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Factors Determining Peer Status in Outdoor Adventure Groups

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Abstract

In this study of 227 students enrolled on 30-day backpacking courses, we examined how certain demographic factors relate to status within the task (goal-related) and social (interpersonal) domains of group functioning. Of particular interest were socioeconomic status (SES) and gender. Using a mixed methods approach, we found that female students had less status in task-based and social contexts, even when controlling for previous experience. Students with low SES had lower status than did their peers in the task-based contexts, but this difference disappeared when also considering previous multinight backpacking experience. As we expected, sources of status differed based on the situational context, with competence driving status for task-based contexts and interpersonal relationships taking precedence in social situations. The findings have important implications for practice in outdoor adventure education, as student demographics change and programs seek greater diversity in a field in which students are traditionally White and male.

KEYWORDS: peer status; sex; socioeconomic status; outdoor adventure education; group dynamics

The social system within a group on an outdoor adventure education (OAE) course involves a dynamic interplay of relationships among individuals. For expedition-based courses in which group members spend extended time together in the field, the social structure is central to group functioning (Ewert & McAvoy, 2000; Martin & Leberman, 2005). As groups progress through stages of development, relationships change, leaders emerge, and group members assess their own standing and the standing of peers (Tuckman, 1965). Piazza and Castellucci (2014) observed, "Power and status differences exist in all organizations and are the inevitable differences along such dimensions as reputation, control over resources, formal authority, knowledge and skill" (p. 296). Student groups within OAE are no exception. Groups create their own hierarchies based on formal and informal assessments of ability, competence, and compatibility, resulting in different levels of status related to the situational context. Status can be defined as one's place within a hierarchical social structure based on the amount of prestige or importance one has in relation to others (Jacob & Carron, 1998). How groups manage status differentials can affect individual and group level outcomes. Researchers in OAE and organizational science have identified many ways that status relationships can lead to greater group cohesiveness (Eys, Ritchie, Little, Slade, & Oddson, 2008) or create group conflict (Bendersky & Hays, 2012). Status plays an important role in OAE because the nature of relationships among students influences the overall social environment and the ability of a group to achieve difficult tasks.

Understanding status and status relationships within groups will be increasingly important as OAE programs manage changing student populations. Presently, many OAE programs are looking at ways to promote diversity in a field in which students are traditionally White and male. Unfortunately, there is little research on how these initiatives affect the social and educational environment on courses (Garvey, Mitten, Pace, & Roberts, 2008). Conventional wisdom posits that the novelty and unique context of OAE programs disrupt traditional status hierarchies and allow for the creation of a more egalitarian social system (Priest & Gass, 2005). The purpose of this study was to address this gap in the literature by examining how demographics, specifically sex and socioeconomic status, relate to member status within groups on OAE courses.

Demographics and Status

Research from other disciplines provides insight on how demographic factors may influence status within a group. For example, Cohen and Zhou (1991) studied corporate work teams and found that when past performance was controlled for, sex had a significant effect on status within a group, with females having lower status than males. Additionally, women who achieve high status positions in traditionally male-dominated fields (e.g., management, leadership positions) are more susceptible to losing their status than are males because of underlying sex expectations (Brescoll, Dawson, & Uhlmann, 2010). Thomas-Hunt and Phillips (2011) found that race also affects an individual's influence within a group. Although the cause of these status differentials is difficult to identify, status beliefs of individuals and groups play an influential role. Ridgeway (2001) argued that within a group context, evaluative assumptions (i.e., stereotypes) and status belief expectations of demographic groups "shape the enactment of social hierarchies among individuals, affecting influence and leadership" (p. 638). Within OAE, status differentials could be a significant source of group conflict, especially if demographic factors are excessively influential in determining peer status. Wide status variability within groups may lead to the development of exclusive cliques, perceptions of noninclusion, and low group cohesiveness (Hackman & Katz, 2010).

Status and Group Functioning

Context is important when considering the role that status plays in group functioning. Research suggests that there are two broad dimensions of group functioning. One is the task

dimension, which is goal and outcome focused, and the other is the social dimension, in which interpersonal relationships take precedence (Bales, 1999; Forsyth, 2010). Individuals in task-oriented contexts tend to prioritize task-related competence in evaluations (Hogg, 2010), whereas individuals in socially oriented settings evaluate their peers based on personality-related characteristics (Piazza & Castellucci, 2014). Both of these are present in outdoor adventure groups, in which programmatic goals require task-related competencies (e.g., navigation) and social functions (e.g., companionship). Indeed, it is challenging to isolate the task and social dimensions of group functioning, but it is helpful at the theoretical level to realize that both dimensions are important.

