

- Lind, Amy, and Jessica Share. 2003. "Queering Development: Institutionalized Heterosexuality in Development Theory, Practice, and Politics in Latin America." In *Feminist Futures: Re-Imagining Women, Culture, and Development*, ed. Kum-Kum Bhavnani, John Foran, and Priya Kurian. London and New York: Zed Books.
- McIlwaine, Cathy, and Kavita Datta. 2003. "From Feminising to Engendering Development." *Gender, Place, and Culture* 10 (4): 369–82.
- Morris, Morris David. 1979. *Measuring the Condition of the World's Poor: The Physical Quality of Life Index*. New York: Pergamon.
- Otto, Dianne. 2001. "Defending Women's Economic and Social Rights: Some Thoughts on Indivisibility and a New Standard of Equality." In *Giving Meaning to Economic, Social, and Cultural Rights*, ed. Isfahan Merali and Valerie Oosterveld, eds. Philadelphia: University of Pennsylvania Press.
- Parisi, Laura. 2006. "'Disciplining' and 'Engendering' the World Bank: A Comment." In *Feminist Economics and the World Bank: History, Theory, and Policy*, ed. Edith Kuiper and Drucilla K. Barker. London and New York: Routledge.
- Staudt, Kathleen. 2002. "Dismantling the Master's House with the Master's Tools? Gender Work in and with Powerful Bureaucracies." In *Feminist Post-Development Thought: Rethinking Modernity, Post-Colonialism, and Representation*, ed. Kriemild Saunders. London and New York: Zed Books: 57–69.
- Tickner, J. Ann. 2006. "Feminism Meets International Relations: Some Methodological Issues." In *Feminist Methodologies for International Relations*, ed. Brooke A. Ackerly, Maria Stern, and Jacqui True. Cambridge: Cambridge University Press.
- UNDP 1995. *Human Development Report*, New York and Oxford: Oxford University Press.
- World Bank. 2001. *Engendering Development: Through Gender Equality in Rights, Resources, and Voice*. Oxford: Oxford University Press.

## Overcoming Obstacles in Quantitative Feminist Research

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Feminist research is motivated by and concerned with social justice, equality, and the empowerment of women and other marginalized groups. The method I have chosen to further my feminist-inspired research is merely an analytical tool. Feminist principles apply to the act of research, the questions asked, and the data to be collected. Thus, the intersection of feminism and quantitative analysis offers a new method of knowledge production for the study of international relations. Yet my research design is traditional: Based on theory, testable hypotheses are formulated, data gathered, and findings reported. The purpose of this feminist-oriented quantitative research is to produce a body of knowledge that can explain, predict, or help elucidate empirical phenomena relevant to women's lives and issues.

Although I am primarily a quantitatively trained researcher, I am well aware of the shortcomings of quantitative analysis and thus remain sensitive to the added benefits of qualitative research. I freely admit that my research is grounded in traditional, positivist, and empirical research methods (using Robert Keohane's terminology, 1998). But my goal through this research is to empower women and create social change. Thus, in response to Ann Tickner (2005), my answer is that yes, some feminists who do international relations research do believe that their research questions can be answered by using social science explanatory frameworks. Quantitative methodology allows me to answer research questions regarding state policies and practices that either further or restrict women's attainment of their economic, social, and cultural rights. The use of quantitative methods to answer feminist questions is becoming a recognized approach by both IR feminists and traditional positivists. As Brooke Acklerly acknowledges, "feminist IR scholarship has built upon positivist and mainstream IR methodologies in the service of exploring feminist questions" (2006, 2). Using data, numbers, and statistical analysis is no more or less feminist, then, than other forms of research that might have been selected.

