

What can I do for you?: An evaluation of University and Professional Organizational roles in the development of student training

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Introduction

Students view professional networking and field experience as an integral component of their academic experience (Kranz, Steele, Lund and Bradford-Cook, 2004). The Human Factors and Ergonomic Society (HFES) promotes the discovery and exchange of knowledge (<http://www.hfes.org>) among all expertise levels of human factors, where students serve as an integral component of its membership. For students, networking opportunities and field experience are two fundamental facets the society provides through their conference. Thus, the question of bolstering valuable career development/networking opportunities during students' academic careers becomes a paramount concern for HFES and academic institutions to address.

Method

Participants

49 Psychology students completed the 2003 HFES Student Survey (22 males, 27 females). Participants' ages ranged from 21 to 33, with a mean age of 26 ($SD = 3.00$).

Materials and Task

Participants completed an 18-question paper-based survey. Open-ended questions focused on the following areas:

- ◆ Intended career sector (Business/Industry for example)
- ◆ Anticipated specialization field (such as Training)
- ◆ University program enhancement suggestions and how professional organizations can contribute
- ◆ Names of professional organizations with current membership
- ◆ Describing student membership contributions toward professional development
- ◆ Number of conferences attended in last five years
- ◆ Reasons for attending another HFES meeting and for encouraging other students to attend
- ◆ Strategies for defraying conference/meeting costs (like sharing a room)
- ◆ Demographics

Rank-ordered questions assessed factors influencing major choice (interest in the field for instance) and membership (like networking opportunities) in any professional organization(s). A Ten-Point Likert Scale question evaluated the University program's effectiveness in preparing students for a career in the field.

Procedure

Need to include this—Haydee can you assist?.

Coding

Protocol Analysis (Ericsson and Simon, 1993) techniques were used to analyze participants' comments for enhancing University programs. Comments were segmented by idea and non-responses were discarded from analyses (N=52). Comments were categorized according to sector (University or professional organizations) and enhancement type.

Results

Career Pursuit

Participants specified the single sector—Academia, Business/Industry, Consulting, Government, Military or Other—they primarily wanted to establish their career. Figure 1 shows 49% of participants expected a Business/Industry career, while 21% selected Academia. 15% of respondents anticipated a Consulting career, while 13% preferred a Government career. Finally, 2% expressed interest in a Military career. Thus, Industry serves as a profound component of HFES and many students attend HFES for industry contacts and experience.

University Program Effectiveness

Participants rated their University's program in preparing themselves for a career in the field as effective ($M = 7.63$, $SD = 1.52$). When probed for ways to enhance their program, respondents focused on enhancements in coursework and career development/networking opportunities (Figure 2). Figure 2 shows 40% of respondents requested augmenting their program's coursework, while 34% indicated their university's program could be improved by increased career development/networking opportunities. 17% of respondents focused on improved programming and 9% believed enhancements to their current program were unnecessary. Table 1 provides a representative sample of comments respondents provided. Developing writing techniques, learning specific computer programs, and special topics courses modeled after how industries conduct day-to-day operations were strongly emphasized.

Roles of Professional Organizations in Enhancing University Programs

Collaborations with professional organizations were seen as an effective method of improving university programs. Figure 2 indicates 76% of participants believed professional organizations could collaborate with Universities to principally enhance career development/networking opportunities. Comparatively, 12% endorsed professional support through coursework, 6% said programming assistance, while 6% maintained no change was required. Table 1 provides sample professional organization suggestions paired with the program enhancement type. These results suggest professional organizations can enhance students' career preparations in the field by marrying learned techniques with practical field experience prior to students entering the workplace.

Participants also recognized that actively participating in professional organizations was another route to pursue career development/networking opportunities. Participants ranked twelve factors (like Career Placement Services) that influenced professional organization membership. Figure 3 shows networking opportunities ($M = 3.76$, $SD = 2.57$) was the principal reason for membership, followed by professional interactions ($M = 3.78$, $SD = 2.42$).

Comment [CS1]: This sentence still seems strangely abrupt (I think it's that it doesn't say what the factors generally were).

Defraying Conference/Meeting Costs

98% of participants considered attending professional organization conferences as a valuable component of their academic careers. Nonetheless, the priority of attending conferences must be balanced against travel and lodging expenses. Figure 4 shows 27% of respondents received University assistance and 25% shared a room. 20% stayed at a less expensive hotel, 13% volunteered for free registration, 4% attended part of the conference, and 4% organized fundraising activities. 7% used other tactics. While conference expenses may be expensive, these results suggest participants concentrated more on the experience than the cost. Further, participants were willing to use their resources to ensure attendance at a high quality event.

