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Making Choices

Mary Caprioli, University of Minnesota-Duluth

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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

data that was imperfect at best. I chose to address the data issues the best I could, even when that meant changing my research focus, helping to create a database on women, and managing the data issues, which included a lack of data and uneven data collection. Eventually, I found myself combining aspects of quantitative and qualitative data.

I had little guidance, for there was no existing body of literature on which I could rely and a dearth of data. I knew that women's reality counts — I had just heard Ann Tickner speak at our graduate seminar after reading her book *Gender in International Relations* (1992), but I was not sure that women's reality could be counted. It is quite difficult to find cross-cultural data on women because women just have not been considered important enough for collecting separate data. So women count, but could they be counted? Unfortunately, the data that do exist often cannot be compared because each state may use a different definition, as is the case with various aspects of education. For example, literacy might be defined by some countries using a proxy measure of number of years of schooling and for others as the ability to complete literacy tasks that require understanding.

I was fascinated with how the issue of violence against women has an impact on state behavior. My problem was how best to measure violence against women. I was left to my own devices. How exactly could I measure the interrelated aspects of women's experiences? Was it even possible? I agonized every time I chose variables to measure gender equality. Measures such as rape and domestic violence would have been ideal. Unfortunately, data on rape and domestic violence are scarce and are suspect when collected. Does a higher level of rape in one country mean that there is more violence against women, or greater awareness and perhaps lower levels of rape, than in a country that reports fewer rapes? The same holds true for domestic violence — collection is sparse, and a greater environment of violence would prevent women from reporting the abuse. So what to do?

There are several practical reasons why I chose my variables. The most mundane consideration, because I study conflicts, is that they exist cross-culturally and longitudinally. This left me with few choices. The best variable I could find was fertility rate, which appeared theoretically to be a better measure of social equality than violence. A high fertility rate is related to poor health for women, low levels of education, and low employment. One can assume that a high fertility rate means low rates of contraceptive use and that women have less of a choice over their reproductive rights, including abortion. In short, high fertility rates signal

an environment effused with patriarchy and male domination. Thus, even though I was not sure that fertility rate was the best measure for equality, I knew it was the best one available at the time.

Given the choice of measures that I had, I needed to change my focus away from violence against women to women's social equality. Having chosen fertility rate as my measure, I needed to deal with an intriguing assumption: Does zero fertility mean perfect equality between men and women? With measures such as rape or domestic violence, a zero rate would be ideal. But fertility rate posed a unique problem because a fertility rate of zero is impractical. What then becomes the magic number for fertility rate to reflect equality? I argued that an "equal" fertility rate should be linked with the average fertility rate, which was just above population replacement. Choice plays a large part in fertility rate, yet choice cannot be adequately measured. So at the time, the average fertility rate of 2.7 (UNICEF 2003) could be rounded to 3 to allow for choice. In my paper, I created a binary variable with 3 as the maximum value associated with equality (Caprioli 2005).

Beyond choice, I needed to deal with the fact that fertility rate is not available for every year. If I had used fertility rate as a continuous variable, I would have had a large number of missing cases. I already knew from an earlier article that fertility rate as a continuous variable was statistically significant (Caprioli 2000). In the 2005 article, I could not afford to lower my *N*. Plus, I wanted to capture "equality" — the tipping point for fertility rate in that particular article. Hence, my decision was to create a binary variable. Where obvious, I coded the missing years. For instance, a state with a fertility rate of 5.5 in 1990 and a fertility rate of 6 in 1992 can be coded with a high degree of confidence as a 1 (fertility rate of 3.01 or higher) for 1991 and 1992.

These struggles with less than adequate data have led to the creation of WomanStats — a multidisciplinary central repository for cross-national data and information on women (available at http://www.womanstats.org) that contains raw data as well as qualitative experiential data. The idea behind WomanStats is to have a free repository of information on women that allows users to find the information they need for research, news reports, and so on. As the information can sometimes be contradictory, especially between numerical and experiential data, WomanStats gives users the opportunity to utilize the database in keeping with their method of inquiry.

Quantitatively oriented researchers can find statistics on the prevalence of particular practices as readily as qualitatively oriented researchers can locate

narrative information on the actual experiences and lives of women. This provides a richer data source for researchers unhappy with relatively superficial indicators, and empowers researchers to create their own indices. For example, when examining the phenomenon of domestic violence, data are collected on not only the incidence of domestic violence and laws concerning domestic violence but also custom and practice concerning domestic violence. So, for example, is domestic violence generally reported? Why or why not? What is the level of societal support for victims of domestic violence, such as the existence of shelters and hotlines? How is fault decided in legal cases concerning domestic violence? What is the range of punishment for this offence? Is rape sometimes sanctioned by the culture, such as in the cases of "disobedience" by a wife or daughter? Are there regional, religious, or ethnic differences in incidence of domestic violence within the society? Are there other barriers to enforcement of the law, such as low arrest and/or conviction rates? In the WomanStats database, there are seven variables on domestic violence alone, 11 on rape, 15 on marriage practice, and so forth.

