The Interchangeability of Paid Staff and Volunteers in Nonprofit Organizations

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Handy, F., Mook, L., & Quarter, J. (2008). The Interchangeability of Paid Staff and Volunteers in Nonprofit Organizations. Retrieved from [http://repository.upenn.edu/spp_papers/100](http://repository.upenn.edu/spp_papers/100)


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Abstract
This article examines the interchangeability of paid and volunteer labor. It reports on estimates and prevalence of such interchangeability through a series of studies of Canadian nonprofits: two national surveys of nonprofit organizations and case studies of two hospitals. The first study found evidence that volunteers were replacing paid staff and that paid staff were replacing volunteers, sometimes in the same organization. The second study explored this pattern further and found the percentage of tasks that were interchangeable. The third study found that about two-thirds of the organizations in the sample agreed that the interchangeability of tasks occurred, but the data indicated that it was limited to about 12% of tasks, not dissimilar to the estimates from the case studies. The implications of the results are discussed, and a model for the interchangeability of paid and volunteer labor is presented.

Keywords
interchangeability, volunteer labor, paid labor, labor substitution, nonprofits

Disciplines
Sociology

Comments
Postprint version. Published in Nonprofit and Voluntary Sector Quarterly, Volume 37, Issue 1, March 2008, pages 76-92. Publisher URL: http://dx.doi.org/10.1177/0899764007303528

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The Interchangeability of Paid Staff and Volunteers in Nonprofit Organizations

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This article examines the interchangeability of paid and volunteer labor. It reports on estimates and prevalence of such interchangeability through a series of studies of Canadian nonprofits: two national surveys of nonprofit organizations and case studies of two hospitals. The first study found evidence that volunteers were replacing paid staff and that paid staff were replacing volunteers, sometimes in the same organization. The second study explored this pattern further and found the percentage of tasks that were interchangeable. The third study found that about two-thirds of the organizations in the sample agreed that the interchangeability of tasks occurred, but the data indicated that it was limited to about 12% of tasks, not dissimilar to the estimates from the case studies. The implications of the results are discussed, and a model for the interchangeability of paid and volunteer labor is presented.

Keywords: interchangeability; volunteer labor; paid labor; labor substitution; nonprofits

The human resources of nonprofit organizations often involve a partnership between paid staff and volunteers. This type of arrangement, which varies in degree among nonprofits, is referred in the research literature as coproduction
(Brudney, 1990; Brudney & England, 1983). The primary empirical research on this topic, by Brudney and colleagues (Brudney, 1990; Brudney & Gazley, 2002; Brudney & Kellough, 2000), has been undertaken in public sector contexts, although the concept has been generalized to nonprofits. In his 1990 study, Brudney found the line between paid and volunteer work is fluid, and as the organization changes, paid staff can assume tasks undertaken by volunteers and vice versa. In the later studies, Brudney and his colleagues have argued and presented evidence that in coproduction arrangements volunteers are not substituting for paid staff but rather supplementing them.

Whether volunteers complement or substitute paid staff is an open question. For an organization, the decision of whether to use volunteers or paid staff, and how much of each, depends on several factors. Organizations that use volunteer labor as one of the inputs in production will be faced with a choice of how much to use of each of the various inputs of production. In other words, the use of labor, volunteer or paid, will depend on its productivity, its price, and other available substitutes. For example, from an economic point of view, the choice of using an additional hour of labor as an input should be made if, and only if, the value of the additional output from this hour is, at the least, equal to the price paid for this hour. For overall efficiency, this logic should be true for all inputs of production, including paid labor. Organizations will eschew volunteer labor as its price increases (the costs per hour of volunteer labor incurred by the organization) and turn to substitute inputs with lower prices, such as minimum-wage labor.

The economics of choosing between paid labor and volunteers is complex, as indicated in the research by Handy and Srinivasan (2005) in the context of hospitals in Canada. Their research indicated that the quantity of volunteer labor used by hospitals is a decreasing function of their costs, productivity, and output. Several noneconomic factors also influence the decisions of organizations to use volunteer labor. Organizations in which volunteers are an essential part of the mission, such as Big Brothers and Big Sisters, will find it impossible to substitute volunteers with paid staff. On the other hand, in hospitals, it would be legally impossible to substitute paid staff for volunteers for any of the medical services. Moreover, in hospitals and Big Brothers, volunteer board members cannot be replaced by paid staff, whereas some tasks, such as helping with routine administrative duties, can be safely done by either paid staff or volunteers.

