

Ethical Issues for Statistical Agencies

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Abstract

This paper looks at how the Canadian federal government values and ethics code can be applied in the context of Canada's national statistical organization: Statistics Canada. The paper also discusses the challenge of the use of administrative files and how Statistics Canada addresses this issue within its values and ethics framework.

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Ethical Issues for National Statistical Organizations

Never has there been so much attention paid by the press and the public to the unscrupulous dealings by those in positions of public trust. We are all familiar with the outcomes of the Enron trials and the consequences of the activities of those involved for their companies and on a personnel level for their lives and their families. Is there a parallel for statistical organizations?

It can be argued that a national statistical organization, like the institutions and businesses recently in the news, will fail ethically long before it fails professionally. However, to view ethics as merely being the ability to stay out of trouble is to significantly misjudge the role of ethics and values in the workplace.

Ethics is about creating strength. What is of importance for those persons working in the arena of public service is that it builds stronger organizations, stronger institutions of all kinds and ultimately stronger nations. Building a stronger organization means being able to address the decisions that need to be made when the choice may seem to be deciding between what appears to be "permissible" in law versus what is ethically responsible.

Values and ethics: what do they entail?

Peter Drucker, the pre-eminent management expert wrote:

"There is only one ethics, one set of rules of morality and one code: That is of individual behaviour in which the same rules apply to everyone alike."

We can agree that in an organization, everyone must follow the same ethical principles. This means that those at the highest levels in the organization to the least senior members of the hierarchy are bound by the same code of ethical behaviour.

This often translates however, into differing opportunities to demonstrate the values-based ethical code to which everyone is bound to follow. The direction to abide by the values and ethics code must come from the highest levels in the organization and no one can be immune from the consequences of failure to follow such a code.

Some argue that at its essence, values and ethics is the understanding of the difference between right and wrong and then doing what is right. However, is it really that simple to determine what is right and wrong? For example, some view that the assessment of a situation and consequent behaviour occurs relative to the circumstances. If this is the case, how would such a rationale apply to statistical activities and are there relative ethical decisions to be made in the context of statistical work?

In reality, understanding ethical issues and taking ethically-based decisions are rarely simple. As an example, one might ask: what is embedded in the commitment of confidentiality made to respondents by a statistical organization? Is there room to give on confidentiality? What is the balance that must be struck between public good and personal privacy when surveys are being designed, records linked or data shared with third parties?

In summary, ethical issues are rarely simple and Statistics Canada, like other national statistical organizations will continually face ethical frontiers. To achieve an ethical resolution of difficult matters requires commitment from all senior managers to ensure that ethics and values are widely known, renewed and validated by all members of the organization. Moreover the ethical manner in which we carry out our mandate will determine the trust that our respondents and data users place in us as data collectors, users and disseminators.

In looking for assistance to further understand and put into practice ethics and values, let's look at the Canadian federal government's code of values and ethics. In the context of Statistics Canada, we will examine how the code fits with the mandate and legal obligations of the country's national statistical organization.

Canadian Public Service Values

Formally introduced in 2003, the Values and Ethics Code for the Public Service¹ contains four specific elements:

- **Democratic Values:** *Helping Ministers, under law, to serve the public interest;*
- **Professional Values:** *Serving with competence, excellence, efficiency, objectivity and impartiality;*
- **Ethical Values:** *Acting at all times in such a way as to uphold the public trust;*
- **People Values:** *Demonstrating respect, fairness and courtesy in dealings with both citizens and fellow public servants.*

Democratic values:

As Canada's national statistical organization, Statistics Canada has the mandate under the *Statistics Act* to collect, process, analyze and disseminate statistical information on the economic, cultural, demographic and social characteristics of the country. This is an Act of specific application in that it applies to only Statistics Canada. Thus, the *Statistics Act* defines

what the Agency can collect, analyze and disseminate.

The Agency's data collection, use, dissemination and retention activities are also shaped by two other federal statutes: the *Access to Information Act and Privacy Act*. These are Acts of general application and so apply to all federal departments and agencies. With respect to Statistics Canada, the federal *Access to Information and Privacy Acts* establish the privacy and access frameworks within which the Agency must operate.

