

Faculty Perspectives on International Research Collaborations (IRC) Case Study: Washington State University

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Survey Methodology

- Mixed mode (web, mail, telephone) survey
- Sent to all WSU “faculty/researchers” N=3506
- Mainly web survey; 8 page mail questionnaire; telephone 15- 20 minutes
- 3 email requests to complete on-line questionnaire with weblink and access code
 - Last request from Vice Provost of Office of International Programs
- Cover letter and Mail questionnaire sent
- Telephone follow-up with data collection
 - email sent with weblink
- AAPOR Response Rate 4 –27.9%
 - n=2738 adjusted for ineligibility

2014 SURVEY OF INTERNATIONAL COLLABORATIONS WASHINGTON STATE UNIVERSITY



Thank you for completing this survey. The results will provide information on how researchers at Washington State University engage in international collaborations and the impact of these collaborations on their scholarly work. The results will also summarize faculty perspectives on the benefits and challenges of establishing and sustaining meaningful international partnerships.

The goal of this survey is also to inform administrators and interested external agencies on the needs and obstacles to successful international research collaborations so as to improve decision-making and resource allocations, where feasible.

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Washington State University's

- Office of Research
- Office of International Programs
- Office of Economic Development
- Department of Mathematics
- Social and Economic Sciences Research Center

DEFINITIONS

Research: the creative work conducted systematically to increase basic and applied knowledge. Research does not include public service, outreach programs, or curriculum development unless these are tied to research objectives and training activities.

International research and collaborations: encompass partnerships with international individuals, teams and institutions that result in the pursuit of new knowledge or creative activity, which requires international cooperation coupled with mutual benefit to the researchers, students and institutional units and are aligned with institutional priorities. These activities encompass areas where intellectual foci are global in scope, require a comparative understanding of international variability, and are best tackled with intellect from around the world engaged in discovery and innovation. Reference: <http://www.nsf.gov/pubs/2011/nsf11025.nsf11025.jsp>

