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Abstract

Across the globe extension or rural advisory service (RAS) networks are experiencing dramatic changes. Rural to urban population shifts, climate variability, and increased competition for limited resources have created a challenging environment. When done effectively, advocacy is one of the most successful tool extensionists possess to increase understanding and visibility for the value and impacts RAS networks can have. Despite the importance of advocacy there has not been any research into the capacities necessary for RAS networks to advocate effectively. To address the gap researchers conducted a three-round Delphi process with an expert panel of 31 individuals from 24 different countries. The panel achieved consensus on 39 specific capacities necessary for RAS networks to advocate effectively. Additional recommendations are provided for RAS networks to develop capacities accordingly

Keywords

Advocacy, Delphi, evaluation, capacity assessment

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Abstract

Across the globe extension or rural advisory service (RAS) networks are experiencing dramatic changes. Rural to urban population shifts, climate variability, and increased competition for limited resources have created a challenging environment. When done effectively, advocacy is one of the most successful tool extensionists possess to increase understanding and visibility for the value and impacts RAS networks can have. Despite the importance of advocacy there has not been any research into the capacities necessary for RAS networks to advocate effectively. To address the gap researchers conducted a three-round Delphi process with an expert panel of 31 individuals from 24 different countries. The panel achieved consensus on 39 specific capacities necessary for RAS networks to advocate effectively. Additional recommendations are provided for RAS networks to develop capacities accordingly.

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Introduction

A rapidly-growing global population is leading to environmental change that impacts agriculture around the world (Godfray & Garnett, 2014; Kitinoja, Saran, Roy, & Kader, 2011). There is a need for an agricultural systems transformation to meet the increasing demands on food resources that will be necessary to obtain sustainable production (Özerdem & Roberts, 2016). Farmers need to be able to adapt to changing situations so they are capable of working in agricultural systems necessary to achieve higher level of productivity (Anderson & Feder, 2004). Accessing updated information available on production and distribution technologies is an important factor in reaching sustainable productivity within the agricultural realm (Beckford & Barker, 2007). In order to achieve sustainable productivity, farmers and other agricultural stakeholders must have access to proper information sources (Okwoche, Asogwa, & Obinne, 2012). Access to information sources can be made possible by enhancing human capital that establishes and maintains strong connections (Cawein et al., 2017).

Rural advisory services (RAS), otherwise known as extension services, around the globe have a goal of enabling stakeholders by developing human capital and assisting in technology transfer from research-based institutions to the end user (Anderson & Feder, 2004). RAS operate as networks at the country, region, continental and global level with multiple actors working collaboratively (Davis & Sulaiman, 2014). Initially RAS were top-down, publicly funded, services confined to a geographical location (Swanson & Rajalahti, 2010). While local application methods improved production in the short term, the limited reach and applicability restricted the ability of RAS providers when assisting the agricultural industry in adapting to changing

climates and market situations (Anderson, 2008).

RAS providers needed to be trained to address issues beyond their local areas (Swanson & Rajalahti, 2010). The training and expansion of RAS required funding beyond that provided by public sources leading to a pluralistic system (World Bank, 2012). However, the defined functions of the public and private contributors to RAS were not delineated and led to a complex system where many competing demands were placed on RAS providers (World Bank, 2012). The increasingly diverse nature of advisory services, due to changes in funding as well as leadership, resulted in a fragmented global system (Swanson & Rajalahti, 2010). Given the intricate nature of agricultural production, evaluating the impact of either form, public and private advisory services, became difficult (Anderson, 2008).

Trends including declining support for publicly-funded programs, criticism of inefficient models of publicly-funded programs, and an enhanced focus on accountability for publicly-funded programs represent a challenging context for RAS networks (Faure, Huamanyauri, Salazar, Gómez, De Nys, & Dulcire, 2017; Lamm, Israel, & Diehl, 2013). The lack of proven impact made it even more difficult for policy makers to support RAS and a decline in recognition and attention has been felt on a global scale (Davis & Sulaiman, 2014). These trends led to reforms in RAS along with calls to be more accountable to clientele and funders (Rivera & Alex, 2005). RAS along with other public or donor-funded institutions are thus eager to advocate regarding their important role in sustainable production (Huffman, 2016). In order to secure sustained funding for RAS there is a need for advocacy, at multiple levels, that focus on why RAS should be supported.