From these three statutes flow a number of policies and guidelines that also embody democratic, professional, ethical and people values. Within the legislative frameworks one of the challenges that the Agency can face concerns the following "Just because we can ---- should we do it?" Let's look specifically at professional values for a statistical organization as this may assist us to answer this question.

Professional Values Embodied by a National Statistical Organization

Regarding professional ethics, the statistical agencies have benefited from a considerable in-depth review and evaluation of their statistical activities, methods, standards and output. As a result there exist a number of complementary and well accepted professional codes of ethics that serve to guide and inform the statistical activities of national statistical organizations.

The United Nations for example, has developed a code which assists nations to establish statistical organizations. One of the guiding principles is that of respect for privacy and protection of the confidentiality of respondents and data suppliers

The United Nations code upon review shows considerable concordance with the codes developed by a number of influential statistical professional associations such as the American Statistical Association and International Statistical Institute. These codes were developed with the objective to foster a professional code of ethics for statistical activities undertaken by statisticians operating in the public and private sectors. Thus such codes establish

¹ Values and Ethics code for the Public Service, Ottawa: Communication Canada, Catalogue no.BT22-89/2003. www.tbs-sct.gc.ca.

benchmarks for acceptable statistical behaviour, practice and rigour.

For statistical organizations, the UN code embodies commitment to data confidentiality and privacy protection as these principles form the cornerstone to the success of a statistical organization. The establishment of data quality measures, rigorous survey/questionnaire design, and the development and dissemination of enhanced data interpretability along with comprehensive metadata are viewed as representing the hallmarks of established practices by national statistical organizations.

Other key elements are the production of objective, informative and relevant analysis available at the same time to all users. The promotion of international collaboration and establishment of accepted methods and standards ensure that statistical information is comparable across countries so that economic, social and cultural indicators can be applied in the international context.

In the area of confidentiality and privacy protection, international standards, such as the Nuremberg Code of ethics that emerged in 1948 and the Belmont Report that was issued in the 1950s have played critical roles in shaping research ethics and practices.

These ethical codes have found their way into both the legislative arena as well as into that policies and guidelines that influence how information is collected and used. They also bring into focus the need to balance the public good that the information may produce and the privacy invasion that the activity may entail. A major focus of these codes centres on the minimization of harm that research could have on those participating in the study.

Ethical Values

Ethical values are also embodied in the international codes developed for national statistical organizations and for statistical practice. At the heart of the discussion around ethical values is the concept of the trust that respondents and the general public must have in the statistical organization. Without widespread trust and confidence in

the statistical organization and its activities it would be impossible for the organization to collect information from citizens, businesses and institutions.

A key factor to the maintaining of public trust includes the ability to stand behind the promise of confidentiality given to all respondents when their information is collected. It also involves the development of measures that will ensure privacy protection and ensure the security, both physical and informatics, of the information collected and stored by the organization.

The measures used by national organizations are frequently referred to as "Data Stewardship". Data stewardship is the attentive custodianship of a precious resource: identifiable information. Data stewardship also addresses issues of informed consent for the sharing and linking of information.

Adherence to ethical values also influences how access to the results of statistical analysis is determined. At Statistics Canada, this means the dissemination of results to all users at the same time. Further to this, the ability to disseminate information in an objective, non-partisan manner ensures that all users will have access to relevant information on which to make important policy, planning and business decisions. It also requires that reporting of data analysis not stereotype groups or sensationalize findings. Thus objective dissemination of results and non-partisanship are major factors that ensure continued public trust.

How information is obtained is also an important factor in the building and maintenance of public trust. In area of household surveys, all of Canada's surveys apart from the monthly labour force survey and the census, rely on the voluntary participation of respondents. When the public has trust in the impartiality of the organization and the public good that can be derived from the information collected and that their information will be kept confidential unless consent to release has been obtained, then response rates remain high.

