

THE CONTRIBUTIONS OF NGOS TO HEALTH
IN THE DEVELOPING
WORLD

by

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ABSTRACT

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This study investigated the contributions of NGOs to health in the developing world and well investigated the influence of organizational factors on an NGOs contribution to health. The researcher examined the health contributions of 210 NGOs with consultative status with the United Nations. The number of sectors and networks an NGO had was found to influence the health contributions of NGOs. HLM was used to examine the interaction between organizational and environmental factors on health contribution. There was no significant interaction found between these to factors.

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CHAPTER 1

INTRODUCTION

1.1 Problem Statement

The declining role of the state and the changes in donor funding from the public to the private sector (Vakil, 1997) have led to a dramatic increase in the number of non governmental organizations in the past 20 years (Edwards, 2004: 21; & Fruttero & Gauri, 2005). It has been estimated that there are over 40,000 internationally operating NGOs, and even more operating on the national level (Anheier, Glasius, & Kaldor, 2001). Services once provided by governments, such as health, education, and financial assistance, are now commonly provided by NGOs (Fruttero & Gauri, 2005). The role of NGOs as service providers is especially relevant in the field of public health. Today, NGOs play a central role in the provision of health services to people in the developing world (Pfeiffer, 2003; WHO; 1995; & UNICEF, 1996). This is due to the fact that many countries in the developing world possess weakened health care systems (Akukwe, 1998). Health care systems in the developing world are often faced with a tremendous amount of disease burden and a low availability of trained medical professionals, equipment, and drugs. Thus the basic health care needs of people in the developing world often go unmet. The fragile health care systems of the developing world can lead to higher levels of disease burden and human suffering. As a result, there has been a dramatic increase in funding for NGOs working in the health sector from bilateral and multilateral actors, such as USAID and the World Bank (USAID, 1995). NGOs are commonly viewed as more efficient and effective service providers than governments, especially when it comes to reaching poor people (Meyer, 1992; Sollis, 1992; & Vivian, 1994). However in recent years NGOs have come under

intense scrutiny by donors, clients, and the countries in which they work. This scrutiny has fostered a debate regarding the merits of NGOs, specifically related to their performance, impact, and accountability. The legitimacy of NGOs has been called into question because there is little evidence demonstrating the effectiveness or impact of their programs and activities. Health NGOs have been criticized, because despite the tremendous amount of money they receive, little is known about their overall contributions to health. Thus, there is a need for scientific research investigating NGOs working in the health sector.

However, researching NGOs is a daunting task for several reasons. First, the sheer number of and diversity among NGOs makes it difficult for researchers to examine the impact of these organizations. NGOs are highly diverse in terms of their organizational characteristics, such as size, resources, age, services and the number of sectors in which they work. This diversity also extends to the environments in which NGOs operate. Many NGOs operate on an international level, and work in countries with vastly different social, economic, and political landscapes. These factors make it difficult for researchers to measure and compare the outputs of NGOs working in different countries. As a result, there is little consensus in the literature regarding this topic, and therefore there is no standardized instrument to measure NGO outputs. Secondly, the lack of a comprehensive database of NGOs has also limited research in this area. Several NGO databases exist however the majority of these lack detailed information on organizational characteristics such size, funding, programs, activities, and locations. Finally, research in this area has also been limited by the lack of reliable and consistent data on NGO outputs. Many NGOs possess weak accountability mechanisms. They often fail to document information regarding program successes and failures, financing, and the number of people served. This failure makes it difficult for researchers to draw conclusions regarding the impact of NGO programs, as well as identify the factors that can influence program success or failure.

The aforementioned problems have limited scientific inquiry into the NGO sector. The present research study seeks to address these problems, and add to the literature by examining the contributions of NGOs working in the health sector. Furthermore, this study will explore the various organizational characteristics that influence the health contributions made by NGOs in the developing world.

CHAPTER 2

EMPIRICAL/THEORETICAL FRAMEWORK

2.1 Literature Review

In the past 20 years there has been a dramatic increase in the number of non governmental organizations (Edwards, 2004: 21; Fruttero & Gauri, 2005). Although NGOs are not a new phenomenon, they are now seen as the preferred vehicle for service provision (Lavelette & Ferguson, 2007). In many areas of the world NGOs are considered the key providers of human services, and the NGO sector currently constitutes a 1.1 trillion dollar industry (Edwards, 2004; 21). As the NGO sector has grown in power and presence, so too has the scientific inquiry into this phenomenon. There is a large, multidisciplinary body of literature that covers a variety of topics in this area. However, before delving into the literature it is important to introduce and define NGOs. Additionally, since the present study focuses on health NGOs, the researcher will also discuss the role of NGOs in the health sector.

There is no single accepted definition of NGOs (Vakil; 1997). Difficulties related to defining NGOs stem from the fact that the term is often used to describe a vast number of organizations who vary greatly in terms of their mission, size, operations, and orientation. The term 'NGO' was coined by the United Nations following World War II, and was initially used to refer only to those societal actors working within the UN system (Martens, 2002). However, recently the term has been expanded to describe societal actors working on either the national or international level, engaged in all sorts of activities, and is no longer limited to those organizations working within the UN system (Martens, 2002). According to the United Nations Department of Public Information (2005) a non governmental organization "is a not for profit, voluntary citizens group which is organized on a local, national, or international level to address

issues in support of the public good.” The UN definition goes on to say that NGOs are task oriented and perform a variety of services and humanitarian functions.

Due to their diversity, NGOs are often classified in terms of their attributes. For example, Gordenker and Weiss (1995) classify NGOs as private, self governing, formal, non profit organizations. The omission of the word “voluntary” from this classification reflects the increasing professionalism of the NGO sector (Vakil, 1997). In fact it is the ‘organizational’ attributes of NGOs that distinguishes them from social movements or other forms of collective action like public protests (Martens, 2002). NGOs possess an organizational structure, such as permanent offices, members, employees, and a constitution (Uvin & Weiss, 1998; 213). One of the main distinctions of NGOs is their self governing attribute. NGOs are private, autonomous organizations made up of individuals with similar social interests, and are not controlled by any government body (Malwaski, 1993). They are typically not composed of government representatives, and not interested in seeking governmental power (Martens, 2002). However, many NGOs have ties to the national governments of the countries in which they work, and they often receive funding from and work in conjunction with government agencies (Martens, 2002). In sum, NGOs are formal, professionalized, independent societal organizations whose primary purpose is to promote a common goal at the national or international level (Martens, 2002).

Several other attributes of NGOs are important to note: level of operation and sector. NGOs are often classified according to their level of operation. Many NGOs are considered transnational organizations; meaning they operate in many countries around the world (Collingwood, 2006). The level of operation often differs among NGOs, and can vary depending on factors such as its size, structure, and purpose. Vakil (1997) identified four levels of operation: international, regional, national, and local. Additionally, NGOs can be classified according to the sector in which they work. There is little consensus regarding the number and

type of sectors in the NGO literature. The present study focuses on NGOs working in the health sector, however before discussing health NGOs the researcher will discuss the relevant discourse and research on the NGO sector.

2.1.1 Criticism of NGOs

The power and presence of NGOs has increased significantly over the past few years and they are now considered significant players in world affairs (Martens, 2002). However, this increase in prestige has been a double edge sword for many organizations. NGOs are now expected to be accountable for their finances, as well as demonstrate the effectiveness of their programs and services. This focus on accountability comes at a time when there is a debate regarding the merits of NGOs, specifically related to service provision, cost effectiveness, and their overall contribution to civil society. NGOs are criticized for possessing weak accountability mechanisms, and poor institutional learning (Mebrahtu, 2002). Critics cite numerous studies that demonstrate a lack of evidence from which to establish the impact of NGO services (Edwards & Hulme, 1996; Kelly, Kilby, & Kasynathan, 2004). These studies indicate that NGOs often fail to monitor and evaluate their programs, and thus are unable to demonstrate the impact of their work. Instances of scandals and misdeeds concerning the use of donor funds have also contributed to the criticism of NGOs. NGOs are also charged with possessing hidden agendas, and being heavily influenced by donors (Lister, 2003; Logister, 2007). On the other hand, proponents of NGOs argue they are effective vehicles of service delivery, reach the poorest communities, and are more cost effective than governments (Fruttero & Gauri, 2005). NGOs are under pressure to show that their organizations are efficient, effective, and accountable for their actions. Demonstrating achievement has been cited as the first step to establishing NGO legitimacy (Fowler, 1997:183). The NGO debate has sparked a significant amount of scientific research into the NGO sector.

2.1.2 Research on NGOs

As NGOs have grown in number and power, so too has the scientific inquiry into this phenomenon. There is a large, multidisciplinary body of literature on NGOs covering a wide range of topics. The following paragraphs will synthesize the relevant discourse and research on NGOs. Then the author will discuss the role and impact of NGOs in the health sector and introduce the theoretical framework for the present study.

2.1.3 NGO Performance/Impact

At the center of NGO debate is the issue of NGO performance or impact. Many terms are used interchangeably in the NGO literature to describe impact, such as performance, effectiveness, or success. All of these terms refer to the organizational outputs of the NGOs. NGOs are thought provide services more efficiently and effectively than governments, to give better value for money, and reach the poorest communities (Sollis, 1992; Vivian, 1994). However, research conducted by Tendler (1982) and Riddell and Robinson (1992) found that NGOs are not automatically more cost effective than the public sectors. In fact, there is no one study which demonstrates that NGO services are cheaper than government services (Edwards & Hulme, 1996). Though some evidence suggests larger NGOs are more cost effective than governments (Edwards & Hulme, 1996).

In terms of reaching the poor, some evidence indicates that NGOs perform better than governments (Smillie & Helmich, 1993; Farrington, Bebbington, Wells, & Lewis, 1993). However Hashemi (1992) found that larger NGOs in Bangladesh strive to achieve breadth rather than depth, and as a result often failed to reach the poorest of the poor. In addition, NGOs are often less inclined to maintain a presence in the more remote and poorer communities (Barr & Fafchamps, 2006). Additionally researchers found that NGOs programs

were not related to community need, and that NGOs did not strive to avoid the duplication of services (Fruttero & Gauri, 2005).

Much of research on NGOs has focused on organizational behaviors, specifically those behaviors that are thought to influence impact. Several organizational characteristics have been found to influence an NGOs' efficiency, longevity, and success. Edwards (1999) found that success was more likely when NGOs had clearly defined long term goals. Environmental characteristics such as political and social factors, and donor influence have also been found to influence NGO impact (Edwards, 1999). Other environmental factors related to poverty and human needs were not relevant when explaining variations in NGO impact.

In the face of growing criticism, NGOs have been called to scale up the impact of their programs (Edwards and Hulme, 1992). Scaling up refers to 'expanding' the impact of NGO services (Uvin, Jain, & Brown, 2000). Even when NGO programs are successful the research indicates that their impact often remains small (Uvin, et. al., 2000). NGOs can scale up impact by: increasing their size and coverage; increasing their activities; networking other organizations; and enhancing organizational sustainability.

One of the most comprehensive case studies of NGO impact was conducted by Riddell, Kruse, Kyollen, Ojanpera, & Vielajus (1997). The researchers investigated 240 development NGOs in 26 developing countries, and identified factors that contributed to the success and failure of projects. Organizational characteristics found to influence performance were organizational capacity, vision, good project design and planning, adequate management, and a well trained, professional staff. Networking with other organizations was also found to positively influence impact. The failure to network with governments or other organizations lead to program failure and duplication of services. The environmental characteristics found to influence NGO success were: the country in which it was located; the overall level of

development of the country; and the general developmental background of the country. Researchers cautioned against making broad generalizations from the results of the study, and the main finding was a lack of reliable data from which to measure impact.

A number of studies of NGOs have also found a lack of evidence from which to establish impact (Kelly, et. al., 2004). Many NGOs fail to collect baseline information before starting their programs. This is most likely due to the fact that NGOs possess weak accountability mechanisms. Accountability is a common topic found in the NGO literature. Edwards and Hulme (1996) defined accountability as “the means by which organizations report to an authority and are held responsible for their actions.” There are several mechanisms of accountability that can be used by NGOs, but the most common are self disclosure statements and performance evaluations (Ebrahim, 2003). Disclosure statements are the most commonly used by NGOs, and they are often required by state or federal laws (Ebrahim, 2003). These reports include information regarding an NGOs finances, organizational structure, and programs (Ebrahim, 2003). Another important accountability tool used to assess NGO impact are performance evaluations. Performance evaluations typically involve the examination of an NGOs short, medium, or long term outcomes. These evaluations are also useful for measuring an NGO progress in achieving its goals. They also provide NGOs with an opportunity to learn from their organization’s successes and failures. In fact, research indicates that impact is linked to organizational learning and accountability (Lewis & Madon, 2004).