There are different types of advocacy based on the type of population served (Brandon, Brandon, & Brandon, 1995). Advocacy is broadly defined as a process of pleading for support of a certain cause or proposal (Lee, 1998; Merriam-Webster, 2017). Advocacy related to knowledge transfer is known to have a high amount of influence on global networks (Stone, 2002). In the field of counseling, Myers and Sweeney (2004) identified advocacy as an important factor for the advancement of a profession. In many professions, being skilled in advocacy is recognized as a responsibility rather than an add-on (Allen, 2017; Almog-Bar & Schmid, 2014; Taylor, 1987). As an illustration, an inclination to rely on government funds was observed to be an issue with various nonprofit service organizations (Smith & Lipsky, 1993). Thus, obtained funding was primarily invested in carrying out direct program services and less for advocacy (Kimberlin, 2010). However, advocacy has been recognized as an important aspect of organization to promote welfare and proper allocation of different resources within the organization (Snow, 2013).

With the global urban population growing every year (World Health Organization, 2017), one of the prominent characteristics of globalization is considerable growth in extent, intensity and velocity of social interactions (Held, McGrew, Goldblatt, & Perraton, 2000). Raynor, York, and Sim (2009) found that advisory organizations operating by networking with other organizations can be more efficient by utilizing collective resources and complementing assets. RAS providers, who currently operate individually, with low cooperation and a lack of common standards (Anderson & Feder, 2004), might be able to increase funding support globally, and reach the full potential of what RAS is capable of

obtaining, by applying this concept of aggregating resources and voices to have greater impact through advocacy efforts (Davis & Sulaiman, 2014).

Theoretical Framework

Social capital enables connections between individuals through strong or weak ties (Lin 2008). Social capital is comprised of norms within networks that equip individuals to work cooperatively (Woolcock & Narayana, 2000). The network perspective of social capital helps us observe and understand patterns within a network (Lin, 2008). This view advocates that strong ties (intra-community) and weak ties (extra-community) are both equally beneficial for acquiring or sharing information (Granovetter, 1995). This is due to the fact that networks are flexible and dynamic, with the ability to expand by forming new connections with different networks that share common values (Hudson, 2001). Fischer and Jasny (2017) identified that organizations are more likely to collaborate with their parallels to obtain relevant information and resources if they feel connected.

Social capital is known to play a major role in human capital development (Coleman, 1988). This is possible as social capital comprises both networks and assets, which can be utilized individually or in combination (Burt, 2009). Davis and Sulaiman (2014) identified advocacy as one of the primary areas of strategic management functioning required for capacity development. A high level of advocacy capacity can be achieved by employing social capital to access networks and identifying essential capacities to be developed in the area of advocacy (Nahapiet & Ghoshal, 1998). Advocacy is a challenging activity to understand and apply as it is influenced by various factors like aims, timeframe and power structures within

an organization (Coates & David, 2002). The scope of networks working on RAS advocacy efforts goes beyond domestic boundaries, extending into global conversations with funding agencies and networks (Keck & Sikkink, 1999). RAS networks identified this and began to pay attention to the need for advocacy at the global level (Davis & Sulaiman, 2014).

Unfortunately, knowledge about the level and nature of advocacy practices in different fields, including RAS, is limited within the literature (Pardeck, 1996; Sosin & Caulum, 1983). As previously identified, higher density ties would enhance resource sharing among members of a network (Lin, 2008); however, a great number of ties also results in increased complexity of a network and research has found that networks that build too many ties too quickly have trouble handling them effectively due to centrality (Bodin & Crona, 2009). For example, in a patient advocacy organization a conflict of interest was observed within the organization among individuals over decision making (Rose, 2013). It was recommended that policy development be directed toward fostering trustworthiness within and among the organizations prior to collective decision making (Rose, 2013). In the context of RAS, trust must be built locally in order to be effective in global settings (Anderson, 2008). This can be achieved by advocating for RAS networks collectively at the regional level and then coming together at the global level (Davis & Sulaiman, 2014). Social capital has the potential to assist the advocacy capacity identification process by enabling interactions within RAS networks (Bodin & Crona, 2009).

Purpose and Research Objectives

The purpose of this study was to identify the capacities needed for a RAS network to effectively advocate for RAS.

The study was driven by the following research objectives:

1. Create a comprehensive list of potential capacities a network may need to effectively advocate for RAS.
2. Arrive at a global consensus on the specific capacities necessary for a RAS network to effectively advocate for RAS.

