

## COMMUNICATING STATISTICS TO THE MEDIA: TELLING THE STORY BEHIND THE NUMBERS

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*Statistics Canada, like most statistical agencies, places great importance on communicating with the media, because the media provide a gateway to the general public. Our challenge is twofold: to engage the interest of journalists in our data, surreptitiously raising the level of their statistical literacy and to sensitize our statisticians to the value of presenting statistics in a manner which the journalist, as a layperson, can understand. The paper will outline the various approaches that Statistics Canada has taken to meet this twofold challenge and will discuss our experiences in training both journalists and statisticians to tell the story behind the numbers.*

### THE COMMON OBJECTIVE: INFORMING THE PUBLIC

Statistics Canada is mandated to undertake surveys that inform the general public about the population, society, economy and culture of their country. By increasing public awareness of the value of this information and demonstrating its relevance to public and private decision-making, the Agency can garner greater public support for its programs and more willing participation in its surveys, which in turn contribute to the quality and timeliness of its output.

The majority of the public, however, will never directly consult a statistical agency or look to it as a source of news. For most citizens, it is the news media itself – newspapers, radio and television – that will provide their exposure to official statistics. As the “gatekeepers” to the public, the news media afford statistical agencies a powerful tool to fulfil a critical part of their mandate. The extent to which agencies can collaborate with the news media, and communicate effectively through them, has an enormous impact on how well they can inform the general population.

For journalists, reaching the public and stimulating their interest in what is happening in the world around them, is a *raison d’être*. And journalists are becoming more aware not only that statistics can play an important role in their news stories but also that statistical agencies are an important source of news stories. This is especially the case as statistical agencies extend the scope of their survey activity beyond the traditional measures of economic and social phenomenon – unemployment levels, school enrollments – to probe the underlying causes and likely outcomes of these statistical measures – the impact of education on employment or the social factors contributing to school drop-out rates or the implications of an aging population on healthcare, housing or occupation profiles.

Though it might seem that that journalists and statisticians have little in common, there is a tangible benefit to both these groups in learning to understand each other better. The challenge for the statistical agency, if it is to effectively communicate its information through the media, is not to train the journalist in statistics or to train the statistician in journalism, but to engage the interest of journalists in statistical stories and to sensitize our statisticians to the value of presenting statistics in a manner which the journalist, as a layperson, can understand.

### THE MEDIA PERSPECTIVE

Bruce Little, the highly respected economics writer with *The Globe and Mail* newspaper in Canada explored the differing perspectives of statisticians and journalists in a 1998 speech to the Statistical Society of Canada and again at a 2003 UN work session on statistical commentary.

In general, he notes, there is a perception among journalists that statistics are dry and hard to understand. They have no interest in the methodological issues that absorb statisticians and they are challenged when it comes to numbers, some unable even to calculate a percentage

increase.

“Journalists are often people who avoided maths and sciences in school because they didn’t like numbers. They preferred words, so they studied languages or history or philosophy. When you don’t understand something, you tend to fear it. Many journalists fear numbers and do what they can to avoid them.”

The disparity between journalists and statisticians even extends into their working environments. Statisticians can take months to produce an analytical article that might undergo numerous revisions through peer review while journalists have hours to produce an article that might be published with only slight revisions by a copy editor. Statisticians work with experts; journalists work with generalists.

Though some journalists, like Bruce Little, are able to match word-smithing with number-smithing, these are in the minority. The vast majority of reporters that Statistics Canada works with are general news journalists, without specific expertise in economics or the social sciences to lend them numeracy skills. If these journalists are uncomfortable with numbers, how can we expect to engage their interest by presenting data tables without the analytical text that interprets what the data is telling them? And, how can we expect them to understand terms like medians, quintiles and cohorts - everyday concepts for a statistician.

Further, financial cutbacks have depleted Canadian newsrooms. Two decades ago, Canada’s domestic news agency, The Canadian Press, had two dozen reporters. Today, it has half that number. Newsrooms have often responded to cutbacks by eliminating specialists. Reporters these days tend to learn things on the fly. They face demanding editors on a daily basis and must file their stories on stringent deadlines. As their numbers go down, their workload increases.

