suggestions do you have for improving the question?

28. **If you are married does your spouse work outside the home?**
   Do you believe that the question measures the intended theoretical *dimension* of job embeddedness?

   Do you think the question is appropriate for an *adventure education* population?

   Do you think that the question could be confusing or *misinterpreted*?

   Do you think that the way the question is being asked could *bias* the results (i.e. implies that one answer is more correct than another)?

   What suggestions do you have for improving the question?

29. **Do you own the home you live in?**
   Do you believe that the question measures the intended theoretical *dimension* of job embeddedness?
30. My family roots are in the community I live in. 
Do you believe that the question measures the intended theoretical dimension of job embeddedness?

Do you think the question is appropriate for an adventure education population?

Do you think that the question could be confusing or misinterpreted?

Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

31. How many of your family members live nearby? 
Do you believe that the question measures the intended theoretical dimension of job embeddedness?

Do you think the question is appropriate for an adventure education population?
Do you think that the question could be confusing or misinterpreted?

Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

32. How many of your close friends live nearby?
Do you believe that the question measures the intended theoretical dimension of job embeddedness?

Do you think the question is appropriate for an adventure education population?

Do you think that the question could be confusing or misinterpreted?

Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

Overall questions for Community Links
1. Is there any part of community links that does not seem like the existing questions are addressing?
2. Are there any questions that you would recommend adding to help measure this dimension?
Community Fit is how well an adventure educator’s skills, preferences, personality, and plans fit with the social, environmental, and cultural reality of the community that they live in.

33. I really love the place where I live.
   Do you believe that the question measures the intended theoretical dimension of job embeddedness?
   Do you think the question is appropriate for an adventure education population?
   Do you think that the question could be confusing or misinterpreted?
   Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?
   What suggestions do you have for improving the question?

34. The weather where I live is suitable for me.
   Do you believe that the question measures the intended theoretical dimension of job embeddedness?
   Do you think the question is appropriate for an adventure education population?
   Do you think that the question could be confusing or misinterpreted?
   Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?
   What suggestions do you have for improving the question?

35. This community is a good match for me.
   Do you believe that the question measures the intended theoretical dimension of job embeddedness?
Do you think the question is appropriate for an adventure education population?

Do you think that the question could be confusing or misinterpreted?

Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

36. I think of the community where I live as home.
   Do you believe that the question measures the intended theoretical dimension of job embeddedness?

   Do you think the question is appropriate for an adventure education population?

   Do you think that the question could be confusing or misinterpreted?

   Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

   What suggestions do you have for improving the question?

37. The area where I live offers the leisure activities I like.
   Do you believe that the question measures the intended theoretical dimension of job embeddedness?

   Do you think the question is appropriate for an adventure education population?
Do you think that the question could be confusing or misinterpreted?

Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

**Overall questions for Community Fit**

1. Is there any part of *community fit* that does not seem like the existing questions are addressing?

2. Are there any questions that you would recommend adding to help measure this dimension?
Community Sacrifice is what the adventure education instructor believes would be lost if she had to leave the community she lives in. These include the financial costs of moving as well as the time and energy to learn the norms in a new community.

38. Leaving this community would be very hard.
   Do you believe that the question measures the intended theoretical dimension of job embeddedness?
   Do you think the question is appropriate for an adventure education population?
   Do you think that the question could be confusing or misinterpreted?
   Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?
   What suggestions do you have for improving the question?

39. People respect me a lot in my community.
   Do you believe that the question measures the intended theoretical dimension of job embeddedness?
   Do you think the question is appropriate for an adventure education population?
   Do you think that the question could be confusing or misinterpreted?
   Do you think that the way the question is being asked could bias the results (i.e. implies that one answer is more correct than another)?
   What suggestions do you have for improving the question?

40. My neighborhood is safe.
   Do you believe that the question measures the intended theoretical dimension of job embeddedness?
Do you think the question is appropriate for an *adventure education* population?

Do you think that the question could be confusing or *misinterpreted*?

Do you think that the way the question is being asked could *bias* the results (i.e. implies that one answer is more correct than another)?

What suggestions do you have for improving the question?

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**Overall questions for Community Sacrifice**

1. Is there any part of *community sacrifice* that does not seem like the existing questions are addressing?

2. Are there any questions that you would recommend adding to help measure this dimension?
Final Questions
1. Do you have any other recommendations?
2. Are there any aspects of how adventure education instructors may become embedded that do not seem to be covered by the previous survey questions?
3. After the first round of individual cognitive interviews can I contact you to discuss some of the findings?

Expertise
Briefly describe your expertise in the following areas:

Human Resources:

Adventure Education:

Survey Methodology:

Thank you for your assistance. Please e-mail a copy of your answers to jadwilso@indiana.edu by <one week from date given. 
Appendix D. Coding Structure

The problem coding structure is based on Cognitive Aspects of Survey Methodology’s (Tourangeau, 1984) 4 stage model. It is assumed that problems earlier in the process are the root problems. The following is a adapted from Conrad & Blair (1996), Podsakoff (2003), Presser et al. (2004), and Willis (2005).

I. Understanding of the question or response format
   a. Literal
      i. Doesn’t understand word
         1. Technical term
         2. Common term used in an unrecognizable manner
      ii. Doesn’t understand phrase or sentence
         1. Complex sentence structure
         2. Doesn’t understand flow of question
   b. Intent
      i. Incorrect inference
      ii. Incorrect assumption
         1. Response conditioned on false information
      iii. Incorrect inclusion or exclusion
      iv. Incorrect time period
      v. Multiple possible intentions perceived

II. Performing primary task
   a. Retrieval
      i. Information is not available/ insufficient knowledge
      ii. Information is too mundane
      iii. Information is too much in the past
      iv. Information is too difficult to complex to accurately recall
   b. Comparison
      i. Question makes a false assumption for respondent
         1. Double barreled question
      ii. Question suggests a correct answer (bias)
      iii. Respondent believes the question was previously asked (redundant)
   c. Mental arithmetic and evaluation
      i. Incorrect mathematic or evaluative conclusion

III. Response formatting
   a. Can’t fit emergent answer onto format
   b. Format causes answer to change (reactivity)
Appendix E. Cognitive Interviewing Prepared Probes

IV. Item specific questions
   a. Understanding of the question or response format
      i. “What does the word X mean to you in this question?”
      ii. “Can you please paraphrase what you think this question is asking.”
      iii. “What assumptions did you make to respond to the question?”
      iv. “What types of information do you think this question was intended to reference?”
      v. “What period of time did you use to answer this question?”
   b. Performing primary task
      i. “Did you have any difficulty remembering the required information?”
      ii. “How did you recall the information?”
      iii. “I saw you pause when you were responding to the question, what was going through your mind?”
      iv. “How confident are you with your answer?”
      v. “Do you feel like this item would apply to you?”
      vi. “Do you feel like there are any right or wrong answers to this question?”
      vii. “You provided the same information to this question as to a previous question, do you believe it is a redundant question?”
      viii. “How did you figure out the answer to the question?”
   c. Response formatting
      i. “If you ignored the response options, what would your answer have been?”
      ii. “Can you explain what you think each of the points on the scale means?”
      iii. “Where on this scale do you think the normal response would be?”

V. Dimension specific questions
   a. “This dimension of job embeddedness is intended to measure <description of dimension>. How do you think this dimension of job embeddedness manifests itself for adventure education employees?”
   b. “Do you believe that the previous questions asked about the most important parts of <name of dimension>.”

VI. Overall
   a. “Do you have any overall thoughts about all of the items?”
   b. “These questions are attempting to measure how adventure education instructors become connected to their work are there other ways, other than the ones mentioned in the items, that you believe AE instructors become connected to their work?”
   c. “Thank you for participating. Do you have any last thoughts or questions?”
Appendix F. Cognitive Interviewing Initial Script

Thank you for your help. I appreciate you participating in this study looking at the retention of adventure education instructors.

This interview should take about 60 minutes, but you can quit anytime you like. Do you have the time to participate right now?

I sent you an e-mail about fifteen minutes ago. Did you receive that e-mail? <If not, then verbally read the link to the participant;


Please click on the survey link.

All right, basically I am going to ask you to verbally tell me everything you think about when you read and respond to the survey question. I may then ask you a few follow-up questions and then ask you to go on to the next question.

Please click on the link on the lower right to the first question and I will demonstrate the process. The first question reads, “How often did you exercise last week?” Well in response to this question I may think, ‘I usually go running and rock climbing for exercise, but I also ride my bike to work and walk around the campus. I am not sure if walking around the campus could be considered exercise, but perhaps commuting by bicycle could be considered exercise. Now does ‘how often’ refer to hours or days? Let me take a look at the response format. OK, it is number of days last week that I exercised. Well, in that case I exercised six days last week. I rode by bicycle to work four days last week, I ran three times, and climbed once; but on Thursday I just stayed home and worked there. Six seems like a lot, but I guess it was six days last week.” After you have responded to the survey question I may ask you a few more questions.

Do you have any questions at this time? Ok, please click on the lower right arrow to the first question and please tell me everything that goes through your head when you read and respond to the question.
Appendix G. Cognitive Interview Results from the Original Job Embeddedness Items

This section is organized based on the theoretical structure of the job embeddedness construct. The issues that were identified by both the expert panel’s review and the first wave of cognitive interviews are compiled by item. The theoretical structure presented here is based on the structure presented in the original job embeddedness article (Mitchell, Holtom, Lee, et al., 2001). The tables in this section include the question stem of each item and the type of survey response error issues associated with each item. These issues are further explored in the summary of this section.

It is important to note that the results are not presented here in a quantitative fashion showing the distribution of different types of responses (e.g., 28% of respondents said X). This is because cognitive interviewing is intended to highlight potential issues, it is not intended to show the pervasiveness of these issues.

Organizational Links

Organizational links are the connections an individual has with others in her organization of employment. The links include the social, psychological, and financial connections as well as tenure which were originally theorized to positive impact all of these connections. Although the original article (Mitchell, Holtom, Lee, et al., 2001) mentioned all four of these aspects of organizational links (social, psychological, financial, and tenure), the original set of items did not include any items measuring the financial aspect of the organizational links dimension.
Tenure

The three tenure items measure how long an individual has worked in their position, company, and industry. The assumption is that individuals will accumulate greater connections with others as they spend more time in their position, company, or industry.

Table 1. Organizational Links, Tenure Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>How long have been in your present position?</td>
<td>-Terminology</td>
</tr>
<tr>
<td></td>
<td>-Recall</td>
</tr>
<tr>
<td></td>
<td>-Response Format</td>
</tr>
<tr>
<td>How long have you worked for this company?</td>
<td>-Terminology</td>
</tr>
<tr>
<td>How long have you worked in this industry?</td>
<td>-Terminology</td>
</tr>
</tbody>
</table>

1) How long have you been in your present position?

There were two terminology issues. The phrases “how long” and “present position” were both open to multiple interpretations.

Individuals understood “how long” as referencing different activities. While some individuals only included time in the back country when answering “how long”, other individuals included time spent working out of the field in front country settings such as preparing courses in an office setting.
The other issue was that some individuals only counted the time they were actually employed by the organization, while other individuals interpreted the question as asking, “How long since you first started working for the organization?” This difference in interpretation could lead to very different responses. For example, if an individual had worked for 10 weeks per season for three seasons, and if they interpreted the question as asking about the actual days worked then they would respond that they had worked 30 weeks for the organization. However, if they used the latter interpretation strategy they would respond that they had worked for 3 years. Therefore, the heterogeneity of interpretation would have led to artificial variation by a factor of more than five\(^{10}\). If the distribution strategies were randomly used, regardless of grouping, then this variance would reduce the power of any statistical conclusions. However, the interpretation strategies did not seem to be randomly distributed across all groups of respondents. For example, all of the seasonal AE instructors who had primarily worked with N.O.L.S. uniformly interpreted the question as asking for how many weeks they had worked, while all of the instructors working for Outward Bound used the latter interpretation strategy. Therefore, this difference in how the phrase “how long” was interpreted could lead to false statistical conclusions about differences between groups.

The other piece of wording in the question stem that had issues was “present position”. Some of the respondents had worked for multiple organizations in the

\(^{10}\) If an individual actually worked 30 weeks, but had reported working for 3 years, then the 3 year response could have been interpreted as meaning 156 weeks, which is 5.2 times as long as 30 weeks.
previous year. These individuals that had worked for multiple organizations were confused which of the positions that they had worked in the term “present position” was referring to.

Moreover, the timing of the interview was an issue. It is logistically very difficult to conduct this type of interview with seasonal AE instructors while they are in the field. They are often in remote settings and need to be working for all of their waking hours. Therefore, all of the interviews were conducted with individuals who were not, at that moment, in the field. Second, since almost all organizations employ seasonal AE instructors based on a contract for those days that they are in the field (or a brief period of time preparing or cleaning up after the course afterwards), all of the interviewed individuals were not, by definition, working as seasonal AE instructors, at that moment. They may have been working the day before, and may have worked the day after, but at that moment, they had no “present position” in the strict sense of the term. This was presumably not an issue for previous populations of workers that were surveyed with the job embeddedness items. However, the discrete nature of seasonal AE contract employment and fact that none of the individuals were working as seasonal AE instructors at the exact moment of their interview made the phrase “present position” ambiguous to some respondents.

“Present position” caused similar issues for individuals that had served in multiple roles within a single organization. This was compounded by the fact that some Individuals reported experiencing fluidity between roles. In this case it was unclear whether they should reference their title or the role of the actual work they had done. While some thought of “position” as a title, others interpreted it as a sphere of
responsibility. This was further complicated by the fact that some individuals reported that they got paid to do the same activities sometimes, but volunteered to do it at other times. When responding to the item, some respondents included both paid and volunteer time, while others included only paid time.

The phrase “present position” was consistently referred to as ambiguous by the interview participants. Heterogeneity of interpretation could likely lead to false variability in survey responses. This variability can be illustrated with the example an individual who had instructed for two organizations. Assume that the individual had volunteered for Organization A for 10 weeks and then been hired to do similar work for an additional 20 weeks at the same organization. Moreover, assume that this individual has worked for 40 weeks for Organization B, and had then been promoted (to a higher level of instructor) at the end of these 40 weeks. On the one extreme this individual may report that he had 0 weeks in his present position since he is currently off-contract, and hence has no position at present. Similarly, if the individual had thought the question was only referencing his work at Organization B, he may respond 0 weeks because he was recently promoted and therefore had not worked anytime under his new position title. On the other extreme, this same individual could have reported that he had worked for 70 weeks if he included both the time he was paid and the time he volunteered, the time he worked for both organizations, and the time that he worked under different titles as an AE instructor. This example illustrates how the item could fail to measure the true tenure of the survey respondents.

There was variability in the ways that individuals recalled the requested information, and the confidence they expressed in the accuracy of these responses.
The various heuristics that were used may have led to systematic bias as an artifact of which heuristic they used for recall. Some individuals recalled their tenure in weeks while others did not. When asked if they could recall their tenure in weeks, individuals that did not normally think of their tenure in terms of weeks often stated that recalling their time in position in terms of weeks was inaccurate or “rough”. Verbal probes also found that some individuals included not only the time that they had worked, but also the time they expected to be working in the upcoming season.

There were also some indications that some individuals had a difficult time recalling data. For example, some respondents had difficulty recalling accurately when they experienced a change in position.

The preferred response format varied between individuals. This seemed to be at least partially a result of how their primary AE organization quantified their experience. Time formats included weeks, years, and seasons. Each of these formats had potential weaknesses. Some individuals spoke about years, but all of these individuals had only worked a very limited number of weeks during a particular season within the year. Similarly, if individuals chose to report their time in seasons, the length of the season often dramatically differed between individuals. Weeks may be the most precise response format; however, this may lead to false precision since it was difficult for individuals that did not normally think of their tenure in weeks to recall their tenure in the unit of weeks over a multi-year period.

2) How long have you worked for this company?
Besides similar issues around the unit of time found in the previous item, the major issue for this item came from the word, “company”. Some individuals vehemently expressed that they did not consider their AE organization a “company”. They felt that “organization” would be a more appropriate term. The use of the term “company” may lead to protest votes of 0 weeks of employment.

3) How long have you worked for this industry?

Industry was open to multiple interpretations including: outdoor education, non-expeditionary types of education, survivalist training, primitive skills training, tracking, natural science taught outside, only activities where the individual was directly involved with students, camping education, outdoor activity instruction, guiding, teaching wilderness medical courses, study abroad trips, and education in general. Variability in the utilized definition of “industry” could lead to false variability in survey responses.

**Social**

The social aspect of organizational link looks at the number of coworkers the respondent interacts with. Theoretically, links with each of these coworkers would be either small or large threads that would cumulatively embed the worker in the organization.

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
</table>
| How many coworkers do you interact with regularly? | -Terminology  
-Context |
4) How many coworkers do you interact with regularly?

This item assumes that regular interaction builds social and professional organizational links; however, this item assumes a static reality. The item assumes that the current coworkers with whom the individual is socializing with will continue to be with the organization. Unfortunately, this is often not the case in many AE organizations which suffer from high rates of turnover (Beeson, 2008; Frankel, 2009). Conversely, strong links with current coworkers may repel an individual from the organization if those coworkers leave the organization (Feldman & Ng, 2007).

Beyond the larger issue of whether the item adequately measured the social aspect of the organizational links dimension, the item itself had a number of problems. The primary issue was a failure for participants to uniformly interpret the item. Individuals who worked for multiple organizations were confused about which group of workers was being referred to. Even within the domain of a single organization, there were multiple interpretations of who the term “coworkers” was referring to. While some respondents included just the people they worked with in the field, others included everyone in regional location of the AE organization (including administrative staff and other field staff that they did not directly work with), and one individual even included individuals from other organizations.

The term “regular” had a similar multiplicity of interpretations. Probes revealed that “regular” included a frequency from everyday to a couple of times of year.
Moreover, one individual used a functional definition rather than a time based definition. This individual defined “regular” based on how reliant he felt on the coworker.

“Interaction” had two distinct interpretations. One group of respondents limited “interaction” to refer to professional time working with others while another group included both professional and social interaction.