Methods

The methods associated with this research are identical with those described in detail in Lamm, Lamm, Davis, and Swaroop (2017). Data were collected simultaneously across multiple thematic areas as part of a larger project (Lamm & Lamm, 2017). Based on recommendations in the literature (Zhang, Jia, Lin, & Tan, 2013) a summary of the involved methods is included; however, readers are strongly encouraged to review the aforementioned manuscript for a more detailed description.

A modified Delphi method research design was employed to address the research objectives. Through the Delphi process experts' opinions of the capacities needed for a RAS network to be effective in advocacy were collected and analyzed until consensus on the final list of capacities was achieved (Dalkey & Helmer, 1963; Garson, 2014; Ziglio, 1996).

The expert panel was composed of individuals actively engaged in RAS representing different geographies, levels of experience, and organizational structures. Specifically, panelists were nominated by the Global Forum for Rural Advisory Services organization (Garson, 2014, Okoli & Pawlowski, 2004). The expert panel was composed of a purposive sample of 31 RAS professionals. Specifically, the expert panel was composed of the following (Lamm et al., 2017):

The 31 experts that participated in the panel represented RAS practitioners, funding organizations, farmer and advocacy groups, academic institutions, research institutes, policy makers, and other affiliated RAS support organizations (for example consultants and agricultural supply companies). Panelists had a range of experience with RAS exposure ranging from four to 45 years, with an average tenure of 18 years. Panelists represented the following countries: Bangladesh, Belgium, Bulgaria, Ecuador, Fiji, Georgia, Ghana, Guyana, India, Ireland, Italy, Lao People's Democratic Republic, Malawi, Nicaragua, Nigeria, Pakistan, Philippines, Samoa, Solomon Islands, South Africa, Switzerland, Uganda, United States of America, and Uzbekistan. (p. 97)

There were three rounds of the Delphi method used to reach consensus using tools and instrumentation recommendations from the literature (e.g. Delbecq, Van de Ven, & Gustafson, 1975; Nistler, Lamm, & Stedman, 2011). In round one of the process, respondents listed up to five (5) of the most important capacities a RAS network should possess to be effective in advocacy (Gliddon, 2006). Responses from round one were analyzed and used to develop round two of the process (Garson, 2014; Gliddon, 2006).

In round two of the process respondents indicated their level of agreement with the capacities identified in the first round. Specifically, respondents were asked to indicate their level of agreement or disagreement that each item was an important capacity for RAS networks to have on a five point Likert-type scale (1 = *Strongly Disagree*, 2 = *Disagree*, 3 =

Neither Agree nor Disagree, 4 = *Agree*, 5 = *Strongly Agree*). Scores for each item were then averaged with only those items with a mean score greater than 3.25 retained for round three (Garson, 2014).

Round three of the process was used to establish respondents' consensus with the capacities retained from round two. Respondents were asked to "Please indicate whether or not the following knowledge management items should be kept or removed as it relates to the following statement. *A country for a or regional RAS network should...*". Items that at least 75% of respondents agreed should be kept were retained (Garson, 2014).

The research was conducted based on a procedure approved by the University of Florida Internal Review Board. The Delphi process was completed using the Qualtrics online survey tool and was administered using the Tailored Design Method (Dillman, Smyth, & Christian, 2008). Data collected online were downloaded and analyzed using the Statistical Package for the Social Sciences (SPSS) version 21. Qualitative responses were analyzed and coded using the Dedoose qualitative analysis software (Dedoose, 2016).

Based on a panel of 31 experts, the first round of the Delphi process had a response rate of 94%, the second round of the Delphi process had a response rate of 87%, and the third and final round of the Delphi process had a response rate of 94%. Previously, Keeney, Hasson, and McKenna, (2011) established that response rates greater than 70% per round in a Delphi process were acceptable.

Results

Following the first round of the Delphi, including consolidation of items, there were 44 capacities identified by the expert panel (Table 1). The panelists were

then asked to indicate the level of importance they associated with each capacity in Round Two of the Delphi. Of the 44 capacities from the first round, all of the items achieved the *post hoc* threshold with a mean score greater than or equal to 3.25 to be retained in Round Two; therefore all 44 capacities were included in the third and

final round. When analyzed, the mean values for the capacities ranged from 4.30 to 3.41 (Table 1). Experts associated the highest level of importance with the statement “A country for a or regional RAS network should...maintain strong partnerships with those involved in policy making to ensure RAS is visible.”

