ARTICLE

WILEY SUDOO

The perceived importance of intersectoral collaboration by health care alliances

Larry R. Hearld¹ 🕕 | Jeffrey A. Alexander² | Laura J. Wolf³ | Yunfeng Shi³

¹University of Alabama at Birmingham

²The University of Michigan

³Pennsylvania State University

Correspondence Email: lhearld@uab.edu

Funding information

This work was supported by a grant from the Robert Wood Johnson Foundation. The authors report no conflicts of interest.

Abstract

There is growing interest in the use of intersectoral collaboration (e.g., alliances, coalitions, partnerships) to address complex, health-related issues in local communities. Relatively little empirical research, however, has examined how to foster and sustain collaboration across sectors during later stages of development, despite a recognition that the needs and goals for collaboration may change over time. The purpose of this study was to address this gap by examining the perceptions of alliance participants regarding the importance of collaborating with different industry sectors as alliances transitioned from stable, prescriptive foundation support to a more uncertain future. Our findings suggest that, in addition to the contextual characteristics highlighted in previous research, the perceived importance of intersectoral collaboration varies for different types of alliances and participants. Moreover, the salience of these characteristics varied for different types of collaboration, in our case, collaboration with nonmedical health care sectors and nonhealth care sectors. Collectively, our findings point to the importance of thinking more comprehensively, across multiple levels of influence, when considering ways to foster or sustain intersectoral collaboration.

1 | INTRODUCTION

There is growing interest in the use of intersectoral collaboration (e.g., alliances, coalitions, partnerships) to address complex, health-related issues in local communities (Mays & Scutchfield, 2010; Prybil et al., 2014; Woulfe, Oliver, Siemering, & Zahner, 2010). Research to date on the development of collaborations in health care has emphasized the conditions that give rise to their formation (Butterfoss, Lachance, & Orians, 2006; Konishi & Ray, 2003). For example, two consistent findings in this research are that agreement on the issue(s) to be addressed and a history of collaboration are precursors to alliance formation (Andranovich, 1995; Ansell & Gash, 2008; Gray, 1989; Waddock, 1986). Comparatively little empirical research, however, has examined how to foster and sustain collaboration during

later stages of development, despite a recognition that the needs and goals for collaboration may change over time (Butterfoss et al., 2006).

The purpose of this study was to address this gap in the literature by examining the perceptions of alliance participants regarding the importance of collaborating with different industry sectors as alliances transitioned from stable, prescriptive foundation support to a more uncertain future. Specifically, the study addresses the following research questions:

How much importance do alliance participants ascribe to collaborating with different industry sectors as they transition into a more uncertain operating environment?

Do the perceptions of alliance participants regarding the importance of collaborating with different industry sectors at this critical juncture vary as a function of community, alliance, and member characteristics?

Participant perspectives are especially important in organizations like alliances because they depend on their participants to directly develop and implement strategy. Therefore, a better understanding of these perceptions and the factors that may influence them is important for identifying potential opportunities for and barriers to intersectoral collaboration that can further alliance efforts to improve health in local communities.

2 | BACKGROUND

Intersectoral collaboration, generally defined, brings "actors from state, market and civil society sectors together to achieve mutual understanding on an issue and negotiate and implement mutually agreeable plans for tackling the issue once it is defined" (Kalegaonkar & Brown, 2000). Our consideration of the characteristics that may be associated with the perceptions of alliance participants regarding the importance of intersectoral collaboration was based on social ecological models that emphasize nested levels of factors that may affect individual and organizational health care decision-making (Golden & Earp, 2012; Richard, Gauvin, & Raine, 2011). Ecological perspectives have grown in popularity because they recognize that most public health issues are complex and rooted in multiple levels of influence (e.g., individual behaviors, interpersonal and interorganizational relationships, organizational strategy, community resources; Sallis, Owen, & Fisher, 2015; Stokols, 1996). Of particular relevance for our study were participant-, alliance-, and community-level characteristics, which we describe in more detail below. Given the absence of empirical research that has taken up these questions among alliances in later stages of development, however, we consider this study exploratory and do not offer a priori hypotheses for these characteristics.

Participants are critical stakeholders for alliances (Butterfoss, Goodman, & Wandersman, 1996; Chinman & Wandersman, 1999; Chinman, Anderson, Imm, Wandersman, & Goodman, 1996). Participants in an alliance are, in effect, synonymous with the alliance given the central role they play in developing and implementing strategy. For example, many leaders of local organizations donate their time to serving on alliance board of directors and other various committees. In some cases, these organizations will also contribute essential resources (e.g., health insurance claims data) to make alliance programs (e.g., public reporting) feasible. Yet the volunteer nature of participation also means that the degree of commitment and level of engagement may vary between participants (Feinberg, Greenberg, & Osgood, 2004; Zakocs & Edwards, 2006). Similarly, participants from different industry sectors (e.g., health care and nonhealth care) often have different missions, norms of operation, time horizons for goal achievement, and resources available to pursue those goals (Prybil, Jarris, & Montero, 2015). Such differences may translate into alliance participants, we considered a range of participant characteristics that may influence how they perceive the importance of intersectoral collaboration, including intensity of participation, perceived strategic priorities, and stakeholder type.