Nonprofit organizations are also mindful of the environmental and organizational constraints under which they operate. Brudney and Kellough (2000) acknowledge that there is a perception that volunteers can put the jobs of employees at risk, and in some cases, there is resistance on the part of employees to volunteer programs. In Canada, it is not uncommon for labor unions to write provisions into collective agreements that attempt to protect paid staff against substitution by volunteers. The research to date begs the question as to whether volunteers are replacing paid labor in nonprofit
organizations or vice versa. Brudney and his colleagues also address this issue in the public sector, and their research suggests that a relatively small percentage of respondents perceived tensions between volunteers and paid staff as a problem (Brudney, 1993; Brudney & Kellough, 2000); this was also the case in hospitals in Canada (Handy & Srinivasan, 2004).

The primary empirical study on the issue of whether volunteers were replacing paid staff was undertaken by Brudney and Gazley (2002) and was a retrospective analysis of more than 42 years of a volunteer program carried out by the U.S. Small Business Administration. Using an interrupted time-series analysis of data related to the Service Corps of Retired Executives, the authors found no evidence in support of either volunteer replacement of paid staff or cutbacks in paid staff in response to volunteer initiatives. Rather, the data suggest that volunteers were supplementing paid staff, a view put forward by Brudney in earlier writings (Brudney, 1990). Even though the Brudney and Gazley (2002) study deals with a government agency, it has similarities to nonprofits serving the public using mainly government funding; however, it is based on a case study of the one organization. The in-depth approach is both the study’s strength and its limitation.

A parallel line of scholarship has argued that nonprofits are being professionalized in response to changes in the funding environment and that paid staff are replacing volunteers (Akingbola, 2004; Hall & Banting, 2000; Reed & Howe, 1999; Smith & Lipsky, 1993). These authors have argued that the key forces in the paid staff–volunteer substitution were, first, an increased dependence on government funds; second, increased demands for organizational efficiency; and third, greater demands for accountability to government, requiring an increased investment in professionals who can write grant applications and reports that satisfy contractors. One of the earliest and harshest critics of this trend, Smith and Lipsky (1993), argue that “the staff of nonprofit agencies are the new street-level bureaucrats” (p. 13). Essentially, these authors argue that the government is transferring its activities to nonprofits and entering into a partnership with them, a pattern conceptualized less critically by Salamon (1995).

Therefore, the research literature suggests that two opposite patterns in the paid staff–volunteer interchange may be occurring simultaneously. To understand the relationship between paid staff and volunteers in nonprofits, this article presents a series of iterative studies that build on each other. Using differing approaches, each study attempts to understand the complex relationship between paid staff and volunteers in nonprofits. After presenting the data from these studies, they are interpreted in relation to the overriding theme of the paid staff–volunteer relationship in nonprofits. We conclude with a model for the interchangeability of paid and volunteer labor.

In this study, our conception of volunteers is broad and includes all forms of volunteering. This includes even those who might gain some personal benefit from volunteering, for example, members of associations, student
volunteers who might receive course credit, or corporate volunteers. In this regard, we are guided by the conception of volunteering as relative rather than as an absolute (Cnaan, Handy, & Wadsworth, 1996) and by a subsequent formulation by Handy et al. (2000), who suggest volunteering could be viewed in terms of the net cost to the volunteer, with different types of volunteering exacting differing net costs. We embrace an inclusive definition for volunteering as suggested by these studies.

**STUDY 1: SURVEY OF NONPROFITS**

To determine the extent of the interchangeability between paid and volunteer labor in nonprofits, we conducted a national online survey of Canadian nonprofit organizations. As our sampling frame, we used *Associations Canada 2002*, a directory of nonprofit organizations containing 19,213 listings from across Canada. This directory is the most comprehensive list of nonprofits available, containing a range of organizations that differ in their charitable status, fields of operation, size, and geographical distribution. However, it does not include all nonprofits in Canada and, therefore, may not be representative. As such, we refer to our sampling as purposive.

Organizations were selected from the *Associations Canada 2002* listing by choosing those nonprofit organizations that were located in Canada; had an e-mail address in the directory; and were not trade unions, professional associations, or chamber-of-commerce organizations. Of this pool of 6,620, there were 90 duplicate e-mail addresses. The actual list consisted of 6,530 e-mails; 1,978 were returned due to invalid address, leaving 4,552 nonprofits, which included nonprofits in every province and territory in Canada.