Similar to most of the items, the respondents indicated that they recalled an answer to this item based on a general impression of their history rather than estimating based on specific incidences.

*Psychological*

The psychological aspect of organizational links refers to the sense of obligation that a worker may feel to other individual or other groups of workers.
Table 3. Organizational Links, Psychological Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many coworkers are highly dependent on you?</td>
<td>-Terminology</td>
</tr>
<tr>
<td></td>
<td>-Context</td>
</tr>
<tr>
<td>How many work teams are you on?</td>
<td>-Terminology</td>
</tr>
<tr>
<td></td>
<td>-Context</td>
</tr>
<tr>
<td>How many work committees are you on?</td>
<td>-Terminology</td>
</tr>
<tr>
<td></td>
<td>-Context</td>
</tr>
</tbody>
</table>

5) How many coworkers are highly dependent on you?

The phrase, “highly dependent”, was confusing for some individuals. In multiple cases, individuals responded that no other coworkers were highly dependent on them. For a couple of these cases, follow-up verbal probes revealed that this was because the respondent had interpreted “highly dependent” as referring to a personality characteristic and they did not feel like their AE coworkers had dependent personalities. Further verbal probes found that the definition of “highly dependent” ranged between dependent on the respondent for their everyday life needs to dependent on the individual for paperwork. In other cases, individuals said that everyone in the whole organization was dependent on her or him because the whole organization depended on her or him to help deliver the mission. The extreme variability in the interpretation of the phrase “highly dependent” could lead to artificial variability which may cause false statistical conclusions in data analysis.

6) How many work teams are you on?
The term “work teams” confused a good deal of individuals. It was variously interpreted as a co-instructor unit, a non-instructional committee, or as a work situation that does not occur in AE. Some individuals felt like they were part of an informal group that served the organization (e.g., helped with maintenance around the base camp), while others mentioned formal group roles (e.g., part of the curriculum committee). All of the work teams that were mentioned were voluntary, rather than assigned roles.

7) How many work committees are you on?

Similar to the previous item, “work committees” led to respondent confusion. Verbal probes found that many respondents interpreted the phrases “work teams” and “work committees” as referring to the same thing. Moreover, many respondents felt like the phrases were confusing and did not accurately describe their experience as a seasonal AE instructor.

Community Links

As opposed to organizational links, community links are intended to measure the connections that individuals have to individuals and groups of individuals outside of their organization of employment.

Social

The items measuring the social aspect of community links refer to the connections with friends and family. There were multiple other possible community social links theorized by Mitchell, et al. (2001) and others that were not referenced by the original 40 items. These included membership in a religious group, membership in clubs or formal recreational groups (Tanova, 2006), and connections with people that
live nearby that are not friends (Tanova, 2006). These issues did not come up in the original wave of cognitive interviews.

Table 4. Community Links, Social Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you currently married or living with a significant other?</td>
<td>-None</td>
</tr>
<tr>
<td>If you are married does your spouse work outside the home?</td>
<td>-Context</td>
</tr>
<tr>
<td>How many of your family members live nearby?</td>
<td>-Context</td>
</tr>
<tr>
<td>How many of your close friends live nearby?</td>
<td>-Context</td>
</tr>
</tbody>
</table>

8) Are you currently married or living with a significant other?

Respondent universally saw this as possibly being an important factor in an AE instructor’s turnover decision. Although being married was originally interpreted as being an embedding factor (Mitchell, Holtom, Lee, et al., 2001), interview respondents reported that it may increase the seasonal AE instructor’s level of embeddedness in an off-season location; hence, leading to a decrease in instructor’s embeddedness in the seasonal AE organization. Although none of the individuals reported ever experiencing a strong romantic connection impelling them away from seasonal AE instruction, some respondents reported witnessing romantic connections pulling other instructors out of the industry. Moreover, some stated that it may cause them to exit the industry in the future. Some individuals suggested that the turnover effects of this may be stronger for women than men due to social expectations and child rearing responsibilities. Among
the married individuals who were continuing to work in AE, they reported that they had chosen to work fewer days in the field because they missed their significant other and/or needed to consider the impact of their absence on their partner. Individuals who were married said that their partners supported their choice to work seasonally in AE, but that was not always the case for everyone.

It should be noted that “significant other” was added based on Cunningham, Fink, & Sagas (2005) rather than maintaining the original, more limited, phrasing. Multiple individuals, including a homosexual respondent who was currently living with her partner, said that this terminology felt appropriately inclusive.

9) If you are married does your spouse work outside the home?

Multiple respondents said that this question did not seem to fit the reality of AE instructors. Multiple individuals stated that due to the low level of pay in AE, partners inevitably always worked unless they were currently unemployed or were full-time students.

10) How many of your family members live nearby?

The location that was being referred to in this item was confusing given that the respondents lived and/or worked in multiple locations. For example, one respondent stated that her family lived near one of the AE organization locations that she worked at.

The importance of familial geographical co-location was universally seen as being low. Part of this may be the fact that in this sample all but one of the individuals came from the relatively individualistic White North American culture (Mallol, et al., 2007; Wu, 2005). However, individuals that reported that their ties to the family of origin
were very important to them stated that this connection was maintained by electronic media (phone, social networking sites, e-mail, etc.) and did not require geographical co-location.

11) How many of your close friends live nearby?

Individuals had multiple interpretations about what a “close friend” was. While some had very loose definitions that included individuals that they had recently connected with, other respondents felt that it took a long history of interaction before an individual could be considered a close friend. Moreover, there was confusion about the geographic area that nearby was referring to.

All of the individuals felt it was important to have some friends geographically close. Similar to interactions with family members, respondents reported interacting with friends through electronic media; however, while some respondents reported that these media worked well for them, other respondents had very negative perceptions of using electronic media to interact with friends.
Psychological

The psychological aspect of community focused on individuals’ connections to characteristics of the community. The original set of items (Mitchell, Holtom, Lee, et al., 2001) only included a single item to measure this aspect.

Table 5. Community Links, Psychological Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
</table>
| My family roots are in the community I live in. | -Terminology  
-Context |

12) My family roots are in the community I live in.

“Family roots” was subject to radically different interpretations. For example it was variously interpreted as family members living nearby, the level of embeddedness of family nearby, or the ancestral home of the family of origin. Respondents generally did not feel like this was very important to their level of embeddedness.

Financial

The financial aspect of community links was theorized to be the financial connections outside of an individual’s organization of employment. Other financial types of community links suggested by the literature that did not have any associated items in the original set of 40 items (Mitchell, Holtom, Lee, et al., 2001) include established relations with service providers such as doctors, dentists, or mechanics.
Table 6. Community Links, Financial Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you own the home you live in?</td>
<td>-Terminology</td>
</tr>
<tr>
<td></td>
<td>-Context</td>
</tr>
</tbody>
</table>

13) Do you own the home you live in?

This was a tricky question for the interview respondents. Similarly, many of the expert panel participants responded negatively to this item.

For many interview participants, their responses were complicated by the fact that they had lived in multiple locations in the recent past, but the question assumed a single residence. Moreover, “home” was problematic. Participants asked if they could consider a car or a tent as a home or only a more sedentary structure such as a house or an apartment.

The assumed relationship is that the ownership of such a large non-portable asset would embed the individual in their community. The assumptions are twofold. First, it was assumed that individual would feel more invested in the community if they owned a major asset in that community. Second, it was assumed that the costs (time and money) involved in selling a house is a barrier to exiting a community.

In contrast to the original theorized impact of home ownership, because AE instructors often did not live in the same location throughout the year, ownership of a house in an individual’s off-season location could increase an instructor’s relative embeddedness in her off-season location and pull her away from her seasonal AE
employment. One benefit of seasonal AE location is that instructors may not need other shelter because they are living in the field and are sometimes provided shelter even when they are out of the field. In contrast, a home owner would need to keep paying her mortgage, regardless of whether or not she was living in her house. The lack of flexibility that she or he may have about paying her of his monthly mortgage payments may increase her or his need for income. This increased need may push the individual into higher paying lines of work. This may be especially true if the AE instructor felt an obligation to provide the financial resources that her family required (Feldman & Ng, 2007). In contrast, if the instructor was a renter, she may feel relatively less embedded in the off-season location because she could simply move and stop paying rent.

Organizational Fit

“Fit” is defined as the perceived compatibility that individuals have with the organization(s) that they work for or the community(ies) they live in. Organization fit is limited to the degree of compatibility between an individual’s preferences, values, personal KSAOCs, and desires and the culture, opportunities, and needs of the organization.
Employees

Table 7. Organizational Fit, Employees Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like the members of my work group.</td>
<td>-Terminology</td>
</tr>
<tr>
<td>My coworkers are similar to me.</td>
<td>-Terminology</td>
</tr>
<tr>
<td></td>
<td>-Inappropriate</td>
</tr>
</tbody>
</table>

14) I like the members of my work group.

“Like” was interpreted in multiple ways. To one extreme, liking someone meant enjoying a friendship with the individuals. Other respondents claimed that they interpreted “like” to mean that the members contributed to the mission of the organization or the respondent’s personal development.

“Work group” was interpreted both narrowly and broadly. Narrowly, the co-instructor team in the field was thought of as the work group. More broadly, it included all of the individuals that work for the organization.

Every respondent mentioned that this was important to them that he or she liked the member of his or her. However, the current variability in interpretation meant that the same individual may respond very favorably to this item, because he was friends with his co-instructors, but if he had interpreted the work team to include as all of the individuals in the organization he may not agree with the statement.

15) My coworkers are similar to me.
Some participants of the expert panel and interviews reacted negatively to this question. They thought of diversity as both an explicit organizational value as well as a personal value. Therefore, this may not embed individuals in the same manner as originally theorized.

In contrast, after further probing, individuals shared that it was important for them to have coworkers that had a similar passion for adventure education (e.g., being outdoors, impacting other’s lives) and orientation towards student safety. In contrast, they stated it was important to them to have coworkers that could present alternative viewpoints. They desired coworkers with KSAOCs (knowledge, skills, abilities, and other competencies) that complemented what they offered in order to increase their own and their student’s learning.

The current wording of this item may lead to protest votes based on the perceived researcher intent of the item. Moreover, the item may be too simplistic, because while some aspects of coworkers may be important for them to be similar to, other aspects may be important for them to differ from.

Values

This aspect refers to both the vision of the organization and how those ideals are implemented into the reality of the employee’s experience.
Table 8. Organizational Fit, Values Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like the authority and responsibility I have at this organization.</td>
<td>-Terminology</td>
</tr>
<tr>
<td>My values are compatible with the organization’s values.</td>
<td>-Terminology</td>
</tr>
</tbody>
</table>

16) I like the authority and responsibility I have at this organization.

Multiple individuals strongly reacted to the word “authority”. Respondents’ antiauthoritarian feelings may lead to protest votes.

Participants emphasized responsibility rather than authority when responding to this item. Responsibility was seen positively, as the expectation to contribute to mission of the organization. In contrast, authority was seen as having the final say. Participants shared that their level of responsibility and authority was relatively high in the field, but greatly diminished in the front country.

17) My values are compatible with the organization’s values.

When the participants were asked how they knew what the organization’s values are, they generally referred to the mission of the organization. All agreed that it was important to feel like they were working to support an organization that shared similar values as themselves.

Future
Organizations not only provide a current reality, but they also provide information that employees’ use to create expectations. The original items measured respondents’ comparison of their hopes for the futures and their expectations based on their current evaluation of the organization.

Table 9. Organizational Fit, Future Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can reach my professional goals working for this organization.</td>
<td>-Terminology</td>
</tr>
<tr>
<td>I feel good about my professional growth and development.</td>
<td>-Terminology</td>
</tr>
</tbody>
</table>

18) I can reach my professional goals working for this organization.

Some individuals responded that they did not know what their “professional goals” were or that they didn’t have any. Some individuals replied that their personal goals were more important than their professional goals in their choice to work in AE.

The interpreted perceived domain of this question was interesting. While some individuals interpreted it as meaning that they could achieve their goals inside of the organization, other responded that they thought of how it helped them achieve goals outside of the organization.

“Professional goals” was variously interpreted as a promotion, different types of work experiences (i.e., program participants, course length, geographic diversity, activities), increased authority, or an opportunity to work more days each year. These goals were seen variously as short-term (proximal) or long-term (distal).
One respondent thought that “can” asserted absolute certainty and should talk about a high degree of probability instead. This and the previous variations in interpretation could lead to false variability in survey responses.

19) I feel good about my professional growth and development.

Again, personal goals were sometime seen as more important than professional goals. Therefore, the item may not be measuring the most important part of this aspect of the job embeddedness domain.

A couple of respondents said they were growing and developing, and hence responded “strongly agree”, but then gave the caveat, that their development was not focused on those skills and abilities that they wanted to develop at this time. This would suggest that even though they strongly agreed, that the wording of the item was not sampling a strong embeddedness factor.

Some of the instructors mentioned experiencing diminishing professional growth and development over time. This was variously attributed to the fact that their focus had shifted over time, or that there was just less to learn over time.

Individuals mentioned that it was important to them to experience how their skills increased their ability to impact participants over time. To adapt a commonly employed metaphor; it was not enough for them to plant seeds; in order to feel good about their own development, they wanted to see their participants reap increasingly more fruit as well.

Demands for KSAOCs
AE instruction requires that employees possess a certain portfolio of KSAOCs (knowledge, skills, abilities, and other competencies). It is theorized that the more an organization needs a particular employee's KSAOCs, the more that they will communicate to the individual employee that they are needed through words and actions.

Table 10. Organizational Fit, Demand for KSAOCs Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>My job utilizes my skills and talents well.</td>
<td>-Context</td>
</tr>
</tbody>
</table>

20) My job utilizes my skills and talents well.

Again, some respondents stated that those skills and talents the job was utilizing were not the skills and talents that they wanted to be developing. Two interview participants mentioned that the skills and talents that they wished to use had changed over time.

One respondent said that she had chosen a seasonal lifestyle because she had not found employment that could utilize all of the skills and talents that she wished to use and develop; therefore, she seasonally worked different jobs that utilized each of her groups of talents.

None of the interview participants said that this was not important to their choice to remain with the organization and some said it was critical.

Culture

This aspect of organization fit theorizes that individuals prefer to be in organizations with different organizational cultures. If the employee believes that his or
her current organization’s culture is good relative to other organizations then he or she would feel compelled to remain with the current organization.

Table 11. Organizational Fit, Culture Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel like I am a good match for this organization.</td>
<td>-Terminology</td>
</tr>
<tr>
<td>I fit with the company’s culture.</td>
<td>-Terminology, -Context</td>
</tr>
</tbody>
</table>

21) I feel like I am a good match for this organization.

“Match” was variously interpreted as having the skills required by the organization, believing strongly in the mission of the organization, or a fit between the individual’s desires and the AE work situation. Among these interpretations, match to mission was seen as being particularly important.

22) I fit with the company’s culture.

“Culture” was variously interpreted as common norms, language, or lifestyle. These commonalities were alternately interpreted as being personal or professional. A couple of individuals from larger organizations mentioned that the organization’s culture varied across organizational locations and differed among different groups of employees.

*Community Fit*
Community fit is how compatible employees feel with the community that they live in.

*Place*

This aspect of community fit refers to the geographic location that the employee lives in.

Table 12. Community Fit, Place Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>I really love the place where I live.</td>
<td>-Context</td>
</tr>
<tr>
<td>I think of the community where I live as home.</td>
<td>-Context</td>
</tr>
</tbody>
</table>

23) I really love the place where I live.

Respondents reported living in multiple places. This level of transience was obviously not assumed in this item. Therefore, “place” was a confusing term.

24) I think of the community where I live as home.

Again, since individuals had lived in multiple locations the single residence assumption inherent in the item was inappropriate. On the extreme side, one instructor responded that he was currently “homeless” because he was so transient.

“Home” was variously interpreted as a social community, the place the individual grew up at, or the place that her or his parents currently resided. Less tangibly, “home”
was referred to as a place where one had authority over choices such as when to clean up the dishes.

**Social**

The social aspect of community fit seems to somewhat overlap with the place aspect of social location.

Table 13. Community Fit, Social Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>The community is a good match for me.</td>
<td>-Context</td>
</tr>
</tbody>
</table>

25) The community is a good match for me.

The term “community” was used multiple times in the original set of items (Mitchell, Holtom, Lee, et al., 2001). It was used both to indicate a physical location and a social group. This failure to use the term community in a singular manner may have been one reason why some respondents found it difficult to understand which use of the term was intended in this and other items. Moreover, there was confusion about which social group or location, among the multiple “communities” that the respondent was members of, should be referenced when responding to the item. Some respondents interpreted that this item was redundant with the earlier item about match to the social culture of the organization or the community item in the place aspect of community fit.

**Activities**
It was assumed by the original authors (Mitchell, Holtom, Lee, et al., 2001) that individual that more that individuals felt like their community offered the activities that they preferred relative to what alternative communities could offer, then the more they would feel embedded in their local community.

Table 14. Community Fit, Activities Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
</table>
| The weather where I live is suitable for me. | -Terminology  
                                   -Context |
| The area where I live offers the leisure activities I like. | -Terminology  
                                   -Context |

26) The weather where I live is suitable for me.

“Weather” was thought to be too limited of a term by many respondents. A couple instructors with science backgrounds recommended that the term “climate” was more appropriate.

There were two reasons respondent cited that climate was important to them. First, was that the climate that was aesthetically pleasing and facilitated them doing the desired outdoor recreation activities they enjoyed doing. This population’s strong participation in outdoor recreation activities may make climate more important for these instructors compared to many others. Second, rather than working in a climate controlled office, AE instructors work and live outdoors for extended periods of time. Therefore, they may be more concerned about the climate of the location where they conduct educational expeditions at.
Finally, this item suffered from the same confusion of which location was being referenced. Individuals reported living at multiple or no locations.

27) The area where I live offers the leisure activities I like.

This item was universally interpreted as important; however, what was seen as facilitating the provision of leisure activities differed among respondents. Some individuals talked about the leisure activities being a product of the physical environment. Other respondents stated that they considered if they had a strong network of individuals in the area who liked to do similar recreational activities as they did.