Despite the fact that these two accountability mechanisms are useful in attracting donor funding, research indicates that most NGOs are weak in the area of accountability (Kilby, 2006). This may be due to the fact that NGOs lack effective information processing systems from which they can produce data to measure their achievements (Lewis & Madon, 2004). Several other factors may contribute to NGOs lack of accountability. First, NGOs face several problems

when attempting to conduct performance evaluations. One common problem when conducting performance assessments is the absence of a commonly accepted measure of NGO performance (Walsh & Lenihan, 2006). The diversity of activities in which NGOs are involved in further constrains their ability to assess the performance of various programs. Additionally, NGO staff members often lack the knowledge and skills to conduct program evaluations. Lastly, complex evaluations can overwhelm smaller NGOs (Ebrahim, 2003). Smaller NGOs often run on a minimal staff and do not possess man power or resources necessary for conducting performance evaluations. Thus, researchers have suggested that building NGO capacity to conduct self evaluations and encouraging the analysis of program failure would further able NGOs to scale up the impact of their services and programs (Ebrahim, 2003). This is consistent with research demonstrating that accountability, particularly downward accountability, increased program impact (Kelly, et. al., 2004). It has been suggested that donors should provide grants and funding for building NGO capacity.

2.1.4 The Role of NGOs in the Health Sector

In recent years, NGOs have become key players in promoting health in developing countries (Pfeiffer, 2003). Health NGOs are seen as alternatives to government run health care services because they are considered less hampered by bureaucratic constraints and inefficiencies (Gilson, Sen, Mohammed, & Mujinja, 1994). Health NGOs are extremely diverse in terms of their origins, motivations, and overall contribution to health. Health NGOs provide a range of services: basic health services; provision of medical or health supplies; health promotion and exchange; health policy setting; resource mobilization and allocation; health advocacy; and monitoring the quality of health care services (WHO, 2001). The aim of many health NGOs is to improve access to and coverage of health services to the poorest communities, and they are often the primary service providers for vulnerable groups such as the

disabled, women, and children (Gilson, et al., 1994; Jareg & Kaseje, 1998). NGOs often provide local health care systems with resources such as health care training, financial support, medical supplies, and drugs (Gilson et al, 1994). In addition, they may establish and run local health clinics or hospitals.

2.1.5 Primary Health Care Policy

The role of NGOs in the health sector was impacted by changes in the thinking regarding development and health policies in the last two decades (Green & Mathais, 1997). One such shift was the introduction of primary health care policy. Primary health care (PHC) was launched by the World Health Organization in the 1987 Alma Ata declaration with the goal of improving health for all by 2000 (WHO, 1978). The Alma Ata declaration transformed the traditional understanding of health by recognizing health as a human right, and overhauling the service delivery system to incorporate all stakeholders in health (Jareg & Kasaje, 1998). Primary health care policies shifted the focus of health care from the biomedical model and placed priority on combating all the causes of poor health by engaging sectors outside of health care (Green & Mathais, 1997).

Primary health care policies are based on several principals: health as a human right (universal health care for all people), community participation, and inter-sectoral coordination (WHO, 1978). PHC draws attention to the link between poor health and under-development. This reflects the view that health is affected by social determinants such as poverty, illiteracy, and sanitation; and that health improvements occur through social, economic, and cultural changes in a community (Green & Mathais, 1997; King, 2001). Thus, PHC stresses the importance of community involvement and development as a mean of improving health. It also reflects the belief that long term improvements in health can be achieved by giving people more choices and control over the determinants of their health (Frankish, 2006). Lastly PHC policies

address the resource wastage historically associated with the health sector by shifting the bulk of funding from large urban hospitals that focus primarily on curative care, to primary care facilities that focus on both curative and preventative measures (Green & Mathias, 1997). While the Alma Ata declaration did not single out NGOs in particular, many health NGOs quickly adopted these ideas into their operations. NGOs are now considered key in the implementation of PHC policies because they are accustomed to working within communities, and partnering with organizations in other sectors (Jareg & Kaseje, 1998).

2.1.5 The Impact of Health NGOs

Health NGOs have received mixed reviews of their contributions to health. Studies have found that NGOs often fragment local health care systems by flooding the market with services, contributing to the brain drain of medical professionals, and failing to coordinate with other health agencies (Pfeiffer, 2008). Moreover, health NGOs often set up a variety of health projects that collapse as soon as the NGO leaves (Pfeiffer, 2003). On the other hand, some studies indicated that NGOs have contributed to better health in certain circumstances. Several researchers have demonstrated the effectiveness of particular health interventions offered by NGOs, such as reproductive health initiatives (Mercer, Khan, Daulatuzzaman, & Reid, 2004). The following paragraphs offer a brief synthesis of the research on health NGOs.

Much of the research on health NGOs compares the effectiveness of NGO run health facilities to government run health facilities. Research in Tanzania found that NGOs functioned better than governments, had a wider availability of drugs, and staff with greater technical skills (Andersson-Brolin, Ole-Memiri, Michanek, & Ndagala, 1991; Kanji, Kilima, & Munishi, 1992). Some evidence exists suggesting that NGO service provision is cheaper than those offered by the government. A study conducted in Mexico found that government provision of cervical screening cost 26% more than screenings provided by NGOs (Gomez-Jauregui, 2001). In

terms of service provision and coverage NGOs in Africa were found to operate on a relatively small budget and staff, yet conducted programs that reached large segments of their communities (Benotsch, Stevenson, Sitzler, Kelly, Makhaye, Mathey, Somlai, Brown, Amirkhanian, Fernandez, & Opgenorth, 2004). Research conducted in other countries found similar results. A study in Bangladesh found that NGOs offering reproductive services were able to achieve high coverage of communities, and strongly contributed to the decline in the national neonatal mortality rate (Mercer, Uddin, Huq, Haseen, Khan, & Larson, 2006). A study in Uganda found differences in the resource levels of NGOs and government health facilities. NGOs had shorter waiting times, higher customer satisfaction ratings, lower cost of treating patients, and a higher expenditure on drugs (Okello, Lubangu, Guwatudde, & Sebina-Zziwa, 1998).

There is some evidence suggesting that NGOs make successful contributions to health in certain circumstances. NGOs have made significant contributions to reproductive and sexual health in many areas in the developing world. Researchers have shown that effectively run NGO reproductive and child health services have decreased child and maternal mortality. NGO primary health care programs were found to expand coverage for reproductive and child health services, and decrease child and maternal mortality (Mercer, et. al, 2004). NGO programs in Bangladesh increased contraceptive use by 78%, child immunizations by 67%, and antenatal care by 78% (Paxman, Sayeed, Buxbaum, Huber, & Storver, 2005). In terms of customer satisfaction, NGO run health facilities received higher marks than government run facilities. A study in Mexico found that women attending NGO services reported more satisfaction than women who attended public clinics (Gomez-Jauregui, 2001). Leonard and Leonard (2004) found that the African rural poor viewed NGO health services to be of higher quality and more attractive despite the fees they charged.

Sustainability is an important concept in the NGO discourse and has been investigated in the NGO research. Sustainability is the “continuation of activities and benefits achieved during a project after donor funding ends” (Bossert, 1991). The sustainability of NGO achievements seems to be linked their willingness to collaborate with government agencies. Government partnerships were found to be critical to the sustainability of NGO health projects (Rosenberg, Hartwig, & Merson, 2008). Sustainability was found to be a key value of health NGOs, and they believed it could be achieved by creating partnerships with local communities (Sarriot, Winch, Ryan, Edison, Bowie, Swedberg, & Welch, 2004).

Investigating NGO performance in the health sector is a daunting task for researchers. The sheer number of and diversity among health NGOs makes it unfeasible and extremely costly to conduct large, multi-country evaluations of the contribution to health made by each individual NGO. Researchers investigating the contribution of NGOs to health are faced with two main problems: the lack of a comprehensive health NGO database, and the lack of reliable and consistent data with which to measure NGO performance. Therefore, we have limited knowledge regarding the contributions of NGOs to global health. The lack of evidence regarding impact has fueled debates regarding the merits of health NGOs.

2.2 Theoretical Framework

The debates regarding the merits of NGOs have put pressure on these organizations to operate more like businesses in the market sector. The once demarcated lines between the for-profit and the not-for-profit sectors (NGOs) have been blurred (Kanter & Summers, 1987). NGOs are increasingly concerned with issues related to funding, accountability, performance effectiveness, and organizational legitimacy; ideas once thought to apply only to businesses. Therefore, researchers have relied on organizational and business theories to gain a better understanding of NGOs. The theoretical framework for the present study relies on a synthesis of

two theories: organizational theories (specifically organizational ecology and behavior), and the resource dependence theory. The following paragraphs will offer a synthesis these theories and use them to gain a deeper understanding of the factors influence an NGO's contribution to health in the developing world.

2.2.1 Organizational Theory

In order to understand the contribution of NGOs to health, it is first important to understand NGOs as organizations. An organization is "a consciously coordinated social unit, composed of two or more people, which functions on a relatively continuous basis to achieve a common goal or set of goals (Robbins, 2005: 5). Scholars use a variety of organizational theories to explain the inner workings, decisions, and performance of NGOs. This study makes use of several aspects of organizational theory to examine the contributions made by health NGOs.

Organizational behavior is a field of study that examines the impact of individuals, groups, and structure on the behavior of organizations for the purpose of improving organizational effectiveness (Robbins, 2005: 9). Past research indicated that NGO behavior was influenced by organizational characteristics. Several organizational characteristics discussed in the literature are: structure, size, and purpose. Organizational structure refers to how jobs are formally divided, grouped and coordinated within an organization, and refers to organizational elements such as: division of labor, chain of command, departmentalization, and span of control (Robbins, 2005: 452). Organizational size can be measured by: the number of employees, offices, revenue/funding, and number of programs. The size of an organization is often associated with factors such as its structure. For instance, larger organizations tend to have more specialization, rules, and regulations than smaller organizations (Robbins, 2005: 470). Organizational purpose is often reflected in an organization's goals and objectives (Behling &

Schriesheim, 1976). An NGO's purpose directs its behaviors and is the main influence for its goals, activities, programs, and location. The purpose of many NGOs is to provide humanitarian aid, therefore they typically offer services for free, or at a minimal cost, operate in areas of the greatest need, and provide basic and social services.

A large amount of organizational research has emerged from the organizational ecology paradigm, which focuses on the evolution and lifecycle of organizations. Organizational ecology attempts to explain how social conditions influence the rates of: creation of new organizations, organizational mortality, and change in organizational forms (Singh & Lumsden, 1990). Population ecology, introduced by Hannan and Freeman (1977), explained the dynamics of organizational populations, and can be used to explain the dramatic growth in the number of NGOs in recent years. As stated previously, the NGO population experienced a tremendous growth in recent years. Changes in thinking regarding health and development, and increased donor funding led to a greater availability of resources for NGOs. Thus, the changes in the social climate have created an environment in which NGOs could grow and flourish.

Organizational ecology theories deal with the interactions between organizations and their environment. One concept of organizational ecology particularly relevant to health NGOs working in the developing world is the density dependence theory. Density is defined as the number of organizations operating in an environment (Guo & Brown, 2006). The density of a population can create an environment that fosters both legitimacy and competition for NGOs. When fewer organizations make up a population little competition exists, but the organizations often possess low levels of legitimacy and poor performance (Singh & Lumsden, 1990). On the other hand, growth in the number of organizations increases the legitimacy of the population. As the number of organizations in the population increases, there is an increase in competition for available resources. At the highest levels of population density, competition for resources

can lead to poor performance and organizational death (Guo & Brown, 2006; Singh & Lumsden, 1990). The theory of density dependence can be used to explain how health NGOs can establish legitimacy in a community. As populations evolve, the public's faith in them increases. On the other hand when population density is high NGOs are forced to compete for resources, often at the expense of service. High density can also lead to the duplication of services. The density dependence theory can be used to understand the variation in impact found in areas of high density versus areas of low density.

Organization ecology theories also make reference to the link between organizational age and impact. Researchers have found a relationship between age and performance in not for profit agencies (Brown, 2005; Judge, 1994; & Olson, 2000). Older organizations often have long standing ties to the communities in which they work, as well as higher levels of legitimacy than newer organizations. Newer organizations are at higher risk for failure because they lack the legitimacy and the ties within a community (Guo & Brown, 2006). As an organization ages it has the opportunity to learn about the community as well as begin to collaborate with other established organizations in the community. It also hones its programs and services and increase its performance and impact. Overtime the legitimacy of the newer NGO will increase and thus allow them to have greater impact.