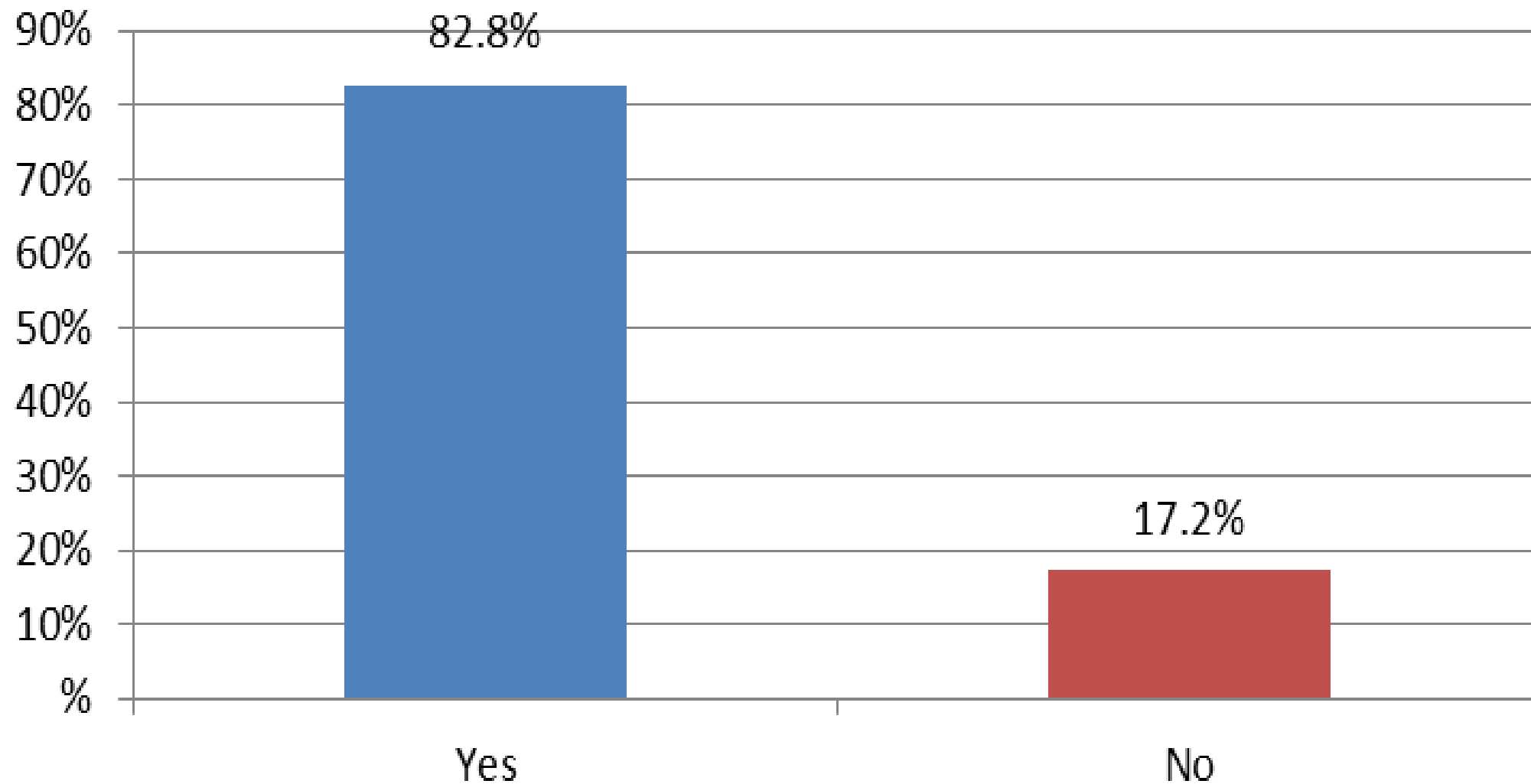
Purpose

- Provide information on how researchers at WSU engage in international research collaboration
- Summarize faculty perspectives on the benefits and challenges of establishing and sustaining meaningful international research partnerships
