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Measuring Women's Empowerment in the Global South

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Abstract

Over the past two decades, we have seen an explosion in research on the topic of women's empowerment and its related dimensions, yet there remains much to be done in terms of clarifying conceptual pathways and best practices in measurement. This review traces the intellectual and historic context in which women's status and empowerment in lower- and middle-income countries have been measured, the conceptual and operationalization challenges in shaping research questions, the use of empirical measures and their connection to levels of social analysis, and the identification of emerging directions for future research. With the recognition that empowerment is as much a collective process as it is individual, we argue that a more integrative and multidisciplinary approach to empowerment is needed. This would require incorporating an intersectional lens, employing the life course approach, and tapping into diverse sources of data that can together strengthen future research.

1. INTRODUCTION

While the political support for gender equality has grown enormously around the globe in the past decades, we continue to wrestle with measuring the extent of progress and barriers to progress. Despite extensive research on gender-based inequalities in measurable indicators such as educational attainment, employment rates, and health status, a focus on these objective measures is sometimes shrouded in debates about the importance of these markers for women themselves. Focusing on women's empowerment allows us to sidestep the debates around the intrinsic value of objective markers and focus on choices that individual women make in their own best interests. Over the past two decades, the term women's empowerment, often used synonymously with gender empowerment, has become ubiquitous in international development discourse and even features as a prominent global commitment in Sustainable Development Goal 5 (SDG-5), which seeks to achieve gender equality and empower all women and girls.

Nonetheless, efforts at understanding processes that may enhance women's empowerment and possible consequences of empowerment are hampered by a lack of clarity on what we mean by empowerment and which indicators best capture it. With growing attention to operationalizing and tracking SDG-5, it is important to focus on clarifying the conceptual underpinnings of the term women's empowerment and evaluating the way in which it is measured. We undertake this task by tracing the historical origins of the discourse on women's empowerment and examining conceptual developments in the field, its operationalization in data collection, and the way in which these concepts have been used in empirical research on selected topics in the Global South. We conclude by highlighting some of the promising new areas of research.

2. GENDER AND DEVELOPMENT: GENESIS OF THE FIELD

Boserup's (1970) pioneering book *Woman's Role in Economic Development* and the first World Conference on Women, organized in 1975 in Mexico City, are often considered the beginning of the field of women in development. Boserup's argument that the invisibility of women's contribution to the economy resulted in imbalances in development policies led to strong advocacy for counting women's economic contributions that persists to date (Zinsser 2002). The emergence of fiscal crises in the 1980s resulted in World Bank- and International Monetary Fund-mandated structural adjustment programs that were perceived to have negative gender consequences (Elson 1990, Sparr 1994). Concern about the relationship between a global capitalist system and the undervaluation of women's labor (Enloe 1990, Mies 1981, Sen 1985) led to research and data collection to measure women's work in both formal and informal sectors (Benería 2001, Short et al. 2002).

Literature following the Mexico City conference in 1975 often focused on women's subordination within the structures of international dependency and class inequality and directed our attention to women's participation in the informal sector and home-based work (Mies 1981). The subsequent decade, falling between the Copenhagen conference in 1985 and the third United Nations Conference in Beijing in 1995 saw the field become what we now call gender and development, in which women's labor in both production and reproduction received considerable attention (Kabeer 1994).

In a related but separate development, feminist scholars within the field of economics increasingly became dissatisfied (Folbre 1986) with the Beckerian model of the household as a unit led by a benign dictator (Becker 1993). Consequently, researchers began to direct attention to gender inequalities within households that shape power dynamics (Presser 1998) as well as differences in men's and women's preferences (Dwyer & Bruce 1988). Strategies for measuring differences in preferences and factors that affect how these differences are resolved became the domain of demographers who invested extensively in measuring women's status as a determinant of

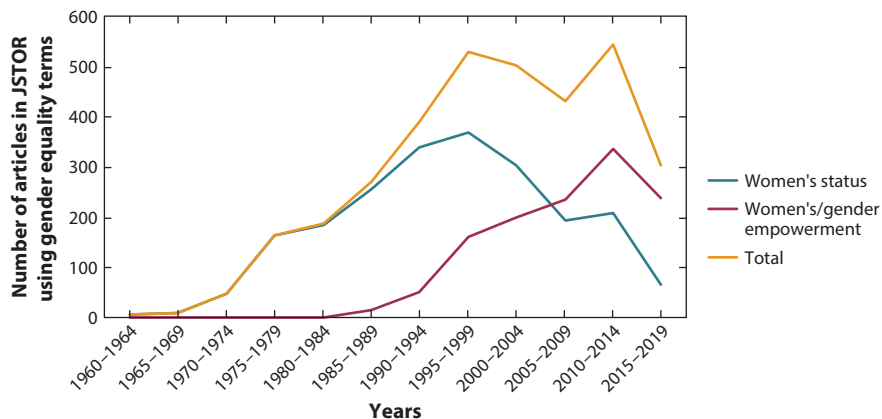


Figure 1

Change in the use of the terms “women’s status” and “women’s empowerment” or “gender empowerment” in JSTOR from 1960 to 2019.

demographic outcomes, particularly fertility and child health (Mason 1986). Research supported by the Rockefeller Foundation’s program on women’s status and fertility (Jejeebhoy & Sathar 2001, Mason & Smith 2000) led to investments in the study of cross-nationally comparable indicators of women’s status that in later years formed the core of gender-related questions included in Demographic and Health Surveys (DHS) (Kishor 2005a).

