

# Methodological Challenges of Empirical Studies on Government-Nonprofit Service Delivery: Toward a Dynamic Approach\*

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## Abstract

Empirical studies have shown that government and human service nonprofit organizations have maintained active partnerships to deliver human services for the past several decades. However, the previous researches on resource dependent government-nonprofit service delivery have revealed serious methodological limitations to adequately demonstrate the dynamic relationship between both sectors over time. Since the dynamics underlying the government-nonprofit service delivery is a complex process, in which multiple factors dynamically interact over time, the assumptions of system dynamics can help improve these methodological drawbacks. This study aims to explore methodological issues and weaknesses observed in empirical studies on resource dependent government-nonprofit service delivery in the United States, and further attempts to provide insights on future research toward a dynamic approach, bringing the assumptions of system dynamics to the challenges of the previous researches.

**Keywords:** Government, Human Service Nonprofits, Government-nonprofit Service Delivery, Interdependency, Dynamic Approach

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## I . Introduction

Government and human service nonprofit organizations have maintained active partnerships to deliver human services for the past several decades. Under these circumstances, government mainly provides financial support to nonprofits, which deliver services to citizens on behalf of government (Boris, 1999; Coston, 1998). Theories explaining government-nonprofit service delivery, such as theory of welfare state, market failure, government failure, and contract failure, attempted to understand the phenomenon of government-nonprofit service delivery, but also demonstrated a limitation to clearly address a full range of the relationship between government and human service nonprofits because of their focus on one side, i.e., either government or market or nonprofits, of the sectors involved (Cho, 2007). Thus, the majority of empirical studies in this area have mainly relied on the resource dependence perspective, which take into account both sectors of government and nonprofits to understand this relationship. However, this perspective has also shown some limitations to effectively understand the mutual dependence between both government and human service nonprofits over time (Cho, 2007; Cho & Gillespie, 2006).

In this context, there have been recent efforts to understand the dynamics of resource dependent government-nonprofit service delivery, extending resource dependence theory with the assumptions of system dynamics. For instance, Cho and Gillespie (2006) initiated a dynamic resource theory to explore the dynamics of government-nonprofit service delivery. Further, Cho (2007) also attempted to revise the static nature of resource dependence theory with the useful assumptions of system dynamics from the theoretical perspective. However, there has been no effort to evaluate how adequately the empirical studies explained the resource dependent relationship between government and nonprofits. In this context, it is critical at this point in time to review the empirical studies done so far in this area in order to seek for ways to clearly address the dynamics of government-nonprofit service delivery.

This study aims to explore methodological issues and weaknesses observed in empirical studies on resource dependent government-nonprofit service delivery in the United States, and further attempts to provide insights on future research toward a dynamic approach, bringing the assumptions of system dynamics to the challenges of the previous researches. In this article, I use the terms of government and human service nonprofits to mean the aggregate of government and human service nonprofit organizations respectively. Throughout this article,

the term of government support or funding indicates both the government contracts and grants.

## II. Resource Dependent Government-Nonprofit Service Delivery

Resource dependence theory pays attention to the exchange relationship between organizations. The theory assumes that organizations are unable to create all of the resources they need and enter into exchange relationships with other organizations that control their needed resources (Aldrich, 1979; Aldrich and Pfeffer, 1976; Benson, 1975; Pfeffer & Salancik, 2003; Thompson, 1967). The theory also indicates that organizations with more resources execute power over organizations with little resources in the exchange process. This perspective emphasizes the asymmetrical nature of power between organizations in the exchange relationships (Emerson, 1962).

Applying the theory to the relationship between government and human service nonprofits for service delivery, it suggests two main points. First, it elaborates why both government and human service nonprofits are willing to interact with each other. Government, as a major service provider, does not have sufficient service delivery capacity, but has relatively sufficient financial resources. In contrast, nonprofits, as major representatives of citizens, have extensive service infrastructure and capability, but lack financial resources (Cho & Gillespie, 2006). That is, both parties have certain strengths and weaknesses to meet people's demand for services. Under these circumstances, the two sectors are willing to collaborate with each other, rather than ignore or compete (Salamon, 1995).

Second, this theory also explains why and how dysfunctional consequences occur in the process of the government-nonprofit collaboration. Government supports to human service nonprofits such as funding and tax-exempt status are usually accompanied with rules or regulations, which could eventually lead to nonprofit organizational change and dependency. The literature has identified a range of nonprofit dysfunctional or unintended consequences resulting from the government-nonprofit interdependence for service delivery. They include failure of advocacy role (Salamon, 1987), mission drift (Bernstein, 1991; Liebschutz, 1992), loss

of autonomy (Gronbjerg, 1993), increased overhead costs (Gronbjerg, 1990), poor quality services (Interface, 1986), and the like.