Personal values and group norms influence how individuals view themselves and their peers in task and nontask settings, and these may vary depending on individual background (e.g., demographics, experience) and group culture (Hackman & Katz, 2010; Jasso, 2014). In short, an individual's status within a group may depend on the situation (e.g., task or nontask) and the prevailing values and preferences present among group members.

Importance of Status in Outdoor Adventure Groups

Status hierarchies exist in OAE groups and may influence individual and group outcomes. OAE programs often have small groups living and traveling with each other for weeks or months at a time. Thus, how well this collection of individuals interacts determines how much the group can achieve (Ewert & McAvoy, 2000). As noted previously, wide disparities in status can lead to divisions within groups and ultimately undermine programs designed to support diversity in outdoor education (Rose & Paisley, 2012). Many OAE programs attempt to address this by disrupting existing status hierarchies (Bell, Gass, Nafziger, & Starbuck, 2014). However, success is not guaranteed. Understanding how demographic factors, particularly sex and socioeconomic status, influence status within a group may offer insight into how well OAE programs are doing to ensure that all students are integrated and accepted within a group. In a 2012 study in which three National Outdoor Leadership School (NOLS) backpacking courses were examined, it was found that females and students from low socioeconomic backgrounds were more likely to be on the periphery of social networks, indicating that they had lower prestige or status than did their peers (Jostad, Sibthorp, & Paisley, 2013). As the makeup of OAE courses changes in the coming years, it will be important to understand the role that status plays in group functioning.

Study Purpose and Research Questions

We examined how certain demographic factors relate to status within the task (goal-related) and social (interpersonal) domains of group functioning on extended OAE backpacking courses. Of particular interest were socioeconomic status (SES) and sex. We chose to use sex as a variable because the complexities inherent in the term *gender* that are not captured in basic demographic data. Specifically, we sought to answer the following research questions:

- RQ1: How do sex and socioeconomic status (SES) relate to peer status within a group for task-based and social scenarios?
- RQ2: What are the key qualitative factors for peer selection, or sources of status, within task and social scenarios?
- RQ3: Do status and peer selection factors change over time?

Based on the research findings in OAE and other disciplines (e.g., Cohen & Zhou, 1991; Jostad, Paisley, Sibthorp, & Gookin 2013; Ridgeway, 2001; Thomas-Hunt & Phillips, 2011), we hypothesized that sex and SES would be related to status in task and social domains, with females having lower status than males and students with lower SES having lower status than their peers. We also expected that status and peer selection factors would change over time as groups developed (see Tuckman, 1965).

Method

We employed a mixed methods approach to examine status within outdoor adventure groups. We tested the main research questions with traditional inferential statistics, and we used qualitative coding to help explain the differences across groups. A mixed methods approach was necessary to address the research questions that sought to determine if sex and SES are related to peer status within a group and to identify the sources of individual prestige. Qualitative findings can be used to corroborate and provide context for quantitative results (Creswell, 2011). Ideally, this allows researchers to offset some of the weaknesses inherent in quantitative (e.g., lack of understanding of individuals and context) and qualitative methods (e.g., generalizability, unable to test hypotheses; Johnson & Onwuegbuzie, 2004).

Sample

We looked at students who participated in courses offered by the National Outdoor Leadership School (NOLS). The mission of NOLS (2014), founded in 1965, is to be "the leading source and teacher of wilderness skills and leadership that serve people and the environment" (p. 2). NOLS offers courses in a variety of skill areas including backpacking, mountaineering, climbing, canyoneering, sea kayaking, and sailing, and all courses have a leadership curriculum that emphasizes critical reflection, communication, decision making, and environmental ethics (Gookin & Leach, 2009). NOLS operates several branches in the United States as well as international bases in Australia, Canada, Chile, India, Mexico, New Zealand, Scandinavia, and Tanzania. The typical NOLS student is between the ages of 16 and 22, but the school also offers courses for younger students (14–15), students over 23, aspiring outdoor professionals, and NOLS alumni and custom courses for schools and organizations. Courses range from a few days to several months, but the most common course types last approximately 30 days.

In this study, we collected data from 237 students enrolled in 30-day wilderness backpacking courses offered by NOLS during the summer of 2013. We looked at courses intended for students who were 16 and older, with the majority of participants under the age of 19. Courses varied in sex and scholarship composition, for which students receiving full scholarships served as an indicator of low SES. Within this sample, nearly all of the students on full scholarships were sent by Summer Search, an organization that works with high school students from low-income families to help prepare them for college through mentorship and experiential learning opportunities. Over 95% of Summer Search students qualify for free or reduced lunch through government programs (Summer Search, 2013). Recruitment for students not on scholarship came through traditional NOLS marketing, largely through course catalogs and the school website. There are significant self-selection biases in both of these samples because both groups need to generate significant motivation and initiative to end up on a NOLS expedition.