This brief history points to the tension between household and social institutions, particularly the economy, as a site for construction of gender inequality and has implications for the indicators of gender empowerment that have been used in the literature. This tension is also visible in a search of the JSTOR database for sociology and demography journals. The graph in **Figure 1** shows a striking increase in articles with “women’s status” and “women’s empowerment” (or “gender empowerment”) as keywords after 1970, with a focus on women’s status getting overshadowed by women’s empowerment in recent years, reflecting a shift from markers of individual attainment such as education and employment to measures of women’s agency. It illustrates the growing need to understand the power interplay among individuals, households, and institutional factors; the multifaceted nature of gender inequality; and the urgency to design intervention policies across the globe that seek to promote gender equality as a goal in and of itself, rather than a means for economic development or improvement of child health.

3. CONCEPTUAL CHALLENGES IN MEASURING WOMEN’S EMPOWERMENT

Before we delve into the enormous body of research on measuring women’s empowerment in the Global South, it is imperative to begin with a review of its conceptualization and associated challenges. What is women’s empowerment? How is it different from similar terms, such as women’s status/agency/autonomy, or gender equality? According to the Web of Science and Google Scholar, one of the most widely cited definitions is given by Kabeer (1999, p. 437), who states that “women’s empowerment is about the process by which those who have been denied the ability to make strategic life choices acquire such an ability.” Several features of this definition are noteworthy. First, it clearly defines empowerment as the process of change, a stark contrast to gender equality or women’s status, which statically describe women’s position or standing relative

to men in the stratification system. Second, it allocates women's ability to make strategic life choices as a key part of the empowerment process.

The ability to define and act on one's goals is often referred to as agency and is deemed the essence of empowerment (Malhotra & Schuler 2005). The term agency has a long tradition in the feminist literature. It is often called power within, or the ability of self-direction (Abrams 1998). One of the most cited definitions of agency comes from Sen (1985), who defines agency as the capability or freedom to achieve the goals one deems important. Another term that is closely related to agency is autonomy. Some scholars trace its roots to literature in psychology and philosophy, and describe it as "being a causal agent over one's life" (Donald et al. 2017, p. 5). While many scholars use agency and autonomy interchangeably (e.g., Jejeebhoy 2000, Mason & Smith 2000), others consider autonomy to be a more static state (Mishra & Tripathi 2011).

Our read of the literature suggests that the term autonomy is used more often in the empirical literature, particularly in the context of measuring decision-making power in the household. We believe that this difference in terminology precisely reflects the interdisciplinary roots of the concept of agency. The ability to define one's goal can be seen as internal to individuals and therefore relates to psychological traits, whereas the ability to enact those goals can be viewed as a second dimension of agency, which is external and is aligned with the economic, social, and political indicators used frequently in empirical research (see more discussion in Section 4).

The dynamic aspect of empowerment, whether at an individual or at a societal level, is challenging to measure since it requires measurement of the process rather than status. Consequently, in practice, Kabeer's focus on empowerment (dynamic) is often translated into measurement of power (static). However, by conceptualizing empowerment as a process and highlighting agency as its core, it is feasible to focus on changes in agency and to study mechanisms through which this change occurs. A husband's migration, for example, may offer a woman opportunities for taking on greater responsibilities for household decision-making (Desai & Banerji 2008, Yabiku et al. 2010). Incorporation into the global economy and associated changes in developmental idealism have been found to bring increased agency in partner selection (Allendorf & Pandian 2016) and termination of marriage (Thornton 2001). Notably, some studies focus on mechanisms at the individual level, while others focus on societal changes following a recognition that women's empowerment is not simply agency gained by an individual but can be a collective process. We illustrate this inherently multilevel perspective of women's empowerment in detail in Section 4.

Finally, we note that the term multidimensionality is routinely invoked in theorizing empowerment. Scholars characterize multidimensionality in different ways that often reflect different disciplinary and programmatic foci. For example, Mason (1986) summarized it with three dimensions: prestige, power, and control of resources (material or nonmaterial), reflecting the Weberian theory of stratification in sociology. Kabeer (1999, 2005) suggested exploring women's empowerment with three interrelated dimensions—resources, agency, and achievement—and specified them as preconditions, process, and outcomes, respectively. Empowerment thus is not a single construct but is characterized as a series of sometimes overlapping and sometimes distinct constructs in this framework. Multidimensionality is also used to characterize different types of empowerment indicators, including economic, social and cultural, legal, political, and psychological empowerment, often measured at the micro or macro level, with some composite measures attempting to be all-inclusive. These different dimensions sometimes move together and at other times are orthogonal to one another. For example, in Bangladesh, some empirical studies have found that women's employment increased, rather than reduced, women's risks of violence (Koenig et al. 2003; Rahman 1999; Schuler et al. 1996, 1998). We elaborate on this point in the next section.