Alliances can also differ considerably in how they are organized to improve the conditions in their local communities, such as their membership composition (e.g., balanced vs. concentrated representation between sectors) and how they are legally structured (e.g., formally constituted as a 501c3 entity or informally as a partnership). Previous research has

shown that such factors are correlated with the perceptions of participants regarding alliance decision making (e.g., types of programs pursued, program buy-in) and participation value (e.g., costs and benefits of participation; Hearld, Alexander, Bodenschatz, Louis, & O'Hora, 2013; Metzger, Alexander, & Weiner, 2005; Prestby, Wandersman, Florin, Rich, & Chavis, 1990). Therefore, we considered three alliance characteristics in this study: legal structure, alliance size, and stakeholder heterogeneity.

Finally, community characteristics are important given the goals of improving the overall quality of health care in targeted communities (Painter & Lavizzo-Mourey, 2008). Programmatic efforts to improve health and health care in local communities must reflect the underlying challenges facing these communities, whether these are health care related, public health-related, or social. Consequently, it is important to consider differences between communities, such as sociodemographic characteristics and health status, characteristics that other studies have also found to be important correlates of alliance formation (Bryson, Crosby, & Stone, 2006; Butterfoss, 2007).

3 | METHOD

3.1 Study context

The study focused on 15 multisector health care alliances that were participants in the Robert Wood Johnson Foundation's (RWJF) Aligning Forces for Quality (AF4Q) initiative. AF4Q was a designed to improve the overall quality of health care in targeted communities by aligning the efforts of various community stakeholders, including health care providers (physicians and hospitals), health care purchasers (employers and insurers) and health care consumers (patients), through multistakeholder alliances to address local health care needs and problems (Painter & Lavizzo-Mourey, 2008). Final decisions about the composition of the alliances were made locally, including the proportion of members included from each sector, which industry sectors (if any) were included beyond those that were required, and which specific individuals and organizations were recruited from each of the sectors.

The first phase of the AF4Q program began in 2006 and the program concluded in 2015, with two alliances being added in later phases (2009 and 2010, respectively). Some of the alliances were created de novo for the program, but most had been in existence prior to applying. Given this history, the alliances we studied were well beyond the formation stage, with all of them operating for more than 5 years, many for well over 10 years. The end of the AF4Q program resulted in a significant loss of funding for the alliances and created a critical strategic juncture as the alliances began to define their future without the financial support of the RWJF. More details on the AF4Q program are provided elsewhere (Scanlon et al., 2012, 2016). The study protocol was approved by each author's respective institutional review board.

3.2 Data sources

Data were drawn from three data sources. The first data source was an Internet-based survey (alliance survey) of alliance participants in 15 of the 16 AF4Q alliances. The survey was administered at the end of the AF4Q program (one alliance was unable to participate because it was in the process of closing down operations at the time of survey implementation). The survey sampling frame was developed from a comprehensive list of alliance participants provided by each alliance (i.e., staff and consultants, board and leadership team members, committee and workgroup members, advisory group members, and members-at-large). The survey was conducted from June 2015 to September 2015. A total of 638 individuals (38.6%) completed the entire survey (range across alliances 21.8%–92.9%). Additionally, 77 (4.7%) responded to a portion of the survey. All participants provided informed written consent as part of the survey.

The second data source was the Area Resource File, which provided information about community characteristics (i.e., median age, racial/ethnic heterogeneity). The third data source was the County Health Rankings, a collaboration between the RWJF and the University of Wisconsin Population Health Institute to "provide a revealing snapshot of how health is influenced by where we live, learn, work, and play" (RWJF, n.d.)

858

TABLE 1 Principal components analysis results

	Nonmedical, health care-related ($\alpha = 0.80$)	Nonhealth-related ($\alpha = 0.93$)
Public health	0.83	0.26
Social services	0.81	0.40
Behavioral health	0.86	0.24
Transportation	0.46	0.74
Housing	0.46	0.78
Recreation	0.28	0.86
Food environment	0.44	0.76
Community planning	0.27	0.79
Criminal justice	0.27	0.83
Faith-based organizations	0.26	0.76
Environmental planning	0.23	0.85
Education	0.54	0.51

859

 $W_{II} = v$

Note. Items were retained if they had a factor loading greater 0.60 on one factor and a factor loading less than 0.40 on the other factor. Based on these criteria, one item/sector was dropped (education).