Instrument

Students completed questionnaires three times during the course, at approximately Day 10, Day 20, and Day 30. The data collection on Days 10 and 20 coincided with scheduled re-rations of food delivered by horse packers, and the final administration occurred the night before leaving the field. On the questionnaire, students selected three students as companions in two hypothetical scenarios that represented the task and social dimensions of group functioning. The task scenario involved difficult off-trail travel and adverse weather conditions, and the social scenario involved easy travel, favorable weather, and time for socializing. The students were presented the following information on their questionnaires:

> Your small group is doing a peak ascent without instructors. The off-trail travel is difficult and it has been raining all day long. Avoiding harm and making it back to camp will require everyone to use their skills. Name up to three students you would want

> in your group for this situation. What is it about these people that draw you to them? (Task Scenario)
>
> You are preparing to do an easy day of travel without instructors. The route is only a few miles on-trail and the weather will be excellent. You will be camping near a lake and should have plenty of time to hang out and enjoy each other's company. Name up to three students you would want in your group. What is it about these people that draw you to them? (Social Scenario)

Respondents also provided qualitative reasons for their selections. In addition, students completed an end-of-course survey that included a question that asked whether participants had previous multinight backcountry expedition experience.

Data Analysis

We conducted three types of analysis with these data. This process included generating status scores based on selection data, analyzing the relationship of sex and scholarship standing on status scores, and examining open-ended responses through qualitative coding and analysis.

Status scores. We analyzed selection data for each scenario using C-IKNOW social network analysis (SNA) software (Science of Networks in Communities Laboratory, 2011). Social network analysis data show the relationship structure within a group and include a measure of prestige. The prestige statistic is reported on a 0–1 scale based on the peer selections and the overall centrality of an individual within a social network in comparison to others in a network (Durland, 2005). The prestige statistic considers the number of incoming links along with the links of other individuals within the social network, assuming that an individual's importance is based to some degree on the prestige of the those directly connected to that individual (Rusinowska, Berghammer, de Swart, & Grabisch, 2011). Those with higher prestige scores generally appear close to the middle of a given network and are considered to have more popularity and influence than others within the group (Hanneman & Riddle, 2011). This prestige score was used as a measure of status for this study.

We used a repeated measures analysis of covariance (ANCOVA) to analyze the quantitative data with status as the dependent variable. Sex (male, female), scholarship standing (scholarship, no scholarship), and time (Day 10, 20, 30) were the predictor variables of interest. Previous expedition experience was the covariate with the understanding that previous experience is a possible predictor of status in outdoor adventure groups.

Qualitative analysis. We qualitatively coded responses to open-ended questions using a multistep process to identify distinct themes related to peer selection in each scenario (Miles, Huberman, & Saldana, 2014; Saldana, 2013). For the first cycle of coding, we used an open-coding process to capture all of the reasons students selected their peers for a given scenario and to summarize these responses. For the second cycle of coding, we inductively looked for patterns in the data, grouping similar responses into categories and themes in an attempt to associate meaning with each "meta-code" (Saldana, 2013). We then put these themes through a final review and modification process to best represent the data, and we selected representative quotes for each theme. We then matched qualitative findings with status data to provide a better understanding of the sources of status for each scenario.

Results

We analyzed 711 questionnaires from 237 respondents on 22 NOLS courses. Females made up 34.6% of the sample (n = 82), and males made up 64.6% (n = 155). Scholarship students, representing students with low SES, made up 19.8% of the sample (n = 47), and those not on full scholarships made up the balance of students (80.2%, n = 190). Within the entire sample, approximately 72.2% of students identified themselves as White, and among students on scholar-

ship that percentage was only 12.8% (see Table 1). The percentage of students not on scholarship who identified themselves as White was nearly 87%. The mean age for the sample was 17.2 years (range = 14–23), with 95% of students between 15 and 18 years of age.

As noted previously, student composition varied within the 22 courses sampled. Fourteen courses were considered "mixed courses" in that they included scholarship and non-scholarship students. Two of these mixed courses were all male. Two courses comprised only scholarship students. Six courses did not have any scholarship students, including one that was all male. Each of the 14 mixed SES courses had between one and three scholarship students. Each of the 19 courses with mixed sex had between one and nine females.

