

2006

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Recommended Citation

Sibthorp, Jim; Paisley, Karen; and Gookin, John (2006) "Predictors of Perceived Development on Courses from the National Outdoor Leadership School," *Research in Outdoor Education*: Vol. 8, Article 25. Available at: <https://digitalcommons.cortland.edu/reseoutded/vol8/iss1/25>

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PREDICTORS OF PERCEIVED DEVELOPMENT ON COURSES FROM THE NATIONAL OUTDOOR LEADERSHIP SCHOOL

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The purpose of this study was to examine some of the potential mechanistic variables related to participant growth and development on courses at the National Outdoor Leadership School (NOLS). The NOLS Outcome Instrument (NOI) was a retrospective pretest posttest created to measure perceived gains in six universal course outcomes targeted by NOLS courses: Communication Skills, Leadership, Expedition Behavior, Judgment in the Outdoors, Outdoor Skills, and Environmental Awareness. Participant level predictors included age, sex, previous expedition experience, and sense of personal empowerment. Course level predictors included course length, challenge level of the course terrain, group's level of functioning, and the instructors' rapport with the group. Data were analyzed using Hierarchical Linear Modeling (HLM 6.0).

During the summer and fall of 2004, 663 participants from 66 NOLS courses completed the questionnaires. The sample was 63% male, and ages ranged from 14 to 62 years, with an average age of 20.6 years. Data cleaning resulted in a viable sample size of 596.

Perceived gains in Communication Skills significantly varied by course ($\tau=.133$, $\sigma^2=.656$, $\chi^2=184.2$, $df=65$, $p<.001$, $ICC=.169$), which accounted for ~16.9% of the variance. Significant predictors were course length, average rapport with instructor, previous experience, sense of empowerment, and age.

Perceived gains in Leadership significantly varied by course ($\tau=.219$, $\sigma^2=.806$, $\chi^2=213.5$, $df=65$, $p<.001$, $ICC=.214$), which accounted for ~21.4% of the variance. Significant predictors included length of course, sex, previous experience, sense of empowerment, and age.

Perceived gains in Expedition Behavior significantly varied by course ($\tau=.142$, $\sigma^2=.763$, $\chi^2=170.4$, $df=65$, $p<.001$, $ICC=.157$), which accounted for ~15.7% of the variance. Significant predictors included length of course, sex, previous experience, sense of empowerment, and age.

Perceived gains in Judgment in the Outdoors significantly varied by course ($\tau=.176$, $\sigma^2=1.53$, $\chi^2=131.9$, $df=65$, $p<.001$, $ICC=.103$), which accounted for ~10.3% of the variance. Significant predictors included perceived level of group functioning, previous experience, and sense of empowerment.

Perceived gains in Outdoor Skills significantly varied by course ($\tau=.347$, $\sigma^2=2.14$, $\chi^2=157.2$, $df=65$, $p<.001$, $ICC=.140$), which accounted for ~14.0% of the variance. Significant predictors were perceived level of group functioning, previous experience, and sense of empowerment.

Perceived gains in Environmental Awareness significantly varied by course ($\tau=.383$, $\sigma^2=3.05$, $\chi^2=143.4$, $df=65$, $p<.001$, $ICC=.126$), which accounted for ~12.6% of the variance. Significant predictors included course length, previous experience, and sense of empowerment.

Previous expedition experience and sense of personal empowerment on the course were universally related to perceived gains in the NOLS course objectives. The differences in previous experience may largely be explained by lower initial levels on the learning objectives allowing more potential for more learning to occur on course. Differences in age can largely be explained by the younger students having lower initial scores on outcomes related to communication, leadership, and expedition behavior. Sex differences were largely the results of lower reports by males on pre-course levels of expedition behavior and leadership, which is contrary to previous research and warrants additional study (cf., Russell, 2004). Course length was a significant predictor for gains in five of the six targeted outcomes, which is consistent with previous studies (e.g., Hattie, Marsh, Neill, & Richards, 1997; Russell, 2004). The average level of group functioning was a significant predictor for gains in two of the outcome variables, with higher levels of group functioning being more related to program gains. Rapport with the instructors was a significant predictor for gains in communication but was unrelated to the other outcome variables.

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