Since the ultimate goal is to improve the lives of women and children, and doing so involves working within a patriarchal system of state and international power, many quantitative feminists have made peace with their decision to use quantitative methods as "the best way to convince nonbelievers of the validity of the message that feminists are seeking to deliver" (Keohane 1998, 196–97). And there are benefits to using the dominant language of the patriarchal system. Using quantitative data allows feminist researchers, like myself, to work for women's rights through the existing political and judicial systems and institutions. "The *political* potential of such work," to quote Mary Maynard, "must not be underestimated" (1994, 13; emphasis in original). Statistics on discrimination, poverty, human rights violations, sexual harassment (to name only a few women's issues) can be used to formulate public policy or to amend laws that can "eventually provide legal redress for individuals" (Reinharz 1992, 80). Rights, often aspirational in nature, must be converted into verifiable and enforceable goals and targets. Statistical indicators can monitor progress and identify patterns of discrimination within the whole of a society. It does not seem likely that there will be an immediate revolution in power and knowledge that could generate social justice and equality. Therefore, the feminist quantitative scholar has to be satisfied if her/his work can, in some small

way, help to improve the well-being of women somewhere. This is precisely the defining rationale for feminist research. To quote Tickner, “the key concern of feminist theory is to explain women’s subordination, or the unjustified asymmetry between women’s and men’s social and economic positions, and to seek prescriptions for ending it” (2001, 11). Consequently, quantitative feminists can be, and in fact are, feminist scholars.

Quantitative IR feminists face several hurdles when studying and evaluating women’s human rights, however. These obstacles include 1) locating adequate data disaggregated by sex and by other characteristics of human concern (age, ethnic and religious minorities, urban/rural populations, HIV status, etc); 2) finding available data covering enough countries to be useful for drawing global comparisons, inferences, or generalizable knowledge; and 3) ensuring that these measures are indeed comparable in that they were defined and collected in fairly similar fashion across all countries. Finding ways of overcoming those obstacles is crucial because it is essential to include women, all women, in policy-relevant research. Obviously, data that are not disaggregated are worthless for determining whether a state’s obligation of nondiscrimination can be discharged. The first step in implementing a strategy to respect and ensure women’s human rights is to ascertain, as precisely as possible, the conditions and situations in which they live, so as to identify more clearly the problems that need to be resolved by policymakers. By including women in policy-relevant research or focusing on women’s lives and issues as dependent variables, quantitative feminists seek to make “the invisible visible, bringing the margin to the center, rendering the trivial important, putting the spotlight on women as competent actors, understanding women as subjects in their own right rather than objects for men” (Reinharz 1992, 248).

This set of goals was precisely what motivated the research I conducted in my 1998 article, “Measuring Women’s Economic and Social Rights Achievement,” concerning the difference in rights attainment between men and women. In this study, I found that a country’s average level of infant mortality rates hid the inferior and unacceptable economic and social rights violations experienced by women. Disaggregating the indicator of infant mortality rates by sex provided an instant detection of discrimination in women’s rights. In many countries, female infants died at higher rates than male babies, even though nature gives the female infant a biological advantage of a higher birth weight. However, what could not be determined is whether female infants from different

cultural, ethnic, religious, class, or disability conditions died at comparable rates. In 1998, locating any data disaggregated by sex was arduous, and my research was an important first step in understanding the fatal effects of sex discrimination.

Quantitative feminist research is confronted with a major obstacle: The politically motivated and biased (often patriarchal) act of data collection by states and international institutions. Quantitative IR feminist research is hampered by the lack of available disaggregated data on women. The act of collecting and publishing data is a political act. It is so because only certain segments of the population are considered worthy of being counted or measured. The Committee on the Elimination of Discrimination Against Women has repeatedly noted its concern with this relative absence of disaggregated, precise, and reliable indicators on the situation or condition of women. The Committee remarked “that statistical information is absolutely necessary in order to understand the real situation of women in each of the States parties to the Convention” (1989, 392). The primary culprits are first and foremost states themselves. But international institutions like the World Bank, the International Monetary Fund, and the World Trade Organization are also guilty of ignoring or excluding women in the collection of data. Other intergovernmental organizations, such as the United Nations Children’s Fund (UNICEF), the United Nations Development Program (UNDP), or the World Health Organization (WHO), have collected data disaggregated by sex for some time now. But, in general, governments and international organizations do not collect data on women’s lives and experiences as regularly (if at all) and as fastidiously as they collect military or economic data. Some countries simply do not collect data, refuse to report data, or the data they present are so unreliable that the UN agencies involved will not publish it.

It must be noted that in recent years, states and World Bank agencies have begun to collect data disaggregated by sex. But now that at least some data are disaggregated by sex, we are still left with the problem that the data often conceal regional, urban–rural, economic (rich–poor), and ethnic differences that are relevant to women’s status. Sexism is only one of the many causes of discrimination against women. Intersectional analysis has made clear that women can suffer from many sources of prejudice. Thus, problems of measurement and collection are exacerbated when the dimensions of gender are added to other motivations of discrimination, such as poverty, religion, ethnicity, race, belonging to an indigenous minority, or the urban/rural distinction.

