

Forum

Perceptions of the 2007 International Symposium on Society and Resource Management Student Forum

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The International Symposium on Society and Resource Management (ISSRM) is the official meeting of the International Association for Society and Natural Resources (IASNR), and is the largest international gathering of researchers and practitioners interested in the application of social science to environmental and natural resource issues. While a primary goal of ISSRM and IASNR is the development and exchange of information, an important secondary goal is professional development, particularly as this applies to graduate students. To further this latter goal, a Student Forum was organized and conducted at the 13th ISSRM in Park City, UT. This article reports the findings of a survey of Student Forum participants conducted to evaluate the session. Data on graduate student participation and participants, importance–performance analysis of the programmatic components of the forum, and measures of social capital generated by the forum suggest that the Student Forum was successful and should be continued.

Keywords importance–performance analysis (IPA), International Symposium on Society and Resource Management (ISSRM), social capital, Student Forum, student perceptions

Conferences are integral to academic life and continued professional development. They create focal points for intellectual exchange and encourage professional socialization, while providing scholars with opportunities to present their work, observe fresh and innovative research, and network with peers. However, graduate students, especially those who are just starting in their respective programs, may find the entire conference culture bewildering and often intimidating (Gupta and Waismel-Manor

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2006). Given the importance of students to the future of any profession, it is vital for graduate students to find their feet quickly and learn to make the most of their conference experiences. Today's system of graduate education often does not adequately prepare students for the needs of a changing workforce (Nyquist and Wulff 2000). Advocates for graduate education have called for greater emphasis on professional development and career guidance for graduate students (Golde and Dore 2001; Luzzo 2000; Nyquist and Wulff 2000). For this reason, it would behoove conference hosts to invest time, energy, and programming to initiate graduate students, introduce them to the field, and offer opportunities for them to build linkages with established scholars and other graduate students.

To address issues of graduate student socialization and professional involvement, the organizers of the 13th International Symposium on Society and Resource Management (ISSRM) designed and implemented a two-day Student Forum immediately preceding the 2007 symposium. The Student Forum was designed as a manifestation of the commitment of the International Association for Society and Natural Resources (IASNR) to furthering the interests of graduate students by enhancing the overall student experience with ISSRM, providing networking opportunities, and fostering participants' knowledge of their future professions (IASNR 2007). This article reports, from the perspective of student participants, the results of an evaluation of the 2007 Student Forum. The student experience is investigated through an importance-performance analysis (IPA) of the various components of the forum, and includes a perspective on social capital to evaluate the extent to which the forum created a sense of social cohesion among attendees. Also included is a participant profile, an analysis of student participation, and recommendations for the organization of future ISSRM Student Forums.

Components of the 2007 ISSRM Student Forum

At the two-day Student Forum, a host of opportunities were offered to participants for networking and career development. Academic and agency professionals gave presentations on how to publish successfully, how to make effective presentations at scientific meetings, and insights into successful grant writing. Presenters shared their philosophies on what they believed to be important elements of professional development. Concurrent job panel discussions were held with representatives from academic institutions, nonprofit organizations, private businesses, and governmental agencies, in which participants discussed issues and students raised questions related to career options. Students also had the option to submit their curriculum vitae (CV) for review and to discuss their CVs with academic, government, private, or nonprofit representatives. These events, in addition to optional fieldtrips and social activities, were designed to enhance the student meeting experience by providing professional development advice, promoting a sense of community, and providing valuable networking opportunities for each student participant.

Research Approach

The 2007 ISSRM Student Forum was evaluated through an online survey of participants. Questionnaires were distributed to all Student Forum participants 1 month after the symposium. In total, 81 students were contacted by e-mail and sent a follow-up reminder message 1 month later. Fifty-six respondents completed the

questionnaire, representing a 69% response rate. The questionnaire was divided into three major sections: background data on respondents, with their participation in ISSRM and other professional conferences; respondent evaluations of the importance of the components of the Student Forum and their satisfaction with these programs; and items addressing social capital generated at the Student Forum.

Importance–Performance Analysis

Importance–performance analysis (IPA) was chosen as an aid in comparing the utility of components of the Student Forum to participants' satisfaction with those same components. IPA was originally developed for marketing purposes (Martilla and James 1977) and has been adopted by researchers in tourism and hospitality (Oh 2001), natural resources recreation (Hollenhorst, Olson, and Fortney 1992), and ecological impact monitoring (Hammitt, Bixler, and Noe 1996; Daniels and Marion 2006). Data measured on a Likert-type scale can be used to generate an IPA diagram as a means to guide efficient allocation of resources (Manning 1999). This technique combines measures of attribute importance and performance by plotting mean values across two lines of measurement, with importance illustrated along the y axis and performance along the x axis (Figure 1). Based upon importance–performance measures, four general evaluations are typically derived. Components positioned in the upper right-hand quadrant (“Keep up the Good Work”) should be maintained, because they are important and perform well. Components in the upper left-hand quadrant (“Concentrate Here”) require immediate action, because they are important but are not performing well. Components clustered in the lower left-hand quadrant (“Low Priority”) are minor weaknesses, because even though they are not performing well, they are not judged as important. Resources committed to components in the lower right-hand quadrant (“Possible Overkill”) might be reallocated elsewhere, because even though they are performing well, they are judged as unimportant (Deng 2007).