3.3 | Variables

Our analysis included two dependent variables. These variables were based on a single question that asked respondents to rate how important they believed it was for the alliance to collaborate with 12 different industry sectors: public health, social services, behavioral health, transportation, housing, recreation, food environment, community planning, criminal justice, faith-based organizations, environmental planning, and education. Responses were recorded on a 5-point scale ranging from 1 (*not at all important*) to 5 (*extremely important*). Responses to these items were subjected to principal component analysis with varimax rotation. The results of this analysis indicated two factors (Table 1). One item (education) was dropped because it did not load substantially on either factor. Based on the factor-loading pattern, the two factors were labeled: nonmedical, health care-related ($\alpha = 0.80$) and nonhealth care ($\alpha = 0.93$). Finally, our two dependent variables were constructed by averaging across the items that loaded on the respective factors.

3.3.1 | Participant characteristics

Participant characteristics were assessed with three groups of variables. First, we were interested in the participants' perceptions of future strategic priorities of the alliance. We believe such perceptions are especially important in the case of our alliances because of the critical juncture they found themselves at-maintaining collaboration in the face of the loss of a major funding source. Participants were asked: "In your view, what is the appropriate level of priority that the alliance should give each of the following possible alliance goals over the next 5 years?" The five items were as follows: (a) preserving the alliance as a viable organizational entity; (b) sustaining the alliance's role as a neutral forum/convener for developing health or health care strategies and initiatives in the community; (c) ensuring that the initiatives/programs started by the alliance continue to be offered by the alliance; (d) expanding the population(s) that alliance initiatives/programs serve; and (e) initiating new programs or initiatives beyond those currently offered by the alliance. Responses to all five items were recorded on a 5-point scale ranging from 1 (*not a priority*) to 5 (*essential*).

The analysis also considered participant' intensity of participation, which was assessed with a single question that asked participants to indicate what percentage of their time they devoted to alliance activities over the past 6 months, which we used to create three dummy indicators: (a) less than 5% (referent), (b) 5%–24%, and (c) 25% or greater. Finally, seven dummy indicators accounted for different types of stakeholder participants: (a) staff (referent), (b) insurer, (c) provider, (d) government agency, (e) employer, (f) consumer, and (g) other.

3.3.2 Alliance characteristics

Three dummy indicators were included to reflect the organizational structure of the alliance: (a) an independent, standalone alliance (referent), (b) a subsidiary of another organization, and (c) an informal partnership. The heterogeneity of alliance members was measured with a modified Gini coefficient (based on the proportion of participants belonging to the different stakeholder groups identified above). Given our interest was in both nonmedical health care sector collaboration and nonhealth care sector collaboration, we also considered the number existing members in these two categories.

3.3.3 Community characteristics

Given the goals of improving health in local communities, our community characteristics focused on physical, sociodemographic, and health characteristics of the residents of these communities. Community health need was a composite based on the County Health Rankings and Roadmaps data. Following the approach by Singh, Young, Daniel Lee, Song, and Alexander (2015), we began by calculating the z-score for 16 indicators from four domains: (a) clinical care (diabetic monitoring, preventable hospital stays, access of primary care physicians); (b) health behaviors (adult smoking, adult obesity, excessive drinking, teen births, motor vehicle crash deaths); (c) social and economic factors (children in poverty, social associations, unemployment, violent crimes); (d) and the physical environment (air pollution, severe housing problems, limited access to healthy foods). These indicators were then weighted and summed for each domain. These domains were then once again weighted and summed to create the final composite, with larger values indicating greater community health need. Median age was defined as the median age of the residents of the counties served by the alliance.

Racial and ethnic heterogeneity was measured with Blau's (1977) index of heterogeneity using five county-level racial and ethnic groups: (a) proportion of county residents that were White, (b) proportion of county residents that were Black, (c) proportion of county residents that were Hispanic, (d) proportion of county residents that were Asian, and (e) proportion of county residents that were some other race or ethnicity. Consistent with other research (Bantel & Jackson, 1989; Harrison, Price, & Bell, 1998), the index was constructed as $1-\Sigma p_i$, where p was the proportion of residents in a county from the *i*th racial and ethnic group. Thus, larger values indicated greater heterogeneity.

3.4 | Analytic strategy

Individual participants were the unit of analysis. Univariate statistics were used to describe the study sample. The multivariate analysis used two random effects regression models, one for each dependent variable, and clustered standard errors at the alliance level to account for the potential correlations of individual respondents within the same alliance.

