Teacher Help-Seeking Beliefs and Help-Seeking Networks

Kara Makara, University of Glasgow Stuart Karabenick, University of Michigan EARLI 2015 Limassol, Cyprus



Teacher Help Seeking

- Teaching places exceptional demands on educators' skills and resources
- Fortunately, teachers practice within a network of teachers at their school whose members can be a source of help (Spillane, Kim, & Frank, 2012)
- Understanding teacher HS networks may inform schools' promotion of professional communities of practice

EARLI 2015 Makara & Karabenick - 2

What impacts teacher HS?

- Organizational Factors: Ample research on factors that foster teacher networks such as subject specialization and PLCs (Spillane et al.)
- Personal Factors: Beginning teachers seek help from friendly experienced colleagues (Tellez, 1992)
- Psychological Factors: Teachers' achievement goals & HS (Butler, 2007)
- Current study brings together these potential factors influencing teacher HS

Aims of the Current Study

- Combine social network analysis perspective with HS perspective to examine teacher HS patterns in a US secondary school
- Examine how HS network patterns differ by beliefs about HS, years of experience, gender, and curricular domain



Procedure & Participants

- All teachers in a US public secondary school were invited to participate in an online survey
- School demographics: 20% eligible for free or reduced lunch, 44% non-White
- 80 teachers participated (75% out of 107)
 - School had 90 full time faculty and 17 assistants
 - No admin participated but were included as sources of help
- 59% female, *M* = 12.9 years experience, *SD* = 7.87, Range = <1 to 44

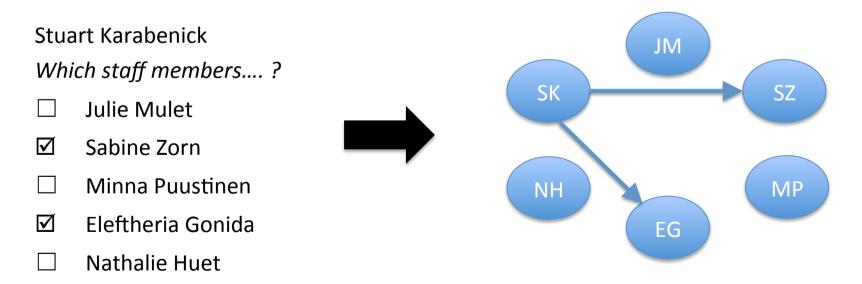
Measures

- Instrumental beliefs (4 items, $\alpha = .82$)
 - "Asking for help with my teaching is a good way to learn to be a better teacher"
- Expedient beliefs (4 items, $\alpha = .61$)
 - "Getting help with my teaching would be a way to avoid doing some of the work"
- Cost/threat (5 items, $\alpha = .84$)
 - "Others might think I'm incompetent if I asked for help with teaching"

Rated 1 = strongly disagree to 5 = strongly agree

Measures

- HS network measure adapted from Pitts and Spillane (2009): "During this school year, which staff members did you regularly turn to for advice or information about teaching?"
- Could select as many as they want