Table 1

Delphi Round One and Two Results: Level of Importance for Advocacy Capacities (n = 44)

Capacity	<i>M</i>	<i>SD</i>
Maintain strong partnerships with those involved in policy making to ensure RAS is visible	4.30	0.82
Be able to clearly identify/define RAS stakeholders	4.22	0.70
Exhibit strong communication skills with policy/decision makers at all levels	4.19	0.88
Be able to articulate RAS stakeholder needs	4.19	0.68
Articulate key advocacy messages	4.19	0.74
Link RAS with ongoing priority government and private sector programs	4.19	0.88
Develop relationships with stakeholders	4.19	0.88
Have representation on national platforms/events	4.19	0.92
Show the role/potential role of RAS in addressing priority concerns (e.g. poverty alleviation, food security)	4.11	0.75
Be perceived as a positive influence on the decision making/policy process	4.11	0.85
Provide information in support of RAS efforts to policy/decision makers at all levels	4.07	0.83
Use creative ways to reach new and old audiences	4.07	0.87
Be recognized as a relevant/important actor	4.07	0.68
Exhibit strong communication skills with the public	4.04	0.94
Develop relationships with community partners	4.04	0.98
Effectively use social media to advocate for RAS	4.00	0.96
Have representation on international platforms/events	4.00	1.00
Provide a deep knowledge of RAS including the impact of RAS initiatives and programs	4.00	0.83
Make advocacy materials available	4.00	0.88
Collaborate effectively to create liaisons and linkages externally in support of advocacy efforts	3.96	0.76
Develop public/private partnerships	3.96	0.94
Have stakeholders that hold RAS in high regard	3.96	0.87
Exhibit strong communication skills (e.g. presentation skills, writing skills, public relations skills)	3.93	0.96
Have beneficiaries that hold RAS in high regard	3.93	0.87
Articulate global trends and context in RAS	3.93	1.00

Collaborate effectively to create liaisons and linkages internally in support of advocacy efforts	3.93	0.78
Articulate an established advocacy strategy	3.89	0.89
Engage in discussions surrounding current policy trends	3.88	0.86
Use success stories when advocating for RAS	3.85	0.91
Develop relationships with universities	3.85	0.95
Organize support to create a common voice in support of RAS	3.81	0.79
Have network officers that are seen as credible sources	3.81	0.92
Identify champions for RAS	3.81	1.00
Have evidence of strong government support	3.78	1.15
Articulate global trends in agricultural innovation	3.74	0.98
Develop advocacy materials	3.74	0.94
Have evidence of strong grassroots support	3.74	0.98
Have representation on local platforms/events	3.67	1.00
Exhibit strong negotiation skills	3.63	0.88
Articulate the role of women extension workers in RAS	3.63	0.88
Effectively use traditional media to advocate for RAS	3.59	1.01
Conduct policy analysis	3.56	1.01
Have RAS network officers that are invited to be a part of the decision making process at all levels	3.48	1.09
Conduct RAS impact studies	3.41	1.34

For the third and final round of the Delphi, the panelists were asked whether each of the capacities should be kept or removed with the intended outcome to establish consensus. Across the 44 capacities

from Round Two of the Delphi there were 39 capacities that received a level of consensus greater than the *post hoc* threshold of 75% (Table 2).

Table 2

Delphi Round Three Results: Level of Consensus with Advocacy Capacities (n = 44)

Capacity	Consensus %
Have representation on national platforms/events	96.6
Maintain strong partnerships with those involved in policy making to ensure RAS is visible	96.6
Be able to articulate RAS stakeholder needs	96.6
Develop relationships with stakeholders	93.1
Effectively use social media to advocate for RAS	93.1
Show the role/potential role of RAS in addressing priority concerns (e.g. poverty alleviation, food security)	93.1
Organize support to create a common voice in support of RAS	93.1
Articulate key advocacy messages	93.1
Make advocacy materials available	93.1
Exhibit strong communication skills (e.g. presentation skills, writing skills, public relations skills)	92.9
Link RAS with ongoing priority government and private sector programs	89.7