Another organizational ecology theory particularly relevant to health NGOs is the niche width theory. A niche is defined as the n-dimensional resource space within which a population exists (Hutchinson, 1957). The width of a niche refers to the range of environments across which a population may exist (Carroll, 1985). The niche width theory distinguishes between two organizational types: specialist and generalist. In the not for profit sector, generalist and specialist organizations are classified according to the range of their activities such as health, education, or development (Galaskiewicz & Bielefeld, 1998). Generalist organizations are

engaged in a diverse range of activities, occupy a wide niche, and often span into other niches (Hurley & Kaluzny, 1987). Specialist organizations are typically smaller, and operate in a narrow niche (Swaminathan, 1995). Many NGOs are involved in a diverse range of activities and are more generalist in nature. Diversification consists of an expansion in the number and range of activities the NGO is involved in, and often happens at the request of funders (Uvin, et. al., 2000). Mugisha, Birungi, and Askew (2005) found that Ugandan NGOs over-emphasized the importance of diversifying their activities, and failed to recognize the advantage of identifying niches. Researchers have found that during the early years of an NGO's existence they took on a large number and diverse range of activities; however as they matured NGOs tended focused on a few programs that they did well (Uvin, et. al., 2000). The theory holds that specialist organizations should out perform generalist organizations in a stable environment (Guo & Brown, 2006). According to this theory, NGOs who specialize in health should have a greater impact because they possess a deeper knowledge of their niche and focus the bulk of their resources to this area.

2.2.2 Resource Dependence Theory

The resource dependence theory (RDT) proposed by Pfeffer and Salanik (1978), is highly related to organizational theories, and has been found to explain the behavior, and performance of organizations (Nienhuser, 2008). The theory provides a framework for understanding the connection between an organization and its environment (Pfeiffer and Salanack, 2003: 229). According to the RDT, organizations are unable to produce all the resources they need to operate; therefore they must engage in exchanges with the external environment in order to acquire the resources they need to survive (Christen, 2005; Pferrer & Salanack, 2003). The RDT stresses the importance looking at the environment in which an NGO operates when trying to explain behavior and impact (Pfeiffer & Salanik, 2003: 1). The

organization's environment is considered a central source of "uncertainty" and constraint (Nienhuser, 2008; Pfeiffer & Salanik, 1978). Characteristics of an organization's environment, such as the distribution of resources or presence of competitors, can influence its performance or impact.

Power is another important premise of the resource dependence theory (Nienhuser, 2008). The survival of most NGOs depends on their ability to attract the resources needed to support their operations. The most common sources of funding for NGOs comes from governments (in the form of contracts and grants), self generating income (from fees for services, fundraising from general public, and investments), and private donations or corporate giving (Leat, 1995). Due to the nature of their work, NGOs are highly dependent on the flow of resources from external providers (Heimovics, Kotlererman, Coughlin, 1993). This dependency can create a situation in which donors have power over the NGO (Christen, 2005; Pfeiffer & Salanack, 2003). Donor funding often comes with complex requirements and expectations (Smillie & Helmich, 1993). Failure to meet these requirements can result in the loss of funding. Therefore NGOs often find themselves in a situation in which they are more likely to succumb to the demands of external forces. The price of obtaining resources from donors can put the NGO's mission, activities, and purpose at risk (Macedo & Pinho, 2006). NGOs may take on functions outside of the scope of their mission or expertise in order to obtain funding, or they may drop programs that do not fit into their donor's agenda (Edwards & Hulme, 1996). In order for an NGO to survive they must balance the demands of donors with the demands of their mission and goals (Pfeiffer & Salanik, 2003).

When the interests of the funding agency conflict with the interests of the organization, NGOs are left with two options: seek funding from other sources, or make the necessary changes in order to obtain funding. NGOs with higher levels of dependency may be forced to

make these changes in order to ensure their survival. Researchers have found that many not-for-profits have changed their mission and goals in order to obtain funding (Billis & Harris, 1992).

NGOs can manage their dependency in several ways. Pfeiffer & Salanick (1978) suggested that NGOs diversify their revenue sources in order to reduce their dependence and maintain their autonomy. NGOs that rely on only a few revenue sources will be highly dependent on donors and less likely to maintain their autonomy. NGOs with diversified revenue strategies are better able to resist the demands of donors; however these NGOs are faced with the challenge of satisfying multiple stakeholders, each with their own and oftentimes competing interests (Dartington, 1996). Therefore, the type, amount, and interests of the funding sources can influence NGO impact and performance (Gronberg, 1993).

As stated previously, organizations must engage in exchanges with their external environment in order to acquire resources. This is one of the reasons that NGOs network with other organizations (Yanacoulos, 2005). Networking with other organizations allows an NGO to increase their organizational resources and support their operations without increasing their dependency on donors (Pfeiffer & Salanik, 1978). It also allows NGOs to increase their political influence and organizational legitimacy (Yanacoulos, 2005).

2.3 Conceptual Framework

The main finding of the research review was that NGO output was influenced by both external (environmental) and internal (organizational) factors. However, researchers cautioned against generalizing the results of these studies to NGOs involved in other sectors. Independent and rigorous research on NGOs is still rather rare (Edwards & Hulme, 1996). There is a dearth of research examining the influence of organizational characteristics on the effectiveness of health NGOs. The conceptual framework of the present study incorporated the

factors found to influence impact, and aspects of organizational and resource dependence theories (Appendix A). The following paragraphs will briefly described the conceptual framework of the study.

2.3.1 Organizational Factors

Past research has suggested that organizational factors can influence an NGOs outputs. According to theories of organizational ecology, newer NGOs must devote more a large portion of their time and energy to establishing ties with the community. Therefore these NGOs often perform more poorly than the older more established NGOs. In addition, impact can be influence by the organizational type. According to the niche width theory, specialist NGOs will perform better than generalist NGOs because they focus their resources in one area rather than many areas. Therefore, NGOs that specialize in health are expected to have higher levels of health contribution than generalist NGOs. The size of the organization is expected to influence its contribution to health. Specifically, larger NGOs will have higher levels of health contribution than smaller NGOs. According to the resource dependence theory, the impact of NGOs is often influenced its ability to obtain the resources necessary to support its operations. Thus NGOs with more resources will have greater impact than those with fewer resources. NGOs can also support or expand their operations by networking with other organizations. Therefore NGOs with more networks will have access to more resources and in turn have more impact than those with fewer networks.

2.3.2 Environmental Factors

According to the RDT, the environment can influence NGO impact. The environment can be a source of constraint for an NGO. Research indicates that environmental factors such as political and social climate can impact an NGO performance.

2.3.3 The Interaction between Organizational and Environmental Factors

Though the research suggests that NGO impact can be influenced by both organizational and environmental characteristics, there are very few studies examining the interaction of these factors. A goal of this study was to address this gap by examining the influence of both of these factors on health contributions.

2.4 Research Hypotheses

The present study investigated the contributions of NGOs to health in the developing world. Previous research found that organizational characteristics influence the performance of NGOs working in various sectors. However, researchers have cautioned against generalizing these findings to NGO working in different sectors. Therefore the present study focused on NGOs working in health. The present study examined the influence of organizational characteristics on an NGOs health contribution. Specifically, the researcher sought to discover which organizational characteristics predicted higher levels of health contribution? The following hypotheses were tested in this study:

1. NGOs with more resources (in terms of annual income) will have higher levels of health contribution.
2. Larger NGOs will have higher levels of health contribution than smaller NGOs.
3. NGOs that specialize in health will have higher levels of health contribution than generalist NGOs.
4. Older NGOs will have higher levels of health contribution than newer NGOs.
5. NGOs with more networks will have higher levels of health contribution than those with fewer networks.

2.5 Higher Level Hypothesis

The present study also investigated the interaction between organizational and environmental characteristics. The researcher tested the hypothesis that environmental and organizational factors influence an NGOs contribution to health.

CHAPTER 3

METHODS

3.1 Research Design

The purpose of this study was to explore the various factors that influence the contributions made by NGOs to health in the developing world. In order to achieve this goal the researcher used a mixed methodological research design. The present study contained both a quantitative and qualitative phase. In the quantitative phase, the researcher built a database of NGO characteristics and outputs which were analyzed using a variety of statistical procedures. In the qualitative phase, the researcher conducted a case study of four health NGOs. The researcher chose a mixed method design for several reasons. First, by using this design the researcher was able to triangulate the data analysis. By including a case study, the researcher was able to gain a deeper understanding of health NGOs by collecting rich, detailed information on several cases. Additionally the use of analytic triangulation provides the researcher with stronger evidence to support the study's conclusions through the convergence of findings from different methods.

3.2 Specific Aims

As stated previously, our knowledge of health NGOs is limited due to the problems faced by previous researchers. The present study sought to fill this gap in the literature by addressing some of the problems faced by previous researchers. To address these problems the researcher achieved several **specific aims**:

1. Developed a comprehensive database of health NGOs, that includes information on organizational characteristics.
2. Created the Health Promotion and Contribution Scale to measure the contribution of NGOs to health in the developing world.

3.3 Sampling Plan

The unit of analysis for this study was NGOs working in health with general or special consultative status with the United Nations. NGOs working in the fields of economic and social development can apply for consultative status with the Economic and Social Council (ECOSOC, n.d.). The UN has three categories of consultative status: general, special, and roster. General consultative status is reserved for large international NGOs whose area of work covers most of the issues on the agenda of ECOSOC and its subsidiary bodies. Special consultative status is granted to NGOs which tend to be smaller and newer, and have a special competence in a few of the fields of activity covered by the ECOSOC. NGOs with roster status typically do not fit in any of the other categories, and have a rather narrow or technical focus. NGOs with general or special consultative status are required to submit quadrennial reports of their activities to the UN every four years.

The UN ECOSOC has a database containing contact information for all NGOs with consultative status. There are 596 NGOs working in health with special or general consultative status with the United Nations.

The researcher determined the sample size necessary for sufficient statistical power to detect relationships in regression analyses. The researcher used Green's (1991) formula to determine the sample size; $N > 104 + m$ (m = number of predictors). The regression model tested in the present study is made up of five predictor variables. Therefore the sample size for the present study needed to have at least 109 NGOs.

3.4 Sample

The researcher used a population sample of NGOs with consultative status with the United Nations. To be in the sample an NGO had to meet the following inclusion criteria: general or special consultative status with the United Nations, an official quadrennial report submitted to the UN, possess an English language website, and work in at least one of the countries classified as developing by the World Bank in 2007. Of the 596 NGOs with special or general consultative status with the UN: 303 had submitted quadrennial reports. Of these 303 NGOs, 93 were excluded from the sample because they did not possess an English website or work in the developing world.

The final sample contained 210 NGOs working in the health sector. This is twice the number necessary for sufficient statistical power. A list of all the NGOs included in the study can be found in Appendix B.

3.5 Measurements/Instruments

3.5.1 Criterion Variable

Another aim of this study was to develop a measure of NGO output. Therefore, the researcher created the Health Promotion and Contribution Scale (HPCS). The HPCS is a composite measure made up of two variables: professed activities and health extension and promotion.

Professed Activities. Most NGOs offer a range of services and programs. Data was collected on the number and type of services offered by the NGO (this includes in health services as well services in other fields). This data was used to create a measure of an NGO's professed activities. Scores were calculated by dividing the number of health related services (programs/outputs) by the total number of services offered by the NGO. The scores ranged from 0.00 to 1.00, with scores closer to 1 indicating high contributions to health.

Health Extension and Promotion. NGOs often attempt to achieve their goals through advocacy and education. These outputs are not directed at the NGO's client base, but rather at promoting their agenda or raising awareness on a global or macro level. This is accomplished through participation in summits and conferences on a local, national, or international level. Data was collected on an NGO's conference attendance (this included conferences on health, as well as conferences in other fields). This data was obtained from the quadrennial reports. It was used to measure an NGO's health extension and promotion. The scores were calculated by dividing the number of health conference attendance by the total number of conferences attended. The scores ranged from 0.00 to 1.00, with scores closer to 1 indicating high levels of health extension and promotion.

The Health Promotion and Contribution Scale was calculated by adding an NGOs scores on these two variables. The scores ranged from 0.00 to 2.00, with higher scores indicating high levels of health promotion and contribution.

3.5.2 Predictor Variables

3.5.2.1 Organizational Variables

Based on the conceptual framework, the researcher identified several organizational characteristics thought to influence an NGOs contribution to health. The organizational characteristics included in model were: sector, age, size, funding/resources, and networking.

Sector. The researcher used the International Classification of Non-Profit Organizations (ICNPO) created by Salamon and Anheier (1992) to classify NGOs by sector. The ICNPO classifies NGOs according to their primary activities and services. The INCPO identifies 12 major activity groups, which can be used to classify the NGOs sectors. These 12 sectors are: *health; development (economic, social, and community) and housing; environmental; social services (relief agencies); law, advocacy, and politics; education/research; cultural/recreation;*

philanthropic; international activities; religious; business and professional unions; and not elsewhere classified. This variable was also used to classify NGOs as specialist or generalist organizations. The researcher classified NGOs working in 6 or more sectors as generalist, and those involved in 5 or less sectors as specialist.