Organization Sacrifice

Sacrifices are the perceived costs of separation. This could either be the material or psychological benefits lost or the cost of breaking established links (Feldman & Ng, 2007). Community sacrifice is normally only an issue when relocations is an issue. The transient nature of seasonal AE instruction suggests that community sacrifice may be a prominent embedding factor. Moreover, AE instructor membership in multiple communities suggests that the sacrifice for seasonally leaving from the off-season community may need to be fairly low.

Holistic

The one item in this aspect of organizational sacrifice is interesting because it measures a global feeling of sacrifice even though other items in this dimension are measuring more limited aspects of the dimension.

Table 15. Organizational Sacrifice, Holistic Item
28) I would sacrifice a lot if I left this job.

“Sacrifice” was interpreted as losing the opportunity to impact others, be part of the social community, gain additional professional experiences, and/or gain further valuable personal experiences. This may not be an issue if this item allows respondents to respond based on those sacrifices that are more important to their own level of embeddedness.

A couple of participants raised the issue that although there would be a sacrifice if they left the job, they also made sacrifices to work as a seasonal AE instructor. This suggests that it is important to not only look at the perceived sacrifice that instructor feel like they would make if they did not seasonally instruct for the organization any longer, but that it was also important to look at the perceived sacrifices they experienced leaving their off-season community.

“Job” had issues that were similar to “present position” in the first item (individuals identified more with the organization rather than a specific job title due to fluidity of responsibilities, they serving multiple roles throughout a given period, and/or respondents experienced frequent changes in title). “Left” was also problematic since all of the instructors leave at the end of each season. While the item could be referring to this end of season departure, perhaps the more important question is what the perceived sacrifice would be from permanently leaving the organization.
Specific Non-Portable Benefits

The four items in this aspect of organizational sacrifice are more specific than the holistic aspect of the dimension. The interview respondents in many cases responded that they felt like the following items were redundant with one another.
Table 16. Organizational Sacrifice, Specific Non-Portable Benefits Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>The perks on this job are outstanding.</td>
<td>-Terminology</td>
</tr>
<tr>
<td>The benefits are good on this job.</td>
<td>-Terminology</td>
</tr>
<tr>
<td>The health care benefits provided by this organization are excellent.</td>
<td>-Terminology</td>
</tr>
<tr>
<td>The retirement benefits provided by this organization are excellent.</td>
<td>-Terminology</td>
</tr>
</tbody>
</table>

29) The perks on this job are outstanding.

There was some tension around the interpretation of “perks”. “Perks” was always initially interpreted as material rewards. This included outdoor gear, additional money, and free trips. However, this initial materialistic interpretation was often followed by a more idealistic interpretation of “perks” as the experiential aspects of the job including the opportunities to socialize with amazing individuals (staff and AE participants), working in a beautiful natural setting, and developmental opportunities (personal and professional). This variability in the interpretation of the item may make it difficult to interpret the data resulting from this item.

30) The benefits are good on this job.

It was unclear to many interview participants what the differences were between “benefits” and “perks”. Some individuals remarked that the terminology was not applicable for AE field staff.

31) The health care benefits provided by this organization are excellent.
With the exception of instructors from larger organizations, interview participants generally noted that organization sponsored health care was not available to field staff. However, some felt that health-care became increasingly important for long-term retention of aging staff.

32) The retirement benefits provided by this organization are excellent.

Almost all participants said that they were not aware of their organization offering any retirement benefits. Of the ones that did know about a retirement plan, they all felt it was inadequate. However, probes discovered that all of the interview participants understood the item in the intended manner.

Other non-portable benefits mentioned in the literature that did not originally have any associated items included sabbaticals, trainings, and commute time. Given the intensive episodic contract nature of AE instruction, it often offers large breaks of time off work; however, unlike a sabbatical, this is not paid time off. The value of the chunks of time off may need to be addressed by items sampling attitudes towards a seasonal lifestyle and work circumstances. Trainings were mentioned as valuable by a couple of interview participants; however, the essence of this point seems to be addressed elsewhere in the “professional development” item. Another aspect that has not been addressed by any of the item but was mentioned by a couple of respondents was commute time. For many instructors the remote location of regional AE locations means that they need to drive long distances to get to the location. One respondent mentioned she switched which AE organization she was working for in order to reduce he commute costs. Other respondents mentioned that they may not come back if they had a longer commute time to the AE organization.
Status

Theoretically employees may be more embedded if they feel like they cannot get the same level of respect at other organizations as in their current organization of employment.

Table 17. Organizational Sacrifice, Status Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel that people at work respect me a great deal.</td>
<td>-Context</td>
</tr>
</tbody>
</table>

33) I feel that people at work respect me a great deal.

This was generally interpreted in the intended manner. Interview participants spoke about administrators as well as other instructors when answering this item. Respect was shown in work assignments, attitudes expressed to the individual, and requests for their advice.

Overall Job

The overall job aspect of organizational sacrifice is fairly global, but more specific than the holistic dimension.
Table 18. Organizational Sacrifice, Overall Job Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>The prospects for continuing employment at this organization are excellent.</td>
<td>-Terminology</td>
</tr>
<tr>
<td>I have a lot of freedom on this job to decide how to pursue my goals.</td>
<td>-Terminology</td>
</tr>
<tr>
<td></td>
<td>-Double-Barrel</td>
</tr>
</tbody>
</table>

34) The prospects for continuing employment at this organization are excellent.

“Prospects” was mentioned by some respondents as being too much of a corporate term. “Prospects” was variously interpreted as meaning either more work days per season, or working in subsequent seasons.

35) I have a lot of freedom on this job to decide how to pursue my goals.

“Freedom” was variously interpreted as being in control of the content, itinerary, and methods used on educational expeditions; a choice of courses; or being able to develop the professional or personal aspects that the individual desired. The item was interpreted as a double barrel question by one of the respondents. She felt that it was asking her to not only evaluate her freedom, but also her ability to pursue her goals, which she saw as two different things.

Advancement

The advancement aspect is the perceived probability that individuals feel like they can personally advance in the organizational structure.

Table 19. Organizational Sacrifice, Advancement Items
36) My promotional opportunities are excellent here.

The interview participants often responded that the “promotional opportunities” were very limited in AE given the flat organizational structure. Moreover, many felt that being promoted often meant being promoted out of the field, which was not desirable. Finally, the possibilities for promotion was often seen as being facilitated by organizational growth or constrained by reductions in organizational size. Perhaps this item should be closer to the professional growth item because there seems to be some overlap between these two items in some people’s minds.

Pay

Pay is the respondents’ personal interpretation of their remuneration compared to alternative opportunities.

Table 20. Organizational Sacrifice, Pay Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>My promotional opportunities are excellent here.</td>
<td>-Context</td>
</tr>
<tr>
<td>I am well compensated for my level of performance.</td>
<td>-Terminology</td>
</tr>
<tr>
<td></td>
<td>-Importance</td>
</tr>
<tr>
<td></td>
<td>-Context</td>
</tr>
</tbody>
</table>

37) I am well compensated for my level of performance.
As written, the question leaves it up to the respondent to decide if the item is referring to absolute level of payment or the relative level of payment. Some individuals indicated that the money that they received was important to them to meet their financial obligations, while others indicated that the money that they received from the AE organization was not an important part of their annual income. However, even the individuals who felt like the pay from the AE work was important to them acknowledged that the pay was relatively low considering jobs with similar levels of qualifications in other industries. While some individuals initially assumed that the question was asking about the absolute level of compensations others initially assumed a relative level of performance. These two divergent interpretations could lead to an inability to interpret the results from this item.

A couple of individuals suggested that, “payment is more than a paycheck.” Rather than dwell on the financial reward, they quickly changed the question to address the issue of non-material personal gratification. Again, if some individuals are talking about compensation in terms of financial rewards while others are talking about experiential rewards, then this bifurcation of interpretations leads to systematic bias.

One individual brought up the issue that he was organizationally embedded because he would receive a much lower level of pay if he worked at another large AE organization. The failure of systems to recognize all of the individuals’ previous experience gained in the current organization means that individuals may be more organizationally embedded.
A couple of individuals raised the point that they have other income sources, and are therefore not dependent on their income from the AE organization. These income sources included other jobs that they worked as well as their spouses’ income.

**Community Sacrifice**

Community is an interesting term as it is used in the original items. In some cases it seems to be referring to a social group while at other times it seems to be in reference to a geographical location. This choice to use the same term in multiple ways led to some confusion by the respondents on many items, but was especially poignant in this dimension.

**Leaving**

All three of the community sacrifice items were grouped under the single title of leaving.

Table 21. Community Sacrifice, Leaving Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leaving this community would be very hard.</td>
<td>-Terminology</td>
</tr>
<tr>
<td></td>
<td>-Context</td>
</tr>
<tr>
<td>People respect me a lot in my community.</td>
<td>-Terminology</td>
</tr>
<tr>
<td></td>
<td>-Context</td>
</tr>
<tr>
<td>My neighborhood is safe.</td>
<td>-Context</td>
</tr>
</tbody>
</table>

38) Leaving this community would be very hard.
Similar to previous items, “community” was problematic. “Community” was interpreted as both a group of individuals as well as a location. Moreover, given the large number of locations and groups of people that the participants had lived in and worked with over the previous year, it was problematic to understand which “community” was being referred to. “Leave” was also a problematic term since AE instructors leave the organization every season.

39) People respect me a lot in my community.

   Again, “community” was problematic for multiple reasons. Depending on how “community” was interpreted, interview participants responded based on only the social respect that they received from community members or the social respect and the professional respect that they received at the organization.

40) My neighborhood is safe.

   Similar to other terms in the items referring to a location, “neighborhood” failed to recognize the transient nature of seasonal AE instruction. Participants generally did not feel like the safety of their community was relevant to their consideration to stay with the organization; however, this may be because none of the participant worked primarily in areas with high crime rates such as Baltimore.

**Appendix H. Cognitive Interview Results from the Preliminary Modified Seasonal Adventure Education Instructor Embeddedness items**

In contrast to the previous appendix the items in this appendix are presented in the order of the theoretical dimensions of construct.

*Organizational Links*
Organizational links are the connections that an individual has developed in the organization that they work for. It is interesting to note that the proposed preliminary items maintained the variety of response options of the original items. Multiple response option formats is unusual and was questioned by one member of the panel who was an expert in instrument development.

**Tenure**

The more complex working situation experienced by seasonal AE instructors compared to previous validation samples meant that more items were required to understand the AE instructor work situation. The previous items assumed that the respondents only worked for only one organization. This assumption of only working for one organization is often true of seasonal AE instructors at a single point in time; however, the seasonal aspect of AE instruction means that instructors most often work for multiple organizations across a single year.

1) How many years have you worked (paid and volunteer) in the adventure education industry? (Adventure education is defined as a type of education that uses outdoor expeditionary courses to facilitate individual and group learning outcomes (e.g., self-confidence, introspection, knowledge, activity skills, teamwork, communication).)

**Response options**

- The response format was a textbox.

**Responses**
The responses ranged from 3 to 25 years. Individuals generally didn’t have any issues with the question, although two of the interview participants needed to read the definition of adventure education more than once.

Changes

- The question stem included a definition of “industry” to minimize divergent interpretations. The definition was simplified to the current form after the first couple of interviews in the second wave.
- The response format is defined as “years” to make the response format more uniform.
- Both paid and volunteer work time was specified because the intent of this item was that time spent working for the organization, regardless of whether the individual was getting paid, would lead to increased organizational links.

2) Please write the name(s) of all of the adventure education organizations that you have worked for in the last 12 months.

Response options

- Five textboxes available for responses with “organization 1”, “organization 2”… “organization 5” before each text box.

Responses

- The different AE organizations included ten different organizations. This included the two largest AE organizations as well as many smaller organization and smaller AE units within larger organizations.

Changes
This is a new question that sought to understand how many organizations individuals were working for rather than assuming a single organization.

3) How many years have you worked for each of these organizations?

Response options

- Five textboxes available for responses with “organization 1”, “organization 2”… “organization 5” before each text box.

Responses

- Responses differed between 1 and 20 years. With a median value of 3.5 years.

Changes

- This is similar to the original item asking about the tenure in the organization except it specifies the time period (years) and allows for the fact that individuals may have worked for multiple organizations.

4) On average each year, how many weeks have you worked for each of these adventure education organizations?

Response options

- Five textboxes available for responses with “organization 1”, “organization 2”… “organization 5” before each text box.

Responses

- Responses ranged from 3 to 20 weeks. This included paid as well as volunteer work time. While for some individuals he or she said it was a rough estimate while other individuals did the math in their head.
• Although it may be a novel request to ask for average number of weeks per season, it does allow for more precision while maintaining a uniform heuristic for attaining overall tenure. The average number of weeks per year can be multiplied by the number of years in order to get the overall tenure.

5) From now on, if a question refers to an “organization” it is referring to the adventure education organization that you worked for the most in the last 12 months. Please enter the name of that organization.

Response options

• Textbox

Responses

• One individual went back up to definition of AE and limited her response to just one organization after including some non-expeditionary work opportunities.

Response options

• This was an item that was added because the logic in the internet survey site could not automatically select the organization with the highest number of weeks worked and let individuals know that this was what was meant as “the organization”. A single organization was chosen in order to eliminate the need for individuals to provide responses for each of the organizations that they had worked for.

6) Please name all of the different titles you have had in this organization over the last 12 months (i.e., intern, instructor, course leader, trainer, logistician, etc.).

Response options
• Five textboxes available for responses with “Title 1”, “Title 2”… “Title 5” before each text box.

Responses

• Titles included trainee, logistical assistant, instructor, lead instructor, trip leader, course director, course leader, trainer, facilitator, and administrator. One individual did not put anything but “instructor” because she felt that her changes in title were more based on pay scale than responsibilities.

Changes

• The changes to the original item address the troublesome failure for individuals to uniformly interpret “current position”. A respondent can list multiple titles that he worked under continuously or discontinuously, in a discrete or overlapping fashion, for one period or multiple periods.
• Allowing individuals to enter as many as five response options is necessarily complicated given the reality of their work situations.

7) What percentage of your total time working for this organization did you work as the following in the last 12 months?

Response options

• Five textboxes available for responses with “Title 1”, “Title 2”… “Title 5” before each text box.

Responses

• Although the participants all understood the item as intended. There were multiple errors. One person gave percentages that added up to more than
100%. Another gave a very different ratio of time between the two positions that she worked when asked in weeks served versus percentage of time worked. Many said that they were simply guessing based on their impression of time served in each role.

Changes

• This allowed the researcher to understand how a respondent’s time was distributed over the different positions.

• Asking for time spent as a percentage of time worked is likely to be a novel request and will likely have a high margin of error, but it will allow researchers to understand in which position an individual spent the majority of their time.

8) Are any of these unpaid (volunteer) positions?

Response options

• Five dichotomous yes/no check boxes with “Title 1”, “Title 2”… “Title 5” before each set of check boxes.

Responses

1. No

   • I don’t work for free anymore.

   • I almost want to say, are you kidding?

2. Yes

Social

The most important item that was added to this sub-dimension acknowledges the culture of turnover that currently exists in AE. This culture of turnover means that even if an individual currently has a strong set of social or professional contacts in the
organization or industry the high rate of turnover may result in these same individuals not being involved in future years. This rate of turnover negates the affect of these social links on the instructors’ level of embeddedness.

9) I have enough professional contacts in the adventure education industry that I can find work when I want it.

Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree
2. Disagree
   - Right now I wouldn’t mind some AE work. That would be great, but I can’t find work in this shoulder season of March. Might be able to get more work in adventure therapy, but that would be a different.
3. Slightly Disagree
   - All of my experience is in a single AE organization and I don’t have a degree in AE or anything like that.
   - I have a lot of contacts. But because the economy is hard it is hard to find work. But I found <other work outside of AE> pretty easily.
   - I would say strongly agree, but the type of work that I can get isn’t the exactly type of work that I necessarily want to work.
4. Neutral
5. Slightly Agree
6. Agree

- Because of all of the work I have done at <multiple local AE locations>.
- I was offered positions at <two different AE organizations>, but I want to continue at <present AE organization>.

7. Strongly Agree

- It sounds pretty egotistical.
- Very important.
- Agree, because getting work would be based on my resume and contacts.

Changes

- This is a new item that assumes individuals will be more embedded in a seasonal AE organization if they can find off-season work, and they will be more embedded in the industry if that work is for another AE organization.
- The wording needed to be changed to suggest a professional network rather than a social network or create a social desirable statement about popularity. Therefore, “I know a lot of people in the adventure education industry.” was transformed to the more utilitarian statement, “I have enough professional contacts in the adventure education industry that I can find work when I want it.” after the first couple of interviews.

10) I have had meaningful work experiences with many other people at this organization in the last 12 months.

Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)
Responses

1. Strongly Disagree

2. Disagree
   - <At first thought the question was referring to the industry and then read it again.>

3. Slightly Disagree
   - I have learned a lot from coworkers, though not always what I wanted to learn.

4. Neutral

5. Slightly Agree
   - It used to be lot more than it is. It has faded over time as I have gotten older and the community has gotten younger.

6. Agree
   - Certainly.

7. Strongly Agree
   - So many students have impacted and reverse. <Shared a story of breaking through with a student.>
   - This comes from personal relationships with coworkers; being able to goof off and show and receive compassion and concern from others.
   - <The AE organization> community is so supportive and filled with people that I am on the same page with. We play and spend time outside with each other. The work is hard. You need those connections.
• I thought of my work with my co-instructors, administrators, and logistics people.

• That’s why I am here!

• It’s the tangible results, the positive impact on at least one client. Working with so many individuals that have led so many trips is phenomenal…

  Leading trainings is incredibly meaningful.

Changes

• Rather than sampling the frequency and breadth of contacts in the organization that the respondent has, the item samples the qualitative value of these contacts.

• Added “in the last 12 months” after the first couple of interviews to understand how this is changing over time.

11) I expect that the people that I enjoy working and/or socializing with at this organization will be working for the organization next year.