4. OPERATIONALIZATION CHALLENGES

While reaching a consensus on the conceptualization of empowerment is not easy, operationalizing it and measuring it empirically are where the field has faced the greatest challenge. Agency is inherently difficult to measure, since we typically observe only the outcomes of what people do, not what they were free to choose to do (Hanmer & Klugman 2016). Two predominant approaches to this challenge are noteworthy. The first focuses on resources and innate capabilities individuals can use to make choices, while the second examines choices that individuals make as an expression of their agency. While the two approaches are not mutually exclusive, the first approach is often used in cross-national rankings, using indices such as the Gender Development Index (GDI), while the second is often used in causal analysis of processes through which empowerment takes place. In this section, we limit our review to quantitative measurement.

As mentioned above, scholars differ but, at the same time, overlap in their conceptual approaches, and this extends to measurement as well (Kabeer 1999, Malhotra et al. 2002). Kabeer, for example, views women's empowerment as a three-step process, with resources as a precondition, including not only material resources but also a wide range of nonmaterial and intangible resources that can enhance a woman's capability to exercise her agency (Kabeer 1999). We note that other scholars use a slightly different approach—that is, instead of considering resources a dimension of women's empowerment, they refer to them as enabling factors, independent variables, or determinants of empowerment (see Buvinic et al. 2020). Distinction between resources as the means and agency as the end is often somewhat ambiguous (Khwaja 2005). Participation in the formal education process, particularly in cultures where gender inequality in education is marked, is both an expression of agency and a resource for exercising agency in other areas of life, such as resisting violence. However, it is important to note that although education and income—particularly education—have often been associated with increased agency in other domains, this relationship is neither consistent nor universal (Bertocchi et al. 2014).

Prior to our discussion on the measurement of individual capability, agency, or resources, we emphasize that it is important to situate women's empowerment in layers of contexts, including the household, the community, and institutions. There is a reasonable consensus on the exogenous influences of institutional forces at the meso (community) and macro (societal) levels. For example, while collective actions of individual women may reshape the institutional infrastructure over the long run (e.g., as more women join the labor force, the gender wage gap may change), most analysts tend to use formal and informal social institutions, such as labor market opportunities; laws regarding inheritance, marriage, and divorce; and social norms regarding division of labor between men and women, as exogenous but important conditioning factors in analyses of women's employment (Agarwal 1997). In the following section, we start with a discussion of the measurement of women's agency as individual capabilities, resources, and choices, and then discuss interaction within the household and further interaction with institutional forces. We conclude with a section on multilevel measurement of agency.

4.1. Individual Capabilities and Resources

Measures of women's agency fall in two categories, somewhat analogous to Sen's depiction of capabilities and functioning (Nussbaum & Sen 1993). The first set reflects different indicators that capture women's capabilities that shape the options from which they can make choices, and the enabling resources. The second set reflects effective choices or expressed agency, either in the private or in the public domain. Individual capabilities and the resources available to them are at the center of the measurement of women's agency/empowerment. Women's capabilities are often expressed through their access to and control over both material and nonmaterial resources.

In the empirical literature, the measurement of material or economic resources is often viewed as relatively straightforward. This includes access to resources such as land ownership, educational attainment, or employment, which are generally available in household surveys. Measuring economic resources in the Global South involves explicit attention to the Southern context, but substantial progress has been made in this area. For example, the literature recognizes that women's disproportionate representation in agriculture and informal work in the Global South requires specially formulated questions (Donahoe 1999). Most surveys include multiple questions on income-generating activities that aim to capture informal, seasonal jobs or work that is paid in kind (Koolwal 2019, Short et al. 2002); some collect time-use data to recall the time spent on specific activities (Buvinic & King 2018, Hirway & Jose 2011), and others (e.g., the Mexican Migration Project and the Latin American Migration Project) collect information on employment history, especially for migrant workers whose current work status may miss the actual labor market experience [see the measurement brief by Stone & Yan (2020)].

In contrast to economic indicators, measurement of agency from a social-psychological perspective (for a review, see Alkire 2005) has been somewhat more challenging. Unlike economic measures emerging from disciplines of economics or development studies, noneconomic indicators of agency are rooted in the discipline of psychology and explicitly focus on the measurement of concepts such as self-direction or self-determination. Unlike the intrahousehold decision-making measures, which are specifically designed to measure women's autonomy, these measures are often not gender specific. However, they are closely aligned with the concept of agency, or power within, which is central to the conceptualization of women's empowerment.