- Inform administrators and agencies on needs and obstacles to international research collaborations
- Determine which factors motivate faculty to pursue international research collaboration

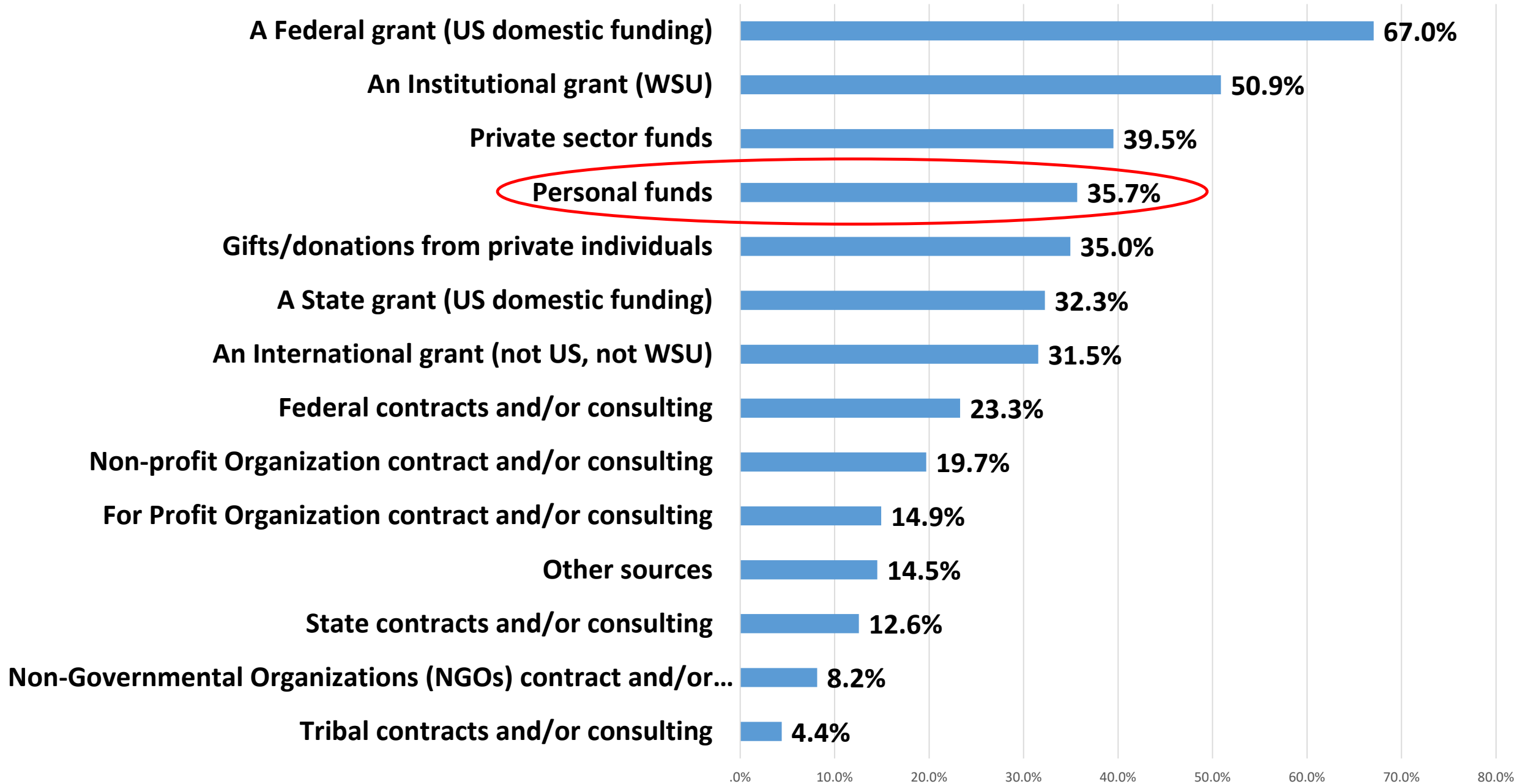
Characteristics of Respondents (n=764)

