



Expanding Our Horizons: Building Capacity for Interdisciplinary Research in Aging
Workshop Synthesis Report

December, 2012

Janice Keefe, PhD
Professor of Family Studies and Gerontology
Director, Nova Scotia Centre on Aging
Lena Isabel Jodrey Chair in Gerontology
Mount Saint Vincent University

Gail Wideman, PhD
Assistant Professor
School of Social Work
Memorial University

With contribution by Alison Spurr

This workshop was financially supported by:

Community Connections & Creative Research Communications Grant,
Mount Saint Vincent University

1. Introduction

This report provides a synthesis of a workshop entitled *Expanding Our Horizons: Building Capacity for Interdisciplinary Research in Aging*, which was held on November 22nd, as part of a 90 minute concurrent session at the Nova Scotia Centre on Aging conference, 'Our Future is Aging.'

The primary goals of this workshop were to allow people with an interest in aging to learn about research happening within the province and across the region, and to advance their understandings of the ways and means to build successful research collaborations on age-related issues, laying the foundations for future interdisciplinary and community collaborations.

The workshop was facilitated by Dr. Anne Martin-Matthews, Professor in the Department of Sociology at the University of British Columbia and former Scientific Director of the Institute of Aging (2004-2011). The workshop was attended by 26 participants, ranging from students to advanced researchers, with research, practice and policy backgrounds and interests in; health administration, gerontology, psychology, neuroscience, medicine, social work, sociology, anthropology, epidemiology, occupational therapy, nursing and the natural sciences. Researchers came from a broad geographical range that included all four of the Atlantic Provinces, Ontario, British Columbia, the United States and the United Kingdom.

Within the workshop, participants were asked to arrange themselves at tables by research interest. The research interests that were selected were: Healthy Aging, Vulnerable Populations, Quality of Life and Continuing Care. Each table had a student note taker assigned to record discussions. The workshop began with an introduction by Anne Martin-Matthews, who gave an overview of the meaning and practice of interdisciplinary research. This was followed by a breakout session during which participants introduced themselves to one another and shared their research interests and experience with interdisciplinary research. This was followed by two presentations, one by Dr. Janice Keefe, Family Studies & Gerontology, Mount Saint Vincent University and another by Dr. Gail Wideman, School of Social Work, Memorial University, on interdisciplinary research projects they have been involved with.

Dr. Keefe's presentation focused on her research team's experience with the interdisciplinary research process surrounding the Canadian Institutes for Health Research (CIHR) Partnerships for Health System Improvement (PHSI)-funded project 'Care and Construction: Assessing Differences in Nursing home Models of Care', which investigates nursing home features that contribute to resident quality of life. The presentation discussed the research process, from recognizing the problem and opportunity to developing a research partnership that involves researchers from different disciplines as well as partners from the nursing home sector, and the lessons learned from the experience.

Dr. Wideman's presentation explored the lessons learned from a multi-sector and multi-disciplinary collaboration on research in aging in Newfoundland and Labrador. She shared background information on the development of the research exchange groups and the Newfoundland Healthy Aging Research Team, which provided for the vision for a

Newfoundland and Labrador Centre on Aging. Finally, some strengths and challenges of the interdisciplinary research process were discussed.

The workshop concluded with a second breakout session in which participants discussed what they saw as the opportunities and challenges of interdisciplinary research, with a focus on the specific competencies required for it to be successful. The results of these discussions are presented in section three of this document.

2. Literature search overview

Prior to presenting the results of the workshop discussions, what follows is a brief overview of a literature search on interdisciplinary research that was conducted in preparation for the workshop.

This literature search focused on interdisciplinary research. Choi and Pak (2006) stated that “Interdisciplinarity analyzes, synthesizes and harmonizes links between disciplines into a coordinated and coherent whole.” Interdisciplinarity is more integrated than multidisciplinary, which draws on knowledge from different disciplines but stays within the boundaries of those fields (NSERC, 2004), and less integrated than transdisciplinarity, which integrates the natural, social and health sciences in a humanities context, and in so doing transcends each of their traditional boundaries (Soskolne, 2000).