ACKNOWLEDGEMENTS

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References

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- Kranz, P. L., Steele, R. A., Lund, N. L., & Bradford Cook, S. (2004). Employment Success and Satisfaction Among Graduates of Tennessee Technological

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Proportion of Respondents Anticipating Each Career Field

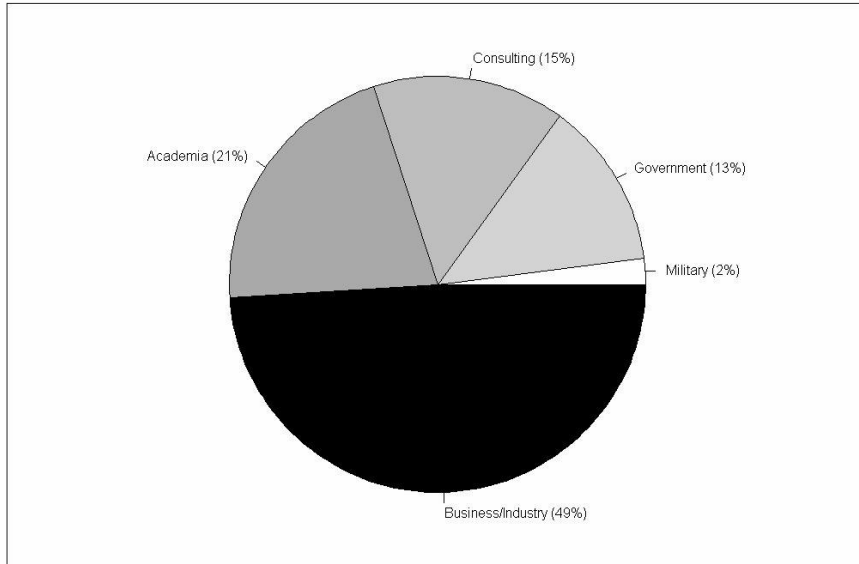


Figure 1. Proportion of respondents anticipating each career field.

Enhancement Type	University Description	Professional Description
Coursework	"...having coursework very much related to practical works [that] goes on in the industry or research field."	"A 'methods of HF' class discussion of techniques in HF research (non-stats oriented)."
Career Development/ Networking	"My program should offer more options...to go outside and apply the theory in the actual field."	"Professional organizations could support my institution through grants and scholarships."
Programming	"School Chapter of HFES."	"HFES could put out timelines for students, provide examples of accomplishments for graduating students. Provide examples, vitae, etc."
No change	"I wouldn't change my program; it is really preparing me for both a job in industry and academia."	"It already does an awesome job."

Table 1 . Respondent comments toward improving their University's program.