Response options

• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral,
  Slightly Agree, Agree, Strongly Agree)

Responses

  1. Strongly Disagree

  2. Disagree

  3. Slightly Disagree

• Not always the case. So many people are only around for a year or two…

  Some of the reasons are that the money isn’t very much. It is hard to
maintain yourself unless you have a lucrative off-season career. I need to guide for a while to pay off debts.

- I have learned from experience that is not necessarily the case… Consistency among administrators is huge, so that you know what to expect… Not having friends come back is difficult, there is less to look forward to.

4. Neutral

- <Two friends> are now both engaged and won’t be back this summer. People often leave after settling down.
- From my experience it’s hard to say what people are going to do next season, whether they are coming back. So I don’t expect it to happen. Who knows.

5. Slightly Agree

- You never really know if someone gets a really great opportunity and moves away. More stable work, more committed relationship. But they still have that passion… Doesn’t really change my perceptions, but it does make me focus more on the relationships with the people that I do have. This has shifted over time. I am more aware of focusing my energy on the people that will be around.
- I don’t know if they will.

6. Agree

- Lots of people go in and out of the organization; however, the core of people that he most hopes to work with will likely be back.
• It’s based on conversations. A popular conversation with other folks goes, “will you come back next season?”
• Probably, I thought of the average turnover rate.

7. Strongly Agree
• Everybody is always in contact with each other talking with each other about which trips they are work on. There is a lot of excitement bubbling up among staff.

Changes
• This item acknowledges the high rate of turnover endemic in the seasonal AE industry.

Psychological

The two items in this sub-dimension measure the respondent’s commitment to the mission of the organization and their fellow employees during the on- and off-season.

12) If I do not work at this organization next year it will negatively impact the organization’s ability to achieve their mission.

Response options
• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses
1. Strongly Disagree
2. Disagree
• I don’t think it would. There are so many people out there to work for <the AE organization>. They are inspired by it and are inspiring. Plenty of people can do it.

• Hmm… How important do I think I am? I think they can achieve mission without me.

• <AE organization> has strong enough roots that I am not integral to delivering the mission.

• I would really like to see if anybody answered yes on that.

• Honestly, they’d be just fine without me, not that I’m not good.

3. Slightly Disagree

• The work is curriculum driven so any #@$ can get hired straight out of college and implement the curriculum.

4. Neutral

• At one point I feel like I contribute a lot, but there is a whole community to fill in those spaces.

5. Slightly Agree

• With these programs I work there was very little mentorship. I work a niche that the trainings don’t nicely address so my mentorship is very important. Without that mentorship these courses would be less successful.

• I have a lot of institutional knowledge.

6. Agree
• I have worked in <a niche program> for quite a while and make a lot of impact in that area.

7. Strongly Agree

Changes

• This item shifted the focus from other groups of workers to the organization itself. This shift was made because it is assumed that during the period of a course, the AE instructor’s co-instructor(s) and the administration are highly dependent on them to deliver the mission via the course. However, in order for this to be a durable embedding factor, an instructor would need to feel like this need continued past the point of the contracted educational expedition and into future possible work experiences.

13) I am part of a work group(s) for this organization during the off-season.

Response options

• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree

• Don’t do anything in the off-season

2. Disagree

• Not involved

• I am not… I don’t really get that question… There is off-season work, but it’s kind of means to me maintenance, and stuff like that came to mind.
I went to a season staff retreat, but I think of work group as doing more physical labor type of stuff.

Except some informal contact that isn’t institutionally driven.

3. Slightly Disagree

I am not involved in anything, but reading the executive director’s e-mails.

4. Neutral

5. Slightly Agree

6. Agree

Yeah I attend a lot of trainings and I went down to <international AE organization location>.

7. Strongly Agree

Changes

This is a change to some of the original items, since it specifically refers to the off-season. Although many participants responded that this did not apply to them, some individuals working for smaller organizations commented that this was one of the ways that they maintained connections to the organization during the off-season.

Financial

There are other items that refer to financial considerations; however, this particular item acknowledges that many instructors often have to figure out what they are going to do for work in the off-season. Given that this sample of instructors only worked seasonally, it may be important to these individuals to find work in off-season to
complement the pay that they receive from their primary AE organization. This item is intended to complement the earlier item, “I have enough professional contacts in the adventure education industry that I can find work when I want it.” since the former is about professional networks while this is less specific; however, quantitative data may find the items to be redundant.

14) My work for this organization facilitates me finding further work opportunities when I am not working for this organization.

Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree
   - <AE organization> doesn’t do this.

2. Disagree

3. Slightly Disagree

4. Neutral

5. Slightly Agree
   - <Local AE organization top administrator> sends out work opportunities for folks to work in <local AE location>. There are opportunities and a job posting site… Also other work opportunities.
   - Whenever I mention <AE organization> it carries a lot of weight.

6. Agree
• <Local AE organization top administrator> puts out a lot of information on work in the organization and other OE stuff.

7. Strongly Agree

• <AE organization> has really just… what I’ve learned there and the reputation of <AE organization> as an AE school. So many people recognize the name and know you have good training.

• I haven’t worked for many other programs, but <AE organization> language makes sense talking to other programs.

• It is highly satisfying… It provides good experience for my resume.

Changes

• Two changes were made after the first couple of interviews. The wording of the question stem was changed to suggest that it is the individual who is actively seeking work instead of the organization. And the original use of “in the off-season” was changed to, “when I am not working for this organization” to be more specific about the time period in relation to work at the organization.

Community Links

The links to the community primarily consist of connections with friends and family. Since seasonal AE instructors are not geographically static, the distance between the individual instructor and their loved ones may change depending on the instructor’s current location. This implies that it is the relative level of connections that each place affords that may be important to an instructor’s level of embeddedness. This relativity of connections means that instructors may be embedded to different
degrees at different locations. One respondent said that even though her level of commitment to her primary AE organization had not changed, she was feeling pressure to stop working because her level of embeddedness in her off-season location had increased. She indicated that it was this relative change in embeddedness due to her recent marriage that was making it more difficult for her to continue working for her primary AE organization. This suggests that the multiple locations that seasonal AE instructors may work and live in makes the relative level of embeddedness more important than ultimate levels.

Place

This series of items are more complex than the original items. This complexity seems to be justified given that seasonal AE instructors often live and work in multiple locations which contrasts with the assumptions implicit in the original items.

15) Please name the different places (cities, towns) you have lived in or worked out of during the last 12 months.

Response options

- Six different text boxes available with the words “Location 1”, “Location 2”… “Location 5” and “other” to the left of each box.

Responses

- Everyone understood the final question in the intended manner. All of the responses were cities, towns, or regions in the U.S. and abroad.

Changes
• This new item was necessary to help understand the often complex relationship between seasonal AE instructors and location.

• A couple of nuances to the wording of this item were added after the first couple sets of interviews in the second wave. An “other” response option was added in order to allow some people to enter more than five locations. The phrase, “or worked”, was added to eliminate the variance between people including, or not including places where they lived and work in the field.

16) Have you worked in or near the following locations for this organization?

Response options

• Five different dichotomous “Yes”, “No” responses with the words “Location 1”, “Location 2”… “Location 5” to the left of each set of options.

Changes

• This item helps the researcher identify which of the following locations the individual worked at for her or his primary AE organization.

Social

These items capture two types of social connections; marriage (or a romantic partnership) and friendships. The dichotomous response to the marriage question was connected to logic in the internet software. This logic programming presented the set of items specifically pertaining to married individuals or single individuals depending on the instructor’s response to the question of marriage.

A couple of the original items referencing spouse’s work situation and the physical proximity to family questions were found in the first wave to be inappropriate for
use with a seasonal AE instructor population. In contrast, the current questions seek to find those particular social factors that have been suggested will most affect a married or unmarried instructor.

The questions about friendship highlight an issue which some participants voiced about the impact of their work on their connections with friends. They stated that on the one hand they may develop very intense friendships with individuals that they work with; however, this may be offset by the fact that they may have difficulty maintaining these relationships because they are cut off from these relationships for large periods of time while they are in the backcountry.

17) Are you currently married or living with a significant other?

Response options

- Dichotomous (yes/no)

Responses

- Yes (Right now, no, but we are living together.)
- No

<If replied yes to being married>

18) A) My significant other supports my decision to work for this organization.

Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, and Strongly Agree).

Responses

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
4. Neutral
5. Slightly Agree
   • She understands that I enjoy it. And she appreciates the money it brings in.
6. Agree
7. Strongly Agree
   • He’s my biggest supporter.

19) A) My significant other works for the same organization as I do.
   Response options
   • 7 point Likert scale (Never .. Once in a while .. Every Season)

<If replied no to being married.>

18) B) My work circumstances allow me to start and maintain romantic relationships.
   Response options
   • 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, and Strongly Agree).

Responses
1. Strongly Disagree
2. Disagree
3. Slightly Disagree
   • Most of the people I have dated have been involved with <AE organization>, but it is difficult to maintain long-term relationships.
4. Neutral
   - Dated a guy last winter and it didn’t last into the season, but <AE organization> wasn’t a factor in that.
   - This is based upon just seeing for some people it works and not for other people. It depends on the other person.
   - You get to meet a lot of people. There are lots of opportunities, but it’s, well it’s hard to keep it going… It’s hard because of the long distance part, you are often out of communication, and there is the physical factor.

5. Slightly Agree
   - A lot of people at <AE organization>, that is where they meet. There was a proposal for marriage and they go married at <AE organization> last year.

6. Agree

7. Strongly Agree

Changes
   - The item’s wording was changed from, “There are opportunities to meet potential romantic partners during the season of working for this organization.” to “My work circumstances allow me to start and maintain romantic relationships.” to emphasize the role of the work circumstances at the organization.

20) My family members support my choice to work for this organization.

Response options
   - 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)
Responses

1. Strongly Disagree

2. Disagree

3. Slightly Disagree

4. Neutral

5. Slightly Agree
   - My parents are fine with it, but my wife and I are having a hard time with it.
   - They’ve grown to support me.

6. Agree
   - My parents have strongly shifted their opinion over time. They don’t really understand it completely so it is difficult them to strongly support it.
   - Funny one, they do. My mom worries about my financial state, but supports me, that I love what I am doing. My stepdad thought it was crazy. What are you doing with your life. But more recently has started to come around because I love it and he sees I am continuing to grow… becoming more of a professional… Becoming more of a professional means working my way up in that profession. You know people ski patrol for their lifetime. And I worked my way up to make enough money. It’s about me becoming more competent and being able to support myself.
   - Thinking of family as dad and sister.

7. Strongly Agree
   - My parents think it is a pretty cool thing.
• They were shocked and surprised at first, but they have supportive over time.

• I automatically thought of that 24 year old instructor and his relationship with his parents, then I thought my partner and present life.

• My parents come up once or twice each summer.

21) The circumstances of my work allow me to maintain connections with family.

Response options

• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
4. Neutral
5. Slightly Agree
6. Agree
7. Strongly Agree

22) I expect that my family circumstances will continue to enable my choice to work for this organization.

Response options

• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses
1. Strongly Disagree

2. Disagree
   - I would like to have a family.

3. Slightly Disagree
   - I foresee me finding a lady and not being gone all summer.

4. Neutral
   - <Parents> would be excited for me to do something else.
   - I’m uneasy about being away from my wife for a couple of months in the summer. It disrupts the balance of our relationship that we work so hard on.

5. Slightly Agree
   - I do expect family circumstances to not change much in the near future…
     But it is not exactly like they are letting me work at <AE organization>.

6. Agree
   - I think my parents will continue to have the same feelings towards it… If I was ever to get married, he would have to accept me leading expeditions.
   - I thought of my mom and dad.
   - I thought of my nuclear family of origin.
   - But it is challenging to do field work and have children as a woman.
     Family circumstances might complicate or make it impossible to continue in the future.

7. Strongly Agree

23) I have good friends at or near these places that I live(d).
Response options

- Five different 7 point Likert Scale with the words “Location 1”, “Location 2”… “Location 5” to the left of each scale.

Responses

1. Strongly Disagree

2. Disagree
   - My friends are no longer there.

3. Slightly Disagree
   - I have less social ties with the present community, I’m more likely to hang out with other folks.

4. Neutral

5. Slightly Agree

6. Agree
   - Because my friends are only there in the summer… I have the friends and people in common. But you only see the people every now and again so you don’t have that consistent relationship with them. If we were in one period for a longer period of time we would grow into being that family.
   - I was considering who is still there, or who will be there when I get back.

7. Strongly Agree
   - Strongly agree means constantly being family to one another. I mean… a really tight group of friends. You party together, you go play outside… It means being always socially comfortable. Everyone can be themselves… It’s about an awesome community of friends.
24) My work in adventure education has given me the opportunity to develop meaningful friendships.

Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
4. Neutral
5. Slightly Agree
   - I feel like I have started many different small fires, but no really big bonfires.
6. Agree
7. Strongly Agree
   - Most of my meaningful friendships have come from <AE organization>.
   - One of my best friends, and boyfriend, I met through <AE organization>. And those are deeply meaningful.
   - A lot of my great friends are from <AE organization>.
   - I don’t really have any friends outside of the industry.
   - On trainings we can trade lots of abstract ideas. You can’t do that with most people, they just don’t understand. There is so much that is mutually shared.
• Yeah, all but one of my friends works in this business… Meaningful means being out of touch for a number of years and then being able to rekindle the relationship in a number of minutes.

• Certainly.

• Oh yes… Based on friendships with students and staff.
25) The circumstances of my work allow me to maintain connections with friends.

Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree
2. Disagree
   - In the summer I drop off the face of the earth… Well the circumstances allow me, but I generally don’t.
3. Slightly Disagree
4. Neutral
   - In some aspects that’s true. But you… It’s hard to stay in touch with friends when you’re in the field… There are large chunks of time to spend with friends out of the field.
   - They understand, it’s ok to not have to talk with some <AE organization> friends for a while. But with other friends, they don’t really understand.
5. Slightly Agree
   - If everything works out I have time to go around and visit people around because of having time off. I have these gaps of time I can go travel.
6. Agree
   - I wouldn’t have much to talk with them about if I don’t.
   - I’m not sure if it the circumstances of work. It’s based more on effort, but the circumstances allow those efforts.
7. Strongly Agree

**Organizational Fit**

Organizational fit is how well the instructor’s values, needs, desires, and KSAOCs (knowledge, skills, abilities, and other competencies) fits with the culture, offerings, and needs of the organization. Given that seasonal AE instructors spend such intensive periods of time in the organization, organizational fit may be more important for this group of workers compared to previous validation samples of workers.

**Employee**

These items refer to the individuals that the instructor works and plays with. This includes both the other organizational staff and the participants on their educational expeditions.

26) I like the people I work with at this organization.

**Response options**

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

**Responses**

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
4. Neutral
5. Slightly Agree
   - They’re ok.
6. Agree
   - We have shared interests, good times together. People are easy to talk to and generally have a nice disposition.

7. Strongly Agree
   - One of the main reasons I keep coming back.
   - More than a work community, it is kind of like a family. I feel like I am going home.
   - They are phenomenal.
   - We are really a close-knit community. Everybody is strongly concerned about each other… In a positive way.

Changes
   - The phrase “work group” in the original item was changed to “people I work with” in order to not use the former phrase which led to some confusion. The current phrasing allows individuals to talk about the group of people that they feel like are most important.

27) My coworkers have a similar or greater level of passion for adventure education as I do.
Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
4. Neutral
5. Slightly Agree
   - It is a mix of those with passion and those that just do it for a job… There is a mix of commitment to the industry… Based on what they do when they aren’t working.
   - I am more passionate than the average instructor.
6. Agree
   - Yeah, but I am exceptionally passionate.
   - Everyone has a passion that affects students. We present them with challenges, developing life skills, and stuff. But, instructors go about the impact in different ways <big physical challenges vs. teaching lessons vs. teachable moments>.
7. Strongly Agree
   - People… it is not just something you do, it is definitely a lifestyle. The fact that people come back year after year shows their passion.
• It is hugely important that my coworkers are equally passionate. I can share experiences with people that understand what I experienced. It helps keep me inspired with their stories. I feel part of a movement.

• Because if you don’t you don’t go out in the Alaska wilds for three months and come back the next year… It’s a hard job.

• This is incredibly important… We’re a values driven organization.

**Changes**

• This item asked about a characteristic of coworkers that interview participants said was important to them.

• Added “or greater” to make sure that the responses were unidirectional.

28) I deeply value the opportunity I have at this organization to impact participants.

**Response options**

• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

**Responses**

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
   • I’m a bit more liberal than many others.
4. Neutral
5. Slightly Agree
6. Agree
7. Strongly Agree
• That is why I am out here is to help change the world and make it a better place… It is very meaningful seeing those aha moments…. Don’t feel terribly satisfied in the front-country. There isn’t enough commitment… It is so interesting working with these folks. <Shared a story about student giving a report on Ewoks as if they were actual people in the forest.>
<Complained about the lack of student diversity at times.>
• Every time I am tired, I think about the students and it gets me going.
• It comes from my original desire to impact others… from my experiences at camp… I always wanted to do that for other people.
• Whenever I work for another organization, I come to love <primary AE organization> more. I get to teach more than specific skills, but also get to have more meaningful experiences.
• I’m passionate about learning from students.
• Nobody does it for money. The transformation of individuals that you get to witness is incredible. <Shared a story of a participant changing over the length of the educational expedition.>

Changes

• This was an item that was added after the first couple of interviews in the second wave. It may be that this item would be better in a measure of AE job satisfaction.
• Changed from “students” to the more universal term of “participants”

29) My coworkers have similar ideas about risk management.

Response options
• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
4. Neutral
5. Slightly Agree

- As a trainer, I talked a lot about perceived versus actual risk. It seems like many people can get caught in trying to minimize perceived risk. I often will increase perceived risk but moderate the actual risk.

6. Agree

- There are times where I have been in more risky situations and we check-in with each other… It is pretty important. This could cause a great deal of conflict. It’s harder to get on the same page. Creates struggle… I’m not going to compromise student safety for communication sake… It raises lots of issues about perceptions of risk or communication style.