Table 1
Student Demographics

	All students			Scholarship			Non-scholarship		
Demographic	***n***	**%**	***M***	***n***	**%**	***M***	***n***	**%**	***M***
White	171	72.2		6	12.8		165	86.8	
Black or African American	6	2.5		4	8.5		2	1.1	
Hispanic	25	10.5		21	44.7		4	2.1	
Asian	15	6.3		7	14.9		8	4.2	
American Indian or Alaskan Native	5	2.1		0	0		5	2.6	
Native Hawaiian or Pacific Islander	1	0.4		0	0		1	0.5	
Multiracial	10	4.2		6	12.8		4	2.1	
Other	4	1.7		3	6.4		1	0.5	
Female	82	34.6		15	31.9		67	35.3	
Male	155	65.4		32	68.1		123	64.7	
Age			17.2			16.7			17.3

Data Screening and Assumption Testing for Quantitative Analysis

Prior to analysis, we screened data for data entry accuracy, missing values, outliers, and assumptions related to the ANCOVA. Missing data in the outcome variables were excluded from analysis on a case basis; however, missing values accounted for less than 1% of the data. Little's missing value test resulted in a chi-square of 24.282 ($df = 24$, $p = .446$), which indicates that the data are missing completely at random (MCAR). Because of the way that participants were recruited, it was not possible to obtain a sample that included an equal number of males and females, nor was it possible to have equal numbers of scholarship and non-scholarship students. This resulted in unequal cell sizes, but the full sample was kept intact because the data were examined using the most robust statistical measures in ANCOVA.

Status

Analysis of the status data revealed no main effect for time (within subject effect), but significant main effects for sex and scholarship standing (between subject effects). Females had lower mean status than males in the task, $F(1, 200) = 20.305$, $p < .001$, partial $\eta^2 = .106$, and social, $F(1, 200) = 4.521$, $p = .017$, partial $\eta^2 = .026$, scenarios on courses with males and females, even when controlling for previous multinight expedition experience (see Table 2 and Figure 1). Status scores for scholarship students were lower than scores of non-scholarship students on

mixed courses only in the task scenario; however, this difference became nonsignificant after controlling for experience (see Table 3 and Figure 2). Previous experience was significantly correlated to scholarship status (r_{φ} = -.353, p < .001), indicating that scholarship students were less likely to have multinight expedition experience prior to the course. Previous experience was not \significantly correlated with sex (r_{φ} = .007, p =.926), indicating that previous experience was not different for male and female participants.

Table 2
Task and Social Status by Sex on Courses With Females and Males

Not Controlling for Previous Experience					
Status	***F* (1, 200)**	***p***	**Partial η²**	***M* (*SE*) females**	***M* (*SE*) males**
Task Status	27.910	< .001	.112	.302 (.033)	.524 (.026)
Social Status	8.027	.004	.034	.428 (.030)	.530 (.023)
Controlling for Previous Experience[a]					
Status	***F* (1, 171)**	***p***	**Partial η²**	***M* (*SE*) females**	***M* (*SE*) males**
Task Status	20.305	< .001	.106	.297 (.034)	.491 (.026)
Social Status	4.521	.017	.026	.427 (.032)	.514 (.025)

Note. Significance values based on a one-tailed hypothesis with α = .05.

[a]Covariate appearing in the model (previous experience) was evaluated at its mean value of .46.

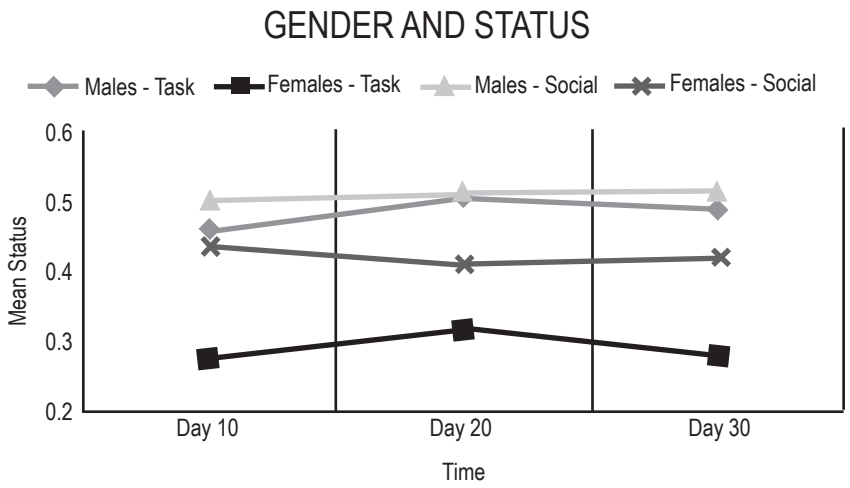

Figure 1. Task and social status over time by sex on courses with females and males. Covariate appearing in the model (previous experience) was evaluated at its mean value of .46. Significance values based on a one-tailed hypothesis with α = .05.