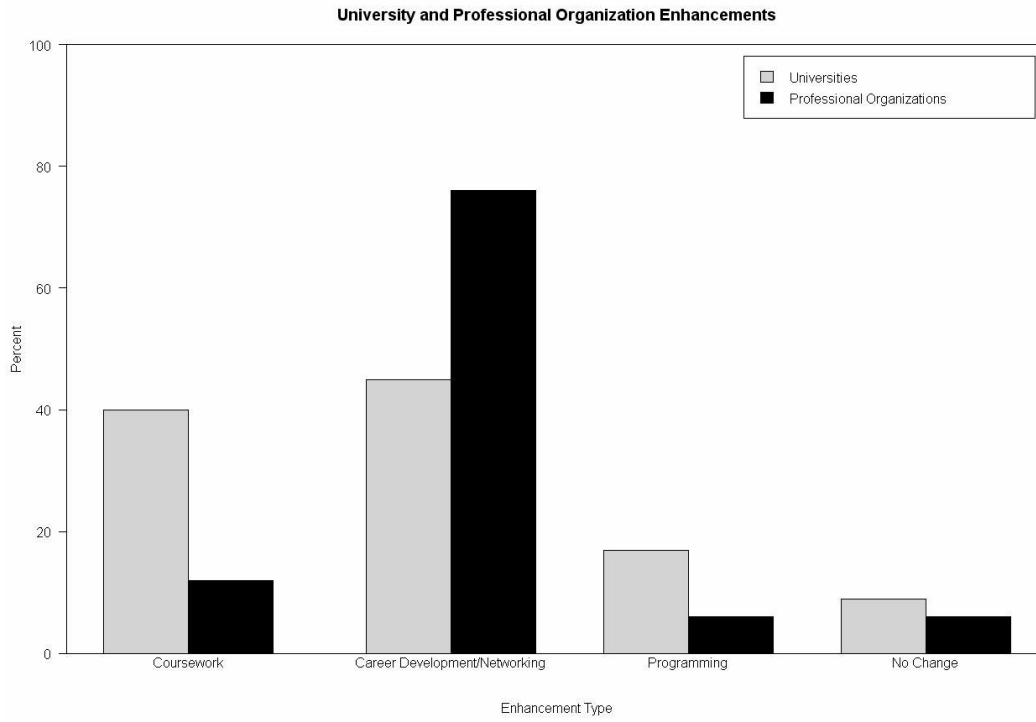


Figure 2. University and Professional Organization Enhancements

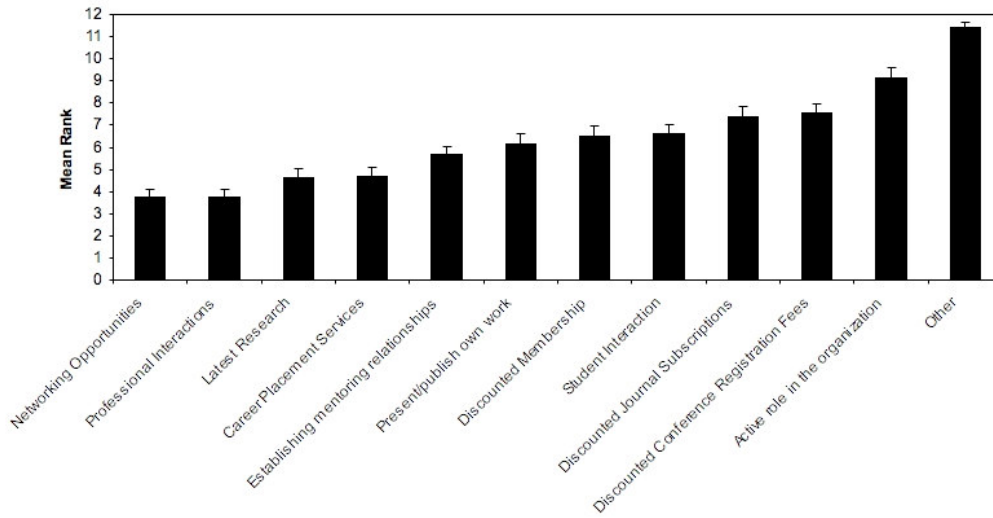


Figure 3. Mean motivation ranks for professional organization membership. Error bars represent the standard error of the mean.

Arrangements Respondents Made to Minimize Conference Expenses

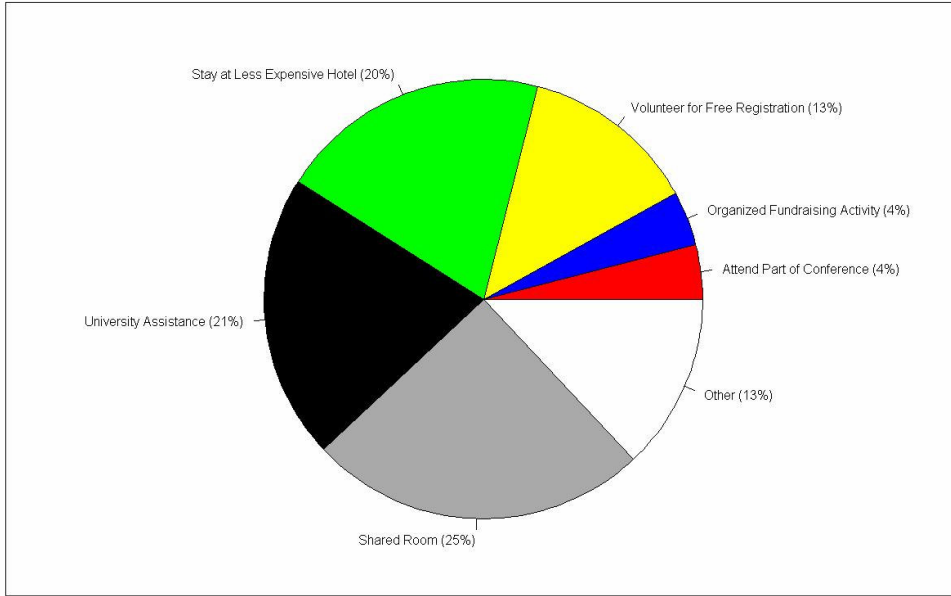


Figure 4. Arrangements respondents made to minimize conference expenses.