- **Current status**
 - 48% fully tenured
 - 12% in tenure track
 - 40% not tenured
- **Time in paid faculty position at WSU**
 - 34% 5 years or less
 - 40% 6 to 20 years
 - 21% >20Yrs
 - 5% not faculty
- **Gender**
 - 59.7% male
 - 40.3% female
- **Education**
 - 81.8% Doctorate
 - 14.1% Masters
 - 4.1% other
- **Citizenship**
 - 60% US citizen all education in US
 - 22% International born/noncitizen
 - 8.6% naturalized
 - 5% US w/substantial international experience
 - 4.5% US w/ education in international
- **In non-citizen visa status**
 - Green card 52.2%
 - Work permit 26.5%
 - Other visa status 21.3%

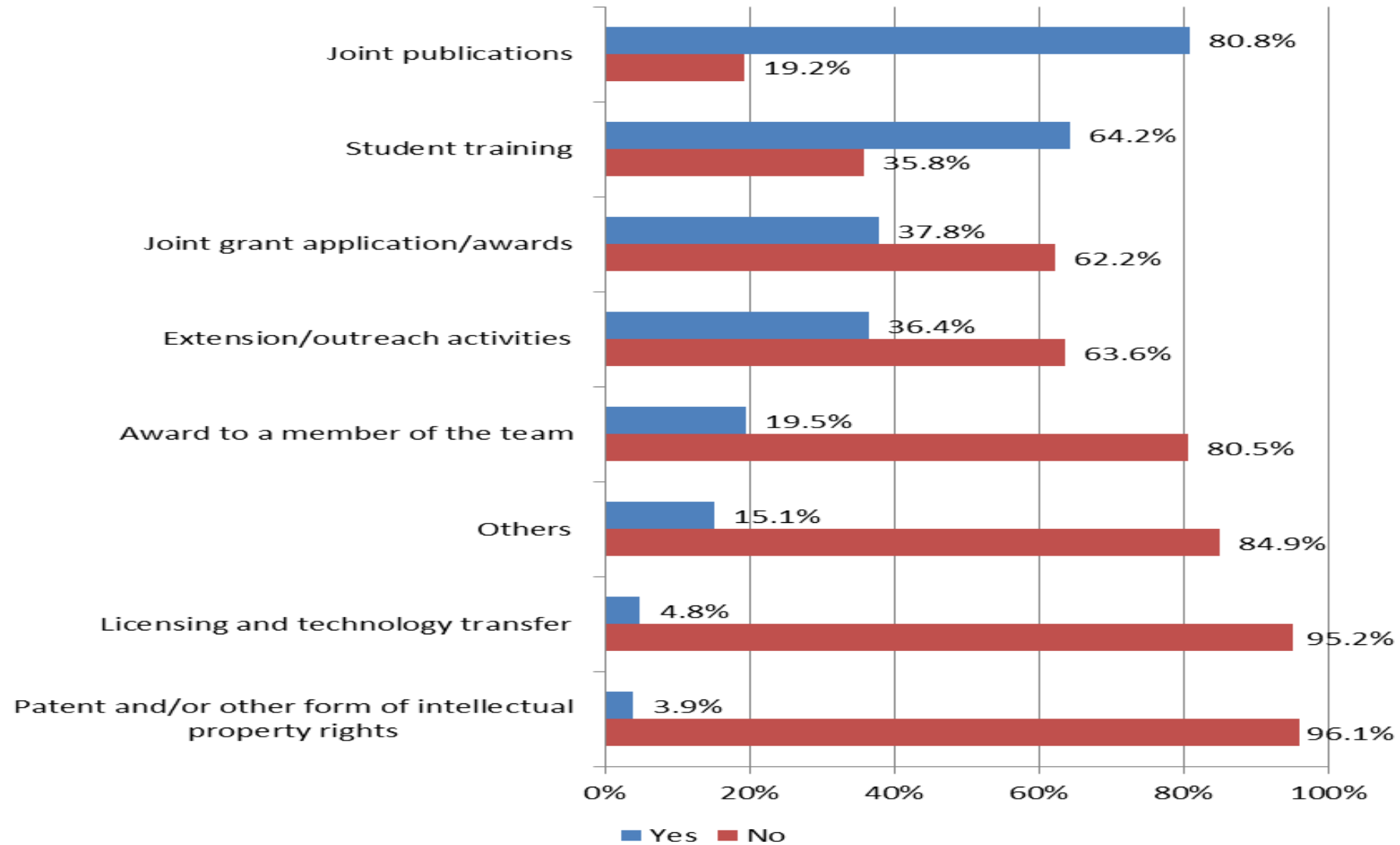
Involvement in international research collaborations in the past 5 years n=764