Table 3
Task and Social Status by Scholarship Standing on Mixed Courses

Not Controlling for Previous Experience					
Status	***F* (1, 139)**	***p***	**Partial η^2**	**Scholarship *M* (*SE*)**	**Non-scholarship *M* (*SE*)**
Task Status	3.328	.035	.023	.345 (.066)	.477 (.030)
Social Status	.012	.406	.000	.501 (.059)	.508 (.027)
Controlling for Previous Experience[a]					
Status	***F* (1, 208)**	***p***	**Partial η^2**	**Scholarship *M* (*SE*)**	**Non-scholarship *M* (*SE*)**
Task Status	1.604	.104	.013	.354 (.066)	.447 (.030)
Social Status	.498	.241	.004	.462 (.062)	.511 (.028)

Note. Significance values based on a one-tailed hypothesis with α = .05.

[a]Covariate appearing in the model (previous experience) was evaluated at its mean value of .44.

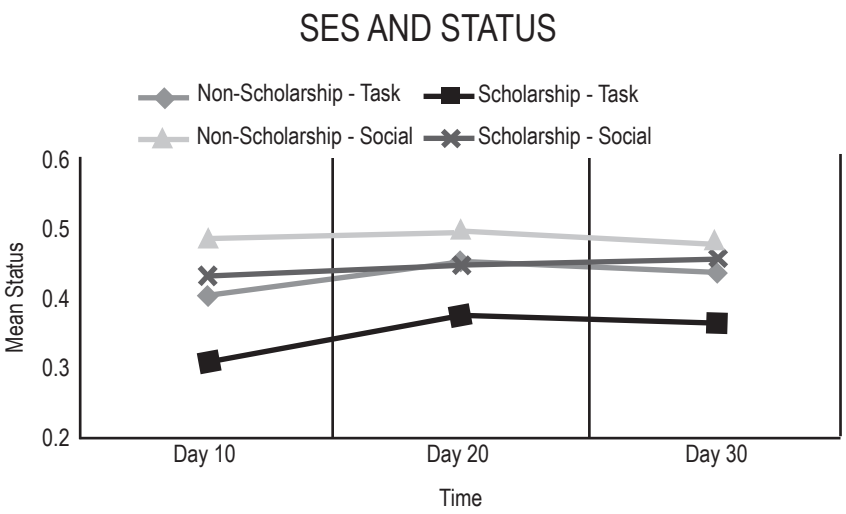

Figure 2. Task and social status over time by scholarship standing on mixed courses. Covariate appearing in the model (previous experience) was evaluated at its mean value of .44. Significance values based on a one-tailed hypothesis with α = .05.

Peer selections and status. The peer selection data revealed that females selected other females for the task scenario 38.4% of the time, which is close to the representation of females in mixed-sex courses, which was 38.9%, $\chi^2(1, N = 687) = .064$, $p = .800$. Females selected other females in the social scenario more often than would be expected by chance alone, approximately 53.8% of the time, $\chi^2(1, N = 693) = 64.940$, $p < .001$. In contrast, males in mixed-sex courses selected females for the task scenario only 16.6% of the time, $\chi^2(1, N = 1118) = 233.144$, $p < .001$, and for the social scenario 23.9%, $\chi^2(1, N = 1{,}117) = 105.695$, $p < .001$. A similar pattern emerged when comparing peer selections of students on scholarship and students not on scholarship. Again, scholarship students in mixed courses selected other scholarship students in the

task scenario 16.7% of the time, which was identical to the percentage of scholarship students in mixed courses, 16.7%, $\chi^2(1, N = 221)$, $p < .001$. Those same scholarship students selected other scholarship students for the social scenario in 23.5% of their selections, which was more than would be expected by chance alone, $\chi^2(1, N = 221) = 7.410$, $p < .001$. Students not on scholarship in mixed courses selected students on scholarship for the task scenario only 9.7% of the time, $\chi^2(1, N = 1{,}079) = 37.877$, $p < .001$. In the social scenario, however, students not on scholarship selected scholarship students approximately 15.7% of the time, which is not significantly different than would be expected by chance alone, $\chi^2(1, N = 1{,}069) = 1.230$, $p = .268$. Peer selections varied slightly across times, but the selection percentages were relatively similar for each scenario and within each subgroup.

Sources of Status

Sources of status in the task scenario. The analysis of the open-ended responses revealed eight themes that describe sources of status in the task scenario. These sources of status included competence (28.6%), general leadership traits (15.7%), physical ability (11.6%), attitude (11.1%), social factors (9.4%), self-management (8.4%), concern for others (8.4%), and compatibility (6.9%; see Table 4). Percentages varied slightly among subgroups within the sample, but were fairly consistent across all times.