Women are not the same as men, but women are also not all the same. Even many of the international governmental organizations that collect disaggregated data on women do not generally, as yet, collect data on intersectional discrimination. The collection of disaggregated measures can demonstrate states' discriminatory practices that allow certain groups, even subgroups of women, to enjoy significantly higher levels of rights fulfillment. Aggregated data can mask large differences between men and women, and between different groups of women, in the attainment of social, political, and economic goods. Measures that are state averages, even measures that are disaggregated by gender, can hide the inferior and unacceptable economic and social rights violations experienced by marginalized female populations. The use of interaction terms allows a quantitative researcher to investigate the effect of discrimination based on different levels of a second category (such as race or work status). For example, social inequality can be based on sex, but it is likely that the level of inequality will be greater for black women than white women. Utilizing intersectional analysis, quantitative feminist researchers could model the relationship between discrimination and sex, which varies depending on racial category.

Incomplete data can be the result of resource limitations, deficient collection mechanisms, or active attempts by governments to hide their discriminatory or depraved behaviors. Women's situations and circumstances are often undercounted because they are frequently relegated, in fact or in the government's viewpoint, to the "informal" or private social and economic sector where there is even less systematic reporting. For example, for a government agency collecting labor data, women's work may not be considered work but simply "chores." The language and definition of concepts used for data gathering can and often do distort the lived realities of women. At this level, and as many nonquantitative feminist studies have shown, language is essential for the implementation and maintenance of patriarchal practices. Workers' benefits and protections are thereby denied women since they are not counted as workers by government agencies.

The distinction between "actively employed" and "unemployed" is often presented as straightforward or expedient in many international data collection projects and for various reporting purposes. However, this distinction is deeply misleading when stacked up against the overwhelming burden of often unpaid work performed by women worldwide (World Bank, FAO, IFAD 2008). Paid work performed by women is often temporary, seasonal, or informal. Furthermore, women's

chores, those household errands and tasks, are typically not viewed as work by governmental and international reporting agencies. An example of the invisibility of women's work includes the collection of water. The Human Development Report (2006) recounts that women in Mozambique, rural Senegal, and eastern Uganda spend 15–17 hours a week collecting water, which often requires a 10 kilometer walk during the dry season (6.1 miles). The WHO suggests that an individual minimum requirement of 20 liters (2.4 gallons) of water per person a day is required for proper health (one gallon of water weighs over 8 pounds). Yet this obviously laborious and vital task is generally not recorded as work. Another example is the gendered definition of the worker. A female tending sheep is simply looking after the family's assets, while a male doing the same job is a shepherd. Thus, as the previous example suggests, the quantitative feminist's data set on women's work often suffers from the problem of "missing data." And missing data reduces the sample size and the power to detect the causes or effects of women's rights violations. As the sample size decreases, the statistical power decreases. A reliable, accurate, and comprehensive data set on women's labor activities would be able to correct for the government fallacy of insisting on the notion of the "economically inactive" or "unoccupied" woman.

My work focuses on human rights and directly targets the rights of women. Lately, my work has shifted to the rights of the child, specifically the rights of the child to be free from hunger and the scourges of malnutrition. In this research, I have found that data concerning women's roles as mothers and caregivers are even more difficult to locate than data on women's economic or political conditions. For example, in a recent paper (2008), the data needed on breast-feeding, prenatal care, or contraceptive rates were reported in less than half of the countries that collected governmental data on the percentage of seats held by women in national parliament or female participation in the labor force. Tickner is correct that "the role of women as reproducers, caregivers, and unpaid workers has been largely ignored in conventional economic analysis" (2005, 8). Due to the large amount of missing data in this study, regression analysis using random effects is appropriate: If "some omitted variables may be constant over time but vary between cases, and others may be fixed between cases but vary over time, then you can include both types by using random effects" (Princeton University Data and Statistical Service n.d.). Random effects methods have the advantage of treating the data as a sample drawn from

a larger population. So it is theoretically possible to generalize the findings and to replicate the study using other countries and time points.