One example of a noneconomic measure of agency is perceived self-efficacy scales, the utility of which is not limited to women's empowerment literature; they can be used to assess a woman's sense of agency and how one proactively copes with difficult demands in life (Bandura 2002, Schwarzer & Jerusalem 1995). Another commonly used measure is the relative autonomy index (Anderberg & Rainer 2011), which was adopted in the 2012 Women's Empowerment in Agriculture Survey Index (WEAI) module. It is rooted in the psychological theory on motivational autonomy or self-determination, referring to individuals' capability of setting their own goals and acting on them (Ryan & Deci 2000). One of the advantages of these measures is that they can be readily used to compare men's and women's relative senses of agency. However, many of these concepts were developed in the context of advanced industrial economies, and their applicability to low- and middle-income countries and variation across cultural contexts remains work in progress (Donald et al. 2017).

4.2. Individual Choices Expressed by Interactions Within the Household

In addition to education, income, and self-confidence, which are indicators of women's capability to make decisions, researchers have increasingly tried to obtain direct measures of women's agency through a focus on intrahousehold decision-making. DHS, nationally representative household surveys that have covered 90 countries since 1984, are a prime example. With some variations across countries in wording, topics, and questions, DHS include modules on freedom of movement and decision-making in the domains of household purchases and expenditure, visiting family, healthcare, and contraception (Kishor 2005b). In addition to DHS, other specialized surveys such as the Indonesia Family Life Survey (Beegle et al. 2001) and surveys conducted under the Status of Women and Fertility Program (Morgan et al. 2002) also include questions about relative importance of women's own preferences in household decision-making. The items are sometimes used in factor analyses or used to create indices for cross-national comparisons of women's empowerment. Combined with extensive literature on intrahousehold bargaining (Bertocchi et al. 2014,

Strauss et al. 2000), they produced a tremendous amount of literature on women's autonomy as well as its implications for health and well-being for women and families in Asia, Africa, and Latin America (Hayes & Boyd 2017, Kishor 2005a, Presser & Sen 2000).

Despite the usefulness of these measures of autonomy, researchers have noted several areas for improvement. For example, decisions on what kinds of clothes to buy or what to cook are not the same as deciding the educational prospects for one's child, as their implications for women's lives are clearly different. Index-based measures are thus often criticized for failing to differentiate across domains (Kabeer 1999). The processes through which intrahousehold negotiations take place are another area that requires more research (Agarwal 1997, Bernard et al. 2020, Fonseca et al. 2012, Wiig 2013).

4.3. Individual Choices Expressed by Interaction with Institutions

In contrast to the literature on agency within households, which has a long tradition in both sociology and economics, the literature on women's agency in dealing with the external world—bureaucrats, service providers, political and legal systems—is comparatively recent. Although it is not easy to find contextually sensitive measures of women's agency in the public sphere (Schatz & Williams 2012), some promising advances have been made.

Measurement of women's agency in extrafamilial settings can be divided into two sometimes overlapping categories: measures of normative and culturally specific behaviors and measures of participation in the public sphere. Unlike in developed countries, where literature on gender-related norms frequently focuses on gender roles within the household, literature in the Global South devotes considerable attention to women's participation in the public sphere and how it is viewed by the community around them. *Purdah* (veiling); freedom to travel unaccompanied to medical facilities, schools, and shops; and social stigma associated with labor force participation fall within this category and are captured in some surveys (Bernhardt et al. 2018, Desai & Andrist 2010, Jejeebhoy & Sathar 2001).

Another line of research, drawing on social movements literature, tries to capture the associational dimension of public participation. Some of the earliest work in this area emerged from research on microcredit programs that documented how women's participation in group-based activities in Bangladesh had the serendipitous impact of improving their ability to negotiate contraceptive access, both through negotiation with their spouses and through navigating health systems (Schuler & Hashemi 1994). Volunteering as health activists in Iran (Hoodfar 2010), unionizing via a self-employed women's association in India (Mehra 1997), and participating in microcredit institutions (Hashemi et al. 1996, Sanyal 2014) have been shown to be important markers for increased agency. However, data on women's participation in social movements and civic associations required to capture associational aspects of women's agency are not usually collected in standardized surveys.

4.4. Agency Measured at Multiple Levels

Many of the data on women's agency and empowerment come from data collected in surveys of households and individual women. However, empirical studies have documented substantially greater variations in indicators of empowerment between nations, states, and communities than between women in the same community. As power relations operate at different levels, so does empowerment (Malhotra & Schuler 2005, Mayoux 2000). Moreover, empowerment is a process that is largely dependent on perceptions in the community (Malhotra & Schuler 2005, Sandberg & Rafail 2013). Therefore, it has been argued that ignoring these higher levels of measurement and analysis, as much of the literature on women's empowerment has done, does not give us the

complete picture of empowerment and its impact on other outcomes (Malhotra & Schuler 2005, Mason 1986).

