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OURE Final Report

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Student Time Management: Student Characteristics Comparison Between Traditional Coursework and Extracurricular Activities

Abstract

The trend that extracurricular activities and organizations are important to a college student is increasing. Many students are active in at least one activity or organization outside of class. These activities at the University of Missouri-Rolla range from design competition teams, to professional societies, to non-varsity sports, and to special interests groups. Do students who have a high interest in education and learning find these activities more important than their coursework? What other traits could affect preference away from traditional coursework towards non-traditional extracurricular activities? Examination of selected traits could lead us to finding trends of preferences.

Introduction

To current students, there is a wide range of pressures put on them to do well in coursework and classes, while at the same time, a large pressure to join extracurricular activities. The pressure to do well in course work can come from many sources: parents, professors, potential employers, or a personal desire to succeed and achieve. On the other hand, extracurricular activities offer benefits of socialization, new challenges, hands-on experience, new and unique educational experiences, and various types of other rewards (Such as: awards, material prizes, job networking.). In addition, an increasing number of employers and school officials promote such activities as being beneficial to students. With only a finite amount of time available to participate

in such activities, as well as, time available to focus on school work, students are forced to make priorities. The biggest question is: What do students place as their top priority? This, of course, is dependent on many factors for each student. In this study, we focus on five constructs that may show a trend in preference. We wish to observe if they still prefer the more traditional coursework and classes, or if they now prefer to achieve their desires of learning through the non-traditional means of extracurricular activities.

Through personal experience and observation, I see a high number of students struggle to find a happy balance between coursework and extracurricular activities. Many students will try to do well in both their class and extracurricular pursuits. This makes predictions based on personality traits or constructs difficult to make. No confident hypothesis can be given based on casual observation, leaving us to wait on the results from each construct.

Model Components

To determine more about the preferences of engineering students, a set of variables needed to be defined. First set of measures that seem necessary are intrinsic and extrinsic motivation. The extrinsic motivation measures are based on a mixed set of extrinsic motivation constructs (Deci & Ryan¹, 1985; Ryan and Deci², 2000). The particular subtype relevant to this analysis is extrinsic introjection which describes one's feelings of consequences or guilt. The intrinsic motivation measures are based on the set of subtypes proposed by Vallerand, Pelletier, Blais, Briere, Senecal, & Vallieres³

(1992). The relevant subtype used here is intrinsic motivation to know, which relates to one's personal desire to learn.

The second set of measures is general personality traits. Need for cognition (Cacioppo & Petty⁴, 1982), organization (International personality Item Pool⁵, 2001), and activity level (International Personality Item Pool⁵, 2001) each provide use for this report. Need for cognition refers to the need to think, learn, and analyze. Organization describes ability to plan, order, and provide structure with one's resources to accomplish one's goal. Activity level refers to how many tasks one will take on and handle.

Method

A survey was distributed at the University of Missouri-Rolla to the members of several campus organizations. During the Fall Semester of the 2004-2005 academic year, they were distributed by contacting the officers of each for permission. If they could not conveniently participate in the questionnaire during their meetings, an online version was made available to the members. Respondents completed informed consent forms prior to completing the questionnaire and received debriefing sheets at the conclusion. Due to the variety of organizations asked to participate, the respondents make a good representation of the students who actively participate in organizations on the campus.

The questionnaire consisted of five sections. The first section collected basic demographics, such as: academic major, class, gender, local residence, and ethnicity.

In addition, a 5-point scale was set up to rate their range of GPA, with "<2.00" at the low end and "3.50-4.00" at the high end.

The second section collected information about their participation in organizations, including leadership positions. It also asked about how many hours per week they spent on specific activities: extracurricular organizations, in class attendance, work on classes outside normal class time, and paid work. Also, they were asked for their current academic credit hours for the semester.

The third section contained 28 items to measure intrinsic and extrinsic motivation. Respondents had to rate answers to the questions "Why did you go to college?" with a five-point rating scale ranging from 1= Strongly Disagree to 5 = Strongly Agree.

The fourth section included 56 items to measure the personality construct measures mentioned above: Organization (10 items), Activity Level (10 items), Need for Cognition (10 items), Social Assurance (8 items), Social Connectedness (8 items), and Generalized Self-Efficacy (10 items). The same five-point scale used with the motivation items was used to measure the items in either a positive or negative manner. Only Organization, Activity Level, and Need for Cognition were used for this analysis.

The final section gave 26 statements about participation and preference in extracurricular activities and coursework. Respondents used another five-point rating scale ranging from 1 = Very Rarely to 5 = Very Often. Certain statements displayed

favor for coursework over extracurricular activities while other statements did the opposite. For this analysis, four statements in favor for coursework were grouped to compare with four equivalent statements favoring extracurricular activities. A ninth statement directly asked for preference towards extracurricular activities or not.

Results

Out of those returned, 147 were used for the data analysis. Median values were used to determine the split for High and Low categories for each construct. The values are show in Table 1 below. Also, a High GPA variable was created based on giving those who responded with a 3.5-4.0 GPA a 2, while all others received a 1. Given in each table are the most significant factors based on their p-values. Significant for our purposes is defined as $p < .05$. However, a few factors had values above $p = .05$, yet still near .05, and because their large mean differences are notable, they are included in the tables. With a larger sample study, improved significance is likely for these factors.

	Count	Maximum	Minimum	Median
Intrinsic Motivation (To Know)	147	5.00	1.00	4.00
Activity Level	147	5.00	1.60	3.80
Organization	147	4.90	1.40	3.30
Need For Cognition	147	4.70	2.30	3.60
Extrinsic Motivation (Introjected)	147	5.00	1.00	3.75

Table 1. Median values for the selected constructs.