Size. Organizational size was measured by a composite measure of three variables: number of paid employees working at an NGO, number of offices, and number of developing countries in which the NGO works.

Age. Organizational age was measured by the number of years the organization has been operating. It was calculated by subtracting the founding date from 2009.

Funding/Resources. The resource variable was measured by the annual income reported by the NGO.

Networking. In order to achieve their goals NGOs often establish partnerships with other organizations, such as: local and national government agencies, other NGOs, and international bodies such as UN, USAID, or WHO. Networking was measured by the total number of partnerships listed by the NGO.

Level of Operation. Level of operation refers to the location of an NGOs programs and activities. NGOs can operate at four levels: local (one location in a city or community), national (multiple locations in one country), international (operations all over the world), and regional (operation isolated to one region). For this study, NGOs will be classified as operating on a local, national, international, or regional level.

Several other organizational variables were measured in the study. The researcher collected data on NGOs country of origin, the number of countries it operates in, board of directors, and missions. These variables were used to provide descriptive information about the NGOs included in the study.

3.5.2.2 Environmental Variables

The research study examined the influence of environmental factors on the contributions of NGOs to health. The two variables used in this study were level of development and political climate.

Level of development was measured by the gross domestic product (GDP) per capita for each nation.

Political Climate was measured by the Economist Intelligence Unit Index of Democracy (Kekic, 2007). This index measures several indicators of democracy; electoral process and pluralism, civil liberties, functioning of the government, and political culture. This variable was used to group the NGOs for the HLM analyses needed to test the higher level hypotheses.

3.6 Case Study

Data collection for the case study component of the study was also obtained from the NGO's websites. The researcher collected detailed information regarding the NGOs organizational characteristics as well as information on the characteristics of the country in which they operate.

CHAPTER 4

RESULTS

4.1 Univariate Analyses

The present study used several statistical procedures to analyze the data: descriptive statistics, multiple regression, and hierarchical linear modeling. In the following paragraphs the researcher will report the results of the univariate, bivariate, and multivariate analyses.

4.1.1 Descriptives

Of the 210 NGOs in the sample the majority originated in the United States (N=73) and the United Kingdom (N=20). The age of the NGOs ranged from 7 to 205 years, and the mean age NGOs was 51 years. All of the NGOs in the study had either general or specific consultative status with the UN. On average, the NGOs had maintained consultative status for 17 years, with a minimum of 3 years and a maximum of 63 years. Of the 210 NGOs in this study 76 NGOs worked in five or less sectors (considered specialist) and 134 worked in six or more sectors (considered generalist). Thirty three NGOs were indigenous, meaning they worked only in the country in which they originated. The NGOs had an average of 16 board members. The demographic information for the NGOs in the study can be found in Table 4.1.

Level of Operation

Of the 210 NGOs in the sample, 177 worked on an international level; 23 on a national level, and 9 on a regional level. The NGO worked in an average of 25 countries. India (N=128) and Kenya (N=101) were the countries with the highest numbers of NGOs. The majority of the NGOs worked in African countries.

Table 4.1 Demographic Information for the NGOs in the Sample

VARIABLE	MEAN	STD DEVIATION
Age	51	38
Income	4,800,000,000	1.1E11
Sector	6.4	2.3
Network	52	224
Employees	4979	14.5
Offices	10.4	14.5
Countries	25.5	28.3
Health Activities	7	14.6
Total Activities	21.2	55.4
Health Conference	2	4
Total Conference	13	12

Mission Statements

All of the NGOs had mission statements. The researcher recorded key words found in the mission statements. The word health was mentioned in 60 of the NGOs' mission statements. Other common words found in the mission statements were human rights (N=43), women (N=39), development (N=33), and education (N=32).

Professed Activities

The majority of NGOs engaged in at least 21 activities, with an average of 6 health activities. The NGOs attended an average of 13 conferences, with an average of 2 focusing specifically on issues related to health. This study looked at the contributions of NGOs to health. Several types of health activities were offered by the NGOs: hospitals or rehabilitation

centers (N=61); nursing homes (N=7); mental health or crisis intervention (N=39); and provision of basic health services and health education (N=199).

Culture/Recreation

Sixty seven NGOs were involved in cultural and recreational services. These NGOs had operations in: art (N=54); recreation (N=6); and service clubs (N=23).

Education/Research

Of the 210 NGOs sampled, 143 has operations in the area of education and research. Services offered were: primary/secondary education (N=56); higher education (N=11); other educational services (N=141); and research (N=36).

Social Services

Social services were offered by 185 NGOs. The types of services offered by these NGOs were: social services (N=165); emergency or refugee services (N=73); and income support (N=18).

Environment

There were 126 NGOs involved in environmental services. The types of services offered by these NGOs were: environment (N=126) and animals (N=8).

Development/housing

Development and housing services were offered by 178 NGOs. The types of services offered were: economic and social development (N=146); housing services (N=26); and employment training (N=128).

Law/Advocacy

There were 166 NGOs offering services related to law and advocacy. The types of services offered were: civil advocacy (N=164), law and legal services (N=20); and political advocacy (N=24).

Other Activities

Fifty four NGOs offered religious services. Philanthropic services were offered by 67 NGOs. Seventy three were engaged in activities in the international sector. Twenty eight offered business and professional services. Finally seventy two engaged in services that were not classifiable by Salamon and Anheier's scale.

4.1.2 Skewness/Kurtosis

The researcher examined the skewness and kurtosis of the five variables in the regression model. The results indicated that several variables were highly skewed in the model: age, income, networking, and size. These same variables also suffered from issues related to kurtosis. The results can be found in Table 4.2. The results indicated that outliers may be present in the dataset. The researcher ran outlier analysis, the results will be discussed in the following paragraphs.

Table 4.2 Skewness and Kurtosis of the Independent Variables

VARIABLE	SKEWNESS	KURTOSIS
Age	1.40*	2.08*
Sector	.19	-.15
Income	14.5*	209.9*
Networking	11.5*	146.4*
Size	1.8*	3.4*

4.2 Bivariate Analyses

4.2.1 Correlation

The researcher ran a correlation for the five main variables in the model. The age variable was significantly correlated with two other variables in the model: sector ($r=.161$) and

size ($r=.247$). There was also a significant correlation between size and networking ($r=.15$). The results of the correlation can be found in Table 4.3. The researcher ran VIF calculations to see if multicollinearity influenced the results of the regression analysis. These calculations will be reported in the following paragraphs.

Table 4.3 Bivariate Correlations Between the Independent Variables

VARIABLE	AGE	SECTOR	NETWORK	INCOME	SIZE
Age		.16*	-.07	.00	.25*
Sector	.16*		.01	.05	-.12
Network	-.07	.01		-.01	.15*
Income	.00	.05	-.01		-.05
Size	.25*	-.12	.15*	-.05	

4.3 Multivariate Analyses

4.3.1 Outlier Analysis

The researcher ran several outlier analyses to determine if outliers were present in the dataset. The results of the outliers analyses indicated that three cases in the sample were outliers: AARP ($D=943.88$; $leverage=.995$; $DFBETA= -.0011$; $DFFITS=34.88$); OXFAM ($D=4.73$, $leverage=.83$, $DFBETA= .04$, $DFFITS= -2.3$); and the Order of St. John ($D=.1$; $leverage=.4$, $DFBETA= -.01$, $DFFITS= .21$). These three variables were found to be outliers in the study and were removed from the analysis. The new sample size was 207.

The researcher ran new univariate and bivariate analyses with the new sample.

4.3.2 Skewness/Kurtosis

Two variables remained highly skewed after the outliers were removed income (7.8) and networking (7.0). The skewness in the income variable is most likely due to the influence

of missing data. The researcher will run several regression analysis to deal with the missing data.

4.3.3 Correlation

Several variables were founded to be correlated in the new sample. Age was correlated with income ($r=.21$), sectors ($r=.18$), size ($r=.22$). Income was found to be correlated with size ($r=.28$). Lastly, networking was correlated with size ($r=.18$). For the results of the correlation see Table 4.4. To make sure that multicollinearity did not effect the results the regression analyses.

Table 4.4 Bivariate Correlations of the Independent Variables for the New Sample

VARIABLE	AGE	SECTOR	INCOME	NETWORK	SIZE
Age		.18*	.21*	-.02	.22*
Sector	.18*		-.10	-.09	-.09
Income	.21*	-.10		.05	.28*
Network	-.02	.09	.05		.18*
Size	.22*	-.09	.28*	.18*	

* Indicates Significance

4.3.4 Regression

The researcher ran several regression analyses due to the missing data found in the annual income variable. In the first regression analysis the researcher included the missing data in the model.

The results of the first multiple regression indicated that the overall model used in the study was significant ($F=5.944$, $p<.05$). The effect of sector on health contribution was found to be significant ($\beta=-.28$, $p<.05$). These results indicated higher levels of health contribution was related to involvement in a fewer number of sectors. The more specialized an NGO is, the

higher level of health contribution. The effect of networking was found to be significant ($\beta=.16$, $p<.05$). The results indicated the more networks/partnerships an NGO has, the higher the level of health contribution. The results for all the variables in the model can be found in Table 4.5. The adjusted $r^2=.11$, indicating that the model explained 11% of the variance found in health contribution. Two hypotheses were supported by the results; NGOs that specialize in health will have higher levels of health contribution than generalist organizations, and NGOs that network with other organizations will have higher levels of health contribution than those that do not network.

Table 4.5 The Contributions of NGOs Regressed on the Predictor Variables

VARIABLE	BETA	SIGNIFICANCE	VIF
Age	.02	.78	1.1
Sector	-.28	.00*	1.1
Income	-.01	.91	1.1
Size	.07	.32	1.2
Network	.17	.01*	1.0

- Indicates Significance at $p <.05$.

The researcher looked at several other statistics to ensure that the assumptions of regression were not violated. To see the model suffered from the problem of heteroscedasticity, the researcher plotted the standardized residuals against the standardized predicted variable. The graph did not show a pattern. The model did not suffer from the problem of heteroscedasticity. Next the researcher checked for multicollinearity. To test for multicollinearity the researcher examined the VIF scores for the independent variables in the model. The rule of thumb is that multicollinearity exists if the VIF scores are greater than 4.

The VIF scores for the variables were around 1, which indicated that multicollinearity was not a problem.

For the second regression the researcher dichotomized the income variable. Cases with the missing data were coded as zero and cases with an income value were coded as one. The new income variable was included in the regression model. The regression was significant ($F=6.8$; $p<.05$). The r^2 was .12, indicating that the model explained 12% of the variance in the model. The effect of income on health contribution was found to be significant ($\beta=.15$, $p<.05$). These results indicate that having income was related to higher health contribution. As in the first regression, the networking ($\beta=.14$, $p<.05$) and sector ($\beta=-.26$, $p,.05$) variables were also significant. The results of this regression can be found in Table 4.6.

Table 4.6 Regression Model with the Income Dummy Coded

VARIABLE	BETA	SIGNIFICANCE	VIF
Age	.01	.89	1.1
Sector	-.26	.00*	1.1
Income	.15	.03*	1.2
Size	.04	.59	1.2
Network	.14	.04*	1.1

- Indicates Significance at $p<.05$.

Lastly, the researcher ran a third regression excluding the income variable from the model. The modified regression model was found to be significant ($F=7.3$, $p<.05$). As with the previous two model, sector ($\beta=-.28$, $p<.05$) and network ($\beta=.17$, $p<.05$) were found to be significant. The adjusted r^2 was .11, indicating that the model explained 11% of the variance in the model. The results of this regression can be found in Table 4.7.

Table 4.7 The Regression Model without the Income Variable

VARIABLE	BETA	SIGNIFICANCE	VIF
Age	.02	.79	1.1
Sector	-.28	.00*	1.1
Size	.07	.31	1.1
Network	.17	.01*	1.0

* Indicates Significance at $p < .05$.

The results of the regression analyses indicated that the variables sector and networking significantly predicted health contribution for NGOs. The researcher accepted the hypotheses: NGOs that specialize in health will have higher levels of health contribution than generalist organizations, and NGOs that network with other organizations will have higher levels of health contribution than those that do not network. The researcher rejected the hypotheses related to income, age, and size.

4.3.5 Hierarchical Linear Modeling

The researcher used HLM to examine the effect of context on NGO contributions to health. In order to do this, the researcher used the Unit Index of Democracy to group the NGOs. Since NGOs work in many different countries, the researcher found the level of democracy for all the countries in which a NGO worked and divided this number by the total number of countries the NGO worked in. Every NGO received a democracy score. Next the researcher used the democracy variable to group the NGOs. The researcher grouped the NGOs into ten groups based on level of democracy. The researcher used the 10th percentile to divide the democracy variable into groups. See Table 4.8 for the descriptives for each of the ten groups.