There are numerous benefits and challenges of interdisciplinary research identified in the literature, some of these will be highlighted below. This literature search revealed that research on aging and the interdisciplinary research process has been limited. When available, most literature relating to interdisciplinary research in aging focuses on partnerships and research within long term care facilities, as opposed to home or community settings. What follows are some benefits, challenges and best practices, both of interdisciplinary research in general, and as it pertains to research on aging.

Benefits

Interdisciplinary research can be an effective way to address and better understand complex health and social issues, as their characteristics and contributing factors are not bound by any disciplinary borders. Interdisciplinary research also can produce more applicable, accessible knowledge for academics, the public and policy makers, as more stakeholders are involved in the research process (Giacomini, 2004). Finally, more and more funding agencies are looking for interdisciplinary approaches to research questions (Hall et al., 2006), so exploring research interests in an interdisciplinary way may open up more potential avenues for funding.

Challenges

The literature identified a number of challenges relating to interdisciplinary research. An initial challenge relates to gaining a sense of what the research question should be and how it might be addressed. It is suggested that researchers should attempt to get a clear picture

of the issue to be investigated before deciding which interdisciplinary entities should participate and how it should be investigated (Giacomini, 2004).

Another challenge can be deciding who to collaborate with, and these decisions should be made with care. It is important to recognize what other disciplines have to offer in response to the research question when making decisions about who to include in the research project (Giacomini, 2004).

A third challenge noted extensively in the literature is the time commitment associated with interdisciplinary research. Excellent scholarship takes time and the more disparate the disciplines or deeper the synthesis, the more time it takes (Aagaard-Hansen & Ouma, 2002). This can be a significant challenge when working under time constraints, such as funding deadlines.

More specific to research in aging, Ford, Henderson, & Handley (2010) noted that two critical challenges include the sharing of power and keeping partners satisfied. Under these conditions, consensus may be difficult to achieve depending on the partners involved, and the extent to which competition for resources exists may cause power struggles, tension and the resulting exit of some partners (Ford, Henderson, & Handley, 2010).

Gaskill et al. (2003) noted that a challenge of an interdisciplinary research project in a long term care facility was the inability to convince some staff of the benefits of the project. They suggested this lack of buy in was compounded by the staff's lack of previous exposure to the research process. They did note, however, that as the study progressed, staff became more accepting of their role and presence in the facility.

Best Practices

Key competencies in interdisciplinary research have been identified in the literature. What follows below is a sample of the key competencies identified by Aboelela et al. (2007) relating to interdisciplinary research generally. Competencies specific to aging research will follow.

Competent interdisciplinary researchers should be able to:

Conduct research

- Use and integrate theories and methods of multiple disciplines in developing research frameworks and protocols
- Investigate hypotheses through interdisciplinary research
- Draft funding proposals for interdisciplinary research programs in partnership with scholars from other disciplines
- Disseminate interdisciplinary research results both within and outside his or her discipline

Communicate

- Advocate interdisciplinary research in developing initiatives within a substantive area of study

- Express respect for the perspectives of other disciplines
- Read journals outside his or her discipline
- Communicate regularly with scholars from multiple disciplines
- Share research from his or her discipline in language meaningful to an interdisciplinary team
- Modify his or her own work or research agenda as a result of interactions with colleagues from fields other than his or her own
- Present interdisciplinary research at venues representing more than one discipline

Interact with others

- Engage colleagues from other disciplines to gain their perspectives on research problems
- Collaborate respectfully and equitably with scholars from other disciplines to develop interdisciplinary research frameworks
- Interact in training exercises with scholars from other disciplines
- Attend scholarly presentations by members of other disciplines
- Collaborate respectfully and equitably with scholars from other disciplines to develop interdisciplinary research frameworks

Choi and Pak (2007) noted eight strategies that can be used to enhance interdisciplinary research, summarised in the acronym TEAMWORK - Team, Enthusiasm, Accessibility, Motivation, Workplace, Objectives, Role and Kinship.