Another element of data stewardship is the reduction of response burden for

respondents. In the case of businesses, administrative data can be substituted and survey sample designs can be made more efficient. For individuals, administrative information too can be used; however to do so requires that the balance be struck between the statistical use of information that was collected for another purpose and the privacy invasion that this implies. The public good that can be derived from the administrative source rather than from the direct collection from a respondent needs also to be considered.

Data Stewardship is the means by which we achieve that balance between meeting a public good: the benefit that is derived by the public from the collection, analysis and dissemination of statistical information on a wide range of economic, demographic and socio-cultural topics and the invasion of privacy that data collection, use and disclosure involves.

This balance rests on a foundation of accountability to Canadians. A cornerstone of this accountability framework is the promise of confidentiality that the Agency makes to all respondents. How we go about to achieve this critical balance is through the application in the context of the collection use and dissemination of personal information for statistical and research purposes of the "Fair Information Practices Code" (s. 4 to 7, *Privacy Act*). This Code identifies the privacy principles of informed collection, consent, consistent use, limiting use, disclosure and retention, and accuracy.

The privacy principles of data security and transparency and openness are the remaining elements on which data stewardship rests. Finally it is important to underline that the balance that must be achieved through data stewardship exist throughout the information lifecycle: from planning to collection to archiving.

In summary then, ethical values means acting at all times in such a way as to uphold the public trust. It represents the key to the success of a national statistical organization and as such it is a core value. Yet, as Aristotle noted: often it is easy to perform a good action, but not always easy to acquire a settled habit of performing such actions.

Thus there is a need to ensure that consistent practice and adherence to values and ethics is an ongoing practice rather than an occasional activity. The requirement to be seen to be doing the right thing as well as actually doing it is at the core of demonstrating ethical values in the conduct of statistical activities.

People values

The fourth element in the Canadian public service ethics and values code concerns people values. This value is stated as the demonstration of respect, fairness and courtesy in the dealings with both citizens and fellow public servants. In the context of a statistical organization, it includes employees and staff, respondents and other data providers, clients and data users,

With regards to staff, at Statistics Canada it involves policies and programs such as, the no lay-off policy, bilingual workplace, employment equity, commitment to Joint Union/Management forums, a community focus such as volunteering in the schools and a focus on employee wellness. In the area of staff development it includes continuous learning and training and a workplace where employee opinions matter

In the context of respondents the fair information practices code (s 4-7, *Privacy Act*) and the ten privacy principles (Treasury Board Privacy Impact Assessment Policy) are ethical values which instruct the Agency to inform respondents about the reasons for the information collection, the use for the information and its retention. As such it includes the development of respondent information brochures and advance letters, training for interviewers and provision of information on the website about surveys in the field. Regarding transparency with the public, the Statistics Canada website² contains information about record linkages, privacy impact assessments and privacy policies.

For clients, a Client Privacy Policy exists as well as a "no call" list. This ensures that

²

<http://www.statcan.ca/english/reference/privacy.htm>

those who purchase information from Statistics Canada can limit further marketing to them by the Statistics Canada. As well, the Agency never sells, distributes or trades information about clients or data users.

Public Service Ethics and Values Code

The Canadian public service ethics and values code complements the professional codes of ethics developed by the United Nations for national statistical agencies and by professional statistical associations. The ethical values and peoples values harmonize well with the legislative requirements as specified in the *Access to Information and Privacy Acts*. As applied by Statistics Canada refers to employees, respondents, clients and data users.

Let's now look at one ethical frontier and challenge to investigate the applicability of the ethics and values code.

Ethical Frontiers and Challenges: Increased use of administrative records for statistical and research purposes

Section 13, *Statistics Act* provides the Agency with the authority to obtain administrative records collected by other departments, institutions and governments for statistical and research purposes. In the case of income tax records, s.24 and s. 25 of the Act reinforces this legal authority by specifically stating that customs and excise records can be obtained as well as personal and business tax records.