### III. Literature Review: Empirical Studies on Resource Dependent Government-Nonprofit Service Delivery

This section reviews the previous empirical studies on resource dependent government-nonprofit service delivery. Empirical studies in this area mainly focused on the following: 1) interdependence between government and human service nonprofits; 2) impact of government funding on nonprofit organizational characteristics; 3) perception about government's privatization.

#### 1. Interdependence between government and human service nonprofits

There were two studies found to test resource dependence theory. Testing the theory, Saidel (1991) showed that both state government and human service nonprofits were mutually dependent on each other for resources. The study indicated that both of them were symmetrically dependent at all levels of the analysis such as service area and sector. Bielefeld (2001) also tested a part of resource dependency in terms of uncertainty. He found that uncertainty among private service providers was positively correlated with their reliance on government funds.

A major discussion involving government-nonprofit service delivery concerns how much nonprofit income was accounted for by government funds. Empirical studies indicated that government funding was the largest single income source of human service nonprofits, followed by service fees and private giving (e.g., De Vita & Salamon, 1985; Froelich, 1999; Gronbjerg, 1990; Kramer, 1981; Lipsky & Smith, 1990; Lukermann, Kimmich, & Salamon, 1984; Millar, De Vita, & Salamon, 1986; Myllyluoma & Salamon, 1992; Social Policy Research Group, 1991). The studies showed that from 1960 through 1993 approximately 27% to 69% of nonprofit revenues derived from government sources. They also reported that the government budget cuts during the early 1980s affected nonprofits' income to a great extent and expedited them to develop other kinds of revenue strategies, such as increasing fundraising

activities or changing management and services. Moreover, the above studies also suggested that government funding helped establish new nonprofits.

Some other groups of studies paid attention to government spending in terms of the scope of the federal, state, local government expenditures, the extent of government support to nonprofits, and the impacts of the governments' budget changes on nonprofits (e.g., Abramson & Salamon, 1986; Gronbjerg, Musselwhite, & Salamon, 1984; Johnson & Musselwhite, 1984; Lukermann, Musselwhite, & Marczak, 1985; Musselwhite, Salamon, Hall, & Holcomb, 1987). These studies demonstrated the extensive and significant reliance of governments on nonprofits to deliver human services in 6 main program areas, i.e., health care, social services, arts/culture, housing/community development, employment/training, and income assistance. Sixteen to fifty percent of government expenditures were explained by human service nonprofits to deliver services.

## **2. Impact of government funding on nonprofit organizational characteristics**

Several studies examined the impact of government funding on nonprofit organizational characteristics. Stone, Hager, and Griffin (2001) investigated the relationships between government funding and nonprofit organizational characteristics, especially with a sample of the United Way-affiliated nonprofits in Massachusetts, USA. Comparing human service nonprofits receiving higher percentage of government funds than United Way funds with those receiving higher percentage of United Way funds than government funds, they noted that there were some differences in organizational characteristics such as organization size, number of board members, administrative complexity, use of volunteers, and racial diversity of board members, staff, and volunteers. The study suggested that the percentage of government funding was positively associated with organization size and racial diversity of board members, but negatively related with board size, percentage of administrative staff, use of volunteers, and use of commercial income.

In addition, Gronbjerg, Stagner, and Chen (1993) presented that government funds was positively correlated to the types of nonprofit agency's expertise and legitimacy. They suggested that government funds had both positive and negative consequences on nonprofit organizational characteristics. The study suggested the following: 1) receiving government

funds was negatively related with nonprofits' expertise, target clients, and use of volunteers, because nonprofits should adopt regulations accompanied by government funds; 2) government funds were positively correlated with use of commercial income and board size.

Examining the relationship between government funding and nonprofit board governance, O'Regan and Oster (2001) found that board members of nonprofits receiving government funds were more likely to get involved in monitoring and advocacy as their top responsibilities, but less likely to get engaged in the traditional board tasks like fundraising. Findings suggested that government funding had both positive and negative impacts on both human service nonprofits and their board members. In other words, board members' involvement in monitoring organizations' management might help human service nonprofits to adequately manage government funds. However, it might cause nonprofits to experience organizational changes because their involvement mainly focused on monitoring how the government funds were spent in accordance with government regulations, not in terms of the quality of service.