Have stakeholders that hold RAS in high regard	89.7
Articulate the role of women extension workers in RAS	89.7
Collaborate effectively to create liaisons and linkages internally in support of advocacy efforts	89.7
Be able to clearly identify/define RAS stakeholders	89.7
Be perceived as a positive influence on the decision making/policy process	89.7
Exhibit strong communication skills with the public	89.7
Engage in discussions surrounding current policy trends	89.3
Collaborate effectively to create liaisons and linkages externally in support of advocacy efforts	86.2
Exhibit strong communication skills with policy/decision makers at all levels	86.2
Articulate global trends and context in RAS	86.2
Use success stories when advocating for RAS	85.7
Have representation on international platforms/events	82.8
Have representation on local platforms/events	82.8
Develop relationships with community partners	82.8
Effectively use traditional media to advocate for RAS	82.8
Develop relationships with universities	82.8
Articulate an established advocacy strategy	82.8
Be recognized as a relevant/important actor	82.8
Have network officers that are seen as credible sources	82.8
Provide a deep knowledge of RAS including the impact of RAS initiatives and programs	79.3
Have evidence of strong grassroots support	79.3
Develop advocacy materials	79.3
Use creative ways to reach new and old audiences	79.3
Have beneficiaries that hold RAS in high regard	79.3
Develop public/private partnerships	78.6
Have RAS network officers that are invited to be a part of the decision making process at all levels	75.9
Provide information in support of RAS efforts to policy/decision makers at all levels	75.9
Identify champions for RAS	75.9
Have evidence of strong government support	72.4
Conduct policy analysis	69.0
Articulate global trends in agricultural innovation	69.0
Exhibit strong negotiation skills	65.5
Conduct RAS impact studies	62.1

Conclusions, Implications, and Recommendations

The challenges facing RAS networks are well established. Shifts in global population (Godfray & Garnett, 2014),

changes to the delivery of extension services (Swanson & Rajalahti, 2010), and an increase in competing demands for limited resources from other institutions (World Bank, 2012) all contribute to a challenging

environment. However, when institutions, such as RAS networks, use advocacy effectively they can greatly improve their potential for visibility and support (Allen, 2017). Despite the challenging environment, and the known value advocacy can provide, there had been very limited research into what capacities are necessary for RAS networks to advocate effectively. The purpose of this research was to address this deficiency and to provide RAS networks a very concrete set of capacities upon which to develop (Davis & Sulaiman, 2014; Lamm et al., 2017).

Consistent with previous capacity focused research within a RAS context (e.g. Lamm et al., 2017), the results of this study indicate that a Delphi panel composed of RAS experts is an effective way to identify the most important capacities for a RAS network to be effective at advocacy (Bodin & Crona, 2009). Specifically, an expert panel composed of individuals representing a diverse set of RAS environments from around the globe helps to ensure the findings are not limited to a specific context where environmental conditions may drastically impact the utility of the results when applied in practice (Lamm et al., 2017). Nevertheless, the use of a purposively selected panel of experts must also be acknowledged as a potential limitation. Although steps were taken to mitigate bias by inviting a diverse panel of experts to participate (Garson, 2014), the results of the study are limited to the knowledge and insights of the participating experts (Bodin & Crona, 2009).

Thematically, RAS networks and individual providers tend to share many similar characteristics (Davis & Sulaiman, 2014); however, prior to this study there has not been a common definition or understanding of advocacy capacities for these groups. A recommendation from this research is for RAS networks to actively

engage with the findings and to begin to develop a common language around advocacy. When networks and organizations have a common language and understanding around a particular topic, including specific capacities that constitute the foundation of an otherwise abstract concept, they can be more effective in communicating, supporting, and sharing best practices. (OECD, 2006).

After analyzing the results of the study, there were three capacity items that the expert panel almost unanimously agreed were necessary for RAS networks to be effective at advocacy. The first capacity is to have representation on national platforms/events. The second capacity is to maintain strong partnerships with those involved in policy making to ensure RAS is visible. The third capacity is to be able to articulate RAS stakeholder needs. These results imply that the most critical capacities that RAS networks need to advocate effectively is to be present, be known, and be clear. These fundamental capacities are necessary to ensure RAS networks have a platform to work from, an audience that is receptive, and a message that is compelling. These are the fundamental criteria for effective advocacy and a recommendation is for RAS networks to ensure they have these three capacities well established. If any of these capacities are absent, developing the capacity should be a priority. Although there were 36 other advocacy capacities that reached an acceptable level of consensus, these were the top three and should receive particular attention.

Interestingly, when the remaining capacities are reviewed there were three primary thematic areas that emerged that were very consistent with the three specific capacity items. The first theme that emerged was that the network should be a visible actor for RAS. From an advocacy perspective one of the requirements for

success is to be recognized as institution, and more importantly to be recognized as a representative of the institution (Allen, 2017). Without acknowledgement from others, it will be very difficult for a RAS network to advocate effectively. A preliminary recommendation is for RAS networks to examine whether they are participating in events where stakeholders are present. For example, if there are opportunities to connect with policy makers at conferences, meetings, or events RAS networks are strongly encouraged to attend and to work on increasing their visibility.