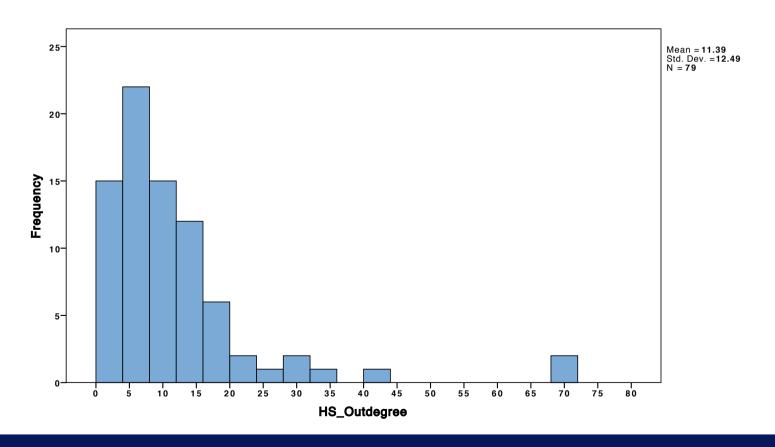


Beliefs about Help Seeking

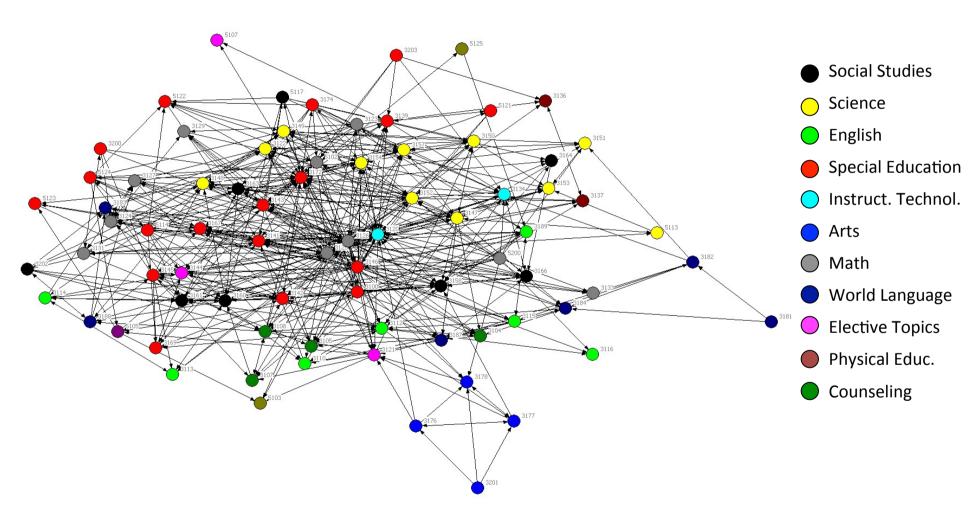
| | M | SD | Costs | Inst. | Exp. |
|--|------|-----|-------|-------|------|
| Costs HS is threatening | 1.78 | .65 | _ | | |
| Instrumental <i>HS helps me learn</i> | 4.52 | .55 | 46*** | - | |
| Expedient HS gives me the answer | 2.49 | .73 | .31* | 11 | - |

Seeking Help from Colleagues

 How many colleagues do teachers go to for help (outdegree)? M = 11.4, SD = 12.5, Range = 0-70

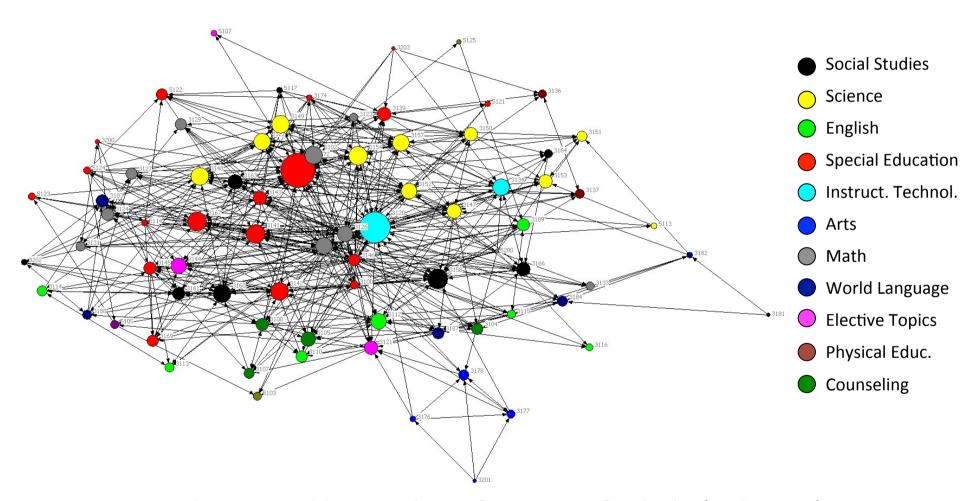


HS Network



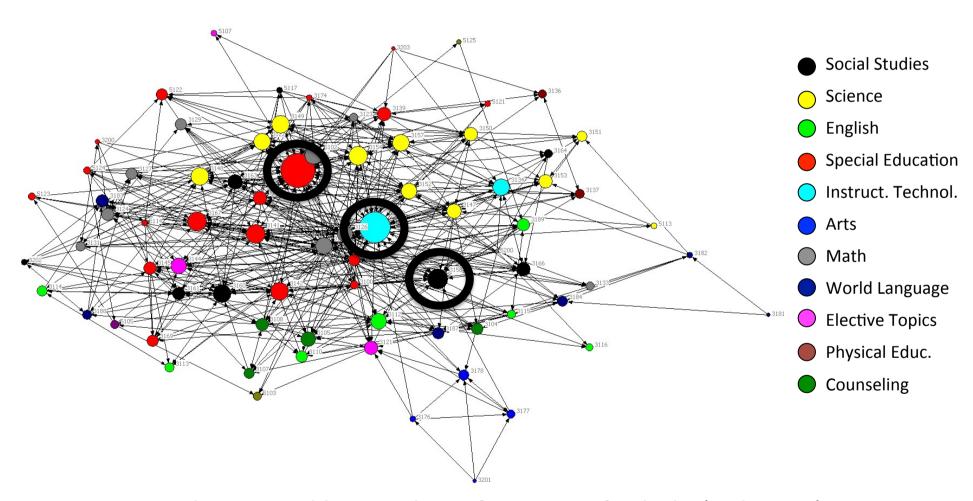
Help seeking nominations between teachers