Table 4.8 Democracy Values used for Grouping Variable in the HLM Analyses

GROUP	RANGE OF SCORES	N
1	0-52	21
2	53-66.5	22
3	66.8-75.3	20
4	75.6-80	20
5	80.5-83	20
6	83.5-88	19
7	88.5-90	22
8	92-97	21
9	97.1-107.6	24
10	108-138	18

The second context variable used by the researcher was a measure of economic development. Economic development was measured by the gross domestic product for each country. As with the democratic variable the researcher found the GDP for each country an NGO worked in, and divided this number by the total number of countries the NGO worked in. See Table 4.9 for the means for each group.

The researcher ran several hlm models to examine the effect of context on an NGOs health contribution. The researcher will discuss each model individually.

Table 4.9 Group Means for GDP Variables used in the HLM Analyses

GROUP	MEAN
1	3134
2	6716
3	5132
4	5549
5	4761
6	4467
7	4470
8	3639
9	3239
10	2905

One way ANOVA with Random Effects Model

This model is used to examine how much variation exists among the intercepts. The variance component for this model was .23, $X^2=13.13$, $p=.156$. The interclass correlation was .021. The results indicated that there was little variation among intercepts. These preliminary findings suggested that the findings for the following models will be insignificant. See Table 4.10 for results.

Table 4.10 Results of the One Way ANOVA with Random Effects Model

	VARIANCE COMPONENTS	DF	CHI-SQUARED	P-VALUE
Intercept 1	.005	9	13.13	.156
Level 1	.23			

Means-as-Outcomes Regression

The researcher ran two means-as-outcomes regression models, one with the grand mean centered and one un-centered. This model tests the effect of the group level variable on the individual level outcome variable. The results of the un-centered regression were insignificant. The final estimation of the variance components was .23, $X^2=13.07$, $p=.109$. The results indicated that economic development was not found to influence an NGOs health contribution.

The results of the centered analysis yielded similar findings. For the centered analysis, the variance component was .23, $X^2=13.07$, $p=.109$. See Table 4.11 for full results.

Table 4.11 Results of the Means as Outcome HLM Models

	VARIANCE COMPONENTS	DF	CHI-SQUARED	P-VALUE
Grand Mean Uncentered	.23	8	13.07	.11
Grand Mean Centered	.23	8	13.07	.11

Random Coefficient Model

The researcher ran several Random Coefficient models. Due to the fact the income variable contained a large amount of missing data, the researcher excluded this variable from the analyses.

The researcher ran two Random Coefficient models (group mean centered and uncentered) to test the higher level hypothesis that environmental characteristics interacted with the NGOs organizational level characteristics. The values for the HLM analyses can be found

on Table 4.12 and 4.13. The final estimation of the variance components for the group mean uncentered model was .20, $X^2=14.14$, $p=.07$. The final estimation of the variance components for the group mean centered was .21, $X^2=14.53$, $p=.104$. The results of both models were insignificant, indicating there was no interaction between environmental and organizational characteristics found in the present study. Therefore, the researcher rejected the higher level hypothesis.

Table 4.12 Results of the Random Coefficient Model Group Mean Centered

FIXED EFFECT	COEFFICIENT	T RATIO	DF	P-VALUE
Age	.00	.31	202	.75
Sector	-.06	-4.8	202	.00
Network	.00	2.6	202	.01
Size	.04	.33	202	.74
Variance Component	.21		9	.10

Table 4.13 Results of the Random Coefficient Model Group Mean Uncentered

FIXED EFFECT	COEFFICIENT	T RATIO	DF	P-VALUE
Age	.00	.31	201	.75
Sector	-.06	-4.8	201	.00
Network	.00	2.6	201	.01
Size	.04	.33	201	.74
Variance	.21		8	.07

The final random coefficient model the researcher tested included only the variables that were found to be significant in the original regression model: sector and networking. The final estimation of variance components was .20, $X^2=14.60$, $p=.07$. The results were insignificant, indicating there was no interaction between the environmental and organizational characteristics in the present study.

4.4 Case Study

In order to provide a deeper understanding of NGOs the researcher conducted a case study of four NGOs: two specialist and two generalist. Demographic information on the four NGOs can be found in Table 4.14.

4.4.1 Two Specialist NGOs

The two specialist NGOs selected for case description were Project Concern International, Inc and CHF International.

Project Concern International, Inc.

History/Mission

Project Concerned International Inc (PCI) was founded in the USA in 1961 by Dr. Jim Turpin after his experience volunteering medical services for children in Tijuana. On this trip, Dr. Turpin saved the lives of two children dying of pneumonia. This experience motivated him to found PCI with the vision of providing children and families all over the world with essential medical services. PCI is a non-profit, global health organization working in countries on five different continents. In 1993, the NGO obtained special consultative status with the United Nations. The mission of PCI is to prevent disease, improve community health, and promote sustainable development. The foundation targets disadvantaged and vulnerable children and families with the goal of building healthy communities by implementing holistic programs. According to George Guimaraes, the current President and CEO, PCI's purpose is to achieve

“sustainable change in the health and self sufficiency of families living in poverty.” PCI’s philosophy holds that health is inseparable from development, and the foundation for long lasting changes in health is community-led development. The NGO takes a bottom up approach to achieving its health goals by building partnerships with local communities, governments, NGOs, and businesses. Therefore, PCI implements programs that are participatory, empowering, and community-led.

Organizational Characteristics

PCI employs 23 full time staff, and has 13 offices all over the world to coordinate its operations. PCI conducts its operations with the help of a large body of volunteers, and by networking with other organizations. PCI has established partnerships with over 131 governmental agencies and NGOs (such as: British embassy, Save the Children, Oxfam, and Catholic Relief Services). PCI works in 18 developing countries: Afghanistan, Bolivia, Botswana, Chad, El Salvador, Ethiopia, Guatemala, Honduras, India, Indonesia, Malawi, Mexico, Nicaragua, Pakistan, Peru, South America, Tanzania, and Zambia.

Funding

In 2007, PCI reported an income of \$26,737,273 coming from three main sources: government grants (\$15,612,275), donations (\$ 6,110,019), investments (\$79,029), agricultural commodities/contributions-in kind (\$4,883,564), and other (\$52,386). PCI reported that 85% of its resources were allocated to program services, 13% for management/general, and 2% for fundraising. PCI’s total expenditures in 2007 were \$27,530,124; expenses ran \$792,851 more than their annual income for this year.

Professed Activities

The mission of PCI is to improve the health and well being of underserved people throughout the world. It achieves its mission by creating lasting partnerships with the

communities in which they work. Through these partnerships PCI educates parents and community members as well as trains local volunteers, health care providers, and ministries of health on disease prevention. It also provides institutional strengthening to achieve long lasting change. PCI's uses an integrated approach focusing on five main activities: disease prevention, maternal and child health, water and sanitation, food security, and humanitarian relief and assistance. The following paragraphs will provide a more detailed description of PCI's interventions.

Disease Prevention

In addition to improving medical care and creating sustainable changes in the health care systems of impoverished countries, PCI's main health related goal is to prevent disease. PCI attempts to achieve this goal by providing people across the globe with access to critical health services and disease prevention methods. PCI works to fight and prevent diseases such as polio, leprosy, Chagas disease, HIV/AIDS, Malaria, and Tuberculosis. For example, in Mexico PCI is focusing on Tuberculosis prevention and treatment. In addition, PCI created a Mobile Health Unit which provides health services such as vaccinations, health referrals, and educational information regarding disease prevention. PCI ensured that over 300 people with Tuberculosis received treatment and trained over 200 health professional in technical issues related to treatment. It also vaccinated over 2000 children under five year of age.

Maternal and Child Health

PCI is ensuring women and children in rural communities stay healthy by promoting health behaviors such as prenatal care, child immunizations, and breastfeeding. PCI seeks to improve child health by providing immunizations, case management for pneumonia, and better nutrition. In Indonesia, PCI decreased severe child nutrition by 25% and reduced the prevalence of diarrhea by two thirds in children under the age of two.

Water and Sanitation

To improve water and sanitation PCI digs wells, and builds latrines, and safe water and sewage systems. Through its Community-Led Total Sanitation program, PCI provides educational information to communities regarding issues related to hygiene and sanitation. In Indonesia PCI conducted water and sanitation assessments in school and residences in 20 villages and developed improvement plans that benefitted 14,804 people from 3,451 households in remote Indonesian villages.

Food Security

PCI works to address malnutrition by providing meals in schools, promoting family gardens, and educating farmers about techniques in order to improve agriculture and livestock production. PCI also invests in local farmers so that they can provide their families with food and provides them with education regarding business so that they can market their products to earn money. In Bolivia, PCI distributed daily meals to 186,700 children in 2,159 schools.

Humanitarian Relief and Assistance

PCI works to prevent health crises that result from catastrophic natural disasters. PCI works to connect humanitarian assistance with its international development efforts, with the goal of decreasing a community's vulnerability to future disasters. For example in India, PCI provided 25,000 liters of drinking water per day after the monsoon floods in Madhubani. In addition its mobile health team provided medical services to 8,000 men, women and children in the hardest hit villages. In Peru, PCI worked with the government and local communities to rebuild homes that are reinforced with adobe so that they are better able to withstand earthquakes and other natural disasters.

CHF International

History/Mission

The Cooperative Housing Foundation was founded in 1952 to provide low income housing for residents of the United States. In 1962, after receiving funding from USAID, the NGO was able to expand its operations to the international level. In 1988, the NGO began to market itself as CHF International to reflect its overseas focus, though its legal name remains Cooperative Housing Foundation. CHF's mission is to be a catalyst for long term change in low to moderate income communities worldwide, and to help them improve their social, economic, and environmental conditions. CHF assists people to improve their families and strengthen their communities. Participation is the theme of CHF, and is a mechanism in all its programs. It employs a bottom up approach to development. CHF recognizes that community-driven development is a critical determinant of stability and economic growth, and this is the foundation of it's programs. It targets communities in less developed countries and in countries undergoing political or economic transitions, or experiencing natural disasters.

CHF applies a specific methodology for assisting communities called *PACE*, Participatory Action for Community Enhancement. CHF inaugurated the PACE project in 1996, as a method for empowering a community in its own development. The PACE methodology begins by holding community wide meetings to involve the local people in the development process, then it elects local representatives to form a Community Development Council (CDC). This council then works to identify and prioritize the development projects. The PACE methodology allows community members full participation in the development process.

Organizational Characteristics

CHF International obtained special consultative status with the United Nations in 1999. It employs over 2,220 individuals and has partnerships with over 285 organizations. CHF

works in more than 30 countries. It currently works in: Armenia, Afghanistan, Azerbaijan, Bolivia, Bosnia & Herzegovina, Colombia, Ethiopia, Georgia, Ghana, Haiti, Honduras, India, Indonesia, Iraq, Jordan, Kenya, Lebanon, Liberia, Mexico, Mongolia, Montenegro, Pakistan, Peru, Philippines, Romania, Rwanda, Serbia, Sri Lanka, Sudan, West Bank & Gaza, and Yemen.

Funding

In 2007, CHF reported an annual income of \$269,330,856; grants (\$226,948,935), contracts (\$3,122,141), In-kind contributions (\$12,944,932), investments (\$6,889,813), other income (527,941), and contributed goods and services (\$18,897,094). CHF reported that 93.9% of its resources were allocated to its programs, and 6% to administrative and general expenses. CHF reported spending \$240,463,368, which is resulted in \$28,867,488 surplus in 2007.

Professed Activities

CHF works in four sectors: development, social services (emergency response and relief), environment, and health.

Development

CHF International's main focus is in the development sector. CHF has a variety of development programs: economic, agricultural, craft sector, workforce, and urban development programs; housing and infrastructure programs; as well as programs for financing development. CHF contributes to economic development by stimulating the creation of jobs, providing loans to small businesses, assisting farmers in low income communities, and providing employment training. CHF also works with communities and local governments to rebuild infrastructures such as new roads, bridges, schools, housing, health clinics, etc. In Afghanistan, CHF's

ASSIST program provided 3,250 people with improved shelter of households, and health and sanitation facilities.

Emergency Relief/Social Services

CHF provides emergency relief services in the wake of natural disasters. CHF works to transition communities out of immediate crisis, and assists them in moving forward into long term economic development and reconstruction. CHF believes that the participation of multiple stakeholders is essential to effective recovery and reconstruction. CHF works with local communities in the wake of disaster. It offers a range of services such as building transitional shelters, and reconstructing homes, schools, and water and sanitation systems. In response to the earthquake in Indonesia in 2006, CHF set up 8,320 transitional shelters for refugees.