4 | RESULTS

4.1 Univariate statistics

On average, respondents rated collaboration with nonmedical health care sectors (mean [M] = 4.38, standard deviation [SD] = 0.64) as more important than collaboration with nonhealth care sectors (M = 3.28, SD = 0.97; Table 2). Among the individual sectors, respondents rated collaboration with public health as most important (M = 4.51, SD = 0.68), on average, and criminal justice as least important (M = 2.90, SD = 1.18). Consistent with this pattern, very few respondents (n = 3) rated any one of the nonmedical health care sectors as "not at all important." In contrast, no fewer than 25 respondents (4.0%) rated one of the nonhealth care sectors as "not at all important." For example, over 12% (n = 76) of

860

	Mean / SD	Not at all important (N / %)	Slightly important (N / %)	Moderately important (N / %)	Very important (N / %)	Extremely important (N / %)
Nonmedical health care-related sectors	4.38 (0.64)					
Public health	4.51 (0.68)	0 / 0%	10 / 1.6%	38 / 6.1%	201/32.0%	379 / 60.4%
Social services	4.17 (0.86)	2 / 0.3%	25 / 4.0%	100/16.0%	236 / 37.7%	263/42.0%
Behavioral health	4.45 (0.71)	1/0.2%	10 / 1.6%	45/7.1%	222/35.2%	353/55.9%
Nonhealth care sectors	3.28 (0.97)					
Transportation	3.29 (1.12)	38 / 6.2%	102/16.8%	216/35.5%	152/25.0%	101/16.6%
Housing	3.24 (1.13)	37/6.1%	127/20.9%	195/32.1%	152/25.0%	96/15.8%
Recreation	3.06 (1.17)	58/9.5%	140/23.0%	203 / 33.3%	125/20.5%	84/13.8%
Food environment	3.58 (1.15)	32/5.2%	84 / 13.6%	153/24.7%	195/31.5%	155/25.0%
Community planning	3.65 (1.12)	25/4.0%	76 / 12.2%	163/26.1%	188/30.1%	173/27.7%
Criminal justice	2.90 (1.18)	76/12.5%	161/26.4%	185 /30.4%	121/19.9%	66/10.8%
Faith-based organizations	3.31 (1.23)	56/9.1%	106/17.2%	172/27.9%	156/25.3%	126/20.5%
Environmental planning	3.14 (1.18)	53/8.7%	137/22.5%	184/30.3%	14123.2%	93/15.3%
Note. $M = mean$; $SD = standard deviation$.						

TABLE 2 Descriptive statistics for intersectoral collaboration items

TABLE 3 Descriptive statistics for community, alliance, and individual characteristics (N = 637)

Participant characteristics	
Strategic priorities (mean / SD)	
Preserving the alliance as a viable organizational entity	4.08 (0.90)
Sustaining the alliance's role as a neutral forum/convener for developing health or health care strategic and initiatives in the community	4.19 (0.82)
Ensuring that the initiative/programs started by the alliance continue to be offered by the alliance	3.64 (0.89)
Expanding the populations(s) that alliance initiatives/programs serve	3.69 (0.95)
Initiating new programs or initiatives beyond those currently offered by the alliance	3.68 (0.97)
Stakeholder type (N / %)	
Staff	113 (17.5%)
Insurer	55 (8.5%)
Provider	206 (31.9%)
Government	27 (4.2%)
Employer	25 (3.9%)
Consumer	97 (15.0%)
Other	122 (18.9%)
Level of participation (N / %)	
0–5%	290 (46.0%)
6%-25%	226 (35.9%)
Greater than 25%	114 (18.1%)
Alliance characteristics	
Organizational structure (N / %)	
Stand alone alliance	563 (77.1%)
Subsidiary	119 (16.3%)
Partnership	48 (6.6%)
Stakeholder heterogeneity (mean / SD)	0.72 (0.06)
Size (mean / SD)	
Number of nonhealth care organization members	18.18 (12.27)
Number of health care organization members	29.49 (12.45)
Community characteristics (mean / SD)	
Overall community needs ^a	4.08 (0.90)
Racial/ethnic heterogeneity	0.24 (0.14)
Median age	39.22 (2.77)

Note. M = mean; SD = standard deviation.

^aHigher values indicate more need/worse conditions.

the sample respondents reported that collaboration with the criminal justice sector was "not at all important," followed by recreation (n = 58, or 9.5%) and faith-based organizations (n = 56, or 9.1%).

On average, the top-rated strategic priority was "sustaining the alliance's role as a neutral forum for developing health or health care strategic initiatives in the community" (M = 4.19, SD = 0.82; Table 3). This priority was followed closely by "preserving the alliance as a viable organizational entity" (M = 4.08, SD = 0.90). The lowest rated strategic priority, on average, was "ensuring that the initiatives/programs started by the alliance continue to be offered by the alliance" (M = 3.64, SD = 0.89).

ILEY

4.2 | Multivariate results-participant characteristics

Two strategic priorities were significantly associated with respondent ratings of the importance of collaborating with nonmedical health care sectors. On average, respondents who believed that sustaining the alliance's role as a neutral forum was a more important strategic priority were more likely to believe that collaboration with nonmedical health care sectors was important (b = 0.09, p < .05; Table 4). Likewise, respondents who believed that expanding the population that the alliance served was a more important strategic priority were more likely to believe that collaboration with nonmedical health care sectors was important (b = 0.13, p < .001).

