

## ORGANIZATIONAL AND INSTITUTIONAL FACTORS ASSOCIATED WITH NIH GRANT SUCCESS FOR SCHOOLS OF SOCIAL WORK

## IASWR Data on NIH Funding of Research at SoSW

Uses CRISP Data Base  
 Data collected for the years 1993-2005  
 Included NIH and constituent agencies  
 Does NOT include non-research funding  
 Does NOT include other federal agencies  
 (e.g. NIJ)  
 Does NOT include any other governmental or  
 private funding (e.g. foundations)

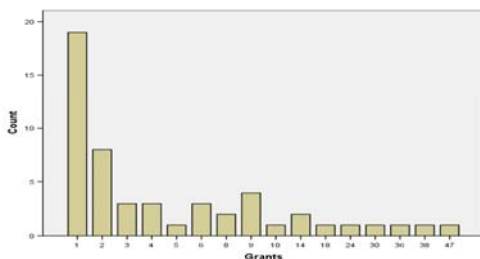
### Other Data

- Lombardi Program on Measuring University Performance (Arizona State University)
- CSWE
- NIH
- Green, Baskind, and Berlin (2002) Results of the doctoral faculty publication project: Journal article productivity and its correlates in the 1990s. JSWE

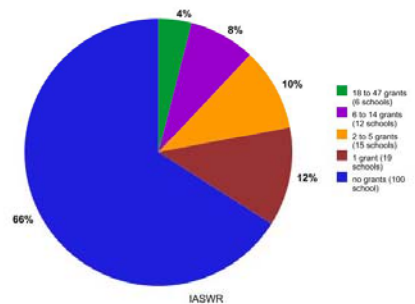
### Descriptive Data

- 52 schools in IASWR data set
- PhD 38 (73%)      No-PhD 14 (27%)
- Med sch. 26 (50%)      No Med sch. 26 (50%)
- Ind. School 32 (62%)      In College 20 (38%)
- BSW 32 (61%)      No BSW 20 (39%)
- Public 34 (65%)      Private 18 (35%)

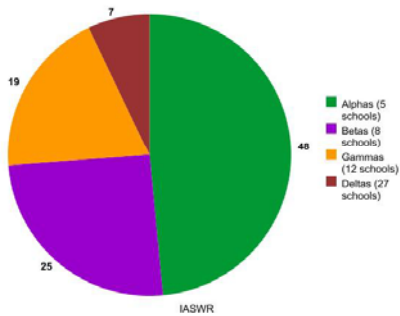
### Graph of Grant Distribution



Distribution of NIH Grants to Schools of Social Work (MSW)  
1993-2005



Percentage of NIH Grants to Schools of Social Work 1993-2005



## T-tests

PhD = 8.9 grants  
 No-PhD = 1.7 grants\*

Med School = 10.7 grants  
 No-Med school = 3.1\*

\* Sig @ p = .01

## T-tests

Freestanding SoSW = 9.7 grants  
 SoSW part of College = 2.5 grants\*

BSW = 4.9 grants  
 No-BSW = 10.2 grants\*

\*Sig.@ p = .01

## T-tests

SoSW in Public University = 6.2 grants  
 SoSW in Private University = 8.3 grants\*

\*n/s

## Correlations

Number of NIH Grants With:  
 Lombardi Federal Funding Ranking -.59\*  
 (Spearman's rho -.79\*\*)  
 Faculty Salaries .43\*  
 Faculty Publication Rates (PhD progs.) .74\*

\*Sig. @ p = .01

\*\*Sig. @ p=.000

## Summary of Findings

- NIH grant success for SoSW is associated with organizational, institutional, and structural factors.
- The overall grant success of the home university is correlated with the success of the SoSW
- The presence of a medical school is positively associated with the grant success of the SoSW
- Having a PhD program is positively associated with grant success
- Having a BSW program is negatively associated with grant success

## Summary of Findings, cont'd.

- Having a freestanding SoSW is positively associated with grant success
- The university's faculty salaries are positively correlated with grant success
- SoSW faculty publication rates are positively correlated with grant success (though this may be moderated by size of faculty)

## Limitations/confounds

- We don't know the characteristics of schools NOT funded
- Generalizability of these findings to other types of funders ?
- We don't know how SoSW size or age is implicated
- Role of geography/ecology of funding

## Other Possible Influences

- Pfeffer and Langton (1993) found that intradepartmental salary inequality was associated with lower job satisfaction, less collaboration, and reduced scholarly productivity among university faculty.