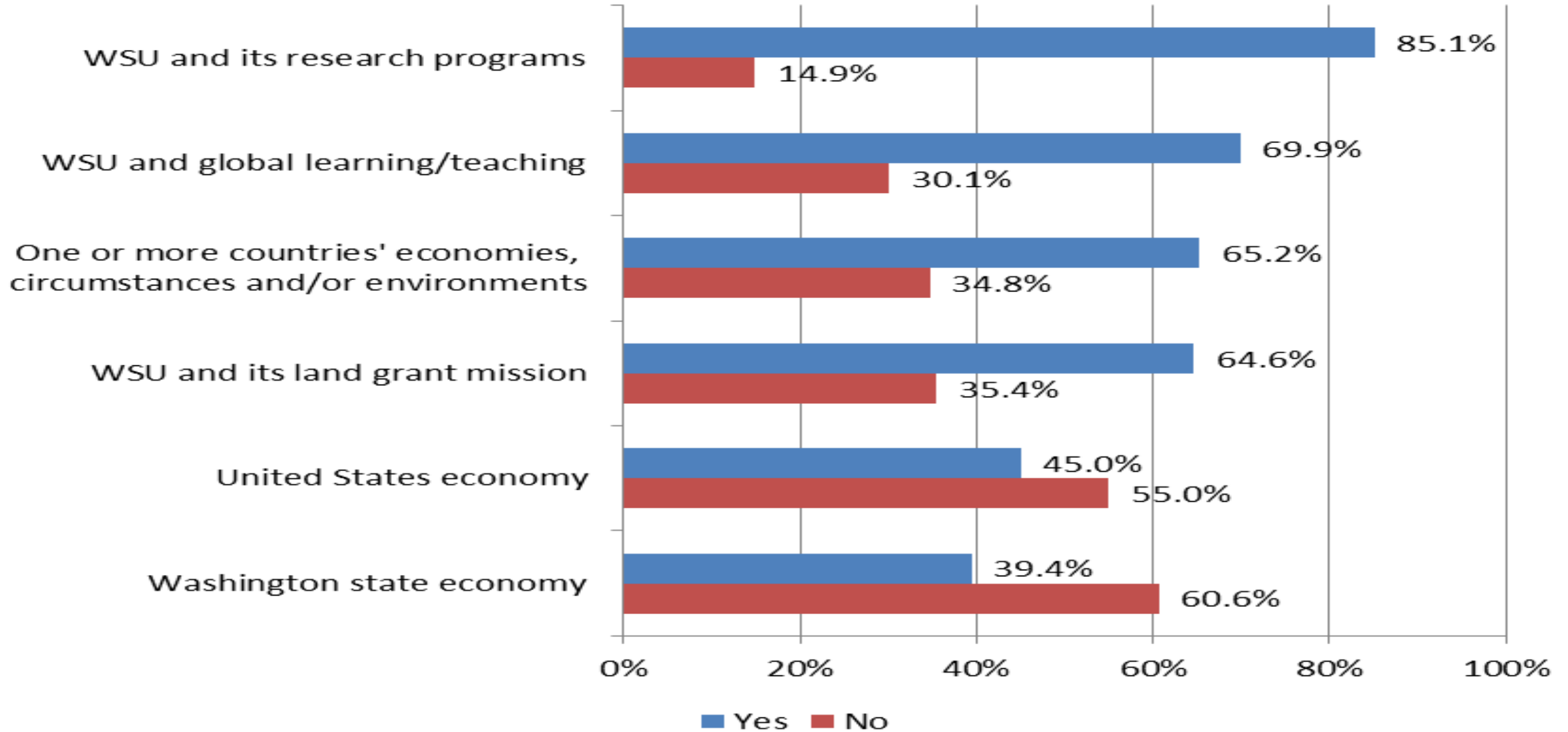
Source of funding for international collaborations n=295