The second thematic area that emerged among the identified capacities is that the network should understand RAS clientele. Although the practical functioning of RAS is important to understand, from an advocacy perspective being able to articulate the impacts of RAS on clientele is generally much more compelling. Therefore, a recommendation is for RAS networks to understand the impacts and outcomes associated with their activities. A further recommendation is to collect not only quantitative results, but also qualitative case studies and anecdotes.

The third thematic area that emerged is that advocacy messages should be communicated effectively. This theme is closely related to the preceding two because it represents the packaging and messaging that is ultimately shared. Specifically, understanding RAS clientele is necessary but not sufficient for effective advocacy. Effective advocacy includes the development of compelling narratives and impact statements and are intended to command the attention from the audience. A recommendation is for RAS networks to work on aggregating and reviewing clientele insights and then identify the most compelling items or case studies. Only the most compelling information should be shared, those situations with the largest

impact or that are most closely aligned to political and funding priorities. A second recommendation is to develop succinct and memorable communication plans and actions associated with the most impactful items. As an added benefit, compelling communication plans that are clear and consistent can be shared with the RAS network to help ensure messaging consistency and effectiveness.

In addition to the specific capacity related results associated with this study an additional recommendation is to extend the results and to develop a scale appropriate for assessing advocacy capacity across RAS networks. This recommendation is consistent with suggestions within the literature to use Delphi process results as a baseline for new scale development (Cheng, Kuo, Lin, & Lee-Hsieh, 2001). A standardized scale should help to provide a common measure of capacity among RAS networks and to facilitate knowledge sharing using a standard set of capacity items.

References

- Merriam Webster's collegiate dictionary. (2017). In *Merriam-Webster.com*. Retrieved from <https://www.merriam-webster.com/dictionary/advocacy>
- Allen, T.C. (2017). Twenty-first century pathologists' advocacy. *Archives of Pathology & Laboratory Medicine*. 141(7), 940-943. <https://doi.org/10.5858/arpa.2017-0105-SA>
- Almog-Bar, M., & Schmid, H. (2014). Advocacy activities of nonprofit human service organizations: A critical review. *Nonprofit and Voluntary Sector Quarterly*, 43(1), 11-35. doi: 10.1177/0899764013483212

- Anderson, J. R. (2008). *Agricultural advisory services*. Washington, DC: Work Bank.
- Anderson, J. R., & Feder, G. (2004). Agricultural extension: Good intentions and hard realities. *The World Bank Research Observer*, 19(1), 41-60. <https://doi.org/10.1093/wbro/lkh013>
- Beckford, C., & Barker, D. (2007). The role and value of local knowledge in Jamaican agriculture: Adaptation and change in small-scale farming. *The Geographical Journal*, 173(2), 118-128. doi: 10.1111/j.1475-4959.2007.00238.x
- Bodin, Ö., & Crona, B. I. (2009). The role of social networks in natural resource governance: What relational patterns make a difference? *Global Environmental Change*, 19(3), 366-374. doi: 10.1016/j.gloenvcha.2009.05.002
- Brandon, D., Brandon, A., & Brandon, T. (1995). *Advocacy: power to people with disabilities*. Oxford, England: Oxford University Press.
- Burt, R. S. (2009). *Structural holes: The social structure of competition*. Cambridge, MA: Harvard University Press.
- Cawein, A., Emini, E., Watson, M., Dailey, J., Donnelly, J., Tresnan, D., Evans, T., Plotkin, S., & Gruber, W. (2017). Human capital gaps in vaccine development: An issue for global health. *Annals of the New York Academy of Sciences*, 1395(1), 3-11. doi: 10.1111/nyas.13316
- Cheng, S., Kuo, C., Lin, K., & Lee-Hsieh, J. (2001). Development and preliminary testing of a self-rating instrument to measure self-directed learning ability of nursing students. *International Journal of Nursing Studies*, 47(9), 1152-1158. doi:10.1016/j.ijnurstu.2001.02.002
- Coates, B., & David, R. (2002). Learning for change: The art of assessing the impact of advocacy work. *Development in Practice*, 12(3-4), 530-541. <http://dx.doi.org/10.1080/0961450220149870>
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, 95-120. <https://doi.org/10.1086/228943>
- Dalkey, N., & Helmer, O. (1963). An experimental application of the Delphi method to the use of experts. *Management Science*, 9(3), 458-467.
- Davis, K., & Sulaiman, R.V. (2014). The “new extensionist”: Roles and capacities to strengthen extension and advisory services. *Journal of International Agricultural and Extension Education*, 21(3): 6-18. doi:10.5191/jiaee.2014.21301
- Dedoose Version 7.0.23, web application for managing, analyzing, and presenting qualitative and mixed method research data (2016). Los Angeles, CA: SocioCultural Research Consultants, LLC..
- Delbecq, A. L., Van de Ven, A. H., & Gustafson, D. H. (1975). *Group techniques for program planning: A guide to nominal group and Delphi processes*. Glenview, IL: Scott, Foresman.
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (Eds.). (2008). *Internet, mail, and mixed-mode surveys: The tailored design method* (2nd ed.). Hoboken, N.J.: Wiley & Sons, Inc.
- Faure, G., Huamanyauri, M. K., Salazar, I., Gómez, C., De Nys, E., & Dulcire, M. (2017). Privatisation of agricultural advisory services and