- People are so different. I tend to be pretty conservative. The overall goal is to have no one die and everybody to have a good time…. But there are some many decisions every day… When there are differences all of the people I work with have been open minded and helpful… People usually go with the more conservative call.
Based on policies and procedures, but there are always judgment calls and everyone has a little different call… Everyone has a different comfort level. But then, other people have a different comfort level. I feel like they shouldn’t be super risky. On the other hand if it is low risk…

That’s really important… I’m pretty conservative.

Everyone wants to lead a safe trip.

The organization has moved away from judgment and more to policies… It’s best if we have similar views, but it’s not necessary. We just go with the most conservative view at the time.

Wouldn’t strongly agree because people have different thresholds of risk.

7. Strongly Agree

I thought about the physical safety of students on course.

Changes

Changed from “safety” to “risk management”. There were two statements that the most important thing is similar ideas about how to manage potential risks rather than the more nebulous idea of safety.

Values

Many of the respondents were vocal about how their personal values meshed with those of the organization. The items in this sub-dimension particularly highlight the values of responsibility, freedom, and influence. It is assumed that these particular values may be culturally specific and could be different for an AE organization in a different cultural context.
30) I like the responsibility I have at this organization.

**Response options**

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

**Responses**

1. Strongly Disagree

2. Disagree
   - No, I don’t receive enough pay for what I do.

3. Slightly Disagree
   - Don’t know… I have a ton of responsibility… Responsible for ten adults in an environment that they are not familiar with. If something happens it is your fault.

4. Neutral

5. Slightly Agree
   - I thought about my job description.

6. Agree
   - As I put more time in at <primary AE organization>, I get more responsibilities… It’s a nice feeling to get that trust.
   - I wish I had more sometimes. I enjoying instructing and <top field position>.
   - It’s cool, the responsibility in terms of carrying out and enforcing the mission and watching out for safety.
   - I thought of logistical freedom.
7. Strongly Agree

- Last summer in Lead Instructor training I got sick, but was still able to be the LI on course. It is your choice to go through LIT. I sometimes wonder if I chose to promote too quickly, but I am not pressured to go into the LI or CD level. I am at the right level of responsibility for myself right now.

- I feel directly responsible to students and staff I enjoy that. The pressure that it puts on me to perform.

- I like the recognition that it is.

- Responsibility to me is the ability to design the course the way I want… For me it is the influence I have over the curriculum and latitude for scheduling the course… Very important.

Changes

- The potential troublesome word “authority” was dropped from the phrasing of the original item.

31) I have the freedom to decide the best way to educate participants on the outdoor expeditionary courses I lead.

Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree

2. Disagree
3. Slightly Disagree

4. Neutral

5. Slightly Agree
   - There is an educational framework... Within that you use your own character and decisions.
   - Well there are educational guidelines in places. Sometimes I feel like those get in the way... It’s come close to being a deal breaker before, but the <top organizational administrator> did listen to me.

6. Agree
   - It goes back to every instructor has their own style.... Not strongly agree, because of accessibility... because sometimes the logistics make it hard to do everything I want to do.
   - I agree, but some staff may feel less so because of the new more stringent policy framework.
   - There is a curricular outline, but the way that the information is delivered is up to the individual instructor.

7. Strongly Agree
   - <Supervisors> give me a lot of freedom. <Changing up course content.>
   - Enjoy the freedom to change the course, almost every portion of the course, without having to feel like I have to check in administration. I feel trust from others when I am in the field.
   - One thing I have noticed working with <two different AE organizations> you have freedom in the field. There is not much oversight.
• There is no, “this is how things happen, this is how.” I was really jaded by <other AE organizations> regimental style. It was so curriculum driven that it was, “the way” to deliver the course. Here we problem solve rather than have protocols. You get to lead your own trip, hike your own hike. Diversity in leadership styles is encouraged.

Changes
• This was one of the values that multiple instructors expressed as being important to them.

32) I have opportunities to influence decisions that affect the entire organization.

Response options
• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses
1. Strongly Disagree
   • No, it is really more consultative, like this is what we decided… There is about a 2% chance of changing anything.
   • I would choose something farther to the left based on my tenure in administration because staff feedback doesn’t have an impact, especially at the higher levels due to the personalities involved, inadequate systems, etc.

2. Disagree
   • Maybe at <the local AE location>, but not beyond that.
• Not too important to me… <AE organization> is too big for one instructor to matter very much.

3. Slightly Disagree

• Ha! Our organization is so large my voice is not heard very much at the organizational level

4. Neutral

• There are opportunities to give input, but the effect is questionable.

5. Slightly Agree

• We do give feedback at the end of each course and it does seem to make a difference.

6. Agree

• With the opportunities, with my research <on younger participants>...

  There is trend across <AE organization> for younger participants with shorter courses... I love standard college age group, but that is not exactly not where students are coming.

• Last year I was in California with the curriculum development committee and had a chance to look at the new manual and gave all of my input into the development of the new curriculum. I feel like the administration acted on my input.

• I’m on the diversity task force.

• Cool one. We have a board of directors that makes many of the decisions, but the <top AE organization administrator> and two season
staff sit on the board of directors. We have a good outlet for staff concerns.

- I thought about the affect I have on the strategic goals in the strategic plan.

7. Strongly Agree

Changes

- This was one of the values that multiple instructors expressed as being important to them. This item showed the potential for strong variability across workers from different organizations.

33) My values are compatible with the organization’s values.

Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
4. Neutral
   - Well I agree with the mission, but there is an information overload.
5. Slightly Agree
   - There’s an overlap between my personal values and <the AE organization’s> values in the style of courses. And values shared with other people who work at <AE organization>. At the same time, <AE
organization> focuses on the good of <AE organization> which sometimes is the same as the good of the individual instructor or students and sometimes isn’t… <For example>, staff want higher qualifications for staff but <AE organization> needs more instructors to staff courses.

6. Agree

• Trying to remember values from educational framework. Educational framework doesn’t address the environmental concerns that are important to me, but educational philosophy is great.

• As they are written down, but not as how they are put into practice by the administration.

• Yeah, I believe in the mission.

7. Strongly Agree

• I was able to define some of my own feelings, articulate of my own values, through <AE organization> language.

• Thinking about compassion and craftsmanship, challenge and adventure, all those things are ways to grow, and live, and be nice to people.

• Above all, compassion.

• I was an <AE organization> kid!… It’s a good match.

• Getting rehired and getting hugs from the <top AE organization director> when I come back… Not only moral values and the LNT type stuff. The values from the staff are passed on that are key, the wilderness ethic and other values. Values are gleaned from mentors.

Changes
This item seems somewhat redundant with the later item about mission. Future studies that use quantitative validation methods may want to check for redundancy.

**Future**

These items measure the instructor’s perception about how his or her current work is affecting his or her current growth and development and how it fits in with his or her long-term goals.

34) I feel good about my growth and development at this organization.
Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree

2. Disagree

3. Slightly Disagree

4. Neutral
   - I think that you facilitate such amazing growth for so many people. And you get that yourself, for yourself at first. But that decreases over time… And that can make people bitter. You should always be receiving the same work you are giving.
   - It used to be a lot more. I kind of plateaued out.
   - I don’t necessarily have any long-term goals.

5. Slightly Agree
   - Right now I am limbo with my career, but the organization offers a great deal of developmental opportunities.
   - Yes, but not for the skills I particularly want to develop.

6. Agree
   - Realized that I was able to go on my own journey. It took me a while to process what those changes were. What happened. I wish I would take more opportunities to take personal trips more.
This is one of the reasons I always come back... I always become a better person.

It’s tricky. As you get higher in the industry, the opportunities for growth shrink.

7. Strongly Agree

Organizationally... it challenged the way I think. My level of compassion was challenged. My increase of compassion with everything transferred to how I operate in my everyday home life.

Been great. I’m kind of a shy person... I wanted to be an instructor, but it was hard, but I knew I would learn so much more... I learned so much everyday last year.

I’ve ended up way ahead of the game from being a glorified babysitter to now leading amazing trips. I get lots of encouragement and feedback from <AE administrators>. I can talk to anyone about the <educational expedition> and that is encouraged and facilitated. Things get written down and don’t get forgotten about. <Example shared of mentorship received from administrators.>

I became a rock climber from going from shaky 5.9 to 5.12 and climbed walls through being part of the community... The system supports instructor growth through the supervision system <feedback and developmental, rather than evaluative, attitude>. 
35) Working for this organization helps me to achieve my long-term goals.

**Response options**

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

**Responses**

1. Strongly Disagree
   - It’s great at the time, but there is not a lot of development in the long-term. I am almost a cliché, a 30-something year old female that has gone back for her master's and now primarily works doing that… Most people love being in remote locations for long periods of time, but after a while relationships, kids, a dog, make it harder.

2. Disagree

3. Slightly Disagree

4. Neutral

5. Slightly Agree
   - Working for <AE organization> was a huge goal of mine for a long time… I have no idea what my long-term goals are… Not sure though what my level of work will be over time.

   - What if you don't have any long-term goals? <Laughter> Well… Becoming a better person gives me the confidence to achieve the other goals… My problem is that it is seasonal and I plan my life around that.

   - I want to continue doing this in the field with students. It’s good to maintain connections in the field and with industry-wide standards… The
organization needs to provide more of a career path of increasingly
diverse experiences and learning.

- My goal is not to continue in AE, but some of the skills are transferrable.

6. Agree

- It doesn’t help me meet my long-term financial goals, but it does help me
  meet my long-term goals of developing a higher sense of morality and
  passion.
- If only I know what those were… My self-confidence and ability to be a
  good leader… I don’t strongly agree because it is not a feeder
  organization for law school.
- I plan on going into geo-archaeology… I want to end up doing research
  based expeditions. Catering towards these research based trips. Right
  now I am building skill sets to do this… My long-term goals also include
  continuing this line of work.
- Yes and no. Yes, <AE organization> is well set up to allow folks to gain
  skills sets to work other kinds of courses… No, there is less help in
  achieving goals <outside of the organization>.

7. Strongly Agree

- I don’t totally know what my long-term goals are right now, but I love doing
  this work.

Demand for KSAOCs

It is assumed that different individuals have different types and level of KSAOCs
(knowledge, skills, abilities, and other competencies) and different organizations have
different needs for sets of KSAOCs. These items are attempting to measure how well the KSAOCs that individual instructors bring with them fit with the needs of the organization. An important shift from the original wording of the item sources the work with the organization as causing the growth rather than the job itself. Second, it is clarified whether the development is in the area that is desired by the worker.

36) My work with this organization utilizes the skills and talents that I want to use and continue to develop.

**Response options**

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

**Responses**

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
   - I wish it was more technically driven. But I have strongly developed my people skills.
4. Neutral
5. Slightly Agree
6. Agree
   - I am always wanting to push myself further. So right now leading 5.6 trad I would probably freak out on, but knowing I need to get there pushes me.
   - I focus on personal strengths and what I bring to the community.
• Communication… ability to be in front of people all the time, to be a litigator.

• The staff development training is fantastic, but only the outdoor education skills I want to work on, not the others.

7. Strongly Agree

• I feel like, in many ways, the job of instructing really fits my personality.

• Leadership is the big one for me.

• Leadership skills are the focus and the hard skills are secondary.

Culture

This sub-dimension captures both the individual’s relationship to the mission as well as the culture of the organization. Multiple participants spoke of the personal and professional culture being very different. Therefore, this sub-dimensions both the personal and professional sides of culture.

37) I deeply believe in the mission of this organization.

Response options

• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree

2. Disagree
• The mission is poorly worded and doesn’t connect well in practice… In adventure education the mission is so important compared to other seasonal work. I mean do fishermen care about the mission?

3. Slightly Disagree

4. Neutral

5. Slightly Agree

6. Agree

• Part of me wishes I could click an N/A because it is so poorly worded; however, I do believe in the essence of the statement.

• I agree, but the shift in focus <on a different type of client> well I’m not sure… It will change the feel of the organization.

7. Strongly Agree

• To me, this is developing compassion, character, and service in the world around us.

• Based on the history of the organization, I deeply believe in the mission of <AE organization>.

• Even though it is the biggest run-on sentence, I believe in how it is delivered to impact individuals… Did they change the mission recently?

• I most strongly identify with the ideal that people don’t realize their own power. <AE organization> gives them experiences to unleash their own potential.

• It’s what I touched on earlier… I deeply believe in mission.

Changes
Again, this item seems to be somewhat redundant with the earlier item concerning “values”.

38) I fit with the organization’s social culture.

Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
   - Interesting, not sure what exactly to consider. A lot of like-minded individuals that appreciate the power of the wilderness. The language that says it all. The jargon, the back stories, builds the culture... I was never a student <unlike most instructors>. I never am discounted, professionally, but I don’t share the same knowledge base.
4. Neutral
5. Slightly Agree
   - Much less so now. I moved on, got married, bought a house. I have a steady lifestyle versus that itinerant lifestyle that we all know and love.
   - Yeah, people who like the outdoors, have the same interests. But age puts me in a different realm.
6. Agree
• I don’t necessarily stick out. Do service, play, go off on expeditions, drinking is encouraged. A bit of binge culture, I have accepted it. Some people can’t put himself around the binge culture anymore because he will fall into alcoholism. Another part is being outside.

• Yes, but I’m a bit less of an extrovert compared to most instructors... But I still fit... It’s feeling comfortable when you are not, not working and just hanging out. We like to do the same things.

• I’m thinking that I have fit more and more here because there has been more females around. And it has become more of an accepting culture. More open to females, different genders, multi-cultural groups. There is still room for improvement. Mountaineering is still mostly male.

• Yeah, I have a Toyota and a dog.

• We’re about the same age and from similar backgrounds, have similar values and... see similar things we like, like about our jobs. Values in a broader sense.

7. Strongly Agree

• Yes, it is very loving, caring, and compassionate at my <regional AE organizational location>.

• We talk a lot about that at <AE organization>. It is a safe place for people of color and people that are queer... What you like to do for fun, commitment to the industry.

• It’s about hanging out with other instructors. Being able to relate to each other and function well.
39) I fit with the organization’s professional culture.

Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
   - There isn’t really a professional culture. There isn’t enough people investing in it to make it a profession.
4. Neutral
5. Slightly Agree
   - I am not as driven, type-A type of personality as most folks. I like where I am. I also have less college education than the average staff member.
6. Agree
   - To me this is about the manner of how you hold yourself while you are at <the local AE organizational location>, on or off contract. I try to be supportive of the mission, no matter what. I help out around the base, even when I am not required to do so. Moreover, I try to carry a level of professionalism on courses. I try to always deliver high quality courses.
   - Yes, but I think of professional culture as coming more from the high level administrators.
• It’s about the amount of experience folks bring. I have a similar history and skills... of a new instructor. Everybody brings a different background, but we all fit.

• I don’t feel like part of the national <primary AE organization> crew. I’m more limited to the <local AE organization>.

• There is no difference between the social and professional culture. <Shared a story about working in the national office for a bit.>

• I think about the administrative side of thing.

7. Strongly Agree

• The professional and social cultures overlap quite a deal.

Community Fit

The difference between organizational and community fit may be a blurred line given that individuals often work and live at the same organizational location. Moreover, these questions focus on the geographical location near the respondent’s primary AE organizational location. It is assumed that it is fit with this location that is most salient for an individual’s choice to return to the organization in the following season.

Place

These two items measure where the instructor works for their primary organization and then asks if they feel like that place or places is home to them. “Home” is a value-laden term and may eventually prove to be problematic; however, the item appeared to measure an important aspect of attachment to place for the instructors.
40) I really love the location(s) where I work for this organization.

Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
4. Neutral
5. Slightly Agree
6. Agree
7. Strongly Agree

- That’s what drew me there was the <AE location>.
- I really love the <AE location>.
- It worked out perfect that I was living there and found out <primary AE organization> was there.
- All of the curriculum is closely related to the local area.
- You can’t complain about the backcountry.
- I love living in different places in different seasons.

Changes

- Changed from single location, “I really love the location” to “location(s)” to allow for multiple locations worked.

41) I think of this place as home
Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
4. Neutral
5. Slightly Agree
   - Home is the place where I am happy and can continue growth and has opportunities for growth. Connection to land. Connection to people. People are seasonal in <primary AE location> so it is difficult to establish permanent connections.
6. Agree
   - I have spent so much time there... I have made an impact on the community... I can come back to, and be a part of community.
7. Strongly Agree
   - To me this is where I grew up and where my parents live.
   - It's a community of folks, a bed to sleep in... A place to stay without feeling awkward, you know, personal space.
   - It's where the parents are and where my stuff is.
   - That's my permanent address. That's where the mail gets sent.

Changes
The wording was simplified.

**Social**

The only item in this sub-dimension addressed the concept of a seasonal lifestyle. What exactly a “seasonal lifestyle” is may slightly differ among groups, but the common definition assumes a lack of geographical or social continuity through the year.

42) I want to continue living a seasonal lifestyle.

Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

- Includes a N/A option.

Responses

1. Strongly Disagree
   
   - No there is not enough continuity in life. The constant moving around is too much. I am ready to be in one location and build a single community around me.

2. Disagree
   
   - Don’t want to.

3. Slightly Disagree
   
   - I don’t want to live out of my car for the next five years.
   - I’m ready to transition. I would love to continue to travel, but I want to have more of a home base so I can have a partner, connection to a town of people,… belong to a book club, and be involved in politics and...
issues... I would like to have a family, and some people do it, have kids and work in the field, but I think you are a more effective parent if you’re not in the field 130 days per year.

- I’m mostly unseasonal right now.
- It’s stressful to need to find work in the off-season.

4. Neutral

- I’m really torn about that. It is fun. It offers breaks in the spring and fall. And, and, at the same time, it would, it would be nice to have a stable job all of the time.
- Hmmm, well I like parts of it. You don’t get burned, burned-out and you meet really great people that have passion… and it is so meaningful. But I dislike the moving around so much. And always leaving people behind, that’s hard. It would be nice <laughter> to have a boyfriend around a bit longer.

5. Slightly Agree

6. Agree

- For a while but eventually I want a house and roots planted. A more consistent group of friends. I want to be able to go out and live.