In the research described here, survey items in the IPA included all major programmatic activities that took place at the forum. Respondents were asked to

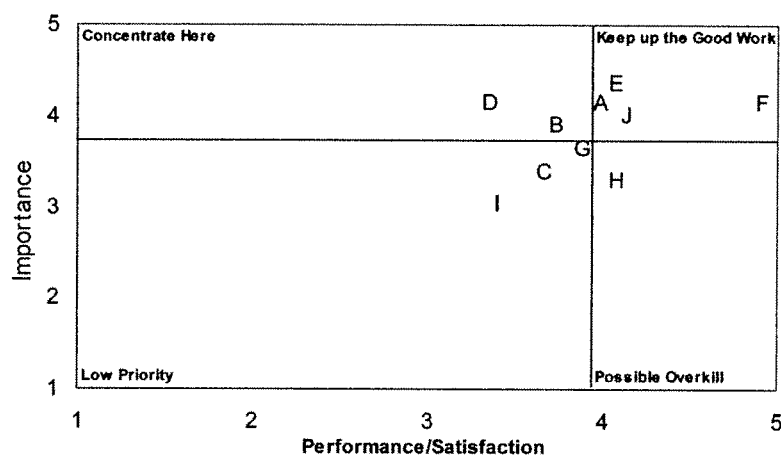


Figure 1. Importance–performance analysis (IPA) grid for components of the 2007 ISSRM Student Forum.

Table 1. Importance and satisfaction scores for components of the 2007 ISSRM Student Forum

Component (code)	Importance	Satisfaction	Discrepancy	<i>t</i> Value
Presentation on the publishing process (A)	4.08	4.00	-0.08	-0.599
Presentation on writing grant proposals (B)	3.93	3.80	-0.13	-0.784
Presentation on conference presentation tips (C)	3.43	3.72	0.29	1.831
Panel discussion on potential career options (D)	4.13	3.38	-0.75	-4.803*
Networking opportunities (E)	4.31	4.08	-0.23	-1.768
CV review session (F)	4.13	4.91	0.78	0.433
Social activities (G)	3.70	3.89	0.19	1.399
Field trips (H)	3.31	4.08	0.77	3.953*
Additional handouts provided (I)	3.06	3.43	0.37	2.776*
Overall importance/satisfaction with the forum (J)	3.98	4.13	0.15	1.591

*Significant at $p \leq .01$.

rate the importance of components of the forum and to report their satisfaction with these components on 5-point Likert response scales. Satisfaction was used as a direct measure of performance. A paired-samples *t*-test was subsequently applied to investigate significant differences between importance and performance measures for each programmatic component (Table 1). Components of the Student Forum were plotted with the intersection of the IPA axis centered on mean values. This technique emphasizes the relative differences among the items being evaluated (Hammitt et al. 1996; Hollenhorst et al. 1992).

Social Capital

The Student Forum was designed to encourage students to form networks and promote social interaction with professionals on an informal basis. These goals suggest a utility for social capital theory in assessing the outcomes of the ISSRM conference. Social capital is theorized to arise as a consequence of sociability and informal interaction. Individuals collectively build social capital by creating networks, norms, and interpersonal trust and by acting to foster a sense of social cohesion (Putnam 1995). A number of underpinning themes emerge in the literature on social capital, including shared norms of reciprocity, interpersonal trust, and social networks, which align with the assumed beneficial qualities, encouraged by the organizers and achieved by the participants in the 2007 ISSRM Student Forum. Researchers have explored social capital concepts in the context of the social sciences (Glover and Hemingway 2005), and have examined how leisure pursuits contribute to the conceptualization of a sense of community (Arai and Pedlar 2003). Hemingway (1999), for example, explored the connection between leisure and the formation of democratic social

Table 2. Mean values and factor loadings of social capital items collected from 56 respondents at the 2007 ISSRM Student Forum

Statement	<i>M</i>	Factor loadings
Reciprocity	4.03*	
The connections I made at the forum were mutually beneficial to both the people I met and to myself	3.98	0.73
People at the forum did not share my same values**	4.09	0.65
I formed a social network through informal interactions at the forum	4.00	0.81
I established relationships with students at the forum who I will associate with in the future	4.04	0.83
Interpersonal Trust	4.32*	
The student forum helped to build a sense of community at the conference	4.43	0.89
The student forum promoted a sense of social cohesion at the conference	4.38	0.87
I connected with individuals outside of my field of study	3.88	0.56
Most of the time people at the forum did not try to be helpful**	4.59	0.51

* $t = 4.25$; $p \leq .01$.