Specifically relating to interdisciplinary research in aging, Gaskill et al. (2003) identified a number of essential elements of the collaborative process in long-term care facilities, noting that a number of authors identify the importance of equal commitment of time, resources and involvement by all of the team. Others discuss the importance of investing time and energy in relationships and team functioning. Power and control seem to be other important issues even though they are less frequently raised in the literature. Power issues between researchers and clinicians, and between different levels of staff in the clinical setting, are likely to influence many collaborative studies.

3. Workshop results summary

As mentioned, 26 workshop participants self-selected into four broad topic areas: Healthy Aging, Continuing Care, Vulnerable Populations and Quality of Life. This section summarizes the break out group discussions on three key questions.

- a) **Group discussion 2.1:** From your experience and relative to table theme, discuss the *opportunities* that multi-sectoral, interdisciplinary research can offer.

Three themes were identified in the discussions of the opportunities that exist within interdisciplinary research: new perspectives, research outcomes, and research funding.

New perspectives:

- There are multiple ways to view an issue

- Data meaning can be different depending on perspective
- Interdisciplinary research can be enjoyable as well as productive, as it allows stakeholders to learn about different perspectives (learning new ways of viewing things and different 'languages'/terminology)
- Micro and macro level thinkers coming together can complement each other
- Incorporating people strategically, when they are needed, expands researchers' knowledge and understanding of the research issue
- Different skill sets broaden the researcher's area of expertise
- Partnerships can increase access to resources (e.g, data sets)
- Cultural studies that incorporate creativity can advance research participant understanding that their contribution is valued
- Can help to translate theory into practice and vice versa
- An opportunity to engage with novel approaches

Research outcomes:

- Bring issues to awareness and sets new priorities
- Allows relationships and partnerships to be built within the community (e.g., with correctional facilities, unions, the education system, and churches)
- Community partners can help bring the practical aspects into play
- The opportunity to develop useful community resources (example of Research at U of Regina Centre on Aging that looks at end-of-life issues in Aboriginal communities and developed videos and other educational resources for the community)
- Mentorship opportunities

Research funding:

- Funding agencies – looking specifically for team grants, provides an added benefit of networking

b) **Group discussion 2.2:** From your experience and relative to table theme, discuss the *challenges* that multi-sectoral, interdisciplinary research can offer.

Challenges of interdisciplinary research as discussed in the breakout groups fell into five main themes: perspectives, consensus building, research process, outcomes and team building.

Perspectives:

- The ways each member of a research team relates to research question(s) and objectives reflects their disciplinary backgrounds and experiences
- Differences in understanding the research purpose and directions
- Different 'languages' of varied academic backgrounds (e.g. jargon)
- Lenses vary (this can also be a positive)

Consensus building:

- Finding common interests between stakeholders
- "Getting the buy in" of all stakeholders

Research process:

- Ethics process
- Working with community stakeholders or industry; they may not want to commit, or go through the ethics process
- High cost (travelling, team building, longer research process)
- Rural communities – more spread out, can also lack capacity, funds, funding
- CIHR moving so much towards collaboration it can be disadvantageous to smaller/more rural provinces to be competitive (due to high cost of including them)
- Time constraints – larger, more varied team may move slower
- Authentic dialogue v.s. paying lip service - Departments/research groups may not talk to each other and may end up with same interests

Outcomes:

- Pressure to publish (the data that community wants is not always the same as what can be published)
- Industry – may not want the results published
- Government priority funding
- CIHR expects to see a ‘Noah’s Arc’ of researchers, may result in tokenism

Team building:

- Articulated goal and outline – different level of commitment
- Holding the group together, can take a long time to get established
- Can be more difficult in rural communities – more spread out, can also lack capacity, funds, funding
- How the research is presented (people are busy, think it will be a large undertaking thus are less likely to join in)
- Building rapport/forming relationships, “liking the people you work with”
- Establishing where people fit within a team/highlighting individual strengths
- Informing the team/communications
- Time constraints
- Understanding others’ commitments to the team/project
- Can be challenging to build collaboration within departments
- Consistency with staff (retention of staff members)
- Very divided boundaries of certain roles
- Management and pace of work (providers, researchers, government)
- Inclusive and respectful
- Don’t vilify government or specific roles
- Ideas grow and evolve – what to include or not
- Relying on clinical versus non-clinical partners
- Interdisciplinary partnerships are labour intensive, which could make them exclusionary to tenure track, PhD students

- c) **Group discussion 2.3:** From your experience and relative to table theme, what are the **conditions** required for successful research collaborations and why?