7. Strongly Agree

Changes

- Included a N/A option for those who felt like it was not applicable to their situation.
Activities

Some of the interview participants talked about dealing with a perception from their friends or family that AE instruction consisted of, “playing in the woods.” While these participants claimed that this was not true, AE instruction does include many elements that are generally considered recreational activities (e.g., rock climbing, backpacking, sea kayaking, etc.). Moreover, it may be these outdoor recreational aspects that attract some individuals to work in the AE field. Therefore, these items ask how AE instruction affects their recreational opportunities.

43) The climate (weather, etc.) at the location(s) where I work for the organization is suitable for me.

Response options

• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
4. Neutral
5. Slightly Agree
   • It’s a little too cold at the beginning of the season and little dry.
6. Agree
   • I won’t strongly agree, because I could use a tiny less rain.
   • Professional, but fun.
• Not a big deal.
• I move around to be in the right climate.

7. Strongly Agree

• I love going to <tropical AE organization location> in the winter. I was always freezing growing up in Colorado.
• <Local AE organization location> is heaven on earth in the summer.

Changes

• Put “at the location(s)” before “where I work” to allow for multiple work locations.
• Added “(weather, etc.)” to clarify that the question was not referring to political or social climate.

44) I enjoy recreating in the physical environment near the location(s) where I work for this organization.

Response options

• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

• Includes a N/A option.

Responses

1. Strongly Disagree

2. Disagree

3. Slightly Disagree

4. Neutral

5. Slightly Agree

• I do much less than previously.
6. Agree
   • <Local mountain range> is the most amazing physical environment I have ever seen… It is crappy rock, but I like to climb ice and snow.
   • Yeah I like paddling on the lakes and there is a great whitewater park in the area.
7. Strongly Agree
   • There’s good climbing there.
   • Lot to do <at local AE location>.
   • <AE organization location> has fantastic whitewater and sea kayaking.

Changes
   • Put in “location(s)” to allow for multiple locations worked.

45) I enjoy having my recreation activities (i.e., rock climbing, kayaking, etc.) being part of my job.

Response options
   • 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)
   • Includes a N/A option.

Responses
1. Strongly Disagree
2. Disagree
3. Slightly Disagree
   • I love to work in the outdoors, but honestly… I haven’t had time or, I guess desire, to take any personal trips for a long time.
4. Neutral

5. Slightly Agree

6. Agree

   • The difference for me is that I try to keep some things to myself and more personal. I don’t really want to be teaching mountain biking versus climbing… I’m ok for that to be an overlapping… Biking, like that is my time, that is recreation and this is professional… being able to enjoy recreational activities… The student relationship is so important to me that just being able to just lead activities, guiding, would not be very important to me.

   • I don’t strongly agree, because it is hard, after being wet for so long, to want to go out and get wet again. But then, then you do.

   • It’s neat to combine those.

   • Less than I used to.

7. Strongly Agree

   • The motivation for doing the job, for me, has been less about the climbing and more about impacting students. My… overtime, my… I’ve had a shift in perspective.

   • It makes it really easy to be passionate… Some people have draw that line.

   • That’s a large part of why I am here.

Changes

• Added an N/A option
46) Many of my coworkers at this organization enjoy the same leisure activities as I do.

**Response options**

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

**Responses**

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
4. Neutral
5. Slightly Agree
   - I wish there was more people that enjoy mountain biking and white water kayaking. It pushes me to seek things out on my own. But there is the commonality with skiing and climbing.
6. Agree
   - Nice to be able to find partners.
   - Yeah, mostly climbing and running.
   - Yes, but I’m slightly less die-hard than many other instructors.
7. Strongly Agree
   - Most if not all.
   - They’re a weird but good breed.
   - That’s the one thing that we all have in common.

*Organization Sacrifice*
This dimension looks at what the individual would lose if she or he stopped working for the organization. This includes both the experiential and material benefits that would be lost.

Holistic

The single item in this sub-dimension asks the respondent to make a fairly global judgment about what it would mean to stop working with his or her primary AE organization. Although this is based on an earlier item from the original set, it may be problematic to have such a global item mixed with the more specific items that are also in this dimension. This mixture of the level of the items may invalidate the classical test theory assumption about the equality of the items.

47) I would likely lose more than I would gain by not working for this organization any more.

Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree

2. Disagree

- I am about to jump ship and go to law school. I do feel like I am going to lose a lot though… A sense of community and belonging, and being able to impact people on a higher level.

3. Slightly Disagree
• Financially I would gain, but that is not what life is about. The personal growth and meaningfulness with community interaction and impact is.

4. Neutral
• For the people I would strongly agree, but financially I strongly disagree.
• Every organization is replaceable.
• I can’t really move up to a more desirable position.
• I don’t know…
• There are trade-offs. I would gain a lot in another, more desirable area.

5. Slightly Agree
• I could work for <a different AE organization> and gain from that, but I really like the focus on people at <primary AE organization>. I like it… it is right for me.

6. Agree
• Helps me give a sense of meaning and a sense of place. I say that I am from <AE organizational location>. That’s my permanent address. That’s where I call home.
• It’s not my time to leave right now.

7. Strongly Agree
• I think not working a full season this upcoming summer makes me think about what I will be missing, what I give the students. I enjoy the opportunity to be concerned about other and not just myself.
• I wouldn’t do this I didn’t strongly agree.
Changes

- This item is a change from the earlier item since it asks the respondent to think of both the costs and benefits involved with potentially quitting.

Non-Portable Benefits

The items listed here refer to both the elements that may be common in this line of work (commute time, physical quality, and gear discounts) as well as elements that are less common in AE, but more common in most jobs in the U.S. requiring a similar level of preparation (health and retirement benefits). Both of these sets of elements may be important because while a desire for health and retirement benefits may pull individuals out of the industry (if their organization does not provide them to an adequate degree), the individual’s level of satisfaction with the other elements may help retain them in the organization.

48) The time that I spend commuting to this organization is reasonable.

Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree

2. Disagree

- I should work at <the AE organization location closest to off-season location>, but I go to where I’ve worked, because I have a reputation there. My name means something… for what that’s worth.
3. Slightly Disagree

- For the two summers I traveled across the country, but that was my choice. That is not the organization, but it is me. Driving for four days is a pretty far commute. That is pretty expensive for my budget. And the environmental impact of driving so much.

- I don’t mind doing it… Alaska is sooo far away. For two years I’ve driven to Alaska and then flown down to the lower 48 for trainings… But now I am in Alaska for good. And since the <local AE location> closed here… I didn’t even consider working for another base.

4. Neutral

5. Slightly Agree

6. Agree

- It wouldn’t work for me if the <regional AE location> were anywhere else. I gotta get up to the mountains. I really like the transition I feel driving up to the <regional AE location>.

- Generally… It is weird from time to time when I have to go to <distant AE regional locations>… There were especially complaints about having to move to <different locations> last summer when the gas prices were so high.

- They flew me out to <remote South American AE location>.

- Cool, I ride my bike to work.

7. Strongly Agree

- Once I’m at base I’m there.
• It’s a healthy four and a half hour from <off-season location>.

49) The free or discounted gear, trips, or other material fringe benefits I receive from this organization are excellent.

Response options
• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses
1. Strongly Disagree
2. Disagree
3. Slightly Disagree
   • The pro-deal saves some money, but not much after the additional shipping.
   • <Primary AE organization> has recently been doing better with staff expeditions… The pro-deals are ok, but we use our personal gear so much. It would be nice to have free gear once in a while.
   • Great system, but I really don’t take advantage of it.
4. Neutral
   • They’re all right. I haven’t really taken advantage of any.
5. Slightly Agree
   • Yes, but it is not so important to me at this point in my life.
   • I don’t really take advantage of it.
   • Complicated system to get discounted gear. Should be easier to get pro-deals.
6. Agree

- <AE organization's> pro purchase program manager works hard. Mt. Rainier trip last May was a lot of fun. Little things are really good. Still have some tea from road kill.

- I make use of the pro-deal and I have taken so many trips that have been partially or fully funded by <AE organization>… The levels of training are great.

7. Strongly Agree

- There are lots of pro-deals and the local culture is that you can borrow school gear. That was super important to me. I could try out the different types of ice axes so I knew what I wanted to buy… The trips I went on with <local staff members> to Mt. Stanford was great. We flew into it and it was awesome.

Changes

- “Things” was changed to “material fringe benefits” to be more specific.
50) The health benefits at this organization are suitable for my needs.

**Response options**

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)
- Includes an N/A option

**Responses**

1. **Strongly Disagree**

2. **Disagree**
   - There really is only an emergency plan and I need more.
   - There is the catastrophic, but it would be nice to have health insurance.

3. **Slightly Disagree**
   - My ignorance of not knowing what health benefits are. They change and it is hard to keep them straight. Not necessarily knowing what is what. It is hard because seasonal work often doesn’t provide this and it is even more important given the risky, active, leisure pursuits we engage in.
   - It would be better if they offered health insurance. I like the accident insurance, but…
   - Right now it is a pretty good system of reimbursement, but not the whole amount… I do understand their concerns, we aren’t full-time employees.
   - The health care reimbursement works pretty well for my needs.

4. **Neutral**
   - Don’t know what they offer.

5. **Slightly Agree**
• <AE organization> gave me some money back last year.

6. Agree

• It is suitable for my increasing medical needs.

• My health needs are small.

7. Strongly Agree

51) The retirement benefits at this organization are suitable for my needs.

Response options

• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

• Includes an N/A option

Responses

1. Strongly Disagree

• There isn’t any that I know of.

• Is there any?

• There is none.

2. Disagree

• Part is my own ignorance, but I don’t know if I am even eligible for the retirement package. And I don’t think the benefits are that great.

• They don’t make any contributions at all… This is one of the reasons I am going to move on. I will never be able to make enough money to live when I am older.

• There is no match.

3. Slightly Disagree
• It’s not just the retirement benefits. It’s a combination of retirement and compensation. There is no way that I am getting the money I need from <AE organization> to retire. The pay is too low to put money away from salary.

4. Neutral

• I kinda started looking into this, but never followed through with it.

• Doesn’t apply

5. Slightly Agree

6. Agree

7. Strongly Agree

52) I enjoy the physical quality of the work I do at this organization.

Response options

• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree

2. Disagree

3. Slightly Disagree

4. Neutral

• Sometimes it isn’t physically engaging enough, but sometimes it is. You can’t just do a 15 mile paddle with students in rough water the first day. Plus, sometimes you’re out there shivering in your sleeping bag eating food that the students burned that evening.
5. Slightly Agree
   - I love mountaineering and sea kayaking, but I don’t like to do it at 1 MPH.

6. Agree
   - I love canoeing and backpacking, climbing. I wish it was a bit more physically demanding, but the lengths are justifiable given the participants.
   - Really enjoy the activities that we do, but sometimes it’s not active enough.
   - The physical demands of my present job is a nice balance.
   - But not strongly, because it is not physical enough.

7. Strongly Agree
   - I enjoy being in the mountains and being around the <local AE location>.
   - I love all of it. I like having a job that I get fitter when I am working.
   - The aspect of the backcountry and the lifestyle. How you get to be, how you get to live.
   - The paddling and the navigation.

Status

Assuming that status is based on perceptions by a party external to the individual, the two external parties that these items address are other individuals who work for the same primary AE organization and other individuals in their professional or personal spheres. These items directly inquire about the internal audience, but more indirectly sample a respondent’s actions based on perceived external attitudes.

53) I feel that people at this organization respect me a great deal.
Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
4. Neutral
5. Slightly Agree
   - Just being asked coming back season after season. The level of respect… I know they respect me, but a great deal?
6. Agree
   - For me, this is based on the personal relationships I have with coworkers.
   - Everyone respects each other… It is really a respectful, a respectful community.
   - Respect… I feel like people respect me, but I’m still approachable.
   - With increasing responsibilities I get more respect.
   - People that know me do.
   - This is due to longevity. I have name recognition. I would have to build up my reputation if I worked elsewhere.
7. Strongly Agree
Respect goes down when you go up the levels <of administration>. They respect me more for what I can do than as a person when you move up the ladder.

I brought a friend last year… My recommendation allowed him to be hired…. He later told me that <administrators> said a lot of good things about me in the interview.

Yes, <the AE organization> seeks out our feedback.

54) Working in adventure education was a goal of mine for a long time before I started working in the industry.

Response options

• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree

• No, I never really thought about it until two weeks before I applied. My WFR instructor just encouraged me to do it and I did.

2. Disagree

• My dad used to drag me along on canoeing trips. Then I got into it because I needed a job. I just fell into it.

• I wouldn’t exactly say it was ever an articulated career goal, I just fell into it.

3. Slightly Disagree
• I was actually heading for a career in physical therapy… and then I took an <primary AE organization> course.

4. Neutral
• It was a goal for a couple of years, but it wasn’t what I went to college for.

5. Slightly Agree
• I kind of stumbled into it from summer camps.

6. Agree
• I guess I was 18 when I decided and 20 when it happened. But it felt like a long time.

7. Strongly Agree
• It’s been a goal of mine since I was 13.

Changes
• Changed from “organization” to “industry”, which would make it more applicable to people who have worked in the industry longer.
• Removed “career” to allow individuals to answer it yes, even if they don’t think of it as a career.

55) In social situations I identify myself as an adventure educator (or some other similar title).

Response options
• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses
1. Strongly Disagree
2. Disagree
   • No, I don’t. I only do, if I am asked pointedly. I don’t know, I feel like so many instructors can be cocky about it, and I’m not into that. I guess it might be a bit of a confidence issue.
   • I try to be quiet and humble about it. I identify myself usually as a student. It’s hard to explain what it means to me in a quick social situation.
   • I identify myself as a student, because that’s what I spend most of my time doing.

3. Slightly Disagree
   • I usually identify myself as a guide because it is more easily understood.

4. Neutral
   • I use to, but right now I consider my focus on <other financial activity>.

5. Slightly Agree

6. Agree
   • Yeah I do.
   • I usually say outdoor educator.
   • Outdoor educator
   • I usually have to provide and explanation beyond the name of the industry.

7. Strongly Agree
   • Yes, it is part of my nature. It is who I am and what I do.

Work Situation
These items address the opportunities that the organization provides for the respondent. Second, one item addresses how the circumstances outside of his or her primary AE organization may limit what organizational opportunities that he or she can take advantage of.

56) I believe I could work for this organization next year if I choose to.

Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
4. Neutral
5. Slightly Agree
6. Agree
   - Unless I totally screw something up.
   - I would like to continue working for the <AE organization>.
   - Yeah, but I am getting older and I need to consider… consider my financial needs… and I need health insurance… I’m like thinking, five years down the road, am I still going to be an instructor? What am I going to do when I get down the road?
   - But not strongly agree, because the organization may go belly up.
7. Strongly Agree
• There is an expectation that you will return.

Changes

• Changed from “season” to “year”.

57) I have the opportunity to work the number of days for this organization that I desire.

Response options

• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree

2. Disagree

• I would love to work more days in the field. I think the optimal number of days probably would be... this summer I am getting 30 field days. I would rather have 40 field days or maybe even more. My previous organization worked 9 weeks. I had so much fun on those courses. I wish I had the same number of courses, but more days per course.

• I wish I was working less.

3. Slightly Disagree

• No, the off-season is kind of minimal... I have a winter ski season going.

• Because of base camp closures, there are more instructors in the system.

4. Neutral

• I would have said yes last year, but there are cuts this year, due to economic down turn.

5. Slightly Agree
• With the closing of all of the <regional AE locations> there is a relative glut of instructors in the systems. I can’t call the courses that I want like I used to be able to do.

6. Agree

• Just agree, because they just got rid of the sea kayaking programs.
• Based on the contract offers I get, but I have to call them up every once in a while to remind them that I am around.

7. Strongly Agree

• I was told by the <local top AE organization administrator> that I work whatever I want.
• They found extra work for me to do at the end of the season.

58) This organization offers me the mix of outdoor expeditionary courses I prefer.

Response options

• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree
2. Disagree
3. Slightly Disagree

• I wish there was more adult backpacking courses. My dream sheet was different that what I got. I didn’t have the seniority to get what I want. I feel like I am being pigeon holed. I wish there were more opportunities.
• I would prefer a bit more new and different… longer, more college age students. They do all right, but not great… I get to work trainings. I am interested in large scale change and working with instructors magnifies the effect I have.

4. Neutral

• This season will be the first time working the age, the older, the age I wanted to originally work with.

5. Slightly Agree

6. Agree

• Last summer I got to do, more, more different courses <like backpacking, sea kayaking, and mountaineering>.

• My skill set is relatively good and rare compared to the need at this time, so I can get these opportunities fairly easily.

• There are enough expedition types and opportunities to break into different activities, learn new skills.

7. Strongly Agree

• There is enough diversity of course types, locations and activities.

• I get exactly the activity mix I want.

Changes

• Change from “expeditions” to “expeditions/courses” because “courses” is a more familiar term for NOLS and OB instructors.

• “Expeditions/courses” changed to “outdoor expeditionary courses”.
59) I have the opportunity to work the balance of different types of work experiences that I prefer at this organization (i.e., field vs. office or logistical work).

Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
   - I wish I could work more long-term courses.
   - No much opportunity to work outside of the prescribed roles.
4. Neutral
   - I feel like I have been pigeonholed into <niche course time>… I have been able to be promoted quickly, but I want to work longer courses.
5. Slightly Agree
   - I’ve been luckier than most.
6. Agree
   - I would say strongly, but last year I kept getting pulled to fill in for others that got sick or hurt. It was all legitimate reasons, and I was happy to help, but it killed my perfect balance.
   - <The local top administrator> was willing to let me do some logistics between instructing… I worked a mix of course lengths.
• Year round, there is a whole variety of programs… Often times, instructors can pick up short term office work.

• Like I said about the leadership stuff, they allowed me to jump into it. They also offered me administrative work if I wanted it.

• Yes because I work to get what I want.

7. Strongly Agree

Changes

• The wording of the item was changed from “organization offers me” to “I have the opportunity” to suggest a more active role in the process for the AE instructor.

• The term “field” was added after “long-term vs. short-term” to clarify.

• “Short vs. long-term” was removed because it seemed to be a double-barreled item and this aspect was already addressed in the previous item about mix of expedition types.