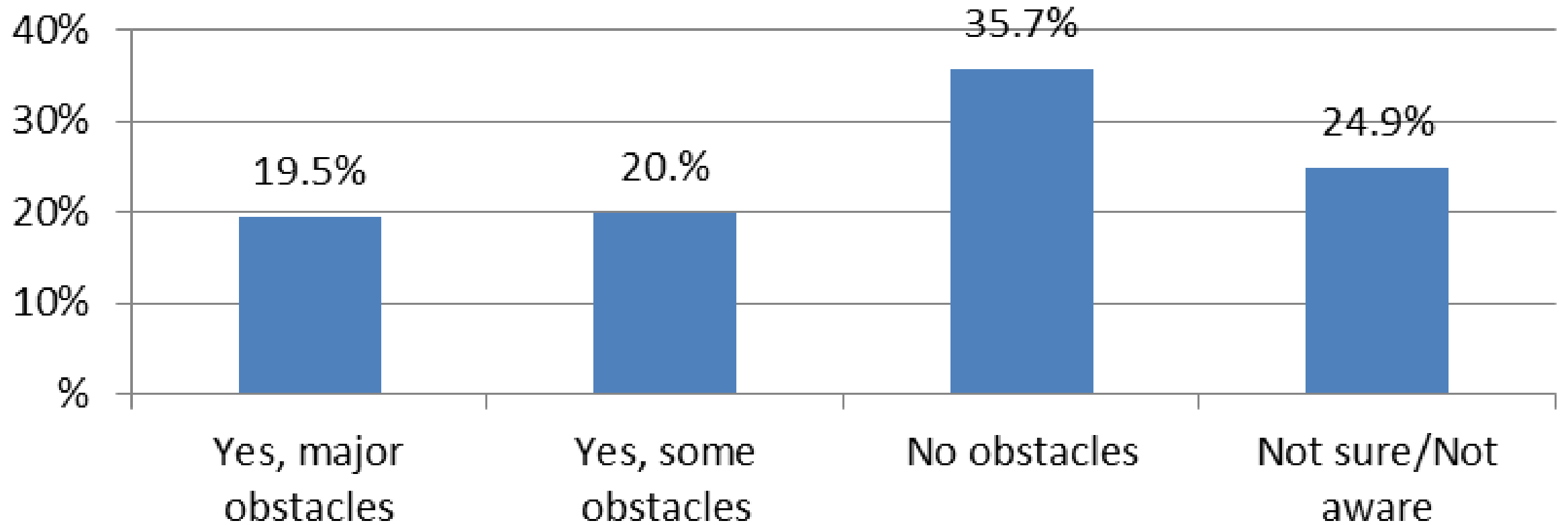
Outcomes of international collaboration



Benefits of international collaboration



Obstacles in international collaboration



Example of barriers

1. Lack of/insufficient funding, time availability and conflict with teaching

- “I think that my obstacles are fairly standard: 1) I have found that there is a general lack of funding for the work that I do and 2) I personally have faced a heavy press for service work at my institution, including chairing two programs.”
- “Funding; absence of formally established collaborative relationship between WSU and specific universities abroad.”
- “Time conflict with WSU teaching schedule.”

2. Institutional barriers

- “Hard to get things funded at WSU because of bureaucracy and overhead costs.”
- “Lack of support by Dean.”
- “Limited international travel funding at WSU.”
- “General lack of understanding of this sort of activity and importance to university mission; ability to attract new resources to institution; provide our students with meaningful global experience (not just tourist).”
- “WSU has minimal experience in managing international projects. “
- “University bureaucracy can sometimes create an inflexibility for project implementation/international collaborative activities. “