Two weeks after the initial e-mailing, the organizations were sent a reminder e-mail asking them to complete the online survey or, if they preferred, to request one by e-mail attachment, fax, or regular mail. Online, 611 surveys were completed, and 50 were sent by e-mail attachment, fax, or regular mail, giving a sample of 661 organizations. Overall, the response rate was nearly 15%.

The results from this survey indicate a seemingly paradoxical situation: In some organizations, volunteers are replacing paid staff; in others, paid staff are replacing volunteers; and in some, both patterns are occurring. These questions were also analyzed to see if there were trends that could be explained by field of activity. We use Salamon and Sokolowski’s (2001) primary categorization into service roles and expressive roles. According to their definition, service nonprofits are those that provide some use-value to society and include education, health, social services, and development and housing. Expressive nonprofits serve to actualize values or preferences and
include culture, sports, recreation, environmental protection, political expression, advocacy, labor unions, and professional and business associations.

The following findings seem to support the trend of volunteers replacing paid staff:

- Of the organizations in the sample, 25.5% agreed that “some activities carried out by volunteers today were performed by paid staff in the past.”
- Of the organizations in the sample, 14.9% agreed that “there are worker/union concerns about volunteers replacing paid staff” even though a relatively small percentage of the sample either was unionized (9.3%) or had a certified collective bargaining unit (3.7%).
- There was a statistically significant relationship between “volunteers are carrying out activities performed by paid staff in the past” and “worker/union concerns” ($\rho = .23, n = 500, p < .00$).

In all of these items, there were no significant differences between service organizations and expressive organizations.

The combination of these findings lends credibility to the data that volunteers are replacing paid staff in about one-quarter of the organizations in the survey. The data do not indicate how extensive this replacement is in the organizations that report it, but the fact that about one-quarter of our sample responded affirmatively, and that 15% responded that there are worker/union concerns about the replacement of paid staff by volunteers, seems to substantiate that the phenomenon merits further investigation. Interestingly, there does not appear to be any statistically reliable relationship between organizational characteristics and the item about volunteers replacing paid staff.

The survey also allowed respondents to include additional comments that explain their responses. With regard to the replacement of paid staff by volunteers, budgetary cutbacks are the primary reason given; indeed, it is almost the exclusive explanation. Some select excerpts follow:

- “We lost core funding in 1995. As a result, we have had to greatly reduce our paid staffing levels.”
- “We have less [of a] budget now.”
- “In the mid-nineties’ financial crunch, we cut back on the hours worked by our paid staff, but we also reduced some of the things we did then.”
- “We are recruiting volunteers with very specific skills, e.g., graphic layout, writing. In the past, projects using these skills would have been performed by staff.”
- “There are cutbacks from the ministries that encourage organizations to recruit volunteers to perform many tasks—‘cheap labor’—to perform many tasks.”
Among organizations that have resisted replacing paid staff with volunteers, unions are cited as one reason.

- “We have not used volunteers for previous paid roles, nor does our collective agreement allow it.”

OPPOSITE TREND

Before jumping to any conclusions, it should be noted that there is a complexity to our data in that in even a larger portion of the sample paid staff are replacing volunteers; for example, 54.7% agree with the item that “some activities that are carried out by paid staff today were performed by volunteers in the past.” More than double the number of organizations agreed that paid staff are replacing volunteers than are volunteers replacing paid staff. Again, there was no significant difference between service nonprofits and expressive nonprofits.

A number of organizational characteristics are positively correlated with paid staff replacing volunteers; specifically, the size of the budget ($r = .11, n = 467, p = .02$), the number of volunteers ($r = .19, n = 438, p = .00$), and the number of volunteer hours ($r = .14, n = 336, p = .01$). This suggests that larger organizations that are more reliant on volunteers are also more likely to substitute paid staff for volunteers. Although our survey data do not give an exact idea of some of the reasons for these changes between the volunteer and paid staff, the comments written into the survey provide an indication of some of the reasons for the trend. The precise wording varies, but the common denominator to the responses is that as the organizations increased in size and funding, they moved from relying on volunteers to a greater dependence on paid staff, a pattern that many of the respondents refer to as professionalization.

- “Growth in revenues has allowed us to hire some additional staff. Competitiveness of the sector means that we require full-time skill sets.”
- “The organization grew from grassroots, where everyone was a volunteer, to what it is today. Therefore, there are roles once done by volunteers that are now done by staff members.”
- “There has been a professionalization trend within our services and the movement in general so that we now hire trained counselors rather than women who have experienced violence.”
- “Volunteers were too unreliable and untrained to do some of the jobs that paid staff now do. Timing for some projects is an issue so paid staff can be expected to meet those timelines but volunteers may or may not. It is time-consuming to train volunteers. Paid staff accept instructions and directions easier than volunteers.”