Mason & Smith's (2003) influential work on women's empowerment in five Asian countries—India, Pakistan, Thailand, Malaysia, and the Philippines—found that when countries are combined, about 40–80% of intercommunity variation in markers of empowerment can be explained by aggregation of community responses without including any individual traits. Similar findings are reported for the prevalence of intimate partner violence across 41 developing nations using data from DHS (Hayes & Boyd 2017), where country-level differences are far greater than differences between individuals within specific countries.

The above two examples clearly underscore the point that empowerment is as much a collective process as it is individual. Nonetheless, it is worth noting that the country-level measures are aggregated from individual responses from survey data. Is aggregation of data from individual responses at the level of the community sufficient (Desai & Johnson 2005), or do we need a different lens? This issue is particularly relevant for efforts to understand deviation from the norm. Women whose behaviors deviate from the acceptable behaviors in their communities may well face considerable backlash, restricting their ability to act in their own interest. We elaborate on this point in the next section of the article, where we assess the empirical literature using empowerment measures.

4.5. Contextual Differences

Contextual differences also pose a challenge in the operationalization and empirical measurement of empowerment, especially in cross-national and cross-cultural comparisons. Dimensions of empowerment that are relevant in one context may be less relevant in another. For instance, freedom of movement is an indicator of women's empowerment in South Asia, but not so much in Africa or Latin America. As Schatz & Williams (2012, p. 813) note, “in sub-Saharan Africa, an important weakness of the DHS variables is the overemphasis on measures more appropriate for Asian cultural context than for Africa.” In fact, many of the earliest theoretical frameworks on women's empowerment and its relationship, especially, with women's health and fertility were tested in the patriarchal belt covering most of South Asia and are best understood in that context. Regions such as Latin America and Africa may require different and more ethnographically grounded indicators.

Even within the South Asian setting, regional differences in sociocultural norms require empowerment measures to be context specific to be meaningful. For instance, significant differences in kinship structures and levels of female autonomy in northern and southern India (Dyson & Moore 1983) limit the usefulness of measures like freedom of movement or *purdah* as indicators of women's autonomy across the country. Jejeebhoy & Sathar (2001) found regional differences much more salient than religion in explaining variation in women's autonomy in three states located in North India, South India, and Pakistan and argue for context-specific measures of women's autonomy in the subcontinent. The definition of what is empowering may also differ across cultural contexts. For instance, in the discourse around gender and Islam (Charrad 2011), some authors have argued that instead of being disempowering, veiling is empowering and a site of resistance (MacLeod 1992, Mahmood 2001).

5. USE OF WOMEN'S EMPOWERMENT MEASURES

One of the strategies for assessing the state of measurement of women's empowerment is to examine the way in which women's empowerment measures have been used. Below, we provide some examples of their use. We begin with a review of various national indices and then follow with a review of literature on the influence of women's empowerment on selected outcome

variables, including fertility and maternal and child health. Due to the vast amount of literature in which women's empowerment is used as either an independent or a dependent variable, this is a selective review.

5.1. Indices to Evaluate National Progress

Given the roots of this literature in United Nations world conferences, it is not surprising that considerable investments have been made in developing indices to rank countries on their success in achieving gender equity (see Buvinic et al. 2020 for a comprehensive list). In this review, we highlight a few indices that best capture the progress and remaining challenges in this field.

The Human Development Index (HDI), first proposed in the 1990 Human Development Report, has been highly influential (UNDP 1990). However, lack of attention to gender in this index was worrisome, and in 1995, the United Nations Development Programme revised the HDI (UNDP 1995) to include gender in two measures, the GDI and the Gender Empowerment Measure (GEM). The GDI used the same variables as the HDI (life expectancy, adult literacy, mean years of schooling, and income per capita) but adjusted them to include inequality between men and women. The GEM included additional dimensions, such as the proportion of women in national parliaments, the percentage of women in economic decision-making positions, and the female share of income. In 2010, the Gender Inequality Index was introduced, which included women-specific indicators, maternal mortality ratio, and adolescent birth rate, as well as gender inequality in parliamentary positions, secondary education, and labor force participation (UNDP 2010).

In spite of their attention-capturing appeal, these indices lack the simplicity of the HDI, since they address both absolute conditions of women (e.g., maternal mortality ratio and adolescent birth rate) and relative conditions in education, labor markets, and the political sphere, and are not easy to interpret (Permanyer 2013). Moreover, they rely on indirect proxies and fail to capture the multifaceted nature of women's empowerment discussed above.