Three strategic priorities were significantly associated with respondent ratings of the importance of collaborating with nonhealth care sectors. First, once again respondents who believed more strongly that expanding the population that the alliance served was an important strategic priority were more likely to believe that collaboration with nonhealth care sectors was important (b = 0.17, p < .001). Similarly, respondents who believed more strongly that ensuring the programs/initiatives started by the alliance were continued was an important strategic priority were more likely to believe that collaboration with nonhealth care sectors was important on the alliance were continued was an important strategic priority were more likely to believe that collaboration with nonhealth care sectors was important (b = 0.12, p < .01). Finally, respondents who believed more strongly that preserving the alliance as a viable organizational entity was an important strategic priority were less likely to believe that collaboration with nonhealth care sectors was important (b = 0.13, p < .01).

Relative to staff respondents, respondents representing government organizations were more likely to believe that collaborating with nonmedical health care sectors (b = 0.36, p < .05) and nonhealth care sectors (b = 0.85, p < .001) was more important. Similarly, consumer respondents were positively associated with the perceived importance of collaborating with nonmedical health care sectors (b = 0.26, p < .05) and nonhealth care sectors (b = 0.45, p < .01), relative to staff respondents.

4.3 | Multivariate results-alliance characteristics

Only one alliance characteristic was associated with the perceived importance of intersectoral collaboration. Members of alliances structured as partnerships, on average, rated the importance of collaborating with nonmedical health care sectors (b = 0.90, p < .01) and nonhealth care sectors (b = 1.14, p < .05) more highly than members of stand-alone alliances.

4.4 | Multivariate results-community characteristics

Respondents who were members of alliances that served communities with greater overall needs were more likely to believe that the alliance should collaborate with nonmedical health care sectors (b = 0.34, p < .05) and nonhealth care sectors (b = 0.72, p < .05). We also examined whether these relationships were due to the influence of individual subdomains (i.e., health behaviors, clinical care, social and economic factors, and physical environment) by reestimating the regression models using the individual subdomains as covariates. The analysis indicated that no individual subdomain was significantly associated with either dependent variable (results available from authors upon request).

5 | DISCUSSION

The findings of our analysis provide some important insights on alliance participant' perspectives on collaboration with different industry sectors during an important transitional point in the alliance's life cycle-the end of significant foundation support. We discuss some potential explanations and implications of these findings in the sections that follow, organized by research question.

How much importance do alliance participants ascribe to collaborating with different industry sectors as they transition into a more uncertain operating environment?

WILE

TABLE 4 Random effects regression results

⁸⁶⁴ WILEY-

	Collaboration with nonmedical health care sectors ($N = 585$)	Collaboration with nonmedical, nonhealth care sectors (N = 582)
	b (<i>SE</i>)	b (<i>SE</i>)
Intercept	1.26 (1.30)	-0.86 (2.47)
Participant characteristics		
Preserving the alliance as a viable organizational entity	-0.06 (0.04)	-0.13 (0.05) [*]
Sustaining the alliance's role as a neutral forum/convener for developing health or health care strategic and initiatives in the community	0.09 (0.04)*	0.06 (0.05)
Ensuring that the initiative/programs started by the alliance continue to be offered by the alliance	0.03 (0.03)	0.12 (0.05)**
Expanding the populations(s) that alliance initiatives/programs serve	0.13 (0.03)***	0.17 (0.05)***
Initiating new programs or initiatives beyond those currently offered by the alliance	0.01 (0.03)	0.06 (0.05)
Stakeholder type		
Staff	Referent	Referent
Insurer	-0.02 (0.12)	-0.09 (0.18)
Provider	0.17 (0.10)	0.24 (0.14)
Government	0.36 (0.15)*	0.85 (0.21)***
Employer	0.06 (0.15)	-0.03 (0.21)
Consumer	0.26 (0.10)*	0.45 (0.15)**
Other	0.19 (0.10)	0.31 (0.15)*
Level of participation		
0-5%	Referent	Referent
6%-25%	0.04 (0.05)	0.05 (0.08)
Greater than 25%	0.10 (0.10)	0.10 (0.14)
Alliance-level characteristics		
Organizational structure		
Stand-alone alliance	Referent	Referent
Subsidiary	0.10 (0.12)	0.36 (0.23)
Partnership	0.90 (0.20)**	1.14 (0.37)*
Stakeholder heterogeneity	0.27 (5.99)	0.43 (1.84)
Size		
Number of nonhealth care organization members	-0.02 (0.02)	-0.02 (0.02)
Number of health care organization members	0.03 (0.01)	0.04 (0.02)
Community characteristics		
Overall community needs ^a	0.34 (0.11)*	0.72 (0.23)*
Racial/ethnic heterogeneity	0.97 (0.65)	1.60 (1.26)
Median age	0.01 (0.02)	0.03 (0.05)

Note. SE = standard error.

^aHigher values indicate more need/worse conditions.