Not only do more than half of the organizations note a greater reliance on paid staff, but it appears that volunteers themselves are becoming more professionalized, as indicated in the response to the following items. Nearly
two-thirds (62.7%) of the respondents agree that “compared to 10 years ago, volunteers are being asked to assume more responsibilities and take on more complex activities.” This is more prevalent for service nonprofits (64.1%) than for expressive ones (59.9%) \((p < .05)\). In addition, 22.9% agree that “compared to 10 years ago, there has been an increase in the amount of funding allocated for management of volunteers.” This is significantly higher for service nonprofits (29.0%) than for expressive ones (16.5%) \((p < .01)\). Moreover, the qualitative responses are highly consistent with the response to this item:

- “Governments expect volunteers to work to professional standards without paying them. What a bargain!”
- “Our organization as a whole has grown and taken on many more tasks; it requires more education (about our organization) to be part of our Board than ever before.”
- “The volunteers of today in our organization assume responsibility for their activities and are accountable to perform according to guidelines set out by the provincial board.”

**RECONCILING CONTRADICTORY TRENDS**

Our initial instincts when looking at the data were that two classes of organizations existed: those in which volunteers are replacing paid staff due largely to budgetary constraints, and those in which paid staff are replacing volunteers primarily because of increased funding and a desire to become more professional. However, the data belie this initial impression because there is a significant positive correlation between organizations that agree that volunteers are replacing paid staff and that paid staff are replacing volunteers \((\rho = .16, n = 578, p < .000)\).² Although this correlation is not high, it is statistically reliable and suggests that a subset of the organizations shift back and forth between volunteer and paid staff. Some of the qualitative comments corroborate the statistics and help us to understand why some organizations shift back and forth in their relative reliance on paid staff and volunteers:

- “Some necessary activities are paid in order to catch up the work, then go back to being volunteer.”
- “Some of the components of the jobs are interchangeable.”

Moreover, the line between volunteers replacing paid labor and vice versa can be subtle, as indicated by some respondents:

- “Volunteers are not used to replace a staff member. Rather they assist the current staff to allow us to cope in this world of ‘doing more with less.’ We have no more or less staff than we have ever had but we certainly have more work due to higher expectations of funders, stakeholders, and participants. Volunteers allow us to keep our heads above water.”
• “Volunteers today are not just bored seniors looking to fill their time. They are educated, busy people wanting to contribute. They therefore are capable of performing more complex tasks. I still maintain, however, that volunteers do not replace staff, but are an enhancement.”

SUMMARY OF THE SURVEY

The results of the survey indicate that there is a complexity to the relationship between paid staff and volunteers. Volunteers are replacing paid staff in some organizations, the reverse trend is occurring in an even greater number of organizations, and both trends are occurring simultaneously in some organizations. These trends are occurring in response to differing social forces: budgetary changes; professionalization of an organization, including the volunteers; and increased sophistication of volunteer roles. The survey responses suggest general trends, and the supplementary comments provide indications for the trends, but as with all large-sample studies, it is not possible to discern organizational dynamics that may lead to a better understanding of these trends. For that, we turn to two case studies of hospitals.

STUDY 2: CASE STUDIES

Hospital A is located in a large Canadian metropolitan area. A relatively new facility, the hospital budget has doubled over the past 5 years with rapid expansion and renovations. In 2004, Hospital A had about 2,500 staff members, 500 volunteers, and a volunteer auxiliary. Hospital B is a large general hospital in a small Canadian city, established more than 100 years ago. In 2004, it had more than 3,500 staff members, 600 volunteers, and a volunteer auxiliary. Hospital B is a teaching hospital, affiliated with a nearby university medical school, and as a result trains medical students and has a sizable cadre of student volunteers. Like most hospitals in Canada, multiple unions serve the staff for each hospital. Both facilities have undergone a professionalization of volunteer management in the past decade and have explored new relationships with the onsite hospital auxiliary, which has historically represented the voluntary fundraising arm of the hospitals.