Unlike the abovementioned indices that utilize administrative or aggregate data, household-based indices provide an alternative way of capturing women's empowerment. For example, the WEAI, originally released in 2012 (with abbreviated and shorter versions developed later), is a widely used aggregate index. It is reported at the country or regional level but is based on interviews at the individual/household level in sample surveys (see Alkire et al. 2013). This index has two subindices: the Five Domains of Empowerment (5DE) and the Gender Parity Index, covering domains such as household decision-making, access to and control over resources, income, leadership, and time use. Unlike many data sources that rely primarily on information reported by the female respondents, an important advantage of WEAI (specifically the subindex of gender parity) is that it uses data for both male and female members from the same household and therefore allows direct comparisons in terms of sources of empowerment/disempowerment (Malapit et al. 2019).

The Survey-based Women's Empowerment Index (SWPER) is another well-known index that extends beyond women's empowerment in the agricultural sector and is also based on household-level data. The SWPER uses data from DHS from 34 African countries of currently partnered women, undertakes principal component analysis to reduce 15 items into three dimensions (attitudes about violence, decision-making authority, and social independence), and further combines them to examine country-level differences in empowerment (Ewerling et al. 2017). Recently, there have been efforts to extend the applicability of the SWPER to all low- and middle-income countries and thus makes it a global measure (Ewerling et al. 2020).

Both the SWPER and WEAI are appealing to researchers in the field of women's empowerment because they are multidimensional and cover multiple domains of empowerment, while at

the same time offering the flexibility of usage as a single construct and subgroup-specific indices. They complement measures such as the GDI and 5DE to track progress over time and allow for cross-national comparisons. However, these indices also have limitations, resulting in calls for more rigorous validation across contexts and greater attention to within-country differences and measurement invariance (Raj 2017, Yount et al. 2018). Additionally, these indices mix up resources, capabilities, agency, and outcomes in a single construct and therefore ignore the enabling mechanisms and the conceptualization of empowerment as a process.

In the next section, we turn to a review of empirical literature that goes in a different direction. Instead of measuring empowerment as a goal in and of itself, this body of research focuses on the consequences of women's empowerment.

5.2. Empirical Research Using Women's Empowerment as a Predictor Variable

In this section we examine how women's empowerment has been used as an independent variable in empirical studies in the Global South. For brevity, we limit our review to a few selected family outcomes—fertility and family planning, and maternal and child health.

Table 1 provides illustrative examples from studies that have used different domains of women's empowerment. Each study is an example of how data are being used to study a particular outcome variable. Women's participation in household decision-making is the most common measure of women's empowerment, followed by women's mobility.

While the early literature mostly used measures of women's status, like education and employment, as indicators of women's empowerment (e.g., Bhattacharya 2006), more recent literature has focused on the agency of women in the form of intrahousehold decision-making (Ahmed et al. 2010, Becker et al. 2006) and mobility (Al Riyami et al. 2004). DHS are arguably the most important sources of data for research on intrahousehold decision-making and mobility. These surveys ask women, and in some countries men, about who in their respective households makes decisions related to contraception, healthcare, visiting family, and household purchases. DHS surveys differ on the wording, topics, and questions by and within regions [for more on variation by region and how they have been used, see the measurement brief by Chhabra & Hurtado (2020)]. However, the household decision-making questions on one's own healthcare, major household purchases, and visits to family and relatives are more or less consistent across regions and are therefore used extensively for comparative research. These questions have mostly been combined in the form of an index, rather than as separate predictors. The mobility variable is used largely for research on South Asia, where freedom of movement is a key indicator of women's empowerment.

Overall, stronger relationships have been observed between women's empowerment and health outcomes than with fertility and family planning. Empirical studies generally support the hypothesis that women's empowerment is significantly and positively associated with maternal and child health outcomes, especially antenatal care, skilled attendance at birth, child mortality, full vaccination, nutritional status, and exposure to violence (for a review, see Pratley 2016). The majority of studies that have examined the relationship between women's empowerment and fertility have found positive associations with lower fertility, longer birth intervals, and lower rates of unintended pregnancy. However, the strength of the relationship between women's status and fertility outcomes varies depending upon the empowerment measure used and the level of analysis (for a review, see Upadhyay et al. 2014).

The relationship between women's empowerment and family planning measures is a little more complex and depends heavily on the empowerment domain and family planning outcomes investigated, the study population, and its context. Associations between empowerment and current contraceptive use, the most widely studied family planning outcome, are inconsistent. However,

Table 1 Examples of empirical studies with women's empowerment as independent variable and a variety of outcome variables