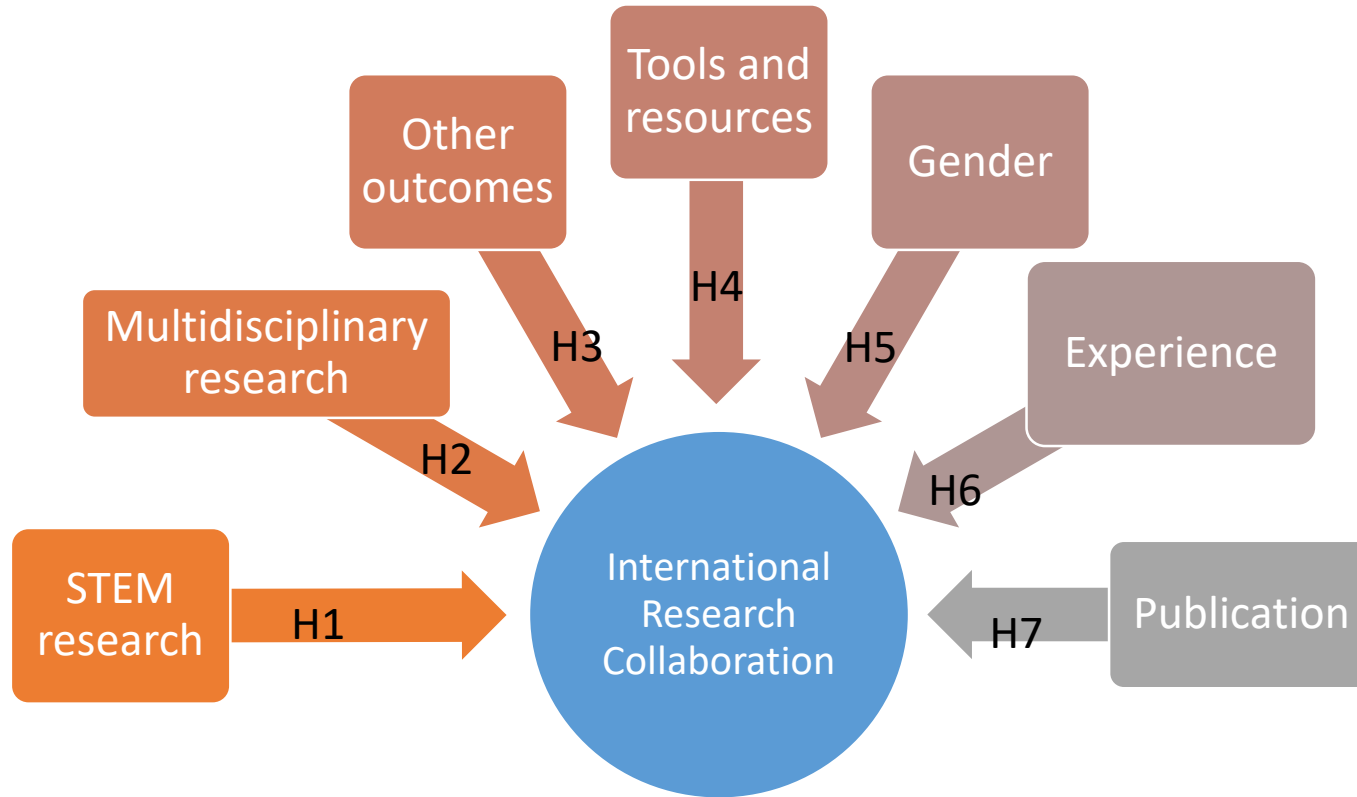
Example of barriers

3. Difficulty of international research environment(s)

- “Canceling trip due to delayed visa; sample damage due to improper handling and shipping too long.”
- “Unstable political conditions”
“Political disruptions in countries, like Egypt, have precipitated the need for contract extensions in order to complete work.”
- “Data collection would be more timely with more opportunities to visit.”
- “Regulatory” and “Getting all necessary permits.”
- “Collaboration requires travelling and meeting collaborators face-to-face. The cost of travel has been a major issue.”
- “Communications are not convenient.”
- “Time zone challenges, teleconferencing, web conferencing.”
- “Some language problems” and “Culture differences, undue expectations from the overseas collaborator.”
- “Difficulties with NGO's. Need training themselves.”

Conceptual framework

Independent variables



Dependent variables

- Binary logistic model to test impact of independent variables on predicting the dependent variable. The effect of each variable on the dependent variable is evaluated in terms of odds ratios.
- Seven hypotheses tested.

Findings

Variable	B	S.E.	Wald X ²	df	P value	Odds Exp (B)
Dependent Variable: IRC						
Dependent Variables:						
STEM as a field of research	0.42	0.24	3.22	1	0.073*	1.53
Research is multi-disciplinary	0.45	0.21	4.83	1	0.028**	1.58
Research is basic and/or applied	0.43	0.22	3.87	1	0.049**	1.53
Research funded by an international grant (not U.S., not university)	1.95	0.43	20.09	1	0.000***	7.02
Research is funded by an NGO	1.70	0.67	6.51	1	0.011**	5.48
IRC identified through networking conference meetings	0.59	0.26	5.28	1	0.022**	1.80
IRC identified through peer-to-peer inquiries	0.89	0.25	13.03	1	0.000***	2.43
Faculty with substantial international education, experience, naturalized, or foreign-born ²	0.36	0.12	8.94	1	0.003***	1.43
Publication count	0.14	0.02	32.12	1	0.000***	1.15
Constant	-2.23	0.31	50.25	1	0.000	0.11
-2 Log Likelihood	577.36					
Cox Snell R Square	0.29					
Nagelkerke R Square	0.39					
Model	159.34			17	0.000***	

Findings

- The likelihood of international research collaboration increases when:
 - research is related to STEM (basic and applied)
 - involves a multidisciplinary team
 - research is funded by an international grant or through an NGO,
 - opportunities for networking and peer-to-peer connections on IRC partner identification exist,
 - researchers have substantial international education and experience, and
 - there are publications and scholarly output produced out of the collaboration.

Conclusion and Implications

- Understanding on the connection between key variables of interest such as academic field, faculty researcher rank, gender, and the motivations and barriers that influence researchers as individuals
- Input-output relationship between these factors and how they can be used to forecast international research collaborations.
- The need to understand and target the motivational processes and interests of researchers among university administrators.
- Obtaining funds for international research remains the most important factor for international research collaborations.