Whatever the source of their news story, journalists like to build upon the human element to capture public interest, particularly television reporters, a set composed almost entirely of generalists. Television is a visual medium. It focuses on pictures. Viewers don’t remember what people have to say, they remember what people look like.

Television journalists keep the use of data to a minimum. Denis Ferland, a member of the French language arm of the Canadian Broadcasting Corporation, warned a group of Statistics Canada analysts in 2004 that a TV journalist will only focus on one or two key numbers and only in colloquial terms. “Instead of saying a 35% increase, we say something went up about a third. It’s not September 2003, it’s ‘a year ago.’ We round off numbers. We say ‘about 500,’ not 497.”

To communicate effectively with journalists, the statistical agency must appreciate the media environment. Detailed data, specificity in calculations, complex terminology and statistical methodology belong to the statisticians. To capture the interest of journalists, the statistical agency must, in Bruce Little’s terms, “loosen up” and find a way to balance statistical rigour with popular analysis that tells the story behind the numbers. The clearer an agency’s communication to journalists, the easier it will be for journalists to recognize the storyline and quickly channel it through to the public in a positive, accurate and informative style, that highlights the importance and relevance of the agency’s information.

## ENGAGING THE MEDIA: COMMUNICATIONS NOT TRAINING

Over the years, statistical agencies have experimented with various training initiatives for journalists, none of which have proven popular, not necessarily because of lack of interest, but more because of lack of time.

We have offered formal workshops for journalists, promoted through media umbrella groups, on data analysis, on finding and using statistics, on working with numbers and on concepts and definitions. We have offered tutorials to explain data issues and interpretation in subject specific domains. We have produced guides on working with statistics, performing basic statistical calculations and understanding statistical jargon.

We have charged for courses to enhance the perceived value of the training and motivate attendance. We have offered them free and on weekends. But journalists face tremendous time constraints. Always at the whim of breaking news, even their pre-registered

attendance cannot be relied on. Staff turnover in news rooms tends to be high and media outlets, with tight budgets, are loath to invest in training a journalist who might be gone in six months. Filling a small basic data analysis class with journalists who do not like to work with numbers, is not easy, even in Canada where, at last count, there were 105 daily newspapers, 790 radio stations, 170 television stations and 950 weekly newspapers.

University journalism programs, however, are rapidly bridging the gap between journalism and statistics for those who do have an intrinsic interest. Students have no shortage of credit courses available to them in the discipline of data analysis. Ryerson University in Toronto, for example, offers courses on computer-assisted reporting with modules in using statistics. There are also websites for writers, explaining spreadsheets and clarifying statistics, such as <http://nilesonline.com/stats>.

Consequently, Statistics Canada no longer tries to beguile journalists with formal training courses. Instead, the agency has strengthened its media relations program to ensure that journalists are alert to the news potential of the Agency's data releases and, more importantly, that these releases are communicated in a manner that demonstrates their public interest value by telling the story behind the numbers.

Operational services under this program include a media hotline to respond to media queries in finding or interpreting data, booking interviews with subject-matter analysts, advance notices of forthcoming releases and traditional media lock-ups for key economic releases. In the case of special news releases, we even invite media representatives to assist us in planning the coverage and potential story lines in advance. For the 2001 Census releases, for example, a team of analysts worked hand-in-hand with a team of reporters from the Canadian Press over the course of 11 news releases to deliver thematic write-ups of broad public interest.

The Internet, of course, has become an indispensable tool to our media relations program. Since 2001, *The Daily*, Statistics Canada's official release bulletin, has been published on the home page of our website [www.statcan.ca](http://www.statcan.ca) every working day at 8:30 a.m., providing journalists with immediate access to all new releases, with links to supporting publications, concepts and definitions. There is now hardly a media outlet in Canada that does not check *The Daily* every morning for possible news.

To further facilitate media access to statistical information, the Agency has also introduced a virtual Media Room on its website [http://www42.statcan.ca/smr\\_r000\\_e.htm](http://www42.statcan.ca/smr_r000_e.htm) that provides journalists with popular theme-based links, a set of easy to understand definitions and regular feature stories on topical or calendar based events – “Back to school, by the numbers” for example.