Reference	Country or region	Empowerment measures	Outcomes	Level of analysis	Findings
Ahmed et al. 2010	31 developing countries	Women's decision-making	Use of modern contraception Attendance of four or more antenatal care visits Presence of skilled attendant at birth	Individual	Positive
Bawah 2002	Ghana	Spousal communication about family planning	Use of contraception	Individual	Positive
Becker et al. 2006	Guatemala	Husbands' and wives' reports of women's decision-making power	Recent maternal health behaviors: emergency plan during pregnancy, delivery in a health facility, postpartum checkup within 4 weeks	Individual	Mixed
Bhattacharya 2006	India	Community-level measures of female literacy Community-level measures of female labor force participation	Total fertility rate Child mortality rate Female disadvantage in child (0–5 years) survival	Community	Mixed
Hossain 2020	Bangladesh	Mothers' ages at first marriage Age ratio between women and partners Mothers' levels of education Mothers' employment for cash	Child malnutrition	Individual	Negative
Pallitto & O'Campo 2005	Colombia	Intimate partner violence Women's decision-making Professional and educational status	Unintended pregnancy	Community (community measures aggregated from individual measures)	Intimate partner violence: positive Decision-making and status: no significant association
Al Riyami et al. 2004	Oman	Women's decision-making Women's mobility	"Met need" for contraception	Individual	Positive

women's empowerment has been found to be consistently and positively associated with other family planning outcomes, including past use of contraception, intention to use contraception in the future, and spousal communication regarding family planning (Prata et al. 2017). For example, the measures consistently positively associated with past use of contraception were education

(Gage 1995, Hindin 2000, Kabir et al. 2005), employment (Hindin 2000, Kabir et al. 2005), household decision-making (Woldemicael 2009), reproductive decision-making (Saleem & Pasha 2008), financial autonomy (Gage 1995, Sathar & Kazi 1997), marital characteristics (Gage 1995, Hindin 2000), spousal communication (Kabir et al. 2005, Woldemicael 2009), and empowerment composite scores (Ahmed et al. 2010). However, reliance on retrospective data in measuring past use of contraception reduces our confidence in generalizing from these studies since empowerment may be both a cause and a consequence of contraceptive use.

As mentioned above, most studies examine empowerment at the individual level. Some have aggregated these individual-level decision-making measures to the community level (e.g., Koenig et al. 2003, Pallitto & O'Campo 2005), and a small number of studies have used direct measures of community-level characteristics (Bhattacharya 2006). For instance, in Colombia, Pallitto & O'Campo (2005) used aggregated measures and found that living in a municipality with high rates of male patriarchal control and intimate partner violence significantly increased women's odds of having an unintended pregnancy.

Similarly, Koenig et al. (2003) studied the individual- and community-level effects of women's status on domestic violence in Bangladesh by aggregating from individual-level measures. Notably, in the more culturally conservative area, higher individual-level women's autonomy and short-term membership in savings and credit groups were both associated with significantly elevated risks of violence, while community-level variables were unrelated to violence. In the less culturally conservative area, in contrast, individual-level women's status indicators were unrelated to the risk of violence, and community-level measures of women's status were associated with significantly lower risks of violence.

An example of a study that used community-level empowerment measures is that of Bhattacharya (2006). The author examined the determinants of fertility, child mortality, and female disadvantage in child survival in India using a district-level panel data set linked to the 1981 and 1991 censuses. He found that variables reflecting the general level of development and modernization have a greater effect in reducing fertility and child mortality during the period of the study than women's agency (measured using female literacy rate and the female labor force participation rate).

Overall, while there is general consistency in the association between women's empowerment and these outcome variables, the literature also documents variations in the strength and direction of the relationship. Several explanations may account for these. First, reverse causality often cannot be easily ruled out—that is, women's empowerment could be a determinant of these family outcomes but could be affected by them as well. For example, higher decision-making power in the household could be a determinant as well as a consequence of better labor market outcomes and lower fertility (Kishor 2000, Kritz et al. 2000). Conceptually, this does not come as a surprise, given that empowerment is construed as a process that unfolds over time, but reliance on cross-sectional data makes it difficult to sort out causal direction.

The second possible reason for the mixed findings is contextual specificity. For example, research on the relationship between maternal education and child health has shown a stronger relationship in Asia and Latin America than in sub-Saharan Africa (Hobcraft 1993), possibly because in addition to individual education, ethnicity may play an important role in shaping child health in sub-Saharan Africa (Victoria et al. 2020). Concerns about the need for contextual specificity require us to reflect on whether universal, cross-nationally comparable measures are needed at all (Agarwala & Lynch 2006). Advocates argue that one of the reasons cross-nationally comparable measures are useful is that they allow us to hold governments accountable for achieving international commitments (Temin & Roca 2016). The work of Miedema et al. (2018) emphasizes how measurement properties must remain the same across culturally diverse settings to be

able to assess progress toward SDGs. Their development and testing of a three-domain, 12-item invariant measurement model is a promising step toward a global development monitoring tool that addresses some of the challenges of DHS data. Malhotra et al. (2002) propose an interesting approach to solving the dilemma of obtaining cross-contextual measures while respecting local perspectives. They suggest relying on a consistent conceptual framework for measuring empowerment but allow flexibility in the specific indicators used to define the key components of that framework across different settings.