Table 4
Sources of Peer Status in the Task Scenario

Theme	Description	Representative responses
Competence	Displays notable ability in course-related skills.	"They are good with maps." "She is an excellent route finder."
Leadership Traits	Describes general leadership abilities including statements related to decision making and group communication.	"He is a good leader." "She is confident and makes good decisions."
Physical Ability	Demonstrates notable physical ability.	"She is a fast hiker." "He never gets tired."
Attitude	Peer maintains a positive attitude in most circumstances.	"He is positive." "She never gets down."
Social Factors	Individual is easy to get along with and makes the experience enjoyable.	"They keep the mood light." "We have a good time on trail."
Self-Management	Takes responsibility for self and takes initiative on group and personal tasks.	"He is reliable." "She does what needs to be done."
Concern for Others	Shows concern for others in the group.	"They are helpful." "They look out for everyone."
Compatibility	Peer selected because of a personal connection.	"We work well together." "We have a lot in common."

There were notable differences between subgroups. Based on chi-square goodness of fit tests, the percentages for several sources showed statistically significant differences between subgroups ($p < .05$). Notably, females mentioned physical ability (8.6%) less frequently than did their male counterparts (13.2%). Females also named concern for others (12.2%) and attitude (14.8%) more often than did males (6.2% and 9%, respectively). Students on scholarship cited having a positive attitude (7.4% of responses) as a reason for peer selection less often than did non-scholarship students (12.0%), but mentioned concern for others (12.8%) at a higher rate than did non-scholarship students (7.4%). This indicates that sources of task-related status, other than competence, were not prioritized in the same order across all subgroups. However, all groups prioritized attributes and skills when selecting peers in the task scenario over social or interpersonal factors. The breakdown of themes by group is summarized in Figure 3.

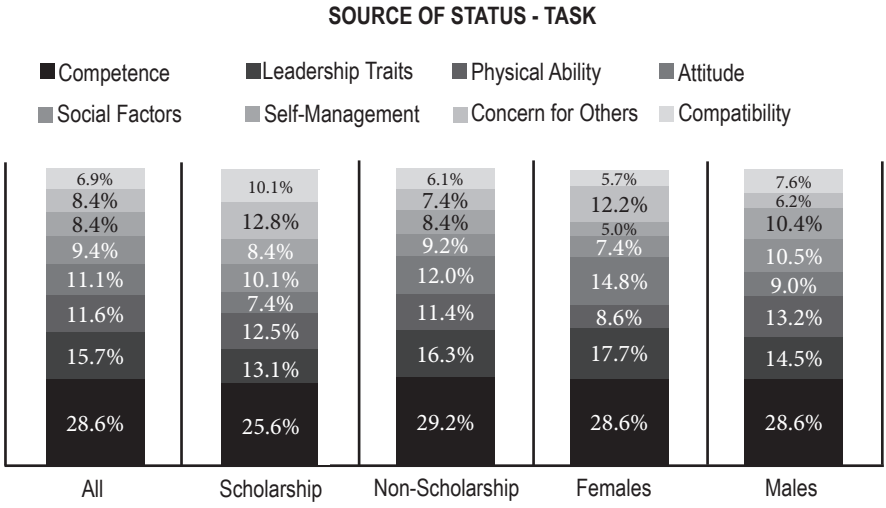

Figure 3. Sources of peer status in the task scenario by group.

Sources of status in the social scenario. Analysis of the open-ended responses in the social scenario resulted in nine themes. For the entire sample, reasons for selecting peers in the social scenario were sense of humor or fun (31.7%), compatibility (25.3%), friendliness (24.5%), competence (5.5%), attitude (5.5%), self-management (3.2%), physical ability (2.0%), concern for others (1.5%), and leadership traits (0.7%). Although variations in percentages varied slightly, the top three themes were the same among all subgroups and the percentages were fairly consistent across all times. Each theme is described in Table 5, and themes by group are summarized in Figure 4. Regardless of sex or scholarship status, all subgroups overwhelmingly chose their peers based on interpersonal factors. This is in contrast to the sources of status in the task domain for which peers were selected based on their attributes and skills.

Table 5
Sources of Peer Status in the Social Scenario

Theme	Description	Representative responses
Sense of Humor/Fun	Selected because of humor or shared fun.	"They are funny."
		"We have fun."
Compatibility	Peer selected because of a personal connection.	"We get along."
		"We have a lot in common."
Friendliness	Peer is easy to get along with.	"They are easygoing."
Competence	Displays notable ability in course-related skills.	"They are good with maps."
		"She is an excellent route finder."
Attitude	Peer maintains a positive attitude in most circumstances.	"He is positive."
		"She never gets down."
Self-Management	Takes responsibility for self and takes initiative on group and personal tasks.	"He is reliable."
		"She does what needs to be done."
Physical Ability	Demonstrates notable physical ability.	"She is a fast hiker."
		"He never gets tired."
Concern for Others	Shows concern for others in the group.	"They are helpful."
		"They look out for everyone."
Leadership Traits	Describes general leadership abilities including statements related to decision making and group communication.	"He is a good leader."
		"She is confident and makes good decisions."