- consequences for the dairy farmers in the Mantaro Valley, Peru. *The Journal of Agricultural Education and Extension*, 23(3), 197-211. doi: 10.1080/1389224X.2017.1320639
- Fischer, A., & Jasny, L. (2017). Capacity to adapt to environmental change: evidence from a network of organizations concerned with increasing wildfire risk. *Ecology and Society*, 22(1), 23. <https://doi.org/10.5751/ES-08867-220123>
- Garson, G. D. (2014). *The Delphi method in quantitative research*. Asheboro, NC: Statistical Associated Publishing.
- Gliddon, D. G. (2006). *Forecasting a competency model for innovation leaders using a modified Delphi technique* (Doctoral dissertation). Available from ProQuest Dissertations & Theses Full Text. (3292523).
- Godfray, H. C. J., & Garnett, T. (2014). Food security and sustainable intensification. *Proceedings of the Philosophical Transactions of the Royal Society B*, 369, 20120273. doi:10.1098/rstb.2012.0273.
- Granovetter, M. (1995). The economic sociology of firms and entrepreneurs. In Alejandro Portes (Ed.), *The Economic Sociology of Immigration: Essays on Networks, Ethnicity, and Entrepreneurship* (pp. 128-165). New York, NY: Russell Sage Foundation.
- Held, D., McGrew, A., Goldblatt, D., & Perraton, J. (2000). Global transformations: Politics, economics and culture. In *Politics at the Edge* (pp. 14-28). London, UK: Palgrave Macmillan.
- Hudson, A. (2001). NGOs' transnational advocacy networks: From 'legitimacy' to 'political responsibility'?. *Global networks*, 1(4), 331-352. doi: 10.1111/1471-0374.00019
- Huffman, W. E. (2016). New insights on the impacts of public agricultural research and extension. *Choices*, 31(2), 1-6.
- Keck, M. E., & Sikkink, K. (1999). Transnational advocacy networks in international and regional politics. *International Social Science Journal*, 51(159), 89-101. doi: 10.1111/1468-2451.00179
- Keeney, S., Hasson, F., & McKenna, H. (2011). *The Delphi technique in nursing and health research*. Chichester, UK: Wiley-Blackwell.
- Kimberlin, S. E. (2010). Advocacy by nonprofits: Roles and practices of core advocacy organizations and direct service agencies. *Journal of Policy Practice*, 9(3-4), 164-182. doi: 10.1080/15588742.2010.487249
- Kitinaja, L., Saran, S., Roy, S. K., & Kader, A. A. (2011). Postharvest technology for developing countries: Challenges and opportunities in research, outreach and advocacy. *Journal of the Science of Food and Agriculture*, 91(4), 597-603. doi: 10.1002/jsfa.4295
- Lamm, A. J., Israel, G. D., & Diehl, D. (2013). A national perspective on the current evaluation activities in extension. *Journal of Extension*, 51(1). Retrieved from <http://www.joe.org/joe/2013february/a1.php>
- Lamm, K., & Lamm, A. (2017). *Capacity Assessment of Regional Networks: Synthesis Report*. GFRAS: Lausanne, Switzerland.
- Lamm, K. W., Lamm, A. J., Davis, K., & Swaroop, B. J. (2017). Identifying knowledge management capacity