Some studies demonstrated nonprofits' perception about the impact of government funding on their organizations (De Vita & Salamon, 1985; Lukermann et al., 1984; Millar et al., 1986; Rozman, De Vita, & Salamon, 1986). According to the studies, nonprofits claimed that government funding resulted in changing their missions and their client focus toward the disadvantaged. The studies showed that claims of mission drift varied depending on studies. Ten to forty three percent of nonprofits reported that they experienced goal displacement by receiving government funds. Furthermore, four out of six nonprofits studied insisted that they experienced increases in overhead operating costs in managing government contracts and grants (Gronbjerg, 1990). Regarding problems in contracting process, human service nonprofits pointed out duplication and waste in documentation deriving from multiple contracts. They suggested that government's overemphasis on fiscal accountability such as line-item budgets caused poor quality services (Interface, 1986).

### **3. Perception about government's privatization**

Other studies examined government officials' perception about government's privatization especially at the state or local level. Opinion surveys of governments across the United States (Apogee Research Inc., 1992; Touche Ross & Co., 1987; Touche Ross & Co., 1989)

demonstrated that nearly all of the local and state governments did contract services out and plan to continue it. Among several alternatives, contracting was identified as the most popular way of service delivery available to local governments (Miranda & Andersen, 1994; Morley, 1989; Moulder, 1988). Government officials reported cost savings and better quality services as advantages of contracts. Difficulty in control, causing political or labor problems, and union or employee struggle were identified as obstacles to privatization. Further, Van Horn (1991) reported that governments made more contracts with nonprofit service providers than with for-profits to deliver social services. According to this study, sixty nine percent of total municipal contracts and sixty percent of total county contracts were made with nonprofits in New Jersey, USA.

## IV. Methodological Issues of Empirical Studies on Government-Nonprofit Service Delivery

The above-examined empirical studies also demonstrated several methodological weaknesses. This section describes methodological issues observed in empirical studies on government-nonprofit service delivery.

### 1. Sampling issues

First of all, a major sampling issue involves unintentional sampling bias resulting from low response rate of studies. The majority of studies used mail survey to obtain data from human service nonprofits. Dillman (1978) claims that general public surveys need to obtain the response rate of over 70% and that surveys of organizational officials require higher response rates than those of the general public. However, studies (e.g., De Vita & Salamon, 1985; Disney, Kimmich, & Musselwhite, 1984; Grossman, Salamon, & Altschuler, 1986; Lippert, Gutowski, & Salamon, 1984; Lukermann et al., 1984; Millar et al., 1986; Myllyluoma & Salamon, 1992; Rozman et al., 1986; Salamon et al., 1986; Salamon, Altschuler, & De Vita, 1987) did not obtain an appropriate level of response rate to properly represent human service nonprofits. The response rates of the studies reviewed here varied, ranging from 20% to 79%. Accordingly, the studies had a weakness to fully represent opinions of the total population of

human service nonprofits, because of low response rates. The validity check of the surveys also supported this. Studies indicated that the responding organizations were generally larger in both annual budgets and organizational size and were more likely to have government funds than the non-responding organizations. It suggested that the findings of mail surveys with low response rate could lead to unintentional sampling bias.

Another sampling issue is ambiguousness of criteria in classifying human service nonprofits. Nonprofits, specifically charitable organizations, are not a homogeneous group, even if they fall under the 501(C)(3). Nonprofits are such a diverse group as categorized into 9 major groups, 26 categories, and over 600 subcategories in National Taxonomy of Exempt Entities (NTEE) (Stevenson, 1997). However, the majority of studies (e.g., Salamon, Altschuler, & De Vita, 1986; De Vita & Salamon, 1985; Gronbjerg, Kimmich, Salamon, 1985; Grossman et al., 1986; Lippert, Gutowski, & Salamon, 1984; Millar et al., 1986; Rozman et al., 1986) failed to present clear criteria in categorizing human service nonprofits in their studies. The criteria of classification of human services were different from one study to another. Studies roughly classified service category into such areas as culture, arts, recreation, social services, health, mental health, education, research, employment, and so on.