Beyond disaggregated data, WomanStats also has available cluster variables to capture the Physical Security of Women, Son Preference, and Sex Trafficking (see Caprioli et al. n.d.). The idea behind the cluster variables is primarily theoretical — to capture data, law, and practice in one composite measure combining quantitative and qualitative data in order to obtain a more complete picture of women's reality across countries and, in some cases, longitudinally — an ongoing data collection process. As mentioned, one of the main problems with capturing violence against women was the lack of data and the nebulous nature of the data. By looking, for instance, at practice along with the laws concerning data on rape, we can get a better measure for violence against women. By creating the cluster variables, we eliminate the problem of multicollinearity and avoid the problem of having a country coded either too high or too low on the basis of only one dimension of the issue. Of course, the cluster variables, as with most composite measures, remain subjective despite high levels of intercoder reliability.

Of note, we can now show by using WomanStats that fertility rate correlates with violence against women (see Caprioli et al. n.d.). Thus, as my research progresses, I find myself combining aspects of quantitative and qualitative data in order to better capture women's realities. WomanStats was used to supplement and add a cautionary note to the data analysis in Caprioli and Douglass (2008). And with the advent of WomanStats, I can now look at data, the law, and practice to achieve

better proxy measures for violence against women, whereas previously I had to switch my research agenda to women's equality. I remain unsure as to whether or not fertility rate is the best measure of equality, as there are so many dimensions to women's equality, though fertility rate was one of the best measures available at the time.

In addition to the aforementioned cluster variables, WomanStats has available a cluster on Inequity in Family Law between Men and Women. For example, Inequity in Family Law between Men and Women compiles information on the legal age of marriage; the prevalence of marriage below the legal age; whether polygyny is legal; the prevalence of polygyny; whether women are free to choose their spouse; whether women know their rights to consent and divorce; whether women can exercise their rights to consent and divorce without fear of reprisal; whether marital rape is illegal and actively prosecuted; whether women and men have equal rights to divorce; whether women can inherit property upon the death of a parent or spouse, or upon divorce; and whether abortion is safe, legal, and readily available.

Inequity in Family Law between Men and Women captures several aspects of women's relation to the state and with the courts by combining data (age of marriage); the law (legal age of marriage); and practice (the prevalence of marriage below the legal age), and so on. With this example, it is the prevalence of marriage below the legal age that requires a judgment call. Yet qualitative/quantitative composites provide information beyond what can be counted but that still counts. It matters what the age of marriage actually is. If one were to merely look at quantitative data — the legal age of marriage — one might get a far different picture. If the age of marriage is younger than the legal age, then we know that the courts and society are not in synch with the law and that the state is choosing to ignore the issue. It also matters whether the typical age of marriage is quite young, which could increase health issues for women and their children, in addition to abbreviating education, and that this age might be far lower than that of men's, even though the legal age of marriage might be identical for men and women.

Although most of the data are not yet longitudinal, they allow users to then run correlations with other data to better assess if one is measuring what one thinks. Thus, for example, I now know that fertility rate is a proxy for violence against women and that better variables may be available for both violence against women and women's equality. The ability to use WomanStats longitudinal data and other data to run

correlations with other potential variables should not be underestimated, as it will lead to better measures and, ultimately, better research.

As of now, due to data collection limitations — lack of interest as previously discussed — there is a small but increasing amount of subnational data. Thus, the data are currently most useful for studying the state level of analysis. The problem with state-level data is that the current quantitative data for the most part provide women's reality as if it were shared across socioeconomic, race, religious, and ethnic status. The qualitative data, however, help highlight some of the weaknesses in terms of measurement of the quantitative data. And the quantitative data allow for cross-national comparison and reveal general trends. So with WomanStats, we can count what counts.

In some ways, I have come full circle with my thinking, though I am more assured of the choices I have made. And I am pleased with the new choices available.

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Why a Feminist Theorist Studies Methods

Brooke Ackerly, Vanderbilt University

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What are the injustices of the world? What causes them? How might we mitigate them? Feminism needs empirical inquiry in all subfields to inform our understanding of the world and our normative reflections on it.