ADVANCE-Purdue Research Note #15

Current research on gender and STEM in academia September 1, 2013



SPECIAL ISSUE

The Flexibility Stigma, Special issue of *Journal of Social Issues*. June 2013. http://onlinelibrary.wiley.com/doi/10.1111/josi.2013.69.issue-2/issuetoc

RESEARCH ARTICLES

1. Career Certainty and Persisting Interest in STEM: An Analysis of Underrepresented Groups. 2013. White, J.L. and Mitchell, S.K. *Journal of Women and Minorities in Science and Engineering* 19(1): 47-66.

Abstract: "...This study focuses on the role that career certainty has on the persistence of interest in STEM...The psychometric attributes of the instrument created for the study are inspected using principle components analysis and Cronbach's measure of internal consistency. Although an analysis of covariance did not find covariation in career certainty, significant interactions were detected among the three groups of students. A discussion of the results of the 6-year study and conclusions are presented along with implications for research, policy, and practice for those interested in the retention of underrepresented student groups in STEM.

 $\underline{\text{http://www.dl.begellhouse.com/journals/00551c876cc2f027,2d4a5d286768c212,0d7b221f55b34ec3.html}$

2. Gender Norms and Institutional Culture: The Family-Friendly Versus the Father-Friendly University. 2013. Sallee, M.W. *Journal of Higher Education* 84(3): 363-396.

Abstract: "The article discusses research into the effect of university faculty policies regarding parenting on fathers' versus mothers' parenting roles. Research studies on institutional culture, gender roles, and work-life balance are discussed, as well as universities' cultures, size, and ratios of female to male faculty. Family leave policies in the U.S., Sweden, and Australia are discussed, as well as research on Swedish corporate cultures, the influence of managers on whether fathers take leave, and coworkers' attitudes."

3. Boundary-work between work and life in the high-speed university. 2013. Ylijoki, O.H. *Studies in Higher Education* 38(2): 242-255.

Abstract: "Drawing upon the notion of acceleration of time in late capitalism, the article addresses the different forms and driving forces of the speeding up of the tempo and rhythm in research work in academia, and the impact of the temporal acceleration on how academics perceive their work and its connection to the private sphere of life. ... [T]hree different constructions of the relationship between work and life are discerned: total commitment involving the work-life equation, boundary between time for real work and wasted time, and boundary between work and life. The article discusses the implications these temporal boundaries have on the moral grounding and basic meaning of academic work and the university as an institution."

4. Changing university work, freedom, flexibility, and family. 2012. Nikunen, M. *Studies in Higher Education* 37(6): 713-729.

Abstract: "This article investigates what Finnish academics on short fixed-term contracts consider to be the effects of having children on work and careers. The study is framed by the context of the current state of the university sector, its neoliberal and entrepreneurial tendencies and its claims to meritocracy. Informants express relative happiness with what they see as freedom and flexibility in their work/life balance, but this can turn to anxiety about their careers when they start talking about having (or postponing) children or taking long family leave. The informants' initial depiction of an egalitarian and family-friendly workplace thus turns into one of a competitive meritocracy with demands that are not easy to meet – and which are unequal in terms of gender when the talk turns to careers. In spite of this, the ideals of the entrepreneurial university are sometimes internalized, and gender equality interpreted in a neoliberal and post-feminist way."

RECENT BOOKS

1. Challenging Knowledge, Sex and Power: Gender, Work and Engineering. 2013. Mills, J. et al. New York: Routledge.

Summary: "Despite efforts to change, little progress has been made in attracting and retaining women in engineering. This book analyses the outcomes of a decade-long investigation into this phenomenon, framed by two questions: Why are there so few women in engineering? And why is this so difficult to change? The study includes data from two major surveys, accounts from female engineers in a range of locations and engineering fields, and case studies of three large engineering corporations. The authors explore the history and politics of several organisations related to women in engineering, and conclude with an analysis of a range of campaigns that have been waged to address the issue of women's minority status in engineering." Source: http://www.routledge.com/books/details/9780415676861/

2. *Do Babies Matter?: Gender and Family in the Ivory Tower.* 2013. Mason et al. Rutgers University Press.

Summary: "Do Babies Matter? is the first comprehensive examination of the relationship between family formation and the academic careers of men and women. The book begins with graduate students and postdoctoral fellows, moves on to early and mid-career years, and ends with retirement. Individual chapters examine graduate school, how recent PhD recipients get into the academic game, the tenure process, and life after tenure. The authors explore the family sacrifices women often have to make to get ahead in academia and consider how gender and family interact to affect promotion to full professor, salaries, and retirement. Concrete strategies are suggested for transforming the university into a family-friendly environment at every career stage." Source: http://rutgerspress.rutgers.edu/product/Do-Babies-Matter,4767.aspx

IN THE NEWS

Minorities at Financial Disadvantage in Earning STEM Ph.D.s. DeCiccio, E. MSNBC, 7/2/13. http://tv.msnbc.com/2013/07/02/minorities-at-financial-disadvantage-in-earning-stem-ph-d-s/