Empirically Testing Collective Impact in Collaborative Initiatives

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Overview of White Paper

This White Paper is the product of the University of Nebraska at Omaha's Juvenile Justice Institute (JJI). The goal of this paper is to provide an overview for empirically testing and developing a reliable survey that captures the various domains and overarching construct of Collective Impact. The paper begins with a brief history of Collective Impact. We then outline the methodological approach and statistical analysis used to create measures that capture the overarching concept of Collective Impact. We close with a brief description of how Collective Impact will be used in JJI's future research agenda.

Collective Impact:

At any given moment, in communities across the globe, people from different sectors are working together to respond to complex social problems. In 2011, Kania and Kramer provided a framework that outlined "the five conditions for collective success," which brought to life the notion of Collective Impact. While successful collaborations had surely tapped into these elements before, Kania and Kramer (2011) outlined them in a way that succinctly captured the critical elements of success and the movement caught fire.

The five elements set forth in the original article include: common agenda; shared measurement; mutually reinforcing activities; continuous communication; and backbone support. Each is described below. Although a number of stakeholders now use this framework and numerous articles have been written on these concepts, they have undergone very little revision since their debut in 2011.

I. **Common agenda:** Participants have a shared vision and common understanding of both the problem and potential solutions to that problem.

II. **Shared measurement:** Collecting data and measuring results consistently across all participants ensures efforts remain aligned and participants hold each other accountable.

III.   **Mutually reinforcing activities:** Participant activities must be differentiated while still being coordinated through a mutually reinforcing plan of action.

IV.   **Continuous communication:** Consistent and open communication is needed across stakeholders to build trust, assure mutual objectives, and create common motivation.

V.   **Backbone support:** Creating and managing Collective Impact often requires a separate organization(s) with staff and a specific set of skills to serve as the backbone for the entire initiative and to coordinate participating organizations.

Shortly after the article was published in *Stanford Social Review*, the Collective Impact movement caught fire and swept across the country, showing up in Midwestern rural counties and states, large urban centers, and eventually spreading across the globe. Indeed, "many organizations in the social and private sectors have embraced the concept as a new way to achieve large-scale systems change" (Kania, Hanleybrown & Splansky, 2014).

By 2014, these concepts had been used across a broad variety of disciplines to help coordinate and strengthen joint efforts. That same year, the five conditions were summarized as follows in *Collective Insights about Collective Impact*:

The Five Conditions of Collective Impact

Common Agenda	All participants share a vision for change that includes a common understanding of the problem and a joint approach to solving the problem through agreed-upon actions.
Shared Measurement	All participating organizations agree on the ways success will be measured and reported, with a short list of common indicators identified and used for learning and improvement.
Mutually Reinforcing Activities	A diverse set of stakeholders, typically across sectors, coordinate a set of differentiated activities through a mutually reinforcing plan of action.
Continuous Communication	All players engage in frequent and structured open communication to build trust, assure mutual objectives, and create common motivation.
Backbone Support	An independent, funded staff dedicated to the initiative provides ongoing support by guiding the initiative's vision and strategy, supporting aligned activities, establishing shared measurement practices, building public will, advancing policy, and mobilizing resources.

Perhaps the very success of this movement is that it makes sense to a range of disciplines, and applies to a variety of social problems and translates across an assortment of collaboratives and communities. Its broad application and simplicity make it a user-friendly model of collaboration. Despite the widespread use, to our knowledge, neither the overarching concept of Collective Impact, nor the five underlying domains have been empirically tested.

Methodological Approach

In June 2016, the Juvenile Justice Institute set out to empirically measure Collective Impact. To develop items for the Collective Impact scale, we utilized sample indicators published in the Guide to Collective Impact: Sample Questions, Outcomes, and Indicators (Preskill, Parkhurst, & Juster, *no date*). The University of Nebraska at Omaha developed some additional items related specifically to juvenile justice. Each of the five factors were measured using both open-ended/multiple choice questions and 7-point Likert responses that ranged from Strongly Disagree to Strongly Agree (with a neutral midpoint) so that higher scores indicated greater Collective Impact. There were a total of 69 Likert-type items. Each factor had three items specific to a juvenile justice context but these items were not included in the analysis, to keep the focus of the scale general so it can be used across initiatives. The number of items for each factor varied:

a. Common Agenda (5 open-ended/multiple choice questions, 14 Likert items)
b. Shared Measurement (4 open-ended/multiple choice questions, 15 Likert items)
c. Mutually Reinforcing Activities (4 open-ended/multiple choice questions, 12 Likert items)
d. Continuous Communication (3 open-ended/multiple choice questions, 12 Likert items)
e. Backbone Support (7 open-ended/multiple choice questions, 16 Likert items)

To test the items, we created an online survey that was distributed to community stakeholders who work within juvenile justice in the state of Nebraska ($N = 93$). The survey was distributed to programs who receive Community-based Aid (CBA) state funds and to the Nebraska Juvenile Justice Association (NJJA) listserv. With the CBA respondents, the survey asked the respondents to indicate other members on their team who should complete the survey. The survey was then emailed to those identified. The total number of respondents from the CBA distribution was 107. To increase sample size to conduct analyses of items, we also sent the survey to the NJJA listserv, which garnered an additional 16 respondents.