HS Network



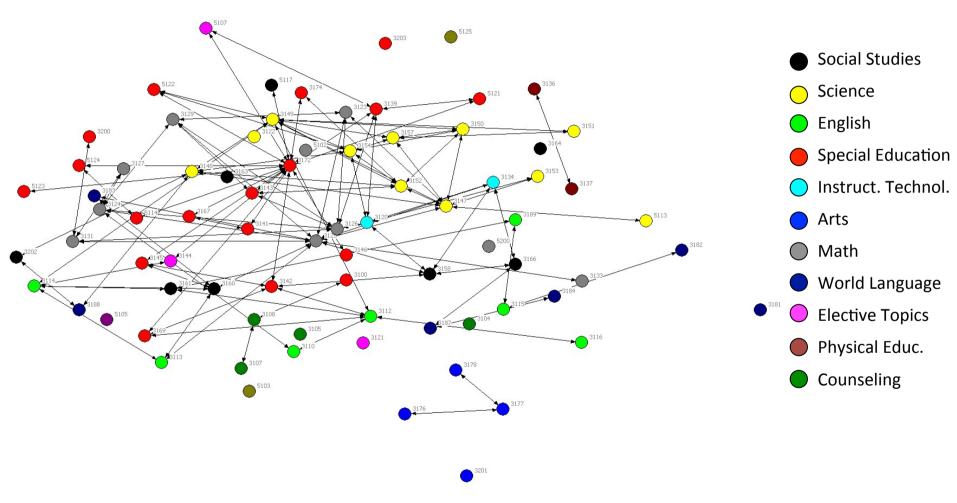
Nodes resized by number of requests for help (indegree)

HS Network



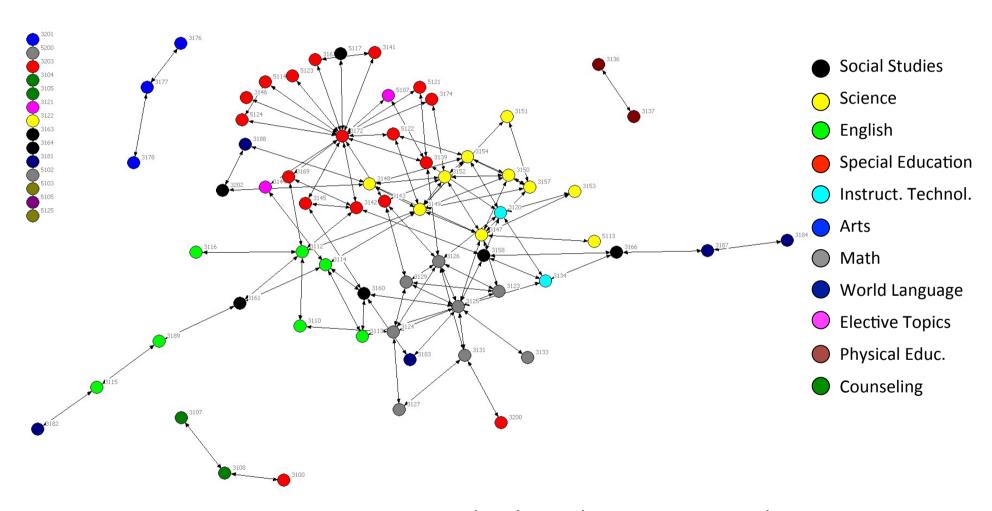
Nodes resized by number of requests for help (indegree)

HS Network – Reciprocated



Reciprocated Help Seeking Among Teachers

HS Network – Reciprocated



New Layout - Reciprocated Help Seeking Among Teachers

Beliefs about HS & Network Patterns

- Instrumental beliefs about HS positively related to the number of colleagues that staff went to for help (outdegree) ($r_s = .26*$)
- Costs of HS and expedient beliefs not related to how many colleagues were sought for help or location within the HS network
 - Trends in the right direction (those with higher costs slightly less likely to seek help, less central)