## **2. Design and analysis issues**

Most studies on government-nonprofit service delivery were descriptive or exploratory in nature. In other words, the majority of studies (e.g., American Public Welfare Association, 1981; Bielefeld, 2001; Gronbjerg, 1990; Gronbjerg et al., 1993 O'Regan & Oster, 2001; Saidel, 1991; Stone et al., 2001) employed descriptive or exploratory analyses. Further, the majority of them relied on survey research, except several studies (e.g., Abramson & Salamon, 1986; Johnson & Musselwhite, 1984), which analyzed secondary data such as public records of federal, state, and local government expenditures in human service area. The research designs were simple. All of the studies were cross-sectional, except for Liebschutz's (1989) longitudinal study. Further, there was neither a experimental design nor a longitudinal causal model found.

None of the studies paid attention to non-linearity issue to examine the government-nonprofit service delivery. All of the studies focused on the linear relationship associated with the government-nonprofit collaboration. All of them relied on simple static analyses. There was no study using dynamic analysis. The straight-line view of causality was

applied even in all the explanatory studies. Furthermore, all the studies reviewed in this article investigated the direct effects of government-nonprofit service delivery on either government or human service nonprofits. There was no empirical study that examined both direct and indirect effects of government-nonprofit service delivery.

Units of analyses in all the empirical studies were organizations, i.e., human service nonprofit organizations and different levels of governments. For instance, some studies (e.g., De Vita & Salamon, 1985; Gronbjerg et al., 1993; Lippert et al., 1984; Millar et al., 1986; Myllyluoma & Salamon, 1992; O'Regan & Oster, 2001) analyzed human service nonprofit organizations in terms of their revenue sources, organizational characteristics, perception about the impact of government support on their organizations, and the like. Other studies (e.g., Abramson & Salamon, 1986; Gronbjerg et al., 1984; Johnson & Musselwhite, 1984; Lukermann et al., 1985; Musselwhite et al., 1987) focused on different levels of governments in terms of their expenditures to human service nonprofits, the impacts of their budget changes, and government officials' perception about privatization.

### **3. Measurement issues**

One of the biggest challenges in studies on government-nonprofit service delivery involves one-way measurement of dependence between both government and human service nonprofits. The majority of studies utilized a measure of dependency from the perspective of either human service nonprofits or government. Some studies (e.g., De Vita & Salamon, 1985; Gronbjerg, 1990; Grossman et al., 1986; Liebschutz, 1989; Malm & Maza, 1988; McMurty, Netting, & Kettner, 1991; Myllyluoma & Salamon, 1992; Rozman et al., 1986) examined the percentage of nonprofit revenues explained by the government sources in order to measure the dependency of human service nonprofits on government for service delivery. Other studies (e.g., Abramson & Salamon, 1986; Disney et al., 1984; Gronbjerg et al., 1984; Hall, Musselwhite, Marczak, & Altheide, 1985; Lukermann et al., 1985; Musselwhite et al., 1987; Rosentraub, Musselwhite, & Salamon, 1985) surveyed nonprofit share of government expenditures in provision of publicly funded services to measure the dependency of government on human service nonprofits. Several other opinion surveys (e.g., Apogee Research Inc., 1992; Touche Ross & Co., 1987; Touche Ross & Co., 1989; Van Horn, 1991) used the percentage of state or local governments' use of contracts for service delivery, which was analyzed from

the perspective of governments. However, these measures did not even satisfy content validity of dependency. The content validity involves “the representative or sampling adequacy of the content - the substance, the matter, the topic - of a measuring instrument” (Kerlinger, 1986, p. 417). Dependency measures used in the majority of studies paid attention to financial dimension. Besides, they failed to deal with mutual dependency in other kinds of resources such as information, political support, and legitimacy.

Saidel’s (1991) measure of resource dependence sheds light on the concept of interdependence between government and nonprofits. Saidel (1991, p. 545) used three scales, i.e., “the importance of the resource,” “the availability of alternatives,” and “the ability to compel provision of the resource,” to measure interdependence between them. Unlike the majority of the empirical studies, Saidel’s measure (1991) dealt with various kinds of resources such as information, political support/legitimacy, access, service delivery capacity, other than nonprofit revenues or government expenditures, and handled mutual, i.e., bi-flow, dependence between two sectors. However, this measure also revealed a limitation. It focused only on how interdependent the government and nonprofits were at some point in time, not how the interdependency changes over time.

## V. Discussion: Agenda for Future Research Toward a Dynamic Approach

Before I move on to methodological challenges of the previous empirical studies, I point out a couple of conceptual limitations of the empirical studies on government-nonprofit service delivery, which are closely related to the methodological limitations. First, little of the empirical studies on government-nonprofit interdependency for service delivery tested the resource dependence theory. The majority of studies attempted to simply describe the relationship between government and human service nonprofits. Most of them partially examined the interdependent relationships between them, describing dependence from one side, either nonprofits or government. They failed to completely capture the extent and developmental pattern of mutual dependence and imbalanced power relationships highlighted by resource dependence theory. Studies paid special attention to the extent of resources

exchanged and superficial description of power differential between both parties at a given point in time. They did not address the dynamic nature of the exchange process, which eventually led to a serious limitation to prove causal relationship between variables.