- Respect – people’s ideas and ways of seeing things
- Trust
- Clear roles outlines for members
- Consistency
- Team sharing of responsibility
- Leadership
- Mentorship
- Regular updates and good communication
- Ensure collaborators feel heard and valued
- Motivation, positive attitudes
- Letting go of ‘ego’
- Acknowledging others contributions/inclusive
- Understanding resources/timelines/realities/motivations

4. Conclusion

Some key messages emerged from the workshop, building on the information available in the literature. There seemed to be a strong focus in the breakout groups on interdisciplinary aging research as it relates to rural areas. Some participants mentioned the challenges: funding is challenging to find, as large interdisciplinary projects often look for team members who live in easily accessible areas, meetings are more difficult to coordinate with researchers being more geographically spread out. There were also some benefits mentioned, such as the willingness of community groups to become involved with research in rural areas, as they are often heavily involved within the community.

The workshop provided a forum for researchers to learn about what others in the aging field are working on, both in the Maritimes and beyond, and to start exploring common interests and making research connections. It also provided an opportunity for emerging scholars to be part of valuable discussions about the importance and realities of interdisciplinary research in aging.

References

Aagaard-Hansen J, Ouma JH. (2002). Managing interdisciplinary health research: theoretical and practical aspects. *International Journal of Health Planning and Management*, 17, 195–212.

Aboelela, S.W., Larson, E., Bakken, S., Carrasquillo, O., Formicola, A., Glied, S.A., Haas, J. & Gebbie, K.M. (2007). Defining Interdisciplinary Research: Conclusions from a Critical Review of the Literature. *Health Services research*, 42(1), 329-346.

Choi, B.C. & Pak, A.W. (2006). Multidisciplinarity, interdisciplinarity, and transdisciplinarity in health research, services, education and policy: 1. Definitions, objectives and evidence of effectiveness. *Clinical Investigative Medicine*, 29(6), 351-64.

Choi, B.C. & Pak, A.W. (2007). Multidisciplinarity, interdisciplinarity, and transdisciplinarity in health research, services, education and policy: 2. Promotors, barriers, and strategies of enhancement. *Clinical Investigative Medicine*, 30(6), 224-32.

Ford, C. R., Henderson, J., & Handley, D. M. (2010). Enhancing long-term care for older adults: An exploration of interagency collaboration within geriatric education centers. *Journal of Health and Human Services Administration*, 32(4), 447-485.

Gaskill, D., Morrison, P., Sanders, F., Forster, E., Edwards, H., Fleming, R. (2003). University and industry partnerships: Lessons from collaborative research. *International Journal of Nursing Practice*, 9(6), 347-355.

Giacomini, M. (2004). Interdisciplinarity in health services research: dreams and nightmares, maladies and remedies. *Journal of Health Services Research and Policy*, 9, 177-83.

Hall, J.G., Bainbridge, L., Buchan, A., Cribb, A., Drummond, J, Gyles, C., Hicks, T.P., McWilliam, C., Paterson, B., Ratner, P., Skarakis-Doyle, E. & Solomon, P. (2006). A meeting of minds: interdisciplinary research in the health sciences in Canada. *Canadian Medical Association Journal*, 175(7), 763-71.

Natural Sciences and Engineering Research Council of Canada (NSERC). Guidelines for the Preparation and Review of Applications in Interdisciplinary Research. Ottawa: NSERC, 2004. Updated on August 3, 2004. URL:
http://www.nserc.ca/professors_e.asp?nav=profnave&lbi=intre

Soskolne C. (2000). Transdisciplinary approaches for public health. *Epidemiology*, 11, 122.