To explore the issue of the interchangeability of paid staff and volunteer roles, surveys and interviews were conducted at the two hospitals. In developing a sample, our goal was to have staff and volunteer representatives from each of the units within the two hospitals that had a volunteer program, as well as union representatives and volunteer managers, although this goal was not always accomplished. The sample was purposive, and in total 40 volunteers completed surveys (a 50 % return rate), and 20 volunteers were interviewed. Of the staff, 25 completed surveys, and 25 were interviewed, including 4 volunteer managers and 3 union representatives. Interviews ranged from 20 to 45 minutes, and open-ended questions allowed
participants to express their views about volunteerism broadly. The issues addressed include the role of the volunteer, the interchangeability of tasks between volunteers and staff, changes over the past 5 years, and the assimilation of volunteers into various teams and programs.

The findings reported here focus on the issue of interchangeability only. Volunteers exclusively performed some tasks within the hospitals; for example, greeters, who welcomed patients and visitors at the hospital entrance, provided information and directed and often accompanied patients and visitors to their destinations. Paid staff performed other tasks exclusively, for example, getting an intravenous line started and giving medications. Staff were clear on the issues regarding legal liability and infection control procedures necessary to protect volunteers from any potential problems in this area. Office and administrative roles and housekeeping roles tend to be protected by union agreements and as such were exclusively for staff and could not be given to volunteers.

Through a probing interview process, we explored tasks that are performed by both staff and volunteers and the potential interchangeability. Because customer service was identified as the primary area of focus of volunteer tasks, not surprisingly this area stands out as one in which tasks are interchangeable, with a prevalence approaching 20%. For other tasks, interchangeability is quite low, less than 5%. Four significant examples of the interchangeability of staff and volunteer roles were identified within the customer service domain:

1. At Hospital B, the in-house café is managed full-time by two volunteers. The organization is quite unique, as nonunionized employees are hired by volunteers to provide service delivery, but volunteers manage the million-dollar operation and volunteers greet customers, clean tables and trays, and generally keep the traffic flowing in the customer service area for three shifts, 7 days per week. The paid staff and volunteers work as a team, both covering the same tasks during very busy times. Free snacks and drinks are provided to all team members, and the café employs one supervisor and pays the other staff to prepare sandwiches and operate the cash register. There is a fairly high paid staff turnover rate creating pressure on the volunteer managers, and this complexity of responsibility challenges the future role of the café in its current structure.

2. In both hospitals, tasks in the emergency department are interchanged between paid staff and volunteers, the latter being retired health care professionals. These volunteers are highly skilled, comfortable in this setting, and used to working with medical and nursing teams. Their main role is to provide assurance to the patients and families and demystify the entry process to emergency care by explaining wait times, providing information on procedures, and advocating on behalf
of the clients to make the experience as painless as possible. This goal is identical whether it applies to volunteers or staff.

3. At Hospital A, the negotiated agreement with one of the union locals allows volunteer information officers to work alongside staff with identical job descriptions. This facilitated the development of new paid positions as well as volunteer positions at the same time. The only functional difference is that paid staff focus on internal formal information requests, whereas volunteers focus on external, or community, requests for patient documents and test results. These formal information requests are usually in writing, so the task is to gather the documents and prepare written responses. This arrangement permits an exact calculation of cost savings to the hospital because paid staff and volunteer roles are very similar.

4. At both hospitals, volunteers perform the sales function at the gift shop, a fairly common role in hospitals and a revenue generator. Paid staff may also be present to assist with high-volume operations.

It is difficult to make an exact estimate of task interchangeability, but at Hospital A it is estimated at about 10% of all tasks involve volunteers; at Hospital B, the estimate is about 20%. The higher percentage at Hospital B may be due in part to its history of more than 100 years’ volunteer service and the high number of student volunteers obtaining their community service hours as credits for their educational courses. Hospital A, as mentioned, is relatively newer and is not a teaching hospital.

Some factors that influenced the permeability of task boundaries included level of risk involved in the task, legal liability, the skill level associated with particular tasks, last-minute needs created by absenteeism, and union agreements. With regard to the latter, the interviewees at both hospitals revealed an awareness of the 1986 Burkett arbitration award that stated, “The use of volunteers shall not be expanded beyond the extent of existing practice as of June 1, 1986” (Ontario Hospital Association, 1988, p. 49). However, this agreement between the Ontario Hospital Association, the Canadian Union of Public Employees (the largest union in Canada), and the Service Employees International Union has been open to interpretation over the years.