Second, the previous studies failed to clearly elaborate how both government and nonprofits experienced both the functional and dysfunctional consequences in the process of government-nonprofit service delivery over time, but mainly dealt with static descriptions of either the negative or positive impacts. Government might not only have advantages from the contracts such as cost savings or higher quality services, but also have disadvantages such as waste and duplication of documentation. As such, nonprofits might have benefits such as acquisition of resources from the partnership, other than just negative impacts such as goal displacement and change of client focus. Both parties must have benefits from the partnership, as resource dependence theory suggests that both government and human service nonprofits voluntarily enter into exchange relationships for the resources they value. Accordingly, an immediate need arises to further seek for not only the mechanism of these consequences but also their developmental patterns over time (Cho & Gillespie, 2006). Future research needs to examine the dynamic process of both positive and negative effects of government-nonprofit collaboration over time to thoroughly understand the dynamics of service delivery.

Third, all the studies of government-nonprofit service delivery failed to identify the service recipients in the process of service delivery, which were the main motives for both government and human service nonprofits to get involved in service delivery. Understanding the needs of service recipients is critical to entirely capture the relationship between the government and service nonprofits over time. With service recipients included in the conceptual framework, we can have a clearer picture of the service delivery system to grasp the whole dynamics of government-nonprofit service delivery.

Besides, the empirical studies revealed several methodological drawbacks as well. First of all, the criteria of classification of nonprofits were ambiguous. Even in the same human service category there are variations in terms of size, region, budget, activities, assets, and age, which could eventually influence the government-nonprofit relationship. For instance, nonprofit income pattern varies depending on service category and thus the pattern of their relationships with government may be different. A problem arises especially when various kinds of human service nonprofits are considered as homogeneous group. Appropriate criteria in distinguishing service category need to be employed, because characteristics of human service nonprofits are

different category by category.

Second, the majority of studies in this area were too simple to infer the causality associated with government-nonprofit service delivery. Cross-sectional studies using simple static analysis and focusing on linear relationships are useful to simply describe the present conditions of the government-nonprofit service delivery. However, they have a serious weakness to explain the causal relationships of variables in the whole system over time.

Third, the one-way measurement of dependence between both sectors is another challenge. Most of the studies attempted to examine how dependent nonprofits were on government or vice versa. However, the measures of dependence used in the majority of studies were limited to nonprofit revenues or government expenditures. The measures of either government or nonprofit dependency are not sufficient to demonstrate mutual dependency of both sectors. Dependence is not a one-way measure, as Aldrich (1979) suggests that one's power implicitly incurs another's dependency.

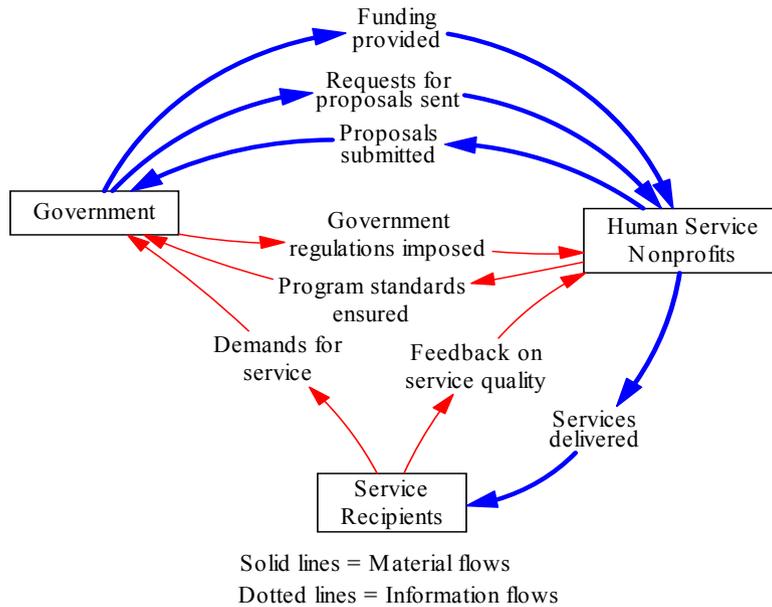
As stated above, the empirical studies showed both conceptual and methodological weaknesses to fully capture the dynamics of government-nonprofit service delivery. These limitations center on the fact that the studies failed to picture the whole system of service delivery, paying attention to its seeming and static nature. The government-nonprofit service delivery is not such a simple phenomenon to examine with the very limited variables at a given point in time. The dynamics underlying the government-nonprofit service delivery is a complex process, in which multiple factors are dynamically associated over time (Cho & Gillespie, 2006). Since government-nonprofit service delivery is not a one-time event, but an ongoing interaction process, we need to take into account feedbacks operating in the system.