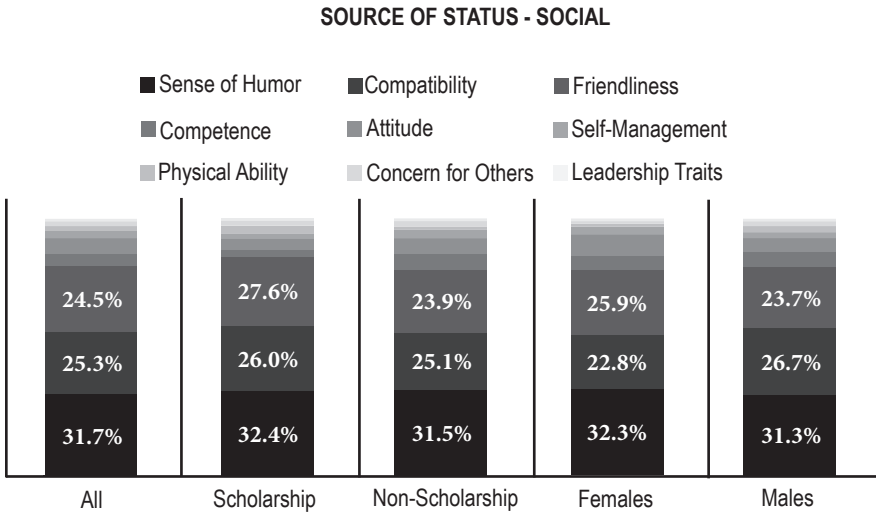

Figure 4. Sources of peer status in the social scenario by group.

Discussion

We sought to examine the relationship between two demographic factors and peer status on extended OAE courses. There were several interrelated purposes and related research questions. The primary purpose was to determine if sex and SES relate to individual status within a group in scenarios that represent the task-based (goal-oriented) and social (interpersonal) domains of group functioning. To gain a better understanding of how and why peers were selected for each scenario, we sought to identify key factors for peer selection, or the sources of individual status. Finally, we examined if status and sources of status changed over time as group dynamics changed. The results showed that female students had lower status in the task and social scenarios, even when controlling for previous experience. Students with low SES had lower status than their peers in the task scenario, but this difference disappeared when also considering previous multinight backpacking experience. Students with low SES were less likely to have much previous outdoor experience, which is likely a source of outdoor skill competence. Analysis of the qualitative data revealed, as expected, that all groups prioritized competence and related attributes of peers for the task-based scenario and elevated interpersonal reasons for the social scenario. Yet in the task scenario there were subtle differences in what students valued beyond competence depending on demographics. Time did not have a significant effect on status or the sources of status, perhaps indicating that status and group hierarchies stabilize early in the course. In the following discussion, we will analyze the results further in light of existing research, explore how the qualitative findings provide additional context for the status data, address limitations of this study, and discuss implications for practice and future research.

Sex and Status

The results indicate that there is a significant relationship between sex and status for the social and task scenarios, with females having lower average status regardless of previous multinight expedition experience. This is consistent with findings in other group contexts that include work groups and leadership positions (see Brescoll et al., 2010; Cohen & Zhou, 1991). The specific cause for the low status of females is unclear and likely complex, though it was found in a recent NOLS study of a similar population of students that males and females tend to group into same-sex cliques, limiting the influence of already outnumbered female students, who are typically segregated in sex-based tent groups (Jostad, Sibthorp, & Paisley, 2013).

The difference in mean status among females in the social scenario could be attributed to same-sex bias in friend selection. Among high school students, there is a tendency to select peers of the same sex in greater percentages than peers of the opposite sex, though the percentage of opposite sex friendships increases with age, especially among females (Richards, Crowe, Larson, & Swarr, 1998). This is consistent with the findings in this study in that males and females overselected their own sex for the social scenario. Because males outnumbered females on mixed courses almost 2 to 1, it could be expected that mean status scores for females would be lower than those for males.

Explaining the status differences in the task scenario may not be as simple. If it is assumed that females are as competent as males, then it is expected that females would be selected in proportions that reflect course composition when controlling for previous experience. Females selected their female peers in percentages that reflected course composition, but males significantly underselected females in this task-oriented scenario. Sex was not significantly correlated with previous experience, so the difference in status cannot be explained by this covariate. It is possible that among males some status expectations and sex stereotypes work in combination with other peer-selection factors that move them to not choose females (Cohen & Zhou, 1991; Ridgeway, 2001). Even though other research has shown that females may be more socially motivated in outdoor pursuits than are males (Ewert, Gilbertson, Luo, & Voight, 2013), these find-

ings should still be of note to OAE program managers and instructors. Clearly, the task scenario requires many of the skills and leadership attributes that programs wish to pass on to all students. With females having significantly lower status in the task domain, it could be argued that females are not ascending to important leadership roles in patterns that would be expected.