In recent years at both hospitals, volunteers have been introduced into primarily nonunionized paid staff areas in designing new programs. An example of this type of initiative was the inclusion of volunteers (many as retired health care professionals) in the palliative care team as full-fledged members. This involves attending case conferences (often with patients and family members), being trained and familiar with each case file, and being capable of working as part of a collaborative team with many different professions (e.g., social work, nursing, medical, and occupational therapy). This very intensive assignment often involves round-the-clock care as death approaches. All team members are briefed daily, and there is special support for volunteers and staff to counteract the emotional stress. Paid staff and
volunteers share shifts, attempting to respond to patient requests as much as possible, and arguably are in interchangeable roles.

The case studies corroborated the data from the first study in that they provided further evidence of the interchangeability of tasks and particulars on how they occur. They seem to indicate that interchangeability occurred for about 10% to 20% of the tasks in these two settings. The next study is designed to test the prevalence of interchangeability with a larger sample.

**STUDY 3: ANOTHER SURVEY OF NONPROFITS**

To check the prevalence of interchangeability, we returned to the same sampling frame as in Study 1, from *Associations Canada*, although in this case for the year 2004. The questions related to interchangeability were a small subset of a larger survey of wages and benefits in nonprofits conducted between September and December, 2005. The sampling frame consisted of 6,383, and in total, there were 428 usable responses. The low return rate can be attributed, in part, to the fact that the questions on interchangeability were part of a long, detailed survey. This implies that the sample is purposive rather than representative.

Our primary interest was to determine how prevalent task interchangeability was between paid staff and volunteers. Therefore, we asked a series of questions directly related to this issue. The first question read as follows:

Our research suggests that a common pattern among nonprofits is that some work is done by paid employees only, other work is done by volunteers only, and some work is relatively interchangeable (both volunteers and paid staff can do this work). Does this pattern describe your organization?

To this question, 67.8% answered yes, suggesting that the phenomenon was widespread. No significant differences between service organizations and expressive organizations were found.

The next question addressed the prevalence of this phenomenon. We asked the respondents to estimate the percentage of tasks undertaken by paid employees only, tasks undertaken by volunteers only, and tasks that were interchangeable between paid employees and volunteers, both at present and 5 years earlier. Arguably, a 5-year retrospective account (2000-2005) should not be treated as more than an approximation, as general memory of organizational practices may not be precise over such a period. Table 1 summarizes the results of this question.

As can be seen in Table 1, the bulk of the organizations in our sample relied on paid staff for their services, both at the time of the survey and 5 years earlier. The percentage of tasks handled by paid staff increased significantly to more than two-thirds of the total in this 5-year time period ($t = 3.92,$
The tasks undertaken by volunteers declined from 24.9% to 20.8%, also a significant change ($t = 3.55$, $n = 209$, $p < .001$). Interestingly, 12.4% of tasks were deemed as interchangeable, a similar magnitude to that of 5 years earlier, which was 13.3% ($t = 0.93$, $n = 184$, ns).

As Table 1 indicates, there was a range in the response to the interchangeability item. Although the mean for interchangeable tasks between paid staff and volunteers was 12.4%, for 15.6% of organizations in the sample 15% or more of tasks were interchangeable and for 6.7% of the sample 20% or more of the tasks were interchangeable. We found that both at the time of the survey and 5 years earlier the percentages of interchangeability were higher for expressive nonprofits (14.9% and 15.3%, respectively) than for service ones (9.7% and 10.1%; $p < .001$).

We also asked respondents what the factors were that determine the tasks that could be done exclusively by paid employees. Whereas 24.4% considered that having specific skills was a key aspect, 19.3% pointed to the number of hours required by task. Other factors mentioned were liability concerns (14.1%) and past practices (13.3%). Service nonprofits were more prevalent than expressive ones with regard to liability concerns (60.8% vs. 31.5%) and certification required (52% vs. 30.3%). Conversely, expressive nonprofits prevail over service ones in the following items: difficulty in recruiting (47.2% vs. 34.3%) and skills required (86.5% vs. 73.5%).

We also asked participants to elaborate on the reasons that determine the tasks that can be done by paid employees or by volunteers. Overall, the comments addressed the differences between paid staff and volunteers with regard to skills, qualifications, and effectiveness. Following is a selection of the reported comments explaining why volunteers are not interchangeable with paid staff:

- “Reality is that many activities require consistency, which means that you must look to staff as few people are willing to volunteer 40 hours a week. Splitting the job between 5 people (8 hours each/week) is not effective.”