Global Health

CHF works to increase the community based health efforts in the countries that they work. CHF gives grants to community based health providers so that they can increase the coverage and quality of their services. CHF also works to combat HIV/AIDS in the developing world. It works within communities to increase awareness campaigns and increase the capacity of local health providers to provide HIV/AIDS services. CHF offers an array of HIV prevention programs, as well as offering voluntary testing and counseling. In addition to providing health services, CHF provides access to clean water, health sanitation, as well as providing psychosocial support to help communities cope with trauma from conflict and displacement. In 2007, CHF reported providing health services to over 978,152 people in Asia, Africa, and the Middle East.

4.4.2 Generalist NGOs

The two generalist NGOs selected for the case study were: Care International and MADRE INC.

Care International

“Cooperative for Assistance and Relief Everywhere”

History/Mission

CARE International was founded in 1945 by 22 American organizations that came together to rush “care packages” to survivors of World War II. The first 20,000 packages reached France on May 11, 1946. The first care packages were US Army surplus “10 in 1” food parcels, originally intended to provide one meal for ten soldiers. At this time one package could be purchased for \$10 and would reach its destination within four months. The contents of the original care package were: beef in broth, steak and kidneys, liver loaf, corned beef, luncheon loaf, bacon, margarine, lard, fruit preserves, honey, raisins, chocolate, sugar, egg powder, milk powder, and coffee. Over 100 million care packages were sent to people in need during the two decades following the war. The scope of the organizations has changed since the decades following WWII, and the NGO has phased out the CARE package program.

Today, CARE International focuses its efforts on long term projects that fight global poverty. Its mission is to serve individuals and families in the poorest communities in the world. CARE works to achieve its mission through community based efforts to improve sanitation and access to clean water, education, disease prevention, economic opportunities, and to protect natural resources. CARE also provides emergency relief services to survivors of war and natural disasters. Additionally, CARE places a special focus on women, as they are often at the heart of many of its community led programs.

Organizational Characteristics

CARE employs over 12,000 full time staff, has 12 offices, and maintains partnerships with over 100 organizations. In 2008 its reported assets were \$708,000,000; coming from grants, donations, and revenue from investments and services. It reported spending

\$674,000,000 on its programs. CARE allocates 90% of its funds to its programs and 10% for support and fundraising activities. CARE works in a total of 66 countries around the world, and has offices in each of these countries. CARE works in 46 developing countries: Afghanistan, Angola, Bangladesh, Benin, Bolivia, Bosnia and Herzegovina, Burundi, Cameroon, Democratic Republic of Congo, Cote d'Ivoire, Ecuador, Egypt, El Salvador, Eritrea, Ethiopia, Georgia, Ghana, Guatemala, Haiti, Honduras, India, Kenya, Lesotho, Madagascar, Malawi, Mali, Mozambique, Nepal, Nicaragua, Niger, Pakistan, Peru, Rwanda, Serbia and Montenegro, Sierra Leone, Somalia, South Africa, Sri Lanka, Sudan, Tajikistan, Tanzania, Togo, Uganda, West Bank and Gaza, Zambia, and Zimbabwe.

Professed Activities

CARE attempts to achieve its mission through its nine program areas:

Agriculture and Natural Resource Program

CARE works to help families produce food and increase their crop and livestock yields while preserving the environment. CARE has three main program areas: soil and water conservation, water, and watershed management.

CARE's soil conservation programs help farmers manage fertile soil and productivity as well as reduce soil erosion and prevent landslides. In Ecuador CARE's Sustainable Land Use Management Project trained 9,000 farm families in techniques to improve agricultural production such as crop rotation and soil fertility tests, pasture care for livestock, soil conservation, and pest management.

The goal of CARE's water projects is to provide equal access to and management of water resources. These programs include irrigation, drinking water, and water conservation projects. In addition the program includes health and hygiene education, as well as better sanitation by providing latrines.

CARE's watershed management projects strive to secure the quality and quantity of water. The program includes such activities as environmental education, watershed mapping, and planting trees and grasses to prevent water contamination, and landslides.

Cross-Cutting Initiatives

This program expands across the breadth of CARE's program sectors to tackle the underlying causes of poverty, with a special emphasis on women and girls. One example of this program is the Sport for Social Change Initiative which uses sports to advance gender equality and develop life skills, etc. The Kenyan American Soccer Exchange, KASE, helps young girls develop self esteem, and build leadership skills.

Economic Development

CARE's approaches economic development through its SEAD programs. These programs attempt to improve the economic security and income opportunities for impoverished people by education and building strong financial institutions.

CARE also provides staff training, loan capital and other resources to encourage institutional development of local organizations. The SEAD programs reach over 800,000 people in about 39 countries.

CARE's economic development programs provide basic financial services to over 30 million households worldwide. It's Village Saving and Loan programs work to teach financial literacy and money management. This program supports savings and loan programs and work to help expand small businesses.

Education

CARE uses an inclusive approach to education by working alongside communities, governments, and partnership organizations. Through this program, CARE trains teachers and school personnel to improve the quality of education, link educational programs to health and

nutrition interventions, and conducting campaigns to promote the right to education. CARE's educational programs also focus on the education of young girls. CARE works with local communities to remove barriers to education for girls and help them transition into secondary school. It also strives to rebuild the educational systems in war torn countries. At national levels, CARE seeks to build the capacity of governments to reform local education systems, increase the quality of basic education and implement effective educational policy.

Emergency Relief

CARE's emergency relief programs seek to provide communities with immediate lifesaving assistance in the wake of disasters, as well as give them the tools for long-term rehabilitation. This program offers a variety of services such as the provision of food, shelter, water, sanitation, and medical care.

CARE's Emergency and Humanitarian Assistance Unit (EHAU) works with communities to create effective emergency response plans to ensure they receive food, water, shelter, and healthcare supplies in the event of an emergency. One of the main focuses of EHAU is to provide support to CARE International Emergency Response Team (CERT). The goal of this initiative is to have emergency response teams on the ground in less than 72 hours after a crisis. CARE's relief efforts in Sri Lanka after the tsunami of 2004 serve as a good example of the type of relief services it offers. After the tsunami, CARE built 1,500 transitional shelters each with clean water and sanitation facilities. It also supplied 32,000 families with food, water, and other necessary supplies. In addition it helped families find temporary employment and laid the foundation for long term reconstruction efforts.

Health

CARE's health projects focus on several areas: reproductive health, children's health, polio eradication, and water, sanitation, and environmental health.

Reproductive Health

CARE's Reproductive Health programs seek to improve access to and use of quality sexual and reproductive health services by poor and underserved. Its program focuses on family planning (contraception and birth spacing) and maternal health (increased access to skilled care during and after delivery). In Bangladesh, CARE's Safe Motherhood Initiative increased the utilization of health services for obstetric care from 16 to 40 percent.

Children's Health

CARE has four main children's health initiatives: Community-based Integrated Management of Childhood Illnesses (IMCI); Community based Neonatal health care; maternal health, and nutrition. The *IMCI* approach seeks to improve: family and community health, detection and care seeking behaviors, and the management of sick children. It also works to prevent illnesses such as malaria, respiratory infections, diarrhea, and vitamin A deficiencies. The *Community based Neonatal health care* programs strives to reduce infant death through the provision of prenatal care, the use of safe delivery kits, by training birth attendants and families in safe delivery techniques, providing essential newborn care and post-partum care. CARE's *Maternal Health* projects include training and equipping traditional birth attendants, making safe delivery kits available, promoting prenatal (including tetanus toxoid and iron supplementation) and post-natal care, birth planning and monetary savings for emergencies.

CARE's *Nutrition* program seeks to reduce childhood malnutrition. The projects emphasize the importance of breastfeeding and complementary feeding, micronutrient intake, prevention of protein-energy malnutrition, and stressing appropriate nutrition during pregnancy and lactation.

CARE's *Polio Eradication* programs seek to reduce the spread of polio through its oral immunization campaigns in high risk areas. CARE also works to strengthen communities

immunization systems, improve detection and reporting efforts, and provide assist to families with paralyzed children. It also seeks to build collaborations with local health authorities and other organizations to fight to eradicate polio.

CARE's *environmental health* efforts seeks to educate communities on the link between sanitation and health, as well as improve access to and the quality of clean water and effective sanitation.

HIV/AIDS

CARE's HIV/AIDS programs provide information and services to vulnerable and high risk groups. CARE also helps communities care for vulnerable and orphaned children, develop peer education and outreach programs, increase access to condoms, counseling, testing, and anti-retroviral treatment. CARE also engages in advocacy for HIV/AIDS victims.

Nutrition

CARE's nutrition programs places special focus on feeding infant and young children. CARE's nutrition programs teach practices that prevent malnutrition, proper breast feeding, as well as educating communities to cultivate and prepare nutritious food.

MADRE, Inc.

History/Mission

Madre Inc. was founded in 1983 by a group of women activists who traveled to Nicaragua to observed the impact of the Contra war. After returning to the United States Kathy Engel, MADRE's founding director, helped to bring together a group of diverse women to establish a woman-led, women-run international human rights organization. MADRE approaches its work from the perspective of women. The mission of MADRE is to uses human rights to advance social justice. To achieve this goal, MADRE partners with women in

communities worldwide to meet local needs and create long term solutions to the problems faced by women all over the world.

Organizational Characteristics

MADRE's office is located in New York City, and it has 11 full time employees. MADRE has over 25,000 members worldwide, and achieves the majority of its work through volunteers and its partnership with other organizations. MADRE has established over 16 partnerships with local organizations in the countries in which the work. In 2007, MADRE reported an annual income of 1,929,237; with its funding coming from national and international grants, donations, member fees, and revenue from services and investments. According to MADRE's financial reports 93% of its funds are allocated to its programs, 3% for fundraising, and 4% for administrative costs. MADRE works in 11 countries in the developing world: Columbia, Guatemala, Haiti, Iraq, Kenya, Mexico, Nicaragua, Panama, Peru, Sudan, and the West Bank and Gaza.

Professed Activities

MADRE works in a large number of sectors through its main programs: peace building; women's health and combating violence against women; and economic and environmental justice.

Peace Building

MADRE's peace building program works to enhance women's capabilities to prevent, survive, and recover from war. It advocates against the use of child soldiers, the use of rape as a weapon in war, etc. In addition, it offers trauma counseling for survivors of war, protection from violence, and health care services and education to refugees of war. For example in Colombia, MADRE works to prevent child soldiers by providing critical services to child at risk of be recruited as child soldiers. MADRE provides these children with a range of recreational

services such as sports, theater, and arts. MADRE also offers academic tutoring and trauma counseling. In Iraq, MADRE supports peace building efforts through its Freedom Space gatherings between Sunni and Shiite women that are working for peace. MADRE gives these young women leadership opportunities as hosts and coordinators of the Freedom Space gatherings.

Women's Health

MADRE believes that health is linked to human rights and is a determinant of political, social, and economic forces. MADRE offers a variety of health programs such as: safe birth centers, clean water facilities, mobile health clinics, sexual and reproductive health workshops, counseling, and asthma treatment. For example in the West Bank MADRE runs a safe birth center. The center offers women pre-and post natal care, health education services, counseling, education regarding nutrition, lab tests, and surgical services. In 2001 in Nicaragua, MADRE established a full service women's health clinic. MADRE continues to send supplies, equipment, and trained medical staff to the clinic. IT also has a mobile health unit that offers services to those women that can not reach the clinic.

Combating Violence Against Women

MADRE works to combat violence against women. MADRE works with women who have been displaced from their homes due to domestic violence. MADRE provides these women with legal services, counseling, as well as offers human rights training so that women can advocate for their rights. In Colombia, MADRE offers safe shelters for displaced women, income generating activities, as well as aids national domestic violence awareness campaigns.

MADRE also offers services to survivors of rape. In Haiti, MADRE offers victims of rape a variety of health services, income generating activities, and psychosocial support groups, and assistance with prosecuting their perpetrators.

Economic Justice

MADRE's economic programs work to help women establish sustainable sources of income. For example in Guatemala, MADRE helps women create and work on chicken and pig farms so that they may have a source of both income and food. MADRE also advocates for women's labor rights as well as establishes education and literacy centers for women to increase their chances of obtaining employment.

Environmental Programs

MADRE has several environmental programs to address problems facing the ecosystems of the communities in which they work. In addition, it supports women farmers through its Women Farmers Unite program operating in the Sudan. This program provides women with the tools, resources, and technical assistance to sustain their families. In Nicaragua, MADRE's Harvesting Hope program trains local women in organic farming techniques and sustainable livestock management. The program also organizes a seed bank through which women can share and cultivate seeds for the growing seasons.