- needs of rural advisory service networks. *Journal of International Agricultural and Extension Education* 24(2), 93-106. doi: 10.5191/jiaee.2017.24207
- Lee, C. C. (1998). Counselors as agents of social change. In C.C. Lee & G.R. Walz (Eds.), *Social action: A mandate for counselors* (pp. 3-14). Alexandria, VA: American Counselling Association.
- Lin, N. (2008). A network theory of social capital. In Dario Castiglione, Jan W. van Deth, & Guglielmo Wolleb (Eds.), *The handbook of social capital* (pp. 50-69). New York, NY: Oxford University Press.
- Myers, J. E., & Sweeney, T. J. (2004). Advocacy for the counseling profession: Results of a national survey. *Journal of Counseling & Development*, 82(4), 466-471. doi: 10.1002/j.1556-6678.2004.tb00335.x
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *The Academy of Management Review*, 23(2), 242-266. Retrieved from <http://www.jstor.org/stable/259373>
- Nistler, D. L., Lamm, A. J., & Stedman, N. (2011). Evaluating the influences on extension professionals' engagement in leadership roles. *Journal of Agricultural Education*, 52(3), 110-121. doi:10.5032/jae.2011.03110
- OECD. (2006). *The challenge of capacity development: working towards good practice*. Paris: Organisation for Economic Cooperation and Development
- Okoli, C., & Pawlowski, S. D. (2004). The Delphi method as a research tool: An example, design considerations and applications. *Information & Management*, 42(1), 15-29. doi:10.1016/j.im.2003.11.002
- Okwoche, V. A., Asogwa, B. C., & Obinne, P. C. (2012). Agricultural information utilization among rural sorghum farmers in Benue State of Nigeria. *European Journal of Scientific Research*, 76(2), 198-207. Retrieved from <http://eprints.icrisat.ac.in/id/eprint/5923>
- Özerdem, A., & Roberts, R. (2016). *Challenging post-conflict environments: Sustainable agriculture*. New York, NY: Routledge.
- Pardeck, J. T. (1996). Advocacy and parents of special needs children. *Early Child Development and Care*, 120(1), 45-53. <http://dx.doi.org/10.1080/0300443961200105>
- Raynor, J., York, P., & Sim, S. C. (2009). *What makes an effective advocacy organization*. Retrieved from TCC Group website: http://www.tccgrp.com/pdfs/EffectiveAdvocacy_final.pdf
- Rivera, W., & Alex, G. (2005.) National Strategy and Reform Process: *Case Studies of International Initiatives*. Agriculture and Rural Development (Discussion Paper No. 12) Extension Reform for Rural Development. Washington, DC: World Bank.
- Rose, S. L. (2013). Patient advocacy organizations: institutional conflicts of interest, trust, and trustworthiness. *The Journal of Law, Medicine & Ethics*, 41(3), 680-687. doi: <https://doi.org/10.1111/jlme.12078>
- Smith, S. R., & Lipsky, M. (1993). *Nonprofits for hire: The welfare state in the age of contracting*. Cambridge, MA: Harvard University Press.

- Snow, K. C. (2013). The importance of advocacy and advocacy competencies in human service professions. *Journal of Human Services*, 33(1), 5-16. doi: 10.1155/2012/490647
- Stone, D. (2002). Introduction: Global knowledge and advocacy networks. *Global networks*, 2(1), 1-12. doi: 10.1111/1471-0374.00023
- Sosin, M., & Caulum, S. (1983). Advocacy: A conceptualization for social work practice. *Social Work*, 28(1), 12-17. <https://doi.org/10.1093/sw/28.1.12>
- Swanson, B. E., & Rajalahti, R. (2010). *Strengthening agricultural extension and advisory systems* (Discussion Paper No. 45). Washington, DC: World Bank.
- Taylor, E. D. (1987). *From issue to action: An advocacy program model*. Lancaster, PA: Family and Children's Service.
- Woolcock, M., & Narayan, D. (2000). Social capital: Implications for development theory, research, and policy. *The World Bank Research Observer*, 15(2), 225-249. doi: 10.1093/wbro/15.2.225
- World Bank. (2012). *Agricultural innovation systems: An investment sourcebook*. Washington, DC: World Bank.
- World Health Organization (2017, August 9). *Global health observatory (GHO) data*. Social Media Today RSS. Retrieved from <http://socialmediatoday.com>
- Ziglio, E. (1996). The delphi method and its contribution to decision-making. In M. Adler, & E. Ziglio (Eds.), *Gazing into the oracle: The delphi method and its application to social policy and public health* (pp. 3-33). Bristol, PA: Jessica Kingsley Publishers.
- Zhang, Y. H., Jia, X. Y., Lin, H. F., & Tan, X. F. (2013). Be careful! Avoiding duplication: A case study. *Journal of Zhejiang University-Science B*, 14(4), 355-358.