Quantitative analysis is among the many tools that feminist scholars have to create or enhance knowledge of women's lived experiences. Marianna Pavlovskaya and Kevin St. Martin write: "Objective knowledge and unbiased truth are impossible because scientific practices necessarily embed social, economic, and cultural contradictions and their outcomes; moreover, they serve those in power and support the status quo" (2007, 587). I believe that quantitative feminists would often agree that knowledge is not neutral and that it is indeed situated in structures of social, economic, and political power. Feminist quantitative researchers must remember that the data collected on women's lives and experiences are often politically motivated, imperfect, and incomplete. In other words, quantitative feminist researchers should realize that statistical findings must be interpreted with less than perfect data. The interpretation of the data depends on both the context of the study and the experience of the researcher, something that necessitates the inclusion of human values and human experience.

Feminist quantitative researchers have a crucial contribution to make by highlighting the importance of accurate measures and requiring the collection of reliable data on the lives and multiple roles of women. What we need are more, not less, data and data analysis. Thus, I believe that dismissing quantitative research could actually prove disastrous to the objectives of feminism in general. Collecting more and better data is particularly important since the data that are collected, and the studies that are conducted, inevitably affect public policy and women's lives.

## REFERENCES

- Ackerly, Brooke. 2006. *Feminist Methodologies for International Relations*. Cambridge: Cambridge University Press.
- Apodaca Clair. 1998. "Measuring Women's Economic and Social Rights Achievement." *Human Rights Quarterly* 20 (1): 139–72.
- . 2008. "The Role of Women's Status and Empowerment in Alleviating Child Malnutrition." Presented at the 2008 International Studies Association Annual Conference, San Francisco.
- CEDAW. 1989. *Statistical Data Concerning the Situation of Women*, General Recommendation No. 9 UN GAOR, 1989 Doc No. A/44/38.
- Keohane, Robert. 1998. "Beyond Dichotomy: Conversations Between International Relations and Feminist Theory." *International Studies Quarterly* 42 (1): 193–98.
- Maynard, Mary. 1994. "Methods, Practice and Epistemology: The Debate about Feminism and Research." In *Researching Women's Lives from a Feminist Perspective*, Maynard, Mary and Purvis June (eds). London: Taylor & Francois.

- Pavlovskaya, Marianna, and Kevin St. Martin. 2007. "Feminism and Geographic Information Systems: From a Missing Object to a Mapping Subject." *Geography Compass* 1 (3): 583–606.
- Princeton University Data, and Statistical Service. N.d. [http://dss.princeton.edu/online\\_help/analysis/panel.htm](http://dss.princeton.edu/online_help/analysis/panel.htm) (June 24, 2009).
- Reinharz, Shulamit. 1992. *Feminist Methods in Social Research*. New York: Oxford University Press.
- Tickner, Ann. 2001. *Gendering World Politics*. New York: Columbia University Press.
- . 2005. "What Is Your Research Program? Some Feminist Answers to IR's Methodological Questions." *International Studies Quarterly* 49 (1): 1–21.
- UNDP. 2006. *Beyond Scarcity: Power, Poverty and the Global Water Crises*. Human Development Report 2006. New York: UNDP.
- World Bank, FAO, IFAD. 2008. *Gender in Agriculture Sourcebook*. Agriculture and Rural Development Series. Washington, DC: World Bank.

## Making Choices

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Not everything that counts can be counted, and not everything that can be counted counts.

— Albert Einstein

I never thought I would be considered a quantitative scholar. When I took my first statistics course in graduate school, I just did not ask the types of questions that required statistical analysis. I was interested in women in development, issues of power and powerlessness, and violence against women — not issues that are readily quantifiable. As you can imagine, I quickly learned how to ask the "right" questions. This all occurred when the democratic peace thesis began to take on a life of its own, and I reasoned that norms of inequality and injustice must surely transfer to the international arena, much the same way as those positive democratic norms are theorized to do (see Hudson et al. 2008/9). So I decided I would study conflict and war, which were readily quantifiable. And I would incorporate measures of women's equality. Thus, by some twist of fate, I chose quantitative methods as one of my testing fields and became a scholar interested in bridging the gap between feminist international relations theory and traditional international relations theory using quantitative methods.

Little did I realize what challenges I would encounter. These challenges included a general lack of support for quantitative feminist research and