System dynamics, in this regard, has a strength to improve the limitations of the previous researches. First, system dynamics, which seeks to examine the dynamic behavior of the system over time, takes into account time dimension and feedbacks underlying the system (Forrester, 1968; Richardson & Pugh, 1981). Attention to these two features enables us to examine the dynamic nature of collaborative service delivery, which is essential to understand the continuously evolving process (Cho & Gillespie, 2006). Careful examination of the feedback loops and time delays operating in the government-nonprofit partnership is crucial to thoroughly capture how the relationship works over time (Gillespie, 2000; Richardson, 1991). Accordingly, system dynamics allows us to elaborate the complex dynamic process of non-linear relationship between variables the previous studies have overlooked to understand

the dynamics of government-nonprofit service delivery.

Second, system dynamics can improve one-way measurement of dependence between government and human service nonprofits. System dynamics attempts to picture the dynamic structure underlying the system (Ford, 1999; Randers, 1980; Richardson & Pugh, 1981; Sterman, 2000). In other words, we can possibly include all the variables critical to understand government-nonprofit service delivery in the model, which makes it possible to understand mutual dependence between both parties.

Third, system dynamics allows us to recognize citizens or the service recipients in the process of government-nonprofit service delivery (Cho & Gillespie, 2006). To completely capture the dynamics of government-nonprofit service delivery over time, all the key actors of government-nonprofit service delivery need to be considered in the model. System dynamics permits us to possibly incorporate the service recipients into the model as endogenous in order to look into the service delivery system (Forrester, 1968). Cho and Gillespie (2006, p. 496) demonstrated how the feedbacks including material and information center around three main actors of government, human service nonprofits, and service recipients. [Figure 1] shows how the dynamics between government, human service nonprofits, and service recipients works in the service delivery system.



Source: Cho & Gillespie (2006, p. 496)

[Figure 1] Dynamics of government-nonprofit service delivery

## VI. Conclusion

Empirical studies have shown that government and human service nonprofits have developed collaborative relationships to deliver human services. However, the previous researches revealed both conceptual and methodological weaknesses to adequately demonstrate the dynamics of government-nonprofit service delivery over time. As shown above, the majority of empirical studies were descriptive or exploratory. Their analyses focused on linear relationship, static analysis, and direct effects. There was no longitudinal causal model to test hypothesis drawn from resource dependence theory. The majority of studies relied on one-way measurement of dependency between government and human service nonprofits. Almost all of the empirical studies on government-nonprofit service delivery focused only on the static relationship between government and human service nonprofits, although the relationships have changed over time. Even though the static analysis is valuable to examine the relationship between variables for an exploratory or descriptive purpose, it has a serious limitation to clarify the

relationship especially for an explanatory purpose.

Since the dynamics underlying the government-nonprofit service delivery is a complicated process, the assumptions of system dynamics can help improve both the conceptual and methodological challenges observed in the previous studies of government-nonprofit service delivery. In this context, system dynamics methodology can provide insights on future research to capture the dynamic nature of government-nonprofit service delivery over time. It allows us to understand the complex dynamic process of non-linear relationship associated with government-nonprofit collaboration for service delivery. It leads us to specification of the structure governing the dynamics of government-nonprofit service delivery over time. Among other things, understanding feedback loops and time delays operating in the system opens the new horizon to clearly understand the government-nonprofit service delivery (Cho & Gillespie, 2006). In addition, system dynamics helps improve one-way measurement of dependence between government and human service nonprofits by incorporating the variables germane to government-nonprofit service delivery in the dynamic model. Moreover, dynamic studies can also help address the dynamic process of both functions and dysfunctions resulting from the government-nonprofit partnership over time. Accordingly, it is critical to pay more attention to the assumptions of system dynamics and further employ a dynamic analysis in studies of government-nonprofit service delivery in order to fully capture the dynamics of service delivery.

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