Emergency Relief

MADRE has an Emergency and Disaster Relief Fund that enables the NGO to act quickly and effectively in the wake of disaster. MADRE's relief and reconstruction programs are founded on the belief that local women are best to equipped to organize relief efforts and rebuild their communities. This fund is used to strengthen the capacity of local women organizations to carry out relief efforts.

Table 4.14 Demographics for the NGOs in the Case Study

Type	Name & Year Founded	Staff	Partner	Income	Countries	Activities
Specialist	Project Concern International (1961)	23	131	26,737,273 85% of funds to programs	18	-Disease prevention and Maternal & Child Health -Water & Sanitation -Food Security -Humanitarian Relief & Assistance
Specialist	CHF International (1952)	2220	285	269,330,856 93% of funds to programs	30	-Development -Emergency & Relief Services -Environment -Health
Generalist	CARE International (1945)	12,000	100	708,000,000 90% of funds to programs	66	-Agriculture & Natural Resources -Sports for Change Program -Economic Development -Education -Emergency & Relief Services -Health -HIV/AIDS -Nutrition -Water
Generalist	MADRE, INC (1983)	11	16	1,929,937 93% of funds to programs	11	-Peace Building -Women's Health -Violence Against Women -Economic Support -Relief -Environmental Justice

4.3 Case Study Results

The addition of the case study component to the present study allowed the researcher to gain a deeper understanding of the contributions NGOs are making to health in the developing world. The dependent variable of the quantitative phase of the study measured the health contributions of NGOs. One of the advantages of the case description was that it allowed the researcher to illustrate these contributions in words and give meaning to the numbers of the quantitative component. The NGOs in the case study engaged in a variety of health related activities. The most common were: disease prevention, maternal and child health, and counseling. Disease prevention was perhaps the most common health related goal of the NGOs. To achieve this goal, NGOs provided immunizations, education, and testing services. These services focused on the prevention and treatment of such diseases as HIV/AIDs, TB, Malaria, and various childhood illnesses. The NGOs also provided many services in the area of maternal and child health, such as safe birth centers, mobile health clinics, nutrition programs, and treatment of childhood diseases. Lastly, the NGOs offered a range of psychosocial and educational counseling services. These findings provide us with a better idea of contributions NGOs are making to health in the developing world.

The researcher noted several interesting commonalities among the NGOs in the case study. First, most of the NGOs recognized the relationship between health and sanitation, and offered a variety of development services such as building latrines, and safe water and sewage systems. Additionally all the NGOs offered emergency and relief services. The NGOs acknowledged that health crises often result in the wake of natural disasters. Therefore the provision of emergency and relief services was considered necessary to prevent disease outbreak and maintain health. The main health services offered by the NGOs were disease

prevention, and maternal and child health services. It is interesting to note that these services are key in achieving the Millennium Development goals related to health.

A secondary goal of the case study was to illustrate the differences between generalist and specialist NGOs. According to the niche width theory, the type of an organizations can be distinguished by the range of activities the NGO is engaged in. Specialists organizations are thought to perform better because they focus their resources on a small number of activities. The results of the case study seemed to corroborate this finding. The specialist NGOs in the case study seemed to focus their activities in three main sectors: health, development, and relief. Whereas the activities of the generalist NGOs covered a wide range of organizational niches. In the quantitative phase of the study, sector was found to influence health contribution. The demographic information of the NGOs lends support to this finding (See Table C14). For example, compare the resources of CHI (specialist) to CARE (generalist). While CARE has more resources than the specialist NGO, it is divided among activities in nine sectors and over operations in 66 countries. Whereas CHI's resources are allocated to programs in only four sectors.

All the NGOs seemed to stress the importance of networking. By establishing partnerships with local community members or agencies as well as working with local government, the NGOs felt they could achieve their goals more efficiently and effectively. The NGOs acknowledged the role that networking has in their work, and it was a key value stressed by all of the NGOs in the study. The NGOs stressed that it was particularly important to establish these networks in the communities that they work in. All of the NGOs favored a bottom up approach to their work. Networking was also found to predict high levels of health contribution in the quantitative analysis. This finding seemed to be corroborated by the results of the case study. The NGOs considered networking a key tool for making sustainable changes

within communities. Sustainability was a goal of almost all the programs offered by the NGOs. The NGOs stated that their programs sought to achieve long term changes rather than simply providing temporary relief or charity.

The researcher also noted that the concepts of primary health care (the right to health, intersectorial coordination, and community participation) seemed to be incorporated into the workings of these NGOs. It is impossible to determine whether this is a coincidence or a direct result of primary health care policies. However all of the NGOs seem to stress the importance of community involvement, and networking with other organizations. It has been suggested that NGOs are integral to the implementation of PHC policies because they are accustomed to working within communities, and with organizations working in other sectors (Jareg & Kaseje, 1998). The results of this study seem to lend support to this idea. Furthermore all the NGOs recognized that health was the result of social determinants, and offered a range of development related services, such as sanitation projects, to achieve better health outcomes in communities in the developing world.

In the quantitative analyses, the researcher examined the influence of organizational characteristics on an NGOs health contributions. Several organizational characteristics did not influence health contribution. An NGO's size, income, and age did not predict health contribution in the quantitative phase of the study. The demographic information for NGOs in the case study showed that they were pretty diverse in terms of these characteristics (See Table C14). In fact, the diversity found in NGOs is considered one of the problems faced by researchers in this area. For example, CARE employs over 12,000 individuals, while MADRE has only 11 paid staff. However, this doesn't seem to affect the range of activities or services they offer. Additionally, the case description found that MADRE has over 25,000 members and conducts the majority of its services through the use of volunteers. Reliance on volunteers may

explain why NGOs can offer a wide range of services on a smaller budget. Theories of organizational ecology suggest that old NGOs will have greater impact than newer NGOs because they are established in the communities in which they work. Age was not significant in the quantitative analyses. The youngest NGO in the case study was 28 years old, and well established in the communities in which it worked. Furthermore, 51 was the mean age of NGOs in the quantitative sample. The theory does not specify how long it takes to establish ties within a community, therefore it is possible that the NGOs in the present study were old enough to have already established these ties.

CHAPTER 5

DISCUSSION

The NGO sector has experienced a dramatic growth in recent years and they are now the key providers of many human services in many areas of the developing world. This growth is thought to be influenced by changes in international policy. One such change was in policy agendas of donor agencies, which favored the private sector over the public sector (Edwards & Hulme, 1996). NGOs were viewed as more efficient and effective service providers than governments (Sollis, 1992). Additionally, the introduction of primary health care transformed international health policy by claiming health as a human right and calling attention to the link between ill health and under-development. PHC is built on the principles of community involvement and inter sectoral coordination. NGOs were seen as natural vehicles for the promotion of PHC because they are thought to be strong in these areas. These policy changes created an environment for NGOs to grow and flourish.

Organizational ecological theories have been used to help researchers examine the evolution and lifecycles of organizations. The present study used several organizational theories to examine the influence of organizational factors on an NGO's health contributions. One characteristic found to influence health contribution was organizational niche (specialist or generalist). NGOs that specialized in a few areas made more contributions to health than those that worked in many sectors. According to the niche width theory, this is due to the fact that specialist NGOs focus their resources in a few areas. However, past research showed NGOs commonly offer a variety of services that span various sectors. This was true of the NGOs in the study sample. The NGOs in the study worked in an average of six sectors. These

findings suggest that NGOs should concentrate their efforts on a few activities that they do well rather than a wide range of activities.

Networking was also found to influence an NGOs health contribution. NGOs with more networks or partnerships were found to have higher contributions to health than those with fewer networks. This finding is consistent with research indicating that NGOs that collaborate or network with governmental agencies and other agencies can achieve greater impact and success (Ullah, Newell, Ahmed, Hyder, & Islam, 2006). Networking is thought to be especially important for NGOs working in the health sector. Collaboration with governments and other health agencies is particularly important to achieve sustainability and to avoid duplication of services (Gomez-Juaregui, 2004). These findings suggest that NGO working health can achieve greater results by partnering with governments, communities, and other NGOs. As stated previously, NGOs have been criticized for fragmenting the health care systems of the countries in which they work. While this study suggests that health NGOs are attempting to network with other organizations, it did not evaluate the quality or outcome of these partnerships. Future research should focus on evaluating these collaborations in order to understand what factors led to strong partnerships.

The age of an organization did not influence an NGOs health contribution in the present study. However these results could be due to the fact that the youngest NGO in this study was seven years old, and the mean age was 51 years. According to organizational ecology theory, older organizations have higher impact because they have established ties in the community; whereas newer organizations have to devote a portion of their time and resources to establishing ties within the community. Since the youngest NGO in the study was seven years old, it is possible that they have had enough time to establish community ties. Organizational ecological theories also make reference to organizational size. In the present study however size was also insignificant. This finding could be the result of several factors. First, in the organizational literature, size is often measured by the number of paid employees.

However the main difference between organizations involved in the business sector and those involved in the not for profit sector, such as NGOs, is the reliance on volunteers. Many NGOs can run their operations with a small number of paid staff and most of their work is conducted by a large number of unpaid volunteers. Thus, it is difficult to measure the size of an NGO based on the number of paid employees. Therefore in the present study organizational size was measured by three variables: number of paid employees, number of countries they work in, and number of offices. It is possible that this variable is a poor measure of NGO size. In addition, one oversight of the present study was that it did not collect information on the number of volunteers working for the NGOs. Future researchers should incorporate this variable into their investigations of NGOs.

The results of the present study also lend support to the idea that NGOs have adopted aspects of primary health care into their operations. Most of the NGOs in this study were involved in six or more sectors. In addition to involvement in the health sector, the four sectors that stood out as having the highest NGO involvement were social services/relief, development, law/advocacy, and education. As stated previously, PHC holds that improvements in health occur through social and economic development, as well as advances in legal rights and education. Primary health care also stresses the importance of community involvement and development as a means of improving health. It holds that long term improvements in health can be achieved by giving people more choices and control over the determinants of their health (Frankish, 2006). These findings support the idea that NGOs can be useful tools for the implementation of primary health care policies.

The NGO literature suggested that organizational and environmental factors influence the behaviors of organizations, but few studies have tested these findings on NGOs working in other sectors, namely the health sector. In the present study, the researcher hypothesized that there was an interaction between organizational and environmental factors on an NGO's contribution to health. However, the results of the HLM analyses did not provide support for this

hypothesis. The results could be due to the grouping variable selected by the researcher for the HLM analyses. Future researchers should attempt to examine the interaction between these factors using other advanced statistical procedures.

5.1 Study Limitations

There were several limitations of the present study. First, the present study investigated only those health NGOs that had general or special consultative status with the United Nations. Thus the sampling frame used for this study excluded a large number of NGOs working in the health sector. Secondly, the researcher collected data from NGOs with English language websites. NGOs that did not possess websites were also excluded from this study. It is likely that NGOs with websites have more resources than NGOs without websites. Additionally, the researcher was only able to use publicly available data found on a NGO's website. Websites differ with regard to the amount, quality, and type of data posted on their site, as well as how often the website is updated. For example, some NGOs post annual financial reports, while others did not post any financial information of their websites. Furthermore it is possible that the information found on an NGO's website may not necessarily reflect its organization or outputs. Therefore, the researcher's ability to generalize the results of the study may be limited due to the variations in NGOs websites and selection bias. There is no one measure of NGO performance or impact, and an aim of this study was to create a measure of NGO output. However, due to the nature of the study and the lack of data regarding NGO program impact, the researcher had to measure NGO performance indirectly. As stated previously, many NGOs do not evaluate their services and programs to see if they are reaching their goals; which makes it difficult for researchers to study NGO impact. To address this problem, the researcher created an instrument that measured NGO output by assessing its contribution to health. This instrument measured an NGOs programs, services, and health extension. However, it is possible that this instrument does not truly capture all the ways that NGOs contribute to health.

Lastly, several of the variables in the study suffered from the problem of missing data. As stated previously, variations were found in the type and amount of information posted on the NGOs websites. The income variable suffered from the most missing data. While some NGOs posted information on their yearly income, many NGOs did not post this information on their websites. To address this problem the researcher ran several follow up analyses to assess whether the missing data influenced the results. In the original regression analysis, the income variable was found to be insignificant. However, in one of the follow up analyses the researcher dichotomized the income variable, and the results indicated that those NGOs with a reported income had higher levels of health contribution than those NGOs that were missing income data. Therefore it was hard to draw conclusions regarding the influence of income on from the results of this study. There are several statistical techniques, such as mean imputation, that can be used to address the problem of missing data. However, due to the variation found in NGOs, the researcher decided against using these measures in the present study.