• Added “or logistical” to office to increase the comparing front and back country work options.

60) The circumstances of my work I do when I am not working for this organization give me the flexibility to work for this organization.

Response options

• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree

2. Disagree
3. Slightly Disagree

4. Neutral
   - I don’t really do anything in the off-season. I just kind of bounce around.

5. Slightly Agree

6. Agree
   - Because I create work circumstances so that I can work for OB in summer. School is nice for that.
   - Work in the ski industry.
   - You have to make it happen.
   - I don’t really do anything else.
   - Being a student works out perfectly. I just quit my part-time job.

7. Strongly Agree

Changes
   - The term “off-season” work was changed to “work I do when I am not working for this organization” to avoid the term “season”, which was previously misunderstood.

Advancement
   The one item in this item discussed the opportunities for professional promotions.

61) My promotional opportunities are excellent at this organization.

Response options
   - 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)
Responses

1. Strongly Disagree
   - There are really no more opportunities in the field.

2. Disagree
   - No you top out in the field pretty quickly.
   - <Originally interpreted the question as getting the opportunity to promote or represent a gear company and get free gear. Then she re-read it and interpreted in the intended manner.>
   - There isn’t much promotions outside of being an administrator. Even there, it’s pretty flat. As a field instructor there is nowhere to go.

3. Slightly Disagree
   - At the beginning they are. You can get promoted and go to different course areas, but they plateau out over time.
   - There are other positions I may enjoy doing, but not many and, hard to get.

4. Neutral
   - There isn’t many promotional opportunities now that I have become a Course Director and trainer. There really isn’t higher positions in the field.
   - Well, you can move pretty quickly up to Course Director, but I don’t know how great that is. In my ideal world, I would stay a longer time in each stage. At a certain point you can’t go much higher.

5. Slightly Agree
• Considering after course director, I guess trainer, but it becomes nowhere to go. The organization is very broad, but not very tall.

• I was offered the opportunity to do some administrative work, but I preferred being in the field. I enjoy my trip, but don’t really care about the hierarchy.

• If you strive and are flexible there are. But opportunities decrease over time. You have to get even more flexible, moving around, over time.

6. Agree

7. Strongly Agree

**Pay**

Wilson (2008b) found that it was not necessarily the absolute level of pay that was important to instructor satisfaction but rather the instructor satisfaction with their level of pay. Therefore, these items ask instructors to evaluate how well the pay they receive from the organization compares to their needs and desires.

<If replied yes to being married>

62) A) The money I earn at this organization contributes significantly to my family’s annual income.

**Response options**

• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

**Responses**

1. Strongly Disagree
2. Disagree
   - I spend half of my time working for <AE organization> but it is only like 20% of my income.

3. Slightly Disagree

4. Neutral

5. Slightly Agree

6. Agree
   - Being a graduate student, the budget is tight.

7. Strongly Agree

63) A) My family’s income can sustain the lifestyle that we want at this time.

Response options
- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses
1. Strongly Disagree

2. Disagree

3. Slightly Disagree
   - We want to travel, but we don’t have the money to… We want to save money and buy a house, but we don’t have the means.

4. Neutral

5. Slightly Agree

6. Agree

7. Strongly Agree
• We have everything we need.

<If replied no to being married>

62) B) The money I earn at this organization contributes significantly to my annual income.
Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree
   - My parents and grandparents support me. I have property in my name.
   - I only worked one month in the last year… It is good money, but the consequences of being gone doesn’t outweigh the money.

2. Disagree

3. Slightly Disagree

4. Neutral

5. Slightly Agree
   - It represents about a 1/3 of my income.
   - Money is important to keep people working. More people would keep working longer if there was more money elsewhere… Absolute amount of money is fundamentally too low. Make the reward greater and people will stay longer… I think for some people it is a problem initially. They’re like, “Oh my god I’m making this?” And speaking of people I’ve seen at <AE organization>. And they work one season and then say, “you know I want to do something else”. And then there is other people who come in and initially the meaning of the work means more than the money. And they stay in that phase for years, potentially. And then after a while the money means more than the work. And those are the people that burn out and
go through a phase of being bitter. And whether they get over that or not is sort of up to them… In reality there is more than one pattern.

6. Agree
   • I recently did my taxes and the majority of my money comes from <AE organization>.
   • I have money from other sources as well.

7. Strongly Agree
   • It is half my annual income.
   • It’s my only income.

63) B) My annual income can sustain the lifestyle that I want at this time.

Response options
   • 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses
1. Strongly Disagree
   • I’m poor
2. Disagree
3. Slightly Disagree
4. Neutral
5. Slightly Agree
6. Agree
   • I don’t have full access to inheritance until 35, but can live well for now.
• Well... I’m doing OK. It sustains me, I mean I can pay my student loans, but perhaps it won’t be enough in the future.

• Right now I agree. I own a house, but it is rented out. To actually own, own a house I would need to earn a bit more. I would want a bigger safety net with kids. There are only a few possible pay increases and those aren’t much.

• In time I may need more, but it works for me now... People generally have other sources of money or live out of their car.

• But it’s not my income from <AE organization> that is sustaining me.

7. Strongly Agree

64) It would be difficult for me to earn more money at another adventure education organization.

Response options

• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

• Include a “Don’t Know” option

Responses

1. Strongly Disagree

2. Disagree

• I think about <Guiding organization>, I could make more starting there.... And this year I won’t get paid as much because of the change in policy about <the way individuals get paid>.
• I feel like I could get paid more at another organization, but I haven’t found one I believe in as much as this organization.

3. Slightly Disagree
• I feel like I could work in North Carolina this fall and it would pay more.
  Working this one program in North Carolina, would get paid 25% more.

4. Neutral
• Don’t know
• I could make more as a guide, but not at another nonprofit, the pay scales are likely to be pretty, fairly similar.
• Don’t know one way or another.
• I don’t know. I just know that transferring to <other AE organization> would be a major pay cut, but other organizations could offer more money.
• Don’t know

5. Slightly Agree

6. Agree
• Yeah, I’m pretty far up the <AE organization> ladder.
• Knowing that the AE field wages are low anyways, and I have a lot of field weeks so pay is pretty good. It would be easier if I was a new instructor.
• I would have to go back to school to get a job that paid more at this point.

7. Strongly Agree
• Don’t know

65) It would be difficult for me to earn more money at an equally as satisfying job.

Response options
• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)
• Include a “Don’t Know” option

Responses
1. Strongly Disagree
2. Disagree
   • Could be happier in many other fields that pay more.
3. Slightly Disagree
   • Satisfying is really hard to quantify. Some things will allow me to be around other people I want to be around.
4. Neutral
   • I could earn more money, but at an as satisfying job? I don’t know.
   • I don’t know.
5. Slightly Agree
   • I think if went to another, more technically focused organization, my pay would go up, but my satisfaction would go down.
   • Don’t know what would be as equally as satisfying. It is the most satisfying job I have ever had.
   • That is the question. I think it will be difficult, but not impossible.
   • There might be some sweet non-profit in <off-season location>. I’m not sure.
6. Agree
   • Just feel like I am doing really well with it.
7. Strongly Agree

*Community Sacrifice*

This final dimension has a single sub-dimension. These items measure the perceived relative cost experienced by the instructor for leaving the difference communities that he or she is a part of.

*Leaving*

66) Leaving my social community at and around the organization at the end of the season is very hard.

Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)
- Include an N/A option

Responses

1. Strongly Disagree

2. Disagree
   - I'm not really around very much anymore. Most of my community has moved on.

3. Slightly Disagree

4. Neutral
   - I certainly miss some of the people at <AE organization> and in the area, but I enjoy the time off and get some down time.

5. Slightly Agree
Now that it is an annual thing I know that is my choice whether I want to come back or not. I can make it happen if I want it to. It is becoming easier the more I do it.

6. Agree

- It is hard, but also a time when people are ready to have their break or move on. It is always just time… It is always sad.
- When you leave you probably won’t see them until the next season, or who knows?… Thank God for facebook.
- It’s part of who I am. Many people know me as an outdoor instructor.

7. Strongly Agree

- I really value those relationships… I do enjoy playing music in the off-season.
- It sucks leaving.
Changes

- The phrase “at and around the organization” was inserted to allow individuals to either talk about social connections with individuals working for the organization or other people living in the area.

67) Never working for this organization again would be very difficult.

Response options

- 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

Responses

1. Strongly Disagree

2. Disagree

3. Slightly Disagree

4. Neutral

- I always would work under a similar mission statement.

- It would depend on why I wasn’t working for the organization any more.

5. Slightly Agree

6. Agree

- It’s the most fulfilling thing for me. I’m sad that I won’t be able to work for <AE organization> next season.

- You put so much time, time and effort that you really feel dedicated to it… And the experiences are so neat.
• Community aspect… and the thought of me being a rock climbing instructor is over is sad… A shift in identity and abandoning of the old identity.

• I really appreciate the people that are there. I hope to teach or something so that I can always be in the field, at least for a course or so.

7. Strongly Agree

• I feel like it will never be over.

• I would most miss the rejuvenation. And giving back to the students… And being on a lake in a boat every day.

68) Leaving the place where I live in the off-season is very hard.

Response options

• 7 point Likert scale (Strongly Disagree, Disagree, Slightly Disagree, Neutral, Slightly Agree, Agree, Strongly Agree)

• Include an N/A option

Responses

1. Strongly Disagree

• No, I’m out of here like a bat out of hell.

2. Disagree

• It’s not hard leaving <off-season location> because I love <AE location> so much.

• No, it’s not very hard.

3. Slightly Disagree
• Always excited to go to <AE organization>. It may be hard, but it is always really good.

4. Neutral

• Most of the time, I’m excited to get back to <local AE location>.

5. Slightly Agree

• It’s usually not too hard, because usually I am not too happy with the work I am doing. But think seasons I have some good friends at <off-season location> so it will be harder.

6. Agree

• It’s always hard.

7. Strongly Agree

• Yeah, my partner, house and yard maintenance, garden, animals…

  We’ve worked our @## off to build a little community for ourselves here.
Appendix I. Preliminary Modified Set of Seasonal Adventure Education

Embeddedness Items

These items are presented here in the order that they were presented to the cognitive interview participants. The survey was hosted on Survey Monkey and included the skip logic patterns that are implied below.

1) How many years have you worked (paid and volunteer) in the adventure education industry? (Adventure education is defined as a type of education that uses outdoor expeditionary courses to facilitate individual and group learning outcomes (e.g., self-confidence, introspection, knowledge, activity skills, teamwork, communication).)

2) Please write the name(s) of all of the adventure education organizations that you have worked for in the last 12 months.

3) How many years have you worked for each of these organizations?

4) On average each year, how many weeks have you worked for each of these adventure education organizations?

5) From now on, if a question refers to an “organization” it is referring to the adventure education organization that you worked for the most in the last 12 months. Please enter the name of that organization.

6) Please name all of the different titles you have had in this organization over the last 12 months (i.e., intern, instructor, course leader, trainer, logistician, etc.).

7) What percentage of your total time working for this organization did you work as the following in the last 12 months?

8) Are any of these unpaid (volunteer) positions?
9) I have enough professional contacts in the adventure education industry that I can find work when I want it.

10) I have had meaningful work experiences with many other people at this organization in the last 12 months.

11) I expect that the people that I enjoy working and/or socializing with at this organization will be working for the organization next year.

12) If I do not work at this organization next year it will negatively impact the organization's ability to achieve their mission.

13) I am part of a work group(s) for this organization during the off-season.

14) My work for this organization facilitates me finding further work opportunities when I am not working for this organization.

15) I like the people I work with at this organization.

16) My coworkers have a similar or greater level of passion for adventure education as I do.

17) I deeply value the opportunity I have at this organization to impact participants.

18) My coworkers have similar ideas about risk management.

19) I like the responsibility I have at this organization.

20) I have the freedom to decide the best way to educate participants on the outdoor expeditionary courses I lead.

21) I have opportunities to influence decisions that affect the entire organization.

22) My values are compatible with the organization’s values.

23) I feel good about my growth and development at this organization.

24) Working for this organization helps me to achieve my long-term goals.
25) My work with this organization utilizes the skills and talents that I want to use and continue to develop.

26) I deeply believe in the mission of this organization.

27) I fit with the organization’s social culture.

28) I fit with the organization’s professional culture.

29) I would likely lose more than I would gain by not working for this organization any more.

30) The time that I spend commuting to this organization is reasonable.

31) The free or discounted gear, trips, or other material fringe benefits I receive from this organization are excellent.

32) The health benefits at this organization are suitable for my needs.

33) The retirement benefits at this organization are suitable for my needs.

34) I enjoy the physical quality of the work I do at this organization.

35) I feel that people at this organization respect me a great deal.

36) Working in adventure education was a goal of mine for a long time before I started working in the industry.

37) In social situations I identify myself as an adventure educator (or some other similar title).

38) My promotional opportunities are excellent at this organization.

39) I believe I could work for this organization next year if I choose to.

40) I have the opportunity to work the number of days for this organization that I desire.

41) This organization offers me the mix of outdoor expeditionary courses I prefer.
42) I have the opportunity to work the balance of different types of work experiences that I prefer at this organization (i.e., field vs. office or logistical work).

43) The circumstances of my work I do when I am not working for this organization give me the flexibility to work for this organization.

44) Please name the different places (cities, towns) you have lived in or worked out of during the last 12 months.

45) I have good friends at or near these places that I live(d).

46) I think of this place as home

47) Have you worked in or near the following locations for this organization?

48) I really love the location(s) where I work for this organization.

49) I want to continue living a seasonal lifestyle.

50) The climate (weather, etc.) at the location(s) where I work for the organization is suitable for me.

51) I enjoy recreating in the physical environment near the location(s) where I work for this organization.

52) I enjoy having my recreation activities (i.e., rock climbing, kayaking, etc.) being part of my job.

53) Many of my coworkers at this organization enjoy the same leisure activities as I do.

54) My family members support my choice to work for this organization.

55) The circumstances of my work allow me to maintain connections with family.

56) I expect that my family circumstances will continue to enable my choice to work for this organization.
57) My work in adventure education has given me the opportunity to develop meaningful friendships.

58) The circumstances of my work allow me to maintain connections with friends.

59) Are you currently married or living with a significant other?

<If replied yes to being married>

60) A) My significant other supports my decision to work for this organization.

61) A) My significant other works for the same organization as I do.

62) A) The money I earn at this organization contributes significantly to my family’s annual income.

63) A) My family’s income can sustain the lifestyle that we want at this time.

<If replied no to being married>

60) B) The money I earn at this organization contributes significantly to my annual income.

61) B) My annual income can sustain the lifestyle that I want at this time.

62) B) My work circumstances allow me to start and maintain romantic relationships.

64) It would be difficult for me to earn more money at another adventure education organization

65) It would be difficult for me to earn more money at an equally as satisfying job.

66) Leaving my social community at and around the organization at the end of the season is very hard.
67) Never working for this adventure education organization again would very difficult.

68) Leaving the place where I live in the off-season is very hard.
EXEMPTION GRANTED

To: Jackson Wilson
   HPER, RPTS

From: IUB Human Subjects Office
       Office of Research Administration – Indiana University

Date: November 6, 2008

RE: Protocol Title: Examining Job Embeddedness Survey Items
    Protocol #: 08-13492
    Sponsor: None

Your study named above has been accepted as meeting the criteria of exempt research as described in the Federal regulations at 45 CFR 46.101(b), paragraph 2. Please note that this exemption requires that information recorded by investigators is done in such a manner that subjects cannot be identified, directly or through identifiers linked to subjects. It is also necessary that any disclosure of subjects’ responses outside the research could not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects’ financial standing, employability, insurability, or reputation. This approval does not replace any departmental or other approvals that may be required.

As the principal investigator (or faculty sponsor in the case of a student protocol) of this study, you assume the following responsibilities:

• Changes to Study: Any proposed changes to the research study must be reported to the IRB prior to implementation. This may be done via an e-mail or memo sent to the IRB office. Only after approval has been granted by the IRB can these changes be implemented.

• Completion: Although a continuing review is not required for an exempt study, you are required to notify the IRB when this project is completed. In some cases, you will receive a request for current project status from our office. If we are unsuccessful in our attempts to confirm the status of the project, we will consider the project closed. It is your responsibility to inform us of any changes to your contact information to ensure our records are kept current.

Per federal regulations, there is no requirement for the use of an informed consent document or study information sheet for exempt research, although one may be used if it is felt to be appropriate for the research being conducted. As such and effective immediately, the IUB IRB will no longer require or stamp study information sheets / informed consent documents for exempt research. Please note that if you still choose to use these documents, you may use unstamped versions.

You should retain a copy of this letter and any associated approved study documents in your records. Please refer to the project title and number in future correspondence with our office. Please contact our office at (812) 855-3067 or by e-mail at iub_hsc@indiana.edu if you have questions or need further assistance.
Appendix K. Expert Panel Information Sheet

<Jane Doe.>

Thank you for participating as a member of my doctoral dissertation expert panel. The purpose of this study is to increase retention of adventure educational employees in order to improve adventure education student experiences. In order to do that, this study aims to create a better set of survey questions to measure the level of job embeddedness in adventure education employees.

On that note, the following is a brief description of adventure education and job embeddedness.

**Adventure Education** instructors are the group of individuals that this survey is intended for. Adventure education primarily consists of 1 to 3 week long expeditionary courses set in wilderness environments. These courses use adventure activities (e.g., hiking, rock climbing, sea kayaking) to help students achieve developmental educational outcomes. Large adventure education organizations in the U.S. include Outward Bound, NOLS (National Outdoor Leadership School), and the Wilderness Education Association. Adventure education employees include instructors, logistics staff, and administrative staff.

**Job Embeddedness** is a psychological concept (construct) composed of the connections between an individual, his or her organization of employment, and his or her community. Previous research has shown that individuals with higher levels of job embeddedness are less likely to voluntarily turnover (quit their job).

