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Development and Validation of an Outdoor Leader Experience Use History Instrument

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DEVELOPMENT AND VALIDATION OF AN OUTDOOR LEADER EXPERIENCE USE HISTORY INSTRUMENT

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Expertise gained in naturalistic settings has been shown to affect decision-making in a variety of ways (Zsambok & Klein, 1997; Fox, 1996; Simon & Chase, 1973). Outdoor leader decision-making is often cited as one of the most important competencies that professionals in the field possess (Priest & Gass, 1997; Cain & McAvoy, 1990; Petzoldt, 1984). This abstract describes the conceptualization, development, and validation of an instrument designed to measure the personal and professional experience levels of outdoor leaders—the Outdoor Leader Experience Use History (OLEUH). The OLEUH represents one method to generate empirical measurement in what has historically been an intuitive arena.

A Delphi process was utilized in the development of the OLEUH. Experience factors were grouped into two broad areas of personal and professional experience. Personal experience factors included level of education achieved, major area of study, estimated weeks of outdoor experience, average trip length, environments encountered, seasons in which experience was gained and frequency of participation by activity. Professional factors include an index of profession employment (compiled from trip length and number of trips), environments encountered (activity), seasons worked, weeks of experience by population, weeks of leadership by level (assistant instructor, instructor, etc.), certifications, and courses or trainings attended. A sample was obtained in order to generate reliability and validity data for the OLEUH from outdoor leaders at a university outdoor education center and an Outward Bound school (N = 121) during their respective staff trainings. Ninety-six (56 male and 40 female with a mean age of 28.66) usable forms were obtained.

Internal consistency reliability for the OLEUH was estimated by computing Cronbach's Alpha (α) for the eight subscales resulting in an overall reliability coefficient of .71. This coefficient meets the accepted standard for reliability coefficients of .70 (Nunnally, 1978). In order to estimate construct validity, a factor analysis was conducted using principal axis factoring with direct oblimin rotation for these data. A two-factor model was returned explaining 44.62 percent of the variance in this data set.

T-scores were represented in radar graphs by grouped means in order to estimate interaction and to provide a visual representation. The T-scores for each subscale were transformed into grid coordinates and the area of each polygon was calculated. The resulting scores have acceptable range (Range = 781, Min. = 366, Max. = 1147). A one-way ANOVA was conducted to test differences in grouped means resulting in significant differences ($p<.001$) for the group as a whole. A Scheffe test of post hoc comparisons found statistical significance ($p<.01$) between all seven groups (Table 3). Thus this scoring scheme demonstrates good discriminatory ability between individuals for the purposes of comparison.

Potential uses for the OLEUH include the assessment of staff development needs, and use as a research variable for investigating the effect of experience on leader performance, decision-making, and program and participant outcomes. The OLEUH also generates a graphic representation of an individual's experience patterns.

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GRAPPLING WITH THE THEORETICAL AND MEASUREMENT ISSUES INVOLVED IN ASSESSING THE IMPACT OF A COMBINED ADVENTURE/ SOCIAL-COGNITIVE PREVENTION PROGRAM ON VIOLENT BEHAVIOR

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About ten years ago, two simultaneous "calls for future research" intrigued me greatly because of their immense potential for promoting positive adolescent development. The first was the Healthy People 2000 document, published by the United States federal government, which called for the development of effective violence prevention programs. The second was a theme that ran through outdoor adventure research literature calling for the examination of adventure education on social problems of youth. Since that time, I have been immersed in an action research process with colleagues aimed to develop effective school-based violence prevention programs (Meyer & Farrell, 1998), a process which recently resulted in our program, Responding in Peaceful and Positive Ways (RiPP), being identified as a Model program for dissemination by the US Department of Health and Human Services. Parallel to that process, I have worked with colleagues in the adventure field to brainstorm ideas for how to bridge violence prevention with outdoor adventure, and recently received funding for a small pilot that would examine the impact of a combined outdoor adventure/social cognitive program on violent behavior. The Crossing the Bridge pilot began in January. The focus of this presentation is to outline the issues we have been grappling with on the journey from developmental psychology toward the field of outdoor education, and to invite practitioners in outdoor adventure to join in this walk for the purpose of seeing how we might be able to collaboratively prevent youth violence and promote positive development. Examples for highlighting these issues are drawn from the action-research process used to develop, evaluate, and improve the RiPP program in urban and rural communities, as well as how that led to the current action-research process of developing the theoretical framework, program curriculum and research design for the Crossing the Bridge pilot.