The specific privacy and ethical challenge embodied in the acquisition and use of administrative records, is that the information which was obtained for an administrative purpose is being used for a secondary purpose ----statistical. This use may occur without the knowledge and consent of the individual to whom the information relates. The privacy issues and ethical challenges are compounded when records are linked to other data sources without consent.

Consent is of course the gold standard for the use of personally identifiable information. Yet it is not always possible or practicable to obtain consent for the linkage and use of administrative records.

Regarding the need to inform individuals as to the subsequent use of their information an interesting development has occurred in the Province of Quebec regarding the sharing of vital statistics information with statistical agencies. Since 2004, the birth, death and marriage certificates (completed by a parent in the case of the registration of a birth, by the attending physician or coroner in the case of a death and by the married couple in the case of a marriage) tell those completing the forms that the information will be shared with a number of institutions including Statistics Canada. They are also informed that the information contained on the forms will be used only for statistical and research purposes.

Such a measure does not constitute consent for the sharing of the information. It does however inform the public that the information will be transmitted to a number of other users. As such, it increases the awareness of the public of the research and statistical uses of information recording a birth, death or marriage in the province of Quebec. It also makes transparent to those completing the form the legal authority of an institution such Statistics Canada to obtain this information.

Record linkage is another statistical activity that poses ethical challenges. There are many very sound statistical reasons for performing record linkage. For example, the information may not be available except as is found in an administrative file such as a vital statistics record, in the cancer registry or on a tax file. Moreover, use of such a file reduces response burden. However along with these benefits exists a number of ethical issues regarding record linkage.

For example, should a linkage be done only if consent exists? Should files remain linked forever, or should a time limit be imposed. Is there a governance structure in place to manage and approve record linkages? How are citizens informed of record linkages and the benefits of the linkage?

At Statistics Canada the majority of record linkages occur with the consent of Canadians. This is certainly the case when linkages involve survey data. In this case,

the Agency has the opportunity during the survey collection period to ask survey respondents for consent to link their survey information with administrative records.

So that respondents can make an informed decision about consenting to the linkage of their information, the Agency strives to tell them the following: what information will be linked; why the record linkage is important; what the linked information will be used for; who will be doing the linkage; how the files will be linked; who will have access to the linked information and for long will the linked information be kept

The Agency has also developed a rigorous governance structure. For example, the Chief Statistician reviews and recommends all record linkages. The Office of Privacy Commissioner is informed of all new record linkages and the Minister approves all record linkages of a type not previously approved.

Regarding transparency, Statistics Canada website contains a description of all record linkages³. This description informs Canadians about the use of the information and length of time that the files will be linked. As required privacy impact assessments will be conducted.

In cases where it is not possible to obtain consent, the Agency depends on the Statistics Canada website to inform Canadians. As well the Agency's Annual Report to Parliament required by the Access to Information and Privacy Acts describes all record linkages involving personal information.

Public opinion: statistical use of administrative records

There exists very little public opinion research in Canada on the topic of the use of administrative records. Based on survey experience we know that for the Survey of Labour and Income Dynamics, 85% of respondents agree to use of their tax records. In the area of health surveys the Canadian Community Health Survey and the National Population Health Survey achieve 90% of respondents agreeing to the linkage

their survey information to administrative health records. In the case of the 2006 Census, for the first time there are consent questions for linkage to tax records and for release of census records in 92 years were asked.

With the use of administrative records there is a trade off being made between privacy and public good. The Agency in the context of its data stewardship frame and adherence to professional, ethical and people values attempted to achieve a balance in this area. It also struggles with the other side of the equation regarding what would happen if the study were not undertaken because record linkage was prevented. It is ethical to prevent the use administrative records for statistical and research purposes?

This is a very difficult trade-off to make. In order to make this decision, questions such as who would be harmed need to be addressed. National Statistical Agencies must remain true to their values and ethics and seek a balance between public good and invasion of privacy. The Canadian federal government ethics and values code along with the professional codes developed by the United Nations and the professional statistical organizations provide guidance to the taking of these difficult decisions.

³ <http://www.statcan.ca/english/recrdlink/>