Job embeddedness is an aggregate of connections or circumstances that connect individuals to the organization that they work for and the community that they live in. There are three theorized types of connections. **Links** are the social and professional relationships an employee has developed. For example, an adventure educator may choose to continue working at an institution because he enjoys the professional relationship he has developed with his boss. **Fit** is the congruence between an individual’s skills and preferences and the amenities, values, and needs of the individuals community and work organization. For example, an employee that desires a high level of pay may not fit with an adventure education organization that has relatively low wages. Finally, **sacrifice** is what it would cost an individual to change jobs and have to move away from their present community. For example, adventure educators may need to start at the bottom of the pay scale if they move from one institution to another.

Attached is a copy of the survey. If you would like a paper copy of the survey please contact me (jadwilso@indiana.edu). Please respond to the survey by <one week following the date receiving this e-mail>.
Thank you for your help.

Jackson Wilson
jadwilso@indiana.edu
(812)202-1553
Doctoral Candidate
Adventure Education
Indiana University
Appendix L. Cognitive Interviewing Initial Contact E-mail

<Jane Doe>,

<X> recommended that I should contact you.

I am a fellow adventure educator and I am working on my doctoral dissertation. My dissertation focuses on how to reduce adventure educator turnover. I would appreciate it if you could participate in this important research.

I am doing a series of interviews with folks in order to understand what connects adventure educators with their work. In order to efficiently do this on a large scale I am modifying a questionnaire. This modification requires understanding how adventure educators understand and respond to the questions.

If you have instructed on a minimum 2 courses, and a maximum of 6 months, for an adventure education institution in the USA within the last 12 months, then you are eligible to participate. The interview will consist of sharing your thought process with me on the phone while you respond to an on-line survey. The survey should take a maximum of 60 minutes, but you can quit anytime you wish.

Please contact me (jadwilso@indiana.edu) as soon as possible if you would like to participate and if you know of any other adventure educators who may be willing to participate. I appreciate your help.

Jackson Wilson
jadwilso@indiana.edu
(812)202-1553
Doctoral Candidate
Adventure Education
Indiana University
References


Frankel, J. (2009). Outward Bound field staff turnover rate, Personal E-mail Communication.


Jackson Wilson
clizimb@yahoo.com
San Francisco CA 94132

RESEARCH FOCUS
Management & diversity issues in adventure education

EDUCATION
Indiana University; Ph.D.; Adventure Education, March 2010
Minor in Nonprofit Management (#1 ranked program in the U.S).
Concentration in quantitative and qualitative research methodology.
Dissertation: Examining Job Embeddedness Survey Items for an Adventure Education Population

Columbia University; M.A.; Economics of Education, December 1999
Thesis: The Use of Education to Minimize the Negative Economic Effects Caused by a Reduction in Foreign Workers in the Saudi Arabian Workforce.

University of Washington; B.A.; Economics, June 1996

AWARDS
Leisure Research Institute; Indiana University, 2007
Awarded a grant of $456 for research expenses; Outdoor instructor motivation: An application of expectancy theory.

Chancellor’s Fellowship; Indiana University, 2005-Present
Described as the “The most prestigious, competitive graduate fellowship offered by IU.” Tuition remission and $16,000 annual stipend.

Director’s Award; Washington Department of Fish & Wildlife, 2002
Awarded for leadership, ingenuity and technical guidance.

Dean’s List; University of Washington, 1994-1996
Maintaining a minimum of a 3.5 GPA.
TEACHING

ACADEMIC
San Francisco State University, Assistant Professor; San Francisco, CA, 2009 to Present

- RPT 700: Orientation and Professional Development in Recreation and Leisure Service
  *Fall 2009*: 12 students
  Developed the existing one credit class into a three credit graduate level class. Focusing on an orientation for new students, exploration of professional career development, and the development of graduate-level research and writing skills.

- RPT 500: Organization of Recreation, Parks, & Tourism
  *Spring 2010*: 64 Students
  Undergraduate class focusing on management practices and issues in the recreation, parks, & tourism industry.

- RPT 300: Leadership in Recreation, Parks, & Tourism
  *Fall 2009*: 58 students
  *Spring 2010*: 41 students
  Undergraduate course uses a mix of discussions, lectures, speakers, peer and instructor led activities and out of class leadership experiences. Involved guest speakers from different Bay area public, profit, and nonprofit organizations.

- RPT 225: Information Technology in Recreation, Parks, & Tourism
  *Fall 2009*: 32 students
  *Spring 2010*: 26 students
  Developed this new undergraduate course. Focuses on developing student skills with essential software functions: Microsoft Office 2007 (Word, Publisher, Excel, PowerPoint), Active.com (event planning software), and Google Sites (electronic portfolios).

Indiana University, Assistant Instructor; Bloomington, Indiana, 2006 to 2008
Fully responsible for the design, delivery, and evaluation of all of the following courses:

- R511: Leadership and Facilitation
  *Fall 2008*: 30 students
  Graduate level class (Master’s and Ph.D. students). Content focused on leadership and group development issues. Class included weekend retreats focusing on challenge facilitation skills and weekly seminars.
- R451: Fiscal Management of Leisure Service Organizations
  
  Fall 2008: 56 students  
  Spring 2008: 65 students  
  Fall 2007: 46 students  
  Spring 2007: 64 students  
  Undergraduate course focusing on applications from economics, finance, and accounting. Focused on budgeting, investing, grant seeking, and business plans.

- R390: Statistical Applications in Leisure
  
  Fall 2006: 41 students  
  Course included descriptive statistics, Z-scores, t-tests, one-way and two-way ANOVA, regression, and chi-squared tests.

- R110: Navigation
  
  Fall 2006: 12 students  
  Spring 2008: 14 students  
  Taught academic courses to undergraduate students with Aiko Yoshino. Concentrated on the use of map and compass techniques. Skills were tested both in the field and on written exams.

**Systematic Business, College Instructor; Penang Malaysia, 1996 to 1997**

Fully responsible for the design, delivery, and evaluation of all of the following courses.

- Introductory Economics for Business Majors
  - 40% more of my students passed the external British exam than the average for the school.
- Introductory Economics for Hospitality Majors
- Monetary Economics for Banking professionals
- Statistics for Hospitality Majors

**Centralia School District, Teacher; Centralia, WA, 1998**

- Taught wilderness skills and art to multi-age elementary classes.

**Olympia School District, Special Education Teacher; Olympia, WA, 1998**

- Developed a math education program for 5th grade girls with learning disabilities and severe behavior issues.

**GUEST LECTURES**

**Divisive Issues with Parks and Other Public Lands in America; San Francisco State University, Spring 2010**

- Introduction to issues with parks and other protected areas.
- Dr. Nina Robert’s national parks & protected areas undergraduate class (RPT640).

**Careers in the Nonprofit Sector; San Francisco State University, Fall 2009**

- How to identify and pursue a career path in the nonprofit sector
- Dr. Asuncion Suren’s nonprofit undergraduate class (RPT370).
Marketing Recreation, Parks, & Tourism Goods & Services; San Francisco State University, Fall 2009
- How to identify and pursue a career path in the nonprofit sector
- Dr. Nina Robert’s planning and evaluation class (RPT550).

Valuation of Public Goods; San Francisco State University, Fall 2009
- Using contingent valuation method to value tourism related public goods
- Dr. Pavlina Latkova’s ecotourism graduate/undergraduate class (RPT605).

Pretesting Survey Items; San Francisco State University, Fall 2009
- Use of cognitive interviewing to pretest survey items
- Dr. Suzan Zieff’s graduate kinesiology seminal (KIN795).

Grant Acquisition; Ohio University, Winter 2009
- Grant application process
- Dr. Aiko Yoshino’s facility management undergraduate class.

Navigation; Indiana University, Fall 2007 & Spring 2008
- Instructed novices in map and compass
- Two different academic outdoor leadership courses.

Research Ethics; Indiana University, Spring 2007
- Role of human subjects review boards in the research process
- Dr. Ruth Russel’s undergraduate research class (R499)

Risk Management; Indiana University, Spring 2007
- Gave a 2.5 hour intensive workshop on risk management concepts and practices
- Semester long CORE program (Conservation & Outdoor Recreation and Education)

Research Methods; Indiana University, Fall 2006
- Lecture and practicum on focus groups
- Amy Shellman’s undergraduate research methodology course (R499).

Group Facilitation; Indiana University, Spring 2006
- Group processing techniques for therapeutic groups
- Dr. Youngkhill Lee’s undergraduate therapeutic recreation class (R379).

Recreation Activities & Leadership Methods; Indiana University, Spring 2006
- Leadership styles
- Aiko Yoshino’s Leadership (R272).

State Legislature; Washington, 2001
- Economic impacts of fish & wildlife related recreation.
ADVENTURE EDUCATION

Outward Bound Wilderness; Washington, 2003 to Present
Staff Trainer
- Train new staff in educational and human and technical skills.
- Staff trainings included ocean sea kayaking, spring mountaineering, backpacking, and rock climbing.

Course Director
- Train and facilitate the development of instructional and logistical staff.
- Manage logistical issues for courses operating in remote mountain and sea environments.

Lead Instructor
- Instruct and direct one to four week long youth and adult courses in the San Juan islands & North Cascades mountains.
- Utilize such elements as technical mountain climbing, sea kayaking, rock climbing, challenge activities, backpacking, solo, service, and orienteering.
- Resolve conflict with students and staff. Manage the process of removing inappropriate students out of the field.
- Lead groups of professionals in team-building focused mountain climbing courses.

Wilderness Education Association; Lead Instructor
West Virginia & North Carolina, 2009
- 25 day expedition taught with Aiko Yoshino, Ph.D.
- Group of 9 Ohio University students
- Responsible for the procurement and organization of all of the logistics
- Backpacked in the Cranberry National Wilderness & sea kayaked in the Outer Banks

Taiwan, 2007
- Led a group of 9 Taiwanese adult students in the Mt. Yushan area.
- Mentored new staff in instructional, human and technical skills.
- Helped plan the logistics for the expedition, which was a partnership between Indiana University and the Taiwanese University, National College of Physical Education and Sports.

Indiana University Outdoor Adventures; Instructor & Staff Trainer
Mexico, 2008 to 2009
- Primary trainer and organizer for a week long staff multi-pitch rock climbing training in El Potrero Chico.

Indiana, 2005 to 2009
- Trained outdoor leaders in advanced navigation and leadership.

Tennessee, Alabama, & Georgia, 2007
- Facilitated vertical caving course for incoming college freshman.

Mt. Rainier, 2004
- Assisted leading a group of Indiana University students and staff up Mt. Rainier.
Passages Northwest; Instructor, Washington, 2004
- Instructed a middle-school group through a gender roles awareness training using challenge activities and rock climbing.

The Evergreen State College 4-H Challenge; Program Facilitator and Staff Trainer, Washington, 1998 to 2003
- Facilitated various groups through built and portable challenge elements.
- Trained the Outdoor Program staff in technical and group dynamics on a 5 day training and summit attempt of Mt. Rainier.

North Carolina Outward Bound School; Instructor, North Carolina, 1999
- Instructed groups of eight to 12 participants in 16 to 23 day courses in the Appalachian mountains and nearby rivers.
- Utilized such elements as backpacking, rock climbing, white water canoeing, and challenge courses.

YMCA Challenge Program; Director & Assistant Site Director, Washington, 1997 to 1998
- Managed a before and after school program for 15 to 30 elementary aged students.
- Created the Y Challenge program: Facilitated initiative activities and games in three school districts in the South Puget Sound.

Thurston County Explorer Search & Rescue; Team Leader, Washington, 1992 to 1997
- Led groups of ground search units in wilderness and urban search environments.
- Searched and recovered both live individuals, deceased individuals, and criminal evidence.
- Coordinated efforts with law enforcement and logistical organizations.
OUTDOOR EXPERTISE

Rock Climbing; Instructing since 1999.
- Top-rope
- Multi-pitch
- Sport
- Traditional
- Wilderness route development
- International experience (North America, Europe, Asia, Australia)

- North Cascades, Rockies
- West coast USA stratovolcanoes (Rainier, Hood, St. Helens, etc.)

Canoeing; Instructing since 1999.
- White-water & Flat water.

Sea Kayaking; Instructing since 2003.
- Multi-week expeditions
- Ocean navigation
- Self and other focused rescue techniques
- Have received instruction from:
  - Dubside (Greenland Games Rolling champion)
  - Jenn Klek (First BCU level 5 Sea Kayak coach in America)

Backpacking; Instructing since 1992.
- Multiple environments (alpine, forest, desert)
- Specialize in navigation instruction
- International experience (Europe & Asia)

Urban Expeditions; Trained at New York City Outward Bound in 1999.

Search & Rescue; Instructing and operating since 1992.
- Wilderness and urban
- High angle rescue
- Personnel and evidence searches

CERTIFICATIONS

Wilderness First Responder; Wilderness Medicine Training Center,
- Continuously certified since 1999.

Wilderness CPR; Wilderness Medicine Training Center

Leave No Trace Master Educator; Center for Outdoor Ethics, 2006

Instructor; Wilderness Education Association, 2006
RESEARCH

POSITIONS

Editor; Proceedings of the National Conference on Outdoor Leadership, 2010
- Working with Aiko Yoshino, Ph.D. & Bridget Eastep, Ph.D.

Research Coordinator; Pacific Leadership Institute, 2009 to Present
- Develop research agenda in concert with Dr. Nina Roberts & Drew McAdams.
- Review and screen research proposals.
- Facilitate process research that improve the PLI program and helps other similar programs and research that focuses on outcomes that can be communicated to potential participants and funders.

Team Member; Active Living Across the Lifespan: Sunday Streets, 2009 to Present
- Member of the four person researcher team that included faculty from Kinesiology and Recreation, Parks, & Tourism departments.
- A SFSU recognized research cluster that was funded $8,000 in seed money for the 2009-2010 academic year.
- Analyzed a majority of the quantitative data.
- Survey development specialist.

Project Leader; Active Living Across the Lifespan: Health Campus Initiative, 2009 to 2010
- Lead a team of faculty from Kinesiology; Nutrition; and Recreation, Parks, & Tourism.
- Spearheaded the development of the Healthy Campus survey.

Team Member; Insieme: Family Tapestry Project, 2009 to 2010
- Member of the four person researcher team working on the use of outdoor education and domestic tourism in therapeutic interventions for victims of domestic abuse.

International Researcher; Outward Bound, 2003 to 2004
- Travelled to and researched different OB schools in North America, Europe, Asia and Oceania.
- Interviewed executive directors, other administrative staff and field staff.
- Attended 2003 International Staff Symposium.
- Taught and observed one to five day programs for professional groups, youth at risk and college students.
- Evaluated sites for possible use as course areas.
- Created presentations on the international and historical dimensions of OB. Wrote articles and took photos for the OB West and OB International newsletters and websites.
Chief Economist & Funds Administrator; Washington Department of Fish and Wildlife, 2000 to 2003
- Forecasted approximately $100 million dollars in revenues for separate funds, sources, and programs. Forecast accuracy was within 1% my final year.
- Estimated the $2 billion dollar economic impact of fish and wildlife to the state economy.
- Testified in front of the State Legislature.
- Supervised two analyst positions.
- Created and delivered multiple trainings and presentations for staff, volunteers and the public throughout the state on subjects such as license changes, contracts, grants and fiscal notes.
- Designed and led many research projects: analysis of legislative proposed policies, benefit-cost analyses of existing agency programs and activities (e.g., fleet development, energy conservation, rotenone use in alpine lakes), analyzed survey data from federally mandated angler survey, and consulted on agency lawsuits.
- Analyzed and reorganized the construction, engineering and maintenance functions, which included over 130 employees.
  - Was awarded the annual Director’s Award for this project.
- Created a partnership with the Access Fund to secure recreational climbing access and facilities via the acquisition of an $86,000 federal grant.

Educational Researcher; Washington State Office of the Superintendent of Public Instruction, 1998
- Conducted a research project in support of the development of policy alternatives addressing the math instructional methods for students from the six largest ESL groups in Washington.
PUBLICATIONS

(* = peer reviewed)


Wilson, J. (In press). Modifications for large groups [Review of the book *Count me in: Large Group activities that work*] Journal of Experiential Education.


PRESENTATIONS


SERVICE

Outdoor Leadership Research Symposium; Peer Manuscript Reviewer, 2009 to Present
- Reviewed six manuscripts.

California Parks & Recreation Society; Peer Manuscript Reviewer, 2009 to Present
- Reviewed three manuscripts.

Journal of Experiential Education; Peer Manuscript Reviewer, 2009 to Present
- Specialize in adventure education, managerial issues, and research methods manuscripts.

Wilderness Education Association
Executive Board of Trustee Member, 2008 to 2010
- Served with the president, vice president and secretary to make major and immediate decisions for the organization.

Treasurer, 2008 to 2010
- Provided oversight for the Executive Director. Guided the organizational investment and budgeting policy.

Research Committee Chair, 2006 to 2007
- Directed the research review and promotion process.

Association for Experiential Education
Member, 2001 to Present
Northwest Regional Conference Committee Publications Organizer, 2002 to 2003

Indiana University Outdoor Adventures; Trainer & Instructor, 2005 to 2008

Graduate Recreation Society
2006 Weir Banquet Host, Organizer New Student Orientation Committee, 2005 to 2008

Chair Search Committee, Recreation, Park, and Tourism Studies; Member, 2007 to 2008

Banff Mountain Film Festival; Master of Ceremonies, 2008

Leisure Research Institute; Board Member, 2006 to 2007

Adventure Research Symposium; Director of the Organizing Committee, 2007

Association for Outdoor Recreation & Education; Member, 2005 to 2007

THINKECON; Founding Member, 2002 to 2004

Mountaineers; Climbing Board Member, 1998 to 2003
Columbia University Outdoor Club; *President*, 1998 to 1999

Kappa Delta Pi, International Honor Society in Education; *Member*, 1998 to 1999

Society for International Educators; *Member*, 1998 to 1999

Society for Economics of Education; *Member*, 1998 to 1999

Community Aids Service Penang, Malaysia; *Member*, 1996 to 1997

University of Washington Hiking Club; *President*, 1995 to 1996

Omicron Delta Upsilon, International Honor Society in Economics; *Member*, 1995 to 1997

AIESEC, International Association of Business and Economics Students; *Vice President of Sales*, 1994 to 1996