With intrinsic motivation to know, none of the statements produced any significance in the difference in their means, which is shown in Table 2. However, the higher group reported slightly more high GPA's and worked nearly 2 hours more.

	Intrinsic Motivation to Know	Mean	Std. Dev.	Significance (P-Value)	Mean Difference (High - Low)
High GPA	High	1.61	0.490	0.035	0.176
	Low	1.44	0.500		
1. How many hours do you currently work per week for pay?	High	4.43	6.918	0.053	1.913
	Low	2.52	4.949		

Table 2. Significant variables for intrinsic motivation to know.

Activity level, displayed in Table 3, presents a few predictable results. The more activity group had a small increase of high GPA's, but also had over 2 more hours spent on extracurricular organizations. They also showed in statement 90 that higher activity respondents were less likely to miss their extracurricular activities for due to coursework.

	Activity Level	Mean	Std. Dev.	Significance (P-Value)	Mean Difference (High - Low)
High GPA	High	1.62	0.488	0.040	0.170
	Low	1.45	0.501		
Hours spent for extracurricular organizations	High	10.40	8.012	0.061	2.426
	Low	7.97	7.518		
90. I miss deadlines with my university extracurricular activities because I am working on my courses	High	1.89	1.117	0.061	-0.382
	Low	2.27	1.326		

Table 3. Significant variables for activity level.

In Table 4, organization shows the most effect on the preference for this report. Again, the high GPA is slightly more for the higher group, but this time the lower group shows to work for pay about 2 hours more. In statements 90, 85, 89, and 97, the higher organization group rated each statement less than the lower organization group. For the first three, this represents favor neither for coursework nor for extracurricular activities. However, statement 97 directly shows that the lower organization group reported more benefit in their extracurricular activities.

	Organization	Mean	Std. Dev.	Significance (P-Value)	Mean Difference (High - Low)
89. I miss homework deadlines because of my university extracurricular activities	High	1.45	0.920	0.001	-0.561
	Low	2.01	1.028		
85. I put less effort into my course work so that I have more time for my university extracurricular organization activities	High	2.24	1.354	0.026	-0.468
	Low	2.71	1.168		
High GPA	High	1.63	0.487	0.027	0.182
	Low	1.44	0.500		
1. How many hours do you currently work per week for pay?	High	2.61	4.647	0.047	-2.060
	Low	4.67	7.402		
97. In general, I feel I benefit more from my involvement in university extracurricular activities than from what I learn in my courses	High	2.67	1.212	0.052	-0.361
	Low	3.03	1.021		
90. I miss deadlines with my university extracurricular activities because I am working on my courses	High	1.89	1.226	0.059	-0.384
	Low	2.28	1.224		

Table 4. Significant variables for organization.

Need for cognition, shown in Table 5, has a few unique differences. First, need for cognition has been the only construct that did not show a significant relationship in the high GPA category. Four statements showed a relationship, though 3 were only near significance ($p \approx < .05$). For statements 90 and 93, the higher cognition group shows favor towards extracurricular activities, but statements 91 and 92 express that they will not sacrifice the quality or challenge in either their coursework or extracurricular activity.

	Need for Cognition	Mean	Std. Dev.	Significance (P-Value)	Mean Difference (High - Low)
90. I miss deadlines with my university extracurricular activities because I am working on my courses	High	1.86	1.064	0.021	-0.481
	Low	2.34	1.377		
91. I try to take easier classes so that I have more time for my university extracurricular activities	High	1.86	1.111	0.054	-0.391
	Low	2.25	1.295		
92. I choose university extracurricular activities that won't take too much time away from my course work	High	2.25	1.298	0.060	-0.422
	Low	2.67	1.375		
93. I expect my instructors to understand when I have to miss class because of my university extracurricular activities	High	2.76	1.380	0.061	0.449
	Low	2.31	1.479		
High GPA	High	1.58	0.497	0.322	0.082
	Low	1.49	0.504		

Table 5. Significant variables for need for cognition.

Finally, Table 6 shows extrinsic motivation (introjected) and how, besides a negative effect on the high GPA rating, no other significant changes to variables occurred.

	Extrinsic Motivation (Introjected)	Mean	Std. Dev.	Significance (P-Value)	Mean Difference (High - Low)
High GPA	High	1.47	0.502	0.052	-0.162
	Low	1.63	0.486		

Table 6. Significant variables for extrinsic motivation (introjected).

Discussion

The results demonstrate the difficulty in forming any predictions based on observation. None of the examined traits truly showed major change in affecting the preferences between coursework and extracurricular activities. Need for cognition and organization were notably close. Need for cognition may show that educationally minded students wish to increase their range of learning by adding extracurricular activities to their schedules. Organization, as could be predicted, shows that such students are more capable of handling both extracurricular activities and coursework, and tend to not make sacrifices of one for the other.

The high GPA category became an interesting factor to examine. GPA is a traditional way of judging performance and attitude towards the traditional coursework. Most of the traits showed increase in the high GPA category with the high category of each trait. Exceptions: need for cognition differences were insignificant, which seems unusual; and extrinsic motivation (introjected) showed a reduction of the high GPA. Could this be a sign that guilt reduces cheating, but cheating truly improves scores?

Organization, being the easiest trait to manipulate and improved with training, may be worth following up on. With improving organization of students, issues between professors and students dealing with coursework and class commitments can be solved. Proof may be found in the lower organization group responses that extracurricular activities are more beneficial to them. The time commitments plus real and diverse experience force such low organized students to make improvements in their organization skills in addition to other their other skills.

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