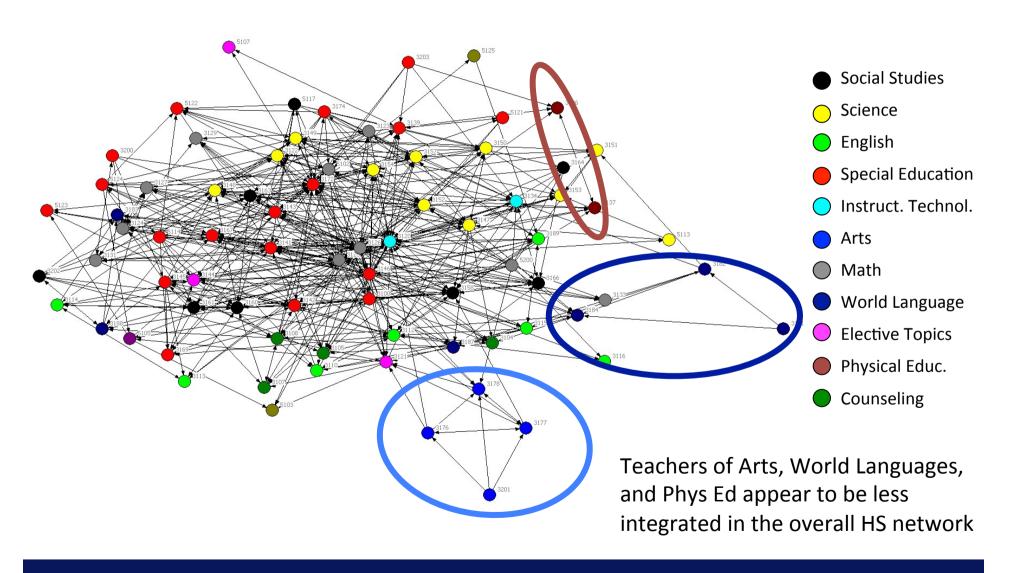
Spearman's Rho correlation due to nonparametric data

Differences Across Teachers

- No gender differences
- Staff with greater experience were sought for help by more colleagues ($r_s = .35**$) and were more centrally located in the HS network ($r_s = .27*$)
- Years of experience not related to instrumental or expedient beliefs, nor to beliefs about costs

Ran Spearman's Rho correlation due to nonparametric data

Curricular Departments



Curricular Departments

- Heterogeneity: In general, SPED, Math, & Technology sought greatest proportion of help outside of department, English & PE were lowest
- Centrality in Network: Technology, Math, SPED, & Science had highest centrality scores; while World Language, PE, Arts & Music had lowest

EARLI 2015 Makara & Karabenick - 18

Summary

- Staff in this school had adaptive HS beliefs
- Little connection between HS beliefs and position in the HS network, with the exception of instrumental beliefs being positively associated with HS from greater number of staff (outdegree)
- Suggest school leaders promote instrumental HS beliefs and time/space for staff to seek help from one another

EARLI 2015 Makara & Karabenick - 19

Summary

- No gender differences—surprising?
- Staff with greater experience were sought for help by more colleagues (indegree) and more centrally located in the HS network (betweenness)
- Interesting differences by department
 - Technology, math, and special education seem to be most integrated & adaptive in terms of HS

Implications & Future Work

- SNA useful for understanding teacher HS networks, comparing across schools
 - School organizational factors, e.g., leadership, interdisciplinary magnet programs
 - May want to limit number of nominations to those colleagues that teachers go to the "most" for help
- Explore other elements of the HS process:
 - Teachers' need for help
 - How they ask for help
 - What type of help is sought

Thank you to Sabine Zorn & Julie Mulet for organizing the symposium, and to our discussant, Eleftheria Gonida



Questions & comments welcome!

- Kara Makara: kara.makarafuller@glasgow.ac.uk
- Stuart Karabenick: skaraben@umich.edu

Extra Slides

Additional Information by Dept

| | % in Sample | % Ties Outside of Dept | Avg # of Noms Received | Centrality Score | Instrumental Belief (M) |
|----------------|----------------|---------------------------|---------------------------|---------------------|----------------------------|
| Special Ed | 23 | 73 | 7.6 | 232 | 4.46 |
| Science | 14 | 68 | 10.2 | 202 | 4.36 |
| Social Studies | 13 | 68 | 8.3 | 163 | 4.83 |
| Math | 10 | 73 | 7.4 | 394 | 4.66 |
| English | 09 | 60 | 6.4 | 143 | 4.46 |
| World Language | 08 | 70 | 4.7 | 64 | 4.33 |
| Arts & Music | 05 | 63 | 3.3 | 89 | 4.63 |
| Electives | 05 | 63 | 5.8 | 121 | 4.63 |
| Technology | 03 | 72 | 19.5 | 692 | 5.00 |
| Physical Educ | 03 | 25 | 4.5 | 85 | 4.00 |

Gender Differences

- No gender differences in beliefs that HS is instrumental, expedient, or in costs of HS
- No gender differences in number of colleagues go to for help, number of colleagues who asked for help, or how central in the HS network

Ran nonparametric independent-samples Mann-Whitney U Test