The qualitative data may provide insight into what characteristics females and males value when making peer selections. Competence and general leadership traits were the most common factors for peer selection in the task scenario, but there were key differences. The third most common factor for peer selection among males was physical ability, and female students considered having a positive attitude and concern for others more important. These peer selection factors can be considered sources of status and show that there are important differences in what females and males value, especially in a goal-oriented situation. Researchers in other disciplines have explored how values affect group dynamics and status (see Hackman & Katz, 2010; Jasso, 2014), and researchers of OAE groups may want to delve deeper into the relationship between demographic groups, values, and peer selection. Instructors play a central role in guiding outcomes in OAE courses (Schumann, Sibthorp, Paisley, & Gookin, 2009), and researchers may want to explore how curricular interventions or intentional instructor-led contributions to group culture could narrow the status gap between the sexes.

SES and Status

The narrative in this study concerning the relationship between SES and status is different than that of sex. Students on scholarship had lower status than did students not on scholarship in the task scenario, but this difference disappeared when controlling for experience. Previous experience was significantly related to scholarship status, confirming the assumption that those on scholarship are less likely to have backpacking and camping experience. The students on scholarship in this study largely came from Summer Search, an organization that works with high school students living in urban centers. When the organization sends students on outdoor adventure expeditions after the students' sophomore year, it is often the first extended trip away from home for many participants and their first in a wilderness setting. Understandably, students on scholarship may be starting their OAE experience in a different place than students who come to NOLS specifically to improve their outdoor skills. That said, it is encouraging that when experience is controlled for, there is no significant difference in status in the task scenario.

Perhaps more encouraging is that this study showed no significant difference in mean status between students on full scholarships and those not on full scholarships in the social scenario. It was observed in a previous study that NOLS students on scholarship were often on the periphery of social groups (Jostad, Paisley, et al., 2013), but results from this study showed that scholarship students appeared to be fitting in socially in courses. In mixed courses with students receiving and not receiving full scholarships, the mean status scores were roughly comparable.

The qualitative data revealed that the factors for peer selection in the task scenario were similar for scholarship and non-scholarship students, with a few interesting exceptions. Once again, these peer selection factors reflect the values of each subgroup. Competence, leadership traits, and physical ability were important to both groups, but students on scholarship valued concern for others more than their non-scholarship peers did. Conversely, students not on scholarship valued a positive attitude more than students on scholarship. These differences in peer selection factors may reflect different student motivations. For example, students on scholarship may be coming to NOLS more for the experience and the broad leadership curriculum than for the opportunity to become outdoor leaders.

Time and Status

There was no main effect for time on status in either scenario. Additionally, the factors for peer selection were fairly stable over all three sample periods. This possibly indicates that social

hierarchies, status, and factors for peer selection stabilize by Day 10. Important stages of group development possibly occur early within a course.

Limitations

There are limitations to this study. Generalizability to other settings is limited because of the unique nature of NOLS courses and the particular student composition of these courses. In addition, the number of students on scholarship enrolled in courses examined in this study resulted in a small sample of this subgroup of students; thus, a more robust sample may have produced different results. The quasi-experimental design without systematic assignment makes causal inferences problematic. As is typical with adventure program research, the structural and logistical constraints of the study setting create compromises in the design. Finally, the status differences between males and females are modest in magnitude, especially in the social scenario, and should be interpreted with caution.

Concluding Thoughts

Status equalization remains a central tenet of adventure programming, though it may be difficult to achieve (Rose & Paisley, 2012). As participants engage in new and novel environments that require diverse skills, the expectation is that the traditional hierarchies of work, home, or school are displaced by a new, more egalitarian structure in which everyone is valued and appreciated for what they contribute to the immediate needs of the group. This premise remains possible, but it is also important to consider two alternatives. First, new group structures may simply form that replace the preexisting hierarchies. As smartphones, zip codes, and money have limited value during outdoor adventures, hierarchies can instead be built on personal competencies and dispositions. Perhaps these become the new "currency" on extended backcountry adventures. This certainly might allow economically disadvantaged students new opportunities to achieve status in diverse social groups, but it does not inherently make a group more egalitarian. Second, one cannot fully escape the inherent cultural hierarchies that exist in society. If traditionally masculine characteristics remain valued in leadership and task completion, these same beliefs and values may also infiltrate adventure programming. Biases of what a leader should look like ultimately influence how leaders are selected. Although caution should be taken to avoid reading too much into the findings from a single study that, by design, had students selecting peers in specific scenarios, we emphasize the need for further research on status in OAE and continued work at the program level. If, as a field, we seek to shift prevailing societal values related to status attribution, we need to understand that this will take intention and effort.

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