Previous empirical research on cross-sectoral alliances has not typically differentiated between specific industry sectors when considering collaboration, despite acknowledging the importance of and challenges to leveraging diverse participation. Our study suggests that such distinctions are important, with participants believing that collaboration with nonmedical health sectors was more important than collaboration with nonhealth sectors. One interpretation of this finding is that these differences reflect an informed understanding of the types of collaboration that the alliance needs to accomplish its goals. For example, collaboration with public health agencies might be viewed as more important for promoting health behaviors in the community than collaboration with organizations from the criminal justice system.

Similarly, but more extreme, is the possibility that participants believe that collaboration with nonhealth care sectors will be detrimental to the alliance. Indeed, the fact that "preserving the alliance as a viable entity" was negatively associated the perceived importance of collaborating with nonhealth care sectors suggests that participants may believe that collaboration with these sectors could undermine the sustainability of the alliance. Consistent with these explanations, we found that a modest percentage of respondents indicated that collaboration with nonhealth sectors was "not at all important"; however, the fact that most respondents still believed it was important to collaborate with these sectors suggests there is more to the story.

Another explanation is that a history of collaboration with primarily other health care sectors has resulted in norms of thinking and behaving that make it difficult to more broadly consider collaboration opportunities with nonhealth care sectors alliances. The consequence of such entrenched ways of thinking could lead to organizational inertia in later stages of their development, with alliance members putting more weight on 'incremental' collaboration with health care-related sectors rather than "radical" departures that entail collaboration with nonhealth care sectors.

Which explanation is "correct" has some important implications for whether and how alliance leaders may attempt to foster intersectoral collaboration. For example, if the differences reflect an informed understanding of the types of collaboration needed by the alliance, then efforts by leaders to foster greater intersectoral collaboration may be misplaced and potentially even detrimental (e.g., alienate participants). On the other hand, if the differences are a result of an inability to see beyond traditional types of collaboration, then the challenge for alliance leaders is to find ways to change the perceptions of participants regarding the importance of broader intersectoral collaboration. Consequently, future research is needed to help assess which of these explanations has more merit.

Do the perceptions of alliance participants regarding the importance of collaborating with different industry sectors at this critical juncture vary as a function of community, alliance, and member characteristics?

Our analysis suggests that, as a group, individual characteristics were more "robust" correlates of the perceptions of alliance participants regarding the importance of intersectoral collaboration than alliance and community characteristics, particularly perceived strategic priorities and stakeholder type. On one hand, this finding is not surprising given that our primary interest was the *perceived* importance of collaboration with different industry sectors. It is conceivable that individual characteristics have a more direct impact on participant' cognitions, such as perceptions of importance, and even mediate the effects of characteristics at other levels of influence (e.g., alliance, community). For example, alliance characteristics such as size and stakeholder heterogeneity may shape a participant's opinion about the strategic priorities of the alliance, which in turn influences how important s/he views collaboration with other industry sectors.

Even so, this finding extends previous research that has tended to emphasize contextual characteristics, especially in the alliance formation stages (Butterfoss et al., 2006; Eisenhardt & Schoonhoven, 1996; Kegler, Rigler, & Honeycutt, 2010). In particular, our analysis highlights potentially more actionable opportunities for influencing the perceptions of alliance participants regarding the importance of collaborating with different industry sectors. For example, alliance leaders could focus on stakeholder types that do not assign high importance to collaboration with different industry sectors when trying to foster collaboration. In contrast, community characteristics may be more immutable (e.g., racial/ethnic heterogeneity), at least in the short term. At the very least, our findings point to the importance of thinking more comprehensively, across multiple levels of influence, when considering ways to foster or sustain intersectoral collaboration. Consistent with other research (Ansell & Gash, 2008; Butterfoss et al., 1996, 2006), our study did find some support for the influence of community characteristics, particularly overall community need, which was associated with the perceived importance of collaboration with both health and nonhealth sectors. These findings suggest that alliance participants recognize the value of looking at a broad range of industry sectors when the needs are greater. It is also notable that the individual dimensions of need were not significantly associated with the perceived importance of collaboration. These findings indicate that it is the amalgamation of community needs that may drive whether participants believe it is important to collaborate beyond traditional medical service organizations. One potential implication of this finding is that it may be difficult to focus on a single attribute (e.g., disease condition, access to care) when trying to mobilize intersectoral collaboration.

Similar to community need, only one alliance characteristic (partnerships) was associated with greater perceived importance of collaboration with both health and nonhealth sectors. Partnerships in our study were not legally constituted entities, but rather they relied on informal relationships between participants. Consequently, it is conceivable that "norms" of collaboration may be more prevalent in partnerships. In other words, because partnerships depend more heavily on collaboration, they may simply rate collaboration as more important. This finding suggests that how an alliance is structured may have important implications for how much emphasis is placed on collaboration across a wide range of sectors and underscores the need to carefully consider to what extent relationships between participants should be formalized.