All survey respondents were asked to consider only one team or collective effort and to identify the social problem (initiative) that the team was working to address. The following examples were provided for juvenile justice providers: reducing disproportionate minority contact, keeping youth from entering detention, and reducing the number of youth in the juvenile justice system.

Results

The primary goal of this initial analysis is to refine the Likert response items to create a shorter tool for measuring Collective Impact. To do so, we employed item factor analysis (IFA) using latent trait procedures for ordinal data in Mplus. IFA statistically tests each item and estimates how much that item is related to the latent factor (Wirth & Edwards, 2007). Therefore, in this analysis, we tested how well each item measured the respective Collective Impact factor (i.e., each a latent factor).

In the first step, we examined how well each item of the 60-items (9 items specific to juvenile justice contexts were removed) fit on its respective factor. For some of the items, not all of the response items were selected. For one item that measured common agenda, neither the strongly disagree or disagree option was selected and this item was removed in order for the model to estimate. For nine additional items, the strongly disagree option was not selected; for these items, thresholds (i.e., the point on the latent response scale that separates two discrete responses on a Likert-type scale; Wirth & Edwards, 2007) were collapsed so that the strongly disagree and disagree options were merged so that the model would estimate. Seven of these items were from the Common Agenda factor, one from Mutually Reinforcing Activities, and one from Continuous Communication. The overall model had good fit (CFI = 0.985; RMSEA = .049, p=0.573), in which CFI values greater than 0.97 and RMSEA values less than .05 indicate good fit.

To parse the scale down to fewer items, the next step involved removing items based on how well they fit to the factor and other descriptive information. All items were statistically related to their respective factors (all items had $r > .737$, $p < .001$). The model also found some highly correlated items within a factor that were removed; one item from Common Agenda and two items from Shared Measurement. Because all remaining items were related to the factor, we examined items for being facially similar to one another. As a result, we removed three additional items from the Backbone Support factor.

Final Model

The final model included 47 items with 9 or 10 items per factor (see Appendix). The overall model with these items removed had good fit according to CFI (CFI = 0.988); and acceptable fit according to RMSEA (RMSEA = .056, p=0.137). All items were statistically related to their respective factors (all items had $r > .687$, $p < .001$).

All five factors were statistically related to each other (Table 1). Common Agenda was negatively related to all other factors. In examining descriptive information for the items within each factor, it appears that most items for Common Agenda were endorsed in the direction of agreement, with few items endorsed in the direction of disagreement. This pattern differs from the other factor items, for which response options were more normally distributed across all response options.

The other four factors are all highly correlated to each other. Although it is beyond the scope of this paper, future analysis with larger sample sizes will examine whether these five factors are part of a higher order factor—Collective Impact. In examining these factor correlations from preliminary data, it appears that Backbone Support, Mutually Reinforcing Activities, Shared Measurement, and Continuous Communication may not be separate factors but actually a single Collective Impact factor; and that Common Agenda may be its own factor.

Table 1. Factor correlations

	Common Agenda	Backbone Support	Mutually Reinforcing	Shared Measurement	Continuous Communication
Common Agenda	--	- .375**	-.442**	- .550**	-.465**
Backbone Support	--	--	.854**	.774**	.909**
Mutually Reinforcing Activities	--	--	--	.836**	.958**
Shared Measurement	--	--	--	--	.834**
Continuous Communication	--	--	--	--	--

Discussion

One of the most intriguing findings of this initial research is that all of the factors were statistically related to each other, but Common Agenda was negatively related to all other factors. The Common Agenda questions on the survey get at the desire to share a common understanding of the problem, to bring in diversified voices and to share a vision or philosophical approach toward solutions. Our results indicate this concept resonates strongly with persons engaged in Collective Impact. However, the reality of implementing Collective Impact is quite different. The remaining four constructs each measures the ways in which individuals *actually complete work* on the Common Agenda. The negative correlation between the constructs and the lower loading may point to two underlying constructs: 1) the ideal of Collective Impact and 2) the actual work of implementing a Collective Impact initiative. Specifically, the cost and energy required to maintain backbone support; the patience required to engage in mutually reinforcing work; the humility required to share common measurement and to be held accountable to another's measures; and finally the diligence required to communicate effectively and responsibly about the initiative. Our initial results reveal what many Collective Impact stakeholders may already know: implementing Collective Impact with integrity is much more difficult that the ideal of Collective Impact.

Future Research

Since the article was first published in 2011, Nebraska has strongly encouraged communities to employ principles of Collective Impact in the community planning process. Because of this, we are now in an excellent positon to test concepts of Collective Impact on a statewide level.

Pursuant to Nebraska law, communities that receive Community-based Aid funds are required to report data to the UNO Juvenile Justice Institute. During June 2017, each county with a Community-based Aid team will be asked to complete the shortened Collective Impact survey, as part of their year-end reporting. A total of forty counties, and an estimated five hundred individuals should complete the survey at that time. The results of this will offer varying degrees of Collective Impact, as well as data that will examine whether these five factors are part of a higher order factor of Collective Impact. After further verification of the domains of Collective Impact, we anticipate adding the community's score to the evaluation of juvenile justice programming to determine whether various levels of Collective Impact are correlated to the outcomes for youth.

References

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