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<td>Mean</td>
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<td>Tasks done only by volunteers ($n = 209$, $t = 3.55$)*</td>
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<td>Tasks interchangeable between volunteers and paid employees ($n = 184$, $t = 0.93$)</td>
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*p < .001.
• “It takes a long time to train employees and volunteers. It is often uneconomical to train volunteers because they move on, have limited time to contribute and need special time and effort to motivate.”
• “We do not believe in using volunteers to do work that employees should be paid for, except with a very few exceptions. Most of our work requires specific skills and education, and we are not willing to use volunteers for this work.”
• “Volunteers have a high turnover rate, so the training and retraining needs are important; this is a factor in the attribution of complex/specialized tasks to paid personnel.”
• “All tasks are currently done by paid staff except donor information, which could be done by volunteers if acceptable qualification, skill, and commitment were available. Recruiting volunteers who meet these criteria is difficult.”
• “Experience shows us that tasks that can be done by volunteers are punctual tasks with guidelines. Regular tasks or those involving care, and supervision of people, need a stable and continuous approach.”

Respondents were then asked what factors determine tasks that are interchangeable between paid employees and volunteers. They were given a series of response options. We found that 21% stated cost considerations; 13.9% said last-minute absenteeism; 19.1% said tradition; and 8.7% chose “other,” with “availability of volunteers” being the most prevalent response in this latter choice (1.3%).

We also looked at whether any organizational characteristics are related to interchangeability. The one characteristic that stood out was the percentage of tasks undertaken by paid employees only. That item had a .46 negative correlation with the percentage of tasks that were interchangeable, suggesting that organizations with a greater number of paid staff had on average a lower percentage of interchangeable tasks. Put differently, organizations with a large paid staff had less need for volunteers and for interchangeable tasks. Similarly, the number of volunteer hours—of board members and of other volunteers—had a low positive correlation (.20 and .14, respectively) with the interchangeability of tasks. This correlation suggests that the greater the reliance on volunteers, the more likely that there will be interchangeable tasks. As noted earlier, expressive nonprofits more than service organizations are likely to engage in interchangeability, perhaps because service nonprofits in fields such as health care and education tend to be larger and more unionized.

**DISCUSSION: TOWARD AN INTERCHANGEABILITY MODEL**

This section first addresses the related concepts of coproduction and interchangeability as they emerge from the findings and then presents an
interchangeability model. Although the literature reports on the trends toward the interchangeability of volunteers and paid staff, our research presents the first statistical estimates of the degree of interchangeability between volunteers and paid staff. The three studies presented in this article build on each other in addressing the relationship between paid staff and volunteers in nonprofit organizations. The first study indicated that about one-quarter of the sampled nonprofits have replaced paid staff with volunteers, and double that percentage has experienced the opposite trend, labeled professionalization. Moreover, a subset of the sample experienced both of these trends.

The second study of these issues, in the two Canadian hospitals, indicated that even though there were distinct domains for paid staff and for volunteers, there were tasks in which paid staff and volunteers were interchangeable. The third study explored the extent of interchangeability and found that about two-thirds of nonprofits report that interchangeability of volunteer and paid labor has occurred within their organizations. However, organizations estimate those tasks done by paid staff and volunteers represent 12.4% of all tasks slightly less than 5 years prior to the survey.

This article builds on the coproduction theory of Brudney and others and attempts to understand the nature of coproduction. The article argues that a prevalent feature of coproduction is the interchangeability of paid staff and volunteers. It does not argue that the interchangeability of tasks implies that volunteer labor is either complementing or substituting that of paid staff, in part because the organizational criteria for doing so are not clear. It could be argued that when volunteers and paid staff are performing the same functions, this represents de facto evidence of substitution, as paid staff could perform these functions.

There is a counter argument because in some cases volunteers who are working at the same tasks as paid staff could be following a tradition, in other words, doing something that has historically been done by volunteers. The gift shop in hospitals is a case in point, as often there are paid staff and volunteers working side by side in a historic arrangement. Similarly, for Hospital B (Study 2), a retired librarian from the nearby university performed a similar role as a volunteer at the Cancer Centre; this librarian position had never been funded. Under these circumstances, it would be difficult to argue that volunteers are substituting for paid staff even though their tasks are often identical.

However, our data do indicate that for some organizations volunteers take over tasks previously done by paid staff. On the surface, this represents substitution, but the qualifier might be if the arrangement is temporary, as when a paid staff person is absent without forewarning. Even in those cases, the organization does have a choice; it can rely on either a pool of paid fill-ins or on unpaid volunteers. To benefit from the unpaid services of volunteers, the hospitals discussed in Study 2 appeared to intentionally use volunteers for certain tasks, a decision aimed at reducing operating costs.