**Mean value reverse coded.

capital. Shared resources are also essential to the production of social capital and allow users to more easily establish a professional network (Glover et al. 2005).

In this analysis of the Student Forum, scaled items were derived from several salient themes that emerged from a review of the literature on social capital. All items were presented as statements and respondents were asked to report the extent to which they agreed or disagreed with each statement using a 5-point Likert-type scale (Table 2). A factor analysis was performed on resulting data using principal component extraction and varimax rotation to further explore the relationships among social capital variables, extracting variables with eigenvalues over 1.0. Items with correlation coefficients of .50 or higher were accepted. Respondents were assigned a score based on their averaged responses for each dimension. Averages were then compared in a paired-samples *t*-test.

Results

Student Forum Participants and Participation

The number of students who registered for the forum exceeded expectations of the organizers. Most respondents (61%) were PhD candidates, while 38% were enrolled in an MS program. A majority of participants (61%) were female and 78% were Caucasian. About one-third (37%) reported a nationality other than American, with 26% residing outside the United States. A majority of students (75%) presented a paper at ISSRM, while 9% presented a poster.

Most respondents (68%) had not participated in ISSRM before but 80% had participated in another academic conference. A large majority of respondents (79%) have been in contact with other participants in the Student Forum after ISSRM, via either e-mail or personal correspondence. Many respondents (82%) reported that if they had the option to attend the 14th ISSRM in 2008, they would again participate in the Student Forum. When asked to report "the most positive experience at the 2007 ISSRM," 33% of respondents identified the Student Forum and nearly half (42%) most enjoyed aspects of networking. A representative open-ended comment was, "I thoroughly enjoyed the opportunity to meet and interact with fellow students at the Student Forum. Having time (designated or otherwise) to informally socialize with the other students was one of my best experiences." Another participant stated, "The student forum created a social and academic network which allowed students to better enjoy the conference and make contacts which they wouldn't have been able to do otherwise." Students also indicated a desire for an additional student event during the conference, perhaps in the form of a mentor program or a quiz bowl.

Importance-Performance

Measures of importance and performance/satisfaction are summarized in Table 1. It is important to note that all components of the Student Forum were judged to be relatively important (above the midpoint on the response scale). Likewise, respondents reported relatively high levels of satisfaction for all components on an absolute basis. The IPA grid constructed from these data was plotted using mean values (as noted earlier), and this technique emphasizes the relative differences among items being evaluated (see Figure 1). The IPA grid suggests the Student Forum should maintain its current emphasis on several programmatic components, including the CV review session (F), the presentation on the publishing process (A), and networking opportunities (E). Future hosts of the Student Forum should consider investing more heavily in two components: the panel discussion on potential career options (D) and the presentation on writing grant proposals (B). Efforts and total time spent could possibly be reduced if needed for several components, including the session on conference presentation tips (C), social activities (G), field trips (H), and handouts (I). Further analysis showed that the only statistically significant discrepancies (significant at $p \leq .01$) between importance and performance measures were for three components: the panel discussion on potential career options (D), field trips (H), and additional handouts provided (I). These components should be addressed in planning for the next Student Forum. Finally, it is important to note that the overall measure of the Student Forum fell within the "Keep up the Good Work" quadrant.

Social Capital

Respondents reported high levels of agreement with all items associated with social capital (see Table 2). Respondents most strongly agreed with the statements "The student forum helped to build a sense of community at the conference" ($M = 4.43$) and "The student forum promoted a sense of social cohesion at the conference" ($M = 4.38$). Using factor analysis, items clustered into two dimensions titled, "Reciprocity" ($M = 4.02$) and "Interpersonal Trust" ($M = 4.40$). The loadings of

variables conformed to the a priori assumptions of this study, except for the reverse-coded statement "People at the forum did not share my same values."

The paired comparison between respondents' averaged scores was significantly different at $p \leq .01$. Interpersonal trust was rated higher than reciprocity, suggesting that students especially valued the time allotted to build substantive relationships. Future Student Forum hosts should therefore provide sufficient time for students to interact on professional and informal bases. Activities might include small-group exercises and facilitated discussions.

Conclusions

Based on the measures developed in this study, the Student Forum at the 2007 ISSRM in Park City, UT, was highly successful. The number of graduate students who registered for the forum exceeded expectations, participants were relatively diverse, especially when considering international attendance, the majority of students reported that they would participate in future Student Forums, and many participants remained in contact after ISSRM (although the period covered by the study was short). All programmatic components of the Student Forum were rated by participants as high in importance, generated high levels of satisfaction, and the forum contributed to the development of social capital among participants, especially with respect to dimensions of reciprocity and interpersonal trust.

These findings suggest that the Student Forum made a substantive contribution to the professional development of aspiring academics and practitioners in general and to the professional objectives of IASNR more specifically. Consequently, we recommend that the Student Forum become a regular part of ISSRM. Findings also lead to some guidance about the organization and conduct of future ISSRM Student Forums.

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