While facilitating media access to statistical information is critical for a statistical agency, access alone is not enough to entice the data-wary journalist to pursue a statistical story. Rather it is the journalistic style with which we communicate this information that ultimately induces the media to carry our news stories through to the public at large.

#### SENSITIZING THE STATISTICIAN

Just as “many journalists fear numbers,” many statisticians fear journalists. Statisticians are a specialist breed, they thrive on data, the methodological issues underlying the data and the scientific rigour governing its analysis. To popularize their statistical findings in a news release might undermine their scientific context, to discuss them with a news journalist might generate misinterpretation and misquotes.

To reach the public however, and demonstrate the relevance of its information to the people who have contributed to its creation through survey participation and public funds, a statistical agency must sensitize its statisticians and analysts to the importance of effective public communications through the intermediary of the media.

Statistical analysts at Statistics Canada are fortunate in three respects: first, we have a senior management committed to achieving media coverage of its information releases; second, we have strong credibility with the media; and third, we have a dedicated media

relations team, which includes working journalists, to provide training and writing and editorial support.

Formal media training is an integral part of the Agency's media relations strategy and is mandatory at Statistics Canada for all statisticians and analysts who are responsible for information releases in *The Daily*.

The first component of this training program is a one-day workshop on "Writing an Effective Release for *The Daily*." Its objective is not to make journalists out of our statisticians, but to introduce them to the journalists' perspective and to familiarize them with the inverted pyramid style of journalistic writing, where key findings appear in the lead paragraph rather than at the end, contrary to the style of most scientific texts. Participants learn how to extract the newsworthy elements of their analysis, identify the relevant contextual information and develop the story line with appropriate headlines and leads. They learn to address the big picture rather than focus on the details, put the results before the methodology and communicate clearly in plain language unencumbered by statistical jargon. To this end, comparisons of prior releases with the actual media coverage they received are a particularly valuable learning tool. The more effectively a *Daily* release communicates the story behind the numbers, the more likely it is that the media will carry it almost verbatim and without misinterpretation.

The second component of the program is a one day "Encountering the Media" course that teaches, through simulated interviews, the basic techniques of maintaining control, staying focused on the key messages and answering questions directly and simply. For statisticians wary of the press, this training increases their confidence, minimizes the opportunity for ill-considered or misleading responses and, ultimately, increases their understanding of the public value of their information when they see or hear their information quoted in the media.

It is not every statistical analyst who can absorb all that effective communications with the media entails and certainly not in just two single-day training courses. This is why Statistics Canada, as part of its media relations program, provides individual advisory and writing services to its statistical analysts on an ongoing basis, whether for the purposes of refining the media appeal of individual releases or providing just-in-time refresher sessions before a media interview. The fact that we have working journalists on our staff, who know what journalists need and speak the same language, helps legitimize the assistance we provide.

To further ensure not only that our statisticians remain cognizant of the media environment but also that the media learn more about the statisticians' perspective, the Agency regularly invites media representatives from print, radio and television outlets to discuss with statistical analysts and senior managers how we might better help each other in bringing statistical information to the attention of the Canadian public.

## CONCLUSION

Statistics Canada has long recognized the important role played by the media in demonstrating the relevance of its information to a far larger audience than it could ever reach on its own.

We have also recognized that the onus is on our shoulders to provide context and perspective to our data, if we are to successfully engage the interest of journalists in channeling our news releases through to the public. And this is why we place such importance on sensitizing our statisticians to the value of presenting statistics in a manner which journalists can understand.

Information releases that tell the story behind the numbers render statistics meaningful not only to the public at large but also to the media, a surreptitious way to raise their level of statistical literacy and far more successful than any formal training initiatives.

Statistical agencies, however, are certainly not the only organizations involved in statistical research. While we have an explicit obligation to ensure that our statistical findings are placed in the public domain, it is rare that statistical research, whatever the discipline, does not have some public interest value. The skill to effectively communicate statistical

information to a generalist audience is an important asset to any student or educator in the statistics field.

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