## Other Possible Influences

- Long, et. al (1998), in a study of management faculty, found that academic affiliation (current employment) was strongly associated with scholarly productivity, but academic origin (where PhD was granted) was not.

## A Word About Success or "Hit Rates"

- IN 2005, the overall NIH reported "hit rate" was 22%; it ranged from 14-30%, by institute or agency
- The "hit rate" for medical schools was 26% in 2004
- New RO1's were funded at 18%; continuation RO1's were funded at 37%
- Therefore new RO1 grant applications (not from medical schools) have about a reported 1:6 chance of being funded
- Mandel and Vessel (2006) examined NIH success rates for 2005 and found, however, that the success rates for unsolicited, unamended first submissions for RO1 grants was only actually only **9% - a 1:11 chance.**

## Implications of Diminished Resources

NIH funding frozen since 2004 (outside of bioterrorism, actual fund availability has decreased); the number of new applications is expected to rise while available grant funds are expected to decrease. The "hit rate" is expected to decline (*The Scientist* February 2006).

## Trends/Odds

Although the number of NIH research grants received by social work researchers varies from year to year, IASWR reports that it has declined from a peak of over 60 grants in 1998 to just over 20 in 2007.

There are now over 180 MSW or MSW/PhD and 400+ total SW schools/departments in the US.

## Cost-benefit Analysis

- This is an extremely COMPETITIVE arena of activity
- Funded research is a zero-sum game
- Thirteen (9%) of all SoSW (MSW & higher) received ¼ of all NIH grants awarded to SoSW
- 1% of all schools/departments received 50% of all NIH grants to academic social work.
- The “hit rate” for the most successful SoSW’s must be substantially better than the average; otherwise the top school, receiving 47 grants, would have had to write and submit 23 NIH proposals per year (one reported a “hit rate” of over 40%)

## Cost-benefit Analysis

- The probable “hit rate” for a SoSW that is not a top SoSW is likely to be substantially lower
- Therefore the probability of receiving a grant would be substantially less
- As the probability of success decreases the opportunity costs increase.

## Recommendations

The organizational/institutional factors identified as associated with funding success with NIH suggest that universities that wish to catalyze funded research in their SoSW need to consider organizational change/development strategies. This goes beyond first order exhortation and encouragement of faculty and indicates a need for structural change.

## Recommendations

- SoSW should conceptualize their funded research goals within a framework that explicitly acknowledges the powerful influences of these institutional factors: limitations and assets
- Substantial resource investment and implementation of effective organizational development is necessary to promote strategic efforts to secure competitive research grants
- Long’s study suggests that without organizational/cultural change, “hiring in” from schools with better funded research success will not alone improve research productivity

## Recommendations

- Since scholarly productivity is associated with grant success, these activities should be preferentially encouraged and rewarded
- Since intradepartmental salary inequality is associated with reduced scholarly productivity, those inequalities should be reduced
- A rational economic model would suggest that “hit rates” need to exceed the average and proposal preparation should be routinized.
- Re-think the hegemony of the Federal funding model

## The SoSW Organizational Model Associated with Success in NIH Funded Research

- PhD program in a
- Freestanding SoSW in a university with a
- Medical School and
- Overall university federal grant success
- No BSW
- Well paid faculty
- Low salary inequality
- Incentives for scholarship
- Staff support to routinize proposal development