5.2 Social Work Implications

Globalization has solidified the idea that social, political, and humanitarian events occurring in other regions have direct consequences for countries all over the world. Thus, local problems often turn into global problems and affect the global community. Historically, the social work profession has worked at all societal levels; internationally, nationally, and locally. Social workers play a vital role internationally promoting humanitarian assistance, social and economic development, international policy initiatives, etc. The profession has continuously engaged in finding solutions to local and global problems and social workers are involved in various international dimensions of practice, as well as involvement with organizations concerned with global issues. The results of the study have several implications for international social work practice, policy, and research; and can contribute to the discourse on global health and the role of non governmental organizations.

International social workers practice in every country and across a broad range of sectors, including the health sector. Internationally, social workers often collaborate with NGOs, as they are the key providers of human services in the developing world. Social workers practice in or collaborate with NGOs, serve on their boards, and in some instances fund their programs. The present study examined the influence of organizational factors on an NGO's contribution to health. Two organizational factors, number of sectors and partnerships, were found to predict higher levels of health contribution in this study. Social workers practicing within NGOs can use these findings to improve the impact of their programs and services.

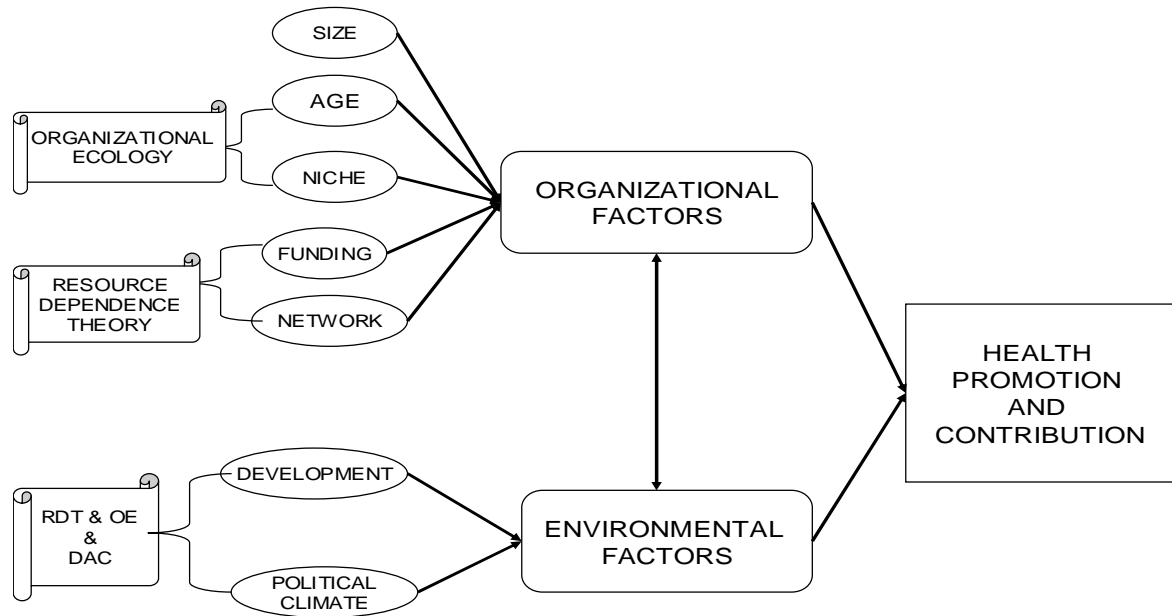
The results of this study also have implications for social work policy. According to the International Federation of Social Workers (IFSW), health is an issue of human rights and social justice, and it is considered a key aspect of all fields of social work...practice, policy, education and research (IFSW, n.d.). The IFSW holds that securing health requires collaboration among international, national, and non governmental agencies; and calls for social workers to be advocates for health. Thus, it is important for social workers to understand how the current policies, such as primary health care policy, are affecting the work of NGOs. The results of the case study show that many of the health programs offered by NGOs are directly related to the Millennium Development Goals. However, it is difficult to know whether this is due to the urgency of these health problems or the fact that there is a lot of funding available for agencies working in these areas. NGOs have been criticized for changing the scope of their health services in order to obtain funding. It is important for donors to recognize how their funding agendas can shape the services offered by NGOs and lead to the duplication of services. Donor agencies should strive to fund a variety of health services rather than limit their grants to organizations seeking to achieve the MDGs.

Lastly, the results of the present study also had significant theoretical and methodological implications for social work research. There is a dearth of research using organizational theories to explain the behaviors of civil society organizations such as NGOs.

This study sought to fill this gap by applying tenets of organizational theory to the NGO sector. Several of these organizational theories, like the niche width theory, were very helpful in explaining the behaviors of NGOs in the present study. The only difficulty faced by this researcher when applying these theories to the not for profit sector was with measuring some of the organizational concepts. Most of the organizational theories are based on research conducted in the business sector, and some of the concepts do not apply to not for profit organizations. For example, organizational size is often measured by the number of paid employees. Since NGOs often conduct their operations through the use of volunteers, many have a small number of paid employees. Thus the researcher had to create a composite measure of organizational size. Future researchers should keep measurement in mind when applying these theories to the NGO sector. Additionally, the present study sought to address some of the problems faced by researchers investigating NGOs. One of the problems faced by previous researchers was the lack of an instrument to measure NGO performance. The present study attempted to address this problem by creating a measure of NGO impact. The researcher created the Health Promotion and Contribution Scale to measure the contribution of NGOs to health in the developing world. Another problem faced by previous researchers was the lack of a comprehensive database on NGOs. Therefore, the researcher created a comprehensive NGO database, which contains information on organizational characteristics. The size and comprehensiveness of this database will contribute to future research on health NGOs. The researcher also sought to contribute to the NGO discourse by examining the interaction between organizational and environmental characteristics using advanced statistical procedures. Though these analyses did not produce significant findings, this study is one of the first to examine this interaction statistically. Future researchers can expand of this technique and further the research in this area.

APPENDIX A
CONCEPTUAL FRAMEWORK

Conceptual Framework



APPENDIX B
LIST OF NGOS IN THE SAMPLE

AARP
 Academic council on the UN system
 Academy for Future Science
 Action Canada for Population and Development
 Adventist Development and Relief Agency
 African American Islamic Institute
 African Association of Education for Development
 African Womens Development and Communication Network (FEMNET)
 All Indias Womens Conference
 American Association of Jurist
 American Civil Liberties Union
 American Psychological Association
 American Society of Criminology
 American Society of International Law
 Arab Organization for Human Rights
 Asian Centre for Organization Research and Development
 Asian Federation of Laryngectomees Association
 Asian Forum of Parliamentarians on Population and Development AFPPD
 Associated Country Women of the World
 Association de Volontaires pour le service international
 Association Francois-Xavier Bagnoud
 Association of African Women for Research and Development
 Canadian Council of Churches
 China Disabled Persons Federation
 Commonwealth Medical Association
 Conference of Non Governmental Organizations in Consultative Status with UN (CONGO)
 Congregations of St Joseph
 Association of Medical Doctors of Asia
 Association of the Bar of the City of New York
 Association of United Families International
 Bangladesh Nari Progati Sangha
 Bischofliches Hilfswerk Misereor
 Bochasanwasi Akshar Purushottam Swaminarayan Sanstha
 Brahma Kumaris World Spiritual University
 Brothers of Charity
 Canadian HIVAIDS Legal Network
 Care International
 Catholic Institute for International Relations
 Center for International Earth Science Information Network
 Center for International Health and Cooperation
 Centre for Social Research
 CITYNET Regional Network of Local Authorities for the management of Human Settlements
 Coalition Against Trafficking in Women
 Comite de Apoyo a los Trabajadores Agricolas
 Commission of the Churches on International Affairs of the World Council of Churches
 Cooperative Housing Foundation
 Cooperazione Internazionale
 Cooperazione e Sviluppo CESVI
 Covenant House
 Deutsche Stiftung Weltbevoelkerung;
 German Foundation for World Population Development Alternatives with Women for a New Era
 Dhaka Ahsania Mission
 Disabled Peoples International
 Economist Allied for Arms Reduction
 Egyptian Red Crescent Society
 Elizabeth Seton Federation
 Family Action Foundation
 Family Care International
 Family Health International
 Federation of American Women's Clubs Overseas (FAWCO)
 Federation of Cuban Women
 Focus on the Family
 Forum for women and development
 FOKUS
 Fraternite Notre Dame Inc
 Fundacion Intervida
 General Conference of Seventh Day Adventists
 Global 2000
 Global Action on Aging
 Global Volunteers
 Good Neighbors International
 Gorakhpur Environmental Action Group
 Gran Fraternidad Universal
 Hariri Foundation
 Hong Kong Council of Social Service
 HOPE worldwide
 Human Appeal International
 INCORVUZ XXI
 Initiatives Women in Development
 Institute for global Environmental Strategies
 Institute of Social Studies Trust
 Interact Worldwide

Interaction, American Council for Voluntary
 International Action
 International Association Against Drug
 Abuse and Drug Trafficking
 International Association of Schools of
 Social Work
 International Association of Lions Clubs
 International Buddhist Relief Organization
 International Catholic Child Bureau
 International Center for Research on
 Women
 International Centre for Trade and
 Sustainable Development
 International Cooperative Alliance
 International Council of Jewish Women
 International Council of Scientific Unions
 International Council of Women
 International Council on Alcohol and
 Addictions
 International Council on Mining and Metals
 International Environmental Law Research
 Centre
 International Federation of Building and
 Wood Workers
 International Federation of Business and
 Professional Women
 International Federation of Hard of Hearing
 People
 International Federation of Social Workers
 International Federation of University
 Women
 International Federation on Aging
 International Health Awareness Network
 International Hotel and Resturant
 Association
 international Indian Treaty Council
 International Islamic Charitable
 Organization
 International Institute for the Rights of the
 Child
 International Kolping Society
 International Longevity Center
 International Organization of Employeers
 International Planned Parenthood
 Federation
 International Presentation Association of
 the Sisters of the Presentation
 International Prisoners Aid Association
 International Rehabilitation Council for
 Torture Victims
 International Research Foundation for
 Development
 International Road Transport Union

International Social Security Association
 International Society for Doctors for the
 Environment
 International Society for Prosthetics and
 Orthotics
 International Society for Traumatic Stress
 Studies
 International Union of Psychological
 Science
 International Women's Health Coalition
 International Women's Rights Action Watch
 international Work Group for Indigenous
 Affair
 International Young Christian Workers
 IPAS
 ISIS International
 Inter Press Services International
 Association
 Jeunesse Horizen
 Jigyansu Tribal Research Center
 Jordanian Hashemite Find for Human
 Development
 Kids Can Free the Children
 League of Kenya Women Voters
 League of Women Voters of the United
 States
 Life for Relief and Development
 Lutheran World Federation
 MADRE INC
 MAMTA Health Institute for Mother and
 Child
 Maryknoll Fathers and Brothers
 Maryknoll Sisters of St Dominic, Inc
 Match International Centre
 Medecins du Monde International
 Medicins Sans Frontiers
 Medical Womens International Association
 Medico International
 Mediteranean Council for Burns and Fire
 Disasters
 Mercy USA for Aid and Development
 Millenium Institute
 Mothers Union
 Mukono Multipurpose Youth Organization
 NAACP
 National Bar Association
 National Council of Negro Women
 National Council of Women in Great Britain
 National Council of Women of the United
 States Inc
 National Society for Human Rights
 Network of East West Women
 New Humanity

Nippon International Cooperation for
Community Development
Open Family Australia
Order of St John
Oxfam International
Pan Pacific and South East Asia Womens
Association
Parliamentarians for Global Action
Peace Child International
Penal Reform International
Peoples Decade of Human Rights
Education
Physicians for Human Rights
Population Council
Population Reference Bureau
Program for Appropriate Technology for
Health (PATH)
Project Concern International
Reach the Children
Rehabilitation International
Resources for the Future
Rotary International
Rural Reconstruction Nepal
Salvation Army
Several Sources Foundation
Shinji Shumeikai
Sisters of Notre Dame de Namur
Society for International Development
Society of Catholic Medical Missionaries
Solar Cookers International
Soroptimist International
SOS Kinderdorf International
Stree Aadhar Kendra (Womens
Development Center)
Susila Dharma International Association
Swedish Association for Sexuality Education
Teresian Association
Tebtebba Foundation
Union Nationale de la Tunisienne
World Association of Girl Guides and Girl
Scouts
World Federation of the Deaf
World Federation Of Ukrainian Womens
Organizations
World Information Transfer
Women's International Zionist Organization
Women's Missionary Society of the African
Methodist Episcopal Church
Women's World Summit Foundation
World Association of Former United
Nations Interns and Fellows
World Movement of Mothers
World Safety Organization

World Union of Catholic Women's
Organizations
World Veterans Federation
World Women's Christian Temperance
Union
World Young Women's Christian
Association
World Youth Foundation
Youth for Unity and Voluntary Action
Youth with a Mission
Zonta International

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