Therefore, the criteria for determining whether the interchangeability of tasks represents the substitution of volunteers can vary. At one extreme, all
interchangeability is a form of substitution; at the opposite extreme, only those that displace regular paid staff with volunteers on a relatively permanent basis represent substitution. We prefer a position somewhere between the two extremes and suggest that the historical role of the task and whether it is a temporary interchange in response to a last-minute need are factors that should be taken into consideration. Our data identify that interchangeability is commonplace, and they suggest that in some cases there is evidence for substitution, but more research on this issue is needed. In fact, because the term *interchangeability of paid labor and volunteers*, as applied in this article, appears to bypass the complexity of determining whether substitution has occurred, it might be a simpler form of labeling for researchers to apply in subsequent research.

**THE INTERCHANGEABILITY MODEL**

The research in these studies has presented many factors that are related to interchangeability. The interchangeability model that follows represents a synthesis of these factors and also presents a dynamic framework that attempts to explain the probability of interchangeability occurring. The model proposes that the probability of an organization interchanging paid staff and volunteers is a function of two general factors: organizational demand and volunteer labor supply. Together, these factors form the environmental constraints within which organizations make their decisions for labor interchangeability—both paid staff replacing volunteers and vice versa.

**ORGANIZATIONAL DEMAND**

1. Organizational culture: the historical precedents of who has done the task traditionally, the degree of unionization and the regulations in collective agreements, whether there is a trend toward professionalization, whether using volunteers increases or decreases the cooperation of staff, and whether volunteers increase the presence of the organization in the community and garner greater support for its mission.
2. Budget health: the ability of the organization to pay for the task at hand; the costs of recruitment, training, and management of volunteers; the ways to deal with last-minute needs such as absenteeism of paid staff; and the financial risks involved in using volunteers.
3. Productivity of volunteer labor: the skill sets of volunteers, their dedication and commitment to assigned tasks, and their reliability and retention rates.

**VOLUNTEER LABOR SUPPLY**

1. Labor market opportunities: the human capital investment for volunteers with utilitarian motives (e.g., new entrants to the workforce, networking, gaining new skills, requirement of community service in
high schools, and the opportunities in the job market that affect the supply) and a tight labor market decreasing volunteer supply.

2. Life cycle effects: increasing life expectancy (potential for more years of volunteering beyond retirement) and the effects of abolishment of mandatory retirement policies and incentives for early retirement.

3. Volunteering tradition: religiosity and education levels in the population (some cultures and subcultures have a greater tradition of volunteering tradition than others and this may impact volunteer supply).

How the organizational demand and volunteer labor supply interact influences the likelihood of the interchangeability of volunteers for paid labor within an organization. Where the supply of volunteers is low and organizational demand is high, interchangeability is least likely; where the supply of volunteers is high and organizational demand is low, interchangeability is most likely.

From an organizational perspective, subject to environmental constraints, the interchangeability of paid and volunteer labor takes place until the marginal product of volunteer labor is equal to the marginal product of paid labor. In other words, the organization chooses volunteer labor if using an additional unit of volunteer labor has a greater net positive contribution to the final product than that of using an additional unit of paid labor. This substitution continues until the net contributions of additional units of paid and volunteer labor are equal (Handy & Brudney, 2007). For a complete analysis, we need to include in the contribution of volunteer and paid labor the externalities that may arise. For example, volunteers can provide word-of-mouth promotion and publicity that has the potential to cultivate a broader base of supporters for a nonprofit and its mission, or on the other hand, the presence of volunteers may threaten staff morale (Handy & Brudney, 2007).

Overall, these studies raise more questions than answers, but many of these issues can be addressed in future research. Moreover, these studies may be useful to nonprofit managers on how and why organizations utilize volunteers and the relationships between volunteer labor and paid labor. In addition, through exploring the sensitive, and almost taboo, issue of the relationship between volunteer labor and paid labor, these studies provide nonprofit managers with a framework for viewing this important issue not only for their organizations but also for their funders. We feel that it is of great importance for nonprofit leaders and researchers to discuss the issue of the volunteer–paid staff interchange openly—even if it might be politically sensitive—to understand it better and to explore its implications for policy and practice.

Notes

1. Because the oversight provided by board members is not a task that can be done by paid staff, board volunteering is excluded in the findings and discussion on the interchangeability of volunteer labor and paid labor and the interchangeability model.
2. We used a Likert-type scale in determining whether respondents agreed to statements on interchangeability of volunteer labor and paid labor; hence, we use Spearman’s rho, the statistic of choice when data are in ordinal form.

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