5.1 | Limitations

866

The findings and their implications should be interpreted in light of several considerations. First, the study response rate (39%) was less than what we would have preferred. However, as part of the evaluation, researchers using data from earlier waves of this survey conducted analyses to identify possible nonresponse bias in the survey data and found that responders did not differ significantly from nonresponders in terms of their attitudes about the alliance. Second, the analysis was cross-sectional, and thus we were not able to establish causal relationships nor were we able to assess changes over time.

Finally, it is worth noting that our study focused on the independent associations between the perceived importance of intersectoral collaboration and a range of community, alliance, and individual characteristics. It is possible that these characteristics interact in ways that may also influence perceptions of intersectoral collaboration importance. For example, expanding the populations covered by the alliance (a strategic priority) may be more strongly associated with the perceived importance of intersectoral collaboration in communities with greater need. Although not limitations per se, such questions were beyond the scope of what we could adequately address in this manuscript, but merit consideration in future research.

5.2 | Conclusion

A growing body of research has documented the influence of social determinants of health (Marmot & Wilkinson, 2005; Wilkinson & Marmot, 2003), which suggests a need for broad, multisectoral participation to address multifaceted issues like health and health care in local communities. Relatively little research, however, has assessed the perceptions of alliance participants regarding the importance of intersectoral collaboration and the factors that may influence these perceptions, especially among health care collaborations at more mature stages of development.

The purpose of this study was to examine the perceptions of alliance participants regarding the importance of intersectoral collaboration and how these perceptions varied as function of participant, alliance, and community characteristics as the alliances transitioned into more uncertain operating environments. Our findings suggest that, in addition to the contextual characteristics highlighted in previous research, intersectoral collaboration may vary for different types of alliances and participants. It is also notable, however, that the salience of these characteristics varied for different types of collaboration, in our case, collaboration with nonmedical health care sectors and nonhealth care sectors. Moreover, participants believed that it was more important to collaborate with nonmedical health care sectors than nonhealth care sectors. Collectively, our findings highlight the nuanced opportunities and challenges to fostering intersectoral collaboration in health care.

ORCID

Larry R. Hearld (b) https://orcid.org/0000-0002-2304-0246

REFERENCES

- Andranovich, G. (1995). Achieving consensus in public decision making: Applying interest-based problem solving to the challenges of intergovernmental collaboration. *The Journal of Applied Behavioral Science*, 31(4), 429–445.
- Ansell, C., & Gash, A. (2008). Collaborative governance in theory and practice. Journal of Public Administration Research and Theory, 18(4), 543–571.
- Bantel, K. A., & Jackson, S. E. (1989). Top management and innovations in banking: Does the composition of the top team make a difference? *Strategic Management Journal*, 10(S1), 107–124.
- Blau, P. M. (1977). Inequality and heterogeneity: A primitive theory of social structure (Vol. 7). New York: Free Press.
- Bryson, J. M., Crosby, B. C., & Stone, M. M. (2006). The design and implementation of Cross-Sector collaborations: Propositions from the literature. *Public Administration Review*, 66(S1), 44–55.
- Butterfoss, F. D. (2007). Coalitions and partnerships in community health. Hoboken, NJ: John Wiley & Sons.
- Butterfoss, F. D., Goodman, R. M., & Wandersman, A. (1996). Community coalitions for prevention and health promotion: Factors predicting satisfaction, participation, and planning. *Health Education & Behavior*, 23(1), 65–79.
- Butterfoss, F. D., Lachance, L. L., & Orians, C. E. (2006). Building allies coalitions: Why formation matters. *Health Promotion Practice*, 7(Suppl. 2), 23S–33S.
- Chinman, M. J., Anderson, C. M., Imm, P. S., Wandersman, A., & Goodman, R. M. (1996). The perceptions of costs and benefits of high active versus low active groups in community coalitions at different stages in coalition development. *Journal of Community Psychology*, 24(3), 263–274.
- Chinman, M. J., & Wandersman, A. (1999). The benefits and costs of volunteering in community organizations: Review and practical implications. *Nonprofit and Voluntary Sector Quarterly*, 28(1), 46–64.
- Eisenhardt, K. M., & Schoonhoven, C. B. (1996). Resource-based view of strategic alliance formation: Strategic and social effects in entrepreneurial firms. *Organization Science*, 7(2), 136–150.
- Feinberg, M. E., Greenberg, M. T., & Osgood, D. W. (2004). Readiness, functioning, and perceived effectiveness in community prevention coalitions: A study of communities that care. American Journal of Community Psychology, 33(3-4), 163–176.
- Golden, S. D., & Earp, J. A. L. (2012). Social ecological approaches to individuals and their contexts: Twenty years of health education & behavior health promotion interventions. *Health Education & Behavior*, 39(3), 364–372.
- Gray, B. (1989). Collaborating: Finding common ground for multiparty problems. San Francisco: Jossey-Bass.
- Harrison, D. A., Price, K. H., & Bell, M. P. (1998). Beyond relational demography: Time and the effects of surface-and deep-level diversity on work group cohesion. Academy of Management Journal, 41(1), 96–107.
- Hearld, L. R., Alexander, J. A., Bodenschatz, L., Louis, C. J., & O'Hora, J. (2013). Decision-making fairness and consensus building in multisector community health alliances: A mixed-methods analysis. *Nonprofit Management and Leadership*, 28(2), 237– 247.
- Kalegaonkar, A., & Brown, L. D. (2000). Intersectoral cooperation: Lessons for practice: Boston: Institute for Development Research.
- Kegler, M. C., Rigler, J., & Honeycutt, S. (2010). How does community context influence coalitions in the formation stage? A multiple case study based on the Community Coalition Action Theory. BMC Public Health, 10(1), 90.
- Konishi, H., & Ray, D. (2003). Coalition formation as a dynamic process. Journal of Economic Theory, 110(1), 1–41.
- Marmot, M., & Wilkinson, R. (2005). Social determinants of health: Oxford: Oxford University Press.
- Mays, G. P., & Scutchfield, F. D. (2010). Improving public health system performance through multiorganizational partnerships. *Preventing Chronic Disease*, 7(6).
- Metzger, M. E., Alexander, J. A., & Weiner, B. J. (2005). The effects of leadership and governance processes on member participation in community health coalitions. *Health Education & Behavior*, 32(4), 455–473.
- Painter, M. W., & Lavizzo-Mourey, R. (2008). Aligning forces for quality: A program to improve health and health care in communities across the United States. *Health Affairs*, 27(5), 1461–1463.

867

WILEY

- Prestby, J. E., Wandersman, A., Florin, P., Rich, R., & Chavis, D. (1990). Benefits, costs, incentive management and participation in voluntary organizations: A means to understanding and promoting empowerment. *American Journal of Community Psychology*, 18, 117–149.
- Prybil, L., Jarris, P., & Montero, J. (2015). A perspective on public-private collaboration in the health sector. Washington, DC: National Academy of Medicine.
- Prybil, L., Scutchfield, F. D., Killian, R., Kelly, A., Mays, G. P., Carman, A., ... Fardo, D. W. (2014). Improving community health through hospital-public health collaboration: Insights and lessons learned from successful partnerships. Lexington, KY: Commonwealth Center for Governance Studies.
- Richard, L., Gauvin, L., & Raine, K. (2011). Ecological models revisited: Their uses and evolution in health promotion over two decades. *Annual Review of Public Health*, 32, 307–326.
- Robert Wood Johnson Foundation. (n.d.). About the county health rankings & roadmaps. Retrieved from http://www. countyhealthrankings.org/about-project
- Sallis, J. F., Owen, N., & Fisher, E. (2015). Ecological models of health behavior. Health behavior: Theory, Research, and Practice, 5, 43–64.
- Scanlon, D. P., Beich, J., Alexander, J. A., Christianson, J. B., Hasnain-Wynia, R., McHugh, M. C., & Mittler, J. N. (2012). The aligning forces for quality initiative: Background and evolution from 2005 to 2012. *American Journal of Managed Care*, 18(Suppl. 6), s115.
- Scanlon, D. P., Beich, J., Leitzell, B., Shaw, B. W., Alexander, J. A., Christianson, J. B., ... McHugh, M. (2016). The aligning forces for quality initiative: Background and evolution from 2005 to 2015. *American Journal of Managed Care*, 22(Suppl. 12), S346– S359.
- Singh, S. R., Young, G. J., Daniel Lee, S.-Y., Song, P. H., & Alexander, J. A. (2015). Analysis of hospital community benefit expenditures' alignment with community health needs: Evidence from a national investigation of tax-exempt hospitals. *American Journal of Public Health*, 105(5), 914–921.
- Stokols, D. (1996). Translating social ecological theory into guidelines for community health promotion. American Journal of Health Promotion, 10(4), 282–298.
- Waddock, S. (1986). Public-private partnership as social product and process. Research in Corporate Social Performance and Policy, 8, 273–300.
- Wilkinson, R. G., & Marmot, M. (2003). Social determinants of health: The solid facts: Geneva: World Health Organization.
- Woulfe, J., Oliver, T. R., Siemering, K. Q., & Zahner, S. J. (2010). Peer reviewed: Multisector partnerships in population health improvement. *Preventing Chronic Disease*, 7(6).
- Zakocs, R. C., & Edwards, E. M. (2006). What explains community coalition effectiveness? A review of the literature. American Journal of Preventive Medicine, 30(4), 351–361.

How to cite this article: Hearld LR, Alexander JA, Wolf LJ, Shi Y. The perceived importance of intersectoral collaboration by health care alliances. *J Community Psychol*. 2019;47:856–868. https://doi.org/10.1002/jcop.22158