Finally, differences in the levels of measurement and analysis also contribute to the inconsistency in the findings. As we mention in Section 3 of the article, it is insufficient to treat women's empowerment simply as individual capabilities or agency. The few studies that have captured the impact of women's empowerment beyond the individual and household levels have made important contributions to our understanding of the relationship between empowerment and other outcomes. For example, Desai & Johnson's (2005) study of the relationship between women's empowerment and child health finds that the measures at the community level are better at explaining children's health outcomes than individual measures. Their findings suggest that community behavior and norms are far more important in determining child health outcomes than what an individual mother does. Therefore, living in an area where many women have greater decision-making authority is far better for a child than living in an area where only their own mother has greater decision-making authority. The findings of the multilevel analysis by Koenig et al. (2003) described above also highlight the importance of contextual specificity.

6. EMERGING DIRECTIONS IN MEASURING EMPOWERMENT

Our review of the existing literature on women's empowerment produced in the past few decades shows tremendous progress in the measurement of empowerment. It is encouraging to see contributions to conceptualization and measurement from many disciplines, as well as integration of work by academic researchers, nongovernmental organizations, and policy makers. In this section, we highlight a few emerging directions on both the theoretical and methodological fronts, beginning with the perspectives of intersectionality and the life course approach, and how longitudinal survey data collection and other data collection modes have injected vitality into this area of research.

6.1. Intersectionality

We view recent attention to an intersectional perspective as a critical step toward addressing various paradoxes in women's empowerment research. Originally conceptualized by Crenshaw (1989) in relation to the lived experiences of African American women, intersectionality has become a theoretical frame for understanding overlapping categories of oppression that compels researchers, policy makers, and activists to locate their work within the relevant layers of social context (see Collins 2015 for more recent theorization on intersectionality).

One of the earliest approaches to intersectionality in women's empowerment in literature on the Global South was articulated by Moser (1989), who differentiated between women's practical and strategic needs. She suggested that while women of different social classes may share a common strategic agenda, the practical needs of poor women due to poor living conditions may lead them to prioritize immediate needs such as water, sanitation, and housing over improvement in long-term power relations between men and women. Over time, this focus on intersectionality has emerged in far more sophisticated arguments identifying conditions under which women in the Global South find themselves boxed into defending patriarchal oppression in order to resist other forms of oppression based on class, race, ethnicity, and religion (Basu 1998, Charrad 2011, Pathak

& Sunder Rajan 1992). Agnes (2002) documents instances in which Muslim women's planned sensitization programs against domestic violence in India were abandoned in the context of communal violence so as not to give the police ammunition against Muslim men.

A focus on intersectionality in studying women's empowerment will require greater conceptual clarity about which differences matter and how to study them. Kandiyoti's (1988) careful review of strategies through which women negotiate to maximize their choices within constrained circumstances, in what she terms "bargaining with patriarchy," enumerates processes through which intersectional approaches can be applied to studying women's empowerment. However, implementing these approaches in empirical research, particularly quantitative research, remains a challenge, although some studies have attempted to do so. For example, politicization of religion in India has led Muslim women to prioritize their Muslim identity in public behaviors (e.g., veiling), while within the household, Hindu and Muslim women are similar on such indicators of gender empowerment as household decision-making and gender differences in child survival (Desai & Tamsah 2014). Finding additional ways to incorporate intersectional insights into quantitative approaches remains an important future avenue to develop.

6.2. The Life Course Approach

In spite of theoretical acceptance of empowerment as a process, empirical literature, typically relying on cross-sectional data, has often tended to focus on static dimensions of women's agency. A marriage of the life course approach with attention to gender empowerment may help remedy this shortcoming. A focus on empowerment as a process lends itself to a study of changes in empowerment over the life course. While the life course approach has been invoked in a discussion of differential experiences and needs of women at different life stages (Horstead 2018, Stuckelberger 2010), the emerging literature on this topic could potentially draw on a full life course perspective by employing five well-articulated principles (Elder et al. 2003): (*a*) progression across different stages of the life course, (*b*) focus on time and place, (*c*) agency, (*d*) timing, and (*e*) linkages between the life courses of different household members.

Although only a few empirical studies have fully embraced a complete life course perspective (e.g., Lee-Rife 2010, Qadir et al. 2011), many of its elements have informed literature on women's empowerment. First, women's empowerment is a lifelong process and could manifest in different ways from childhood to young adulthood to old age (principle *a*). Different life domains are also interconnected. For example, early-life disadvantages reflected in low educational attainment have been shown to limit women's autonomy in fertility decision-making (Jejeebhoy 1995) and the abilities to use health services (Chakraborty et al. 2003, Elo 1992, Tsala Dimbuene et al. 2018) and to resist domestic violence (Boyle et al. 2009, Ghimire et al. 2015).

Second, empowerment not only evolves along the line of an individual's personal time but also is conditioned by sociohistorical time and is shaped by different forces in various contexts, both positively and negatively (principle *b*). For example, increasing export opportunities have been shown to improve women's labor force participation in Bangladesh and Indonesia, while increasing religious tensions have negatively impacted Muslim women's participation in public spaces in India (Desai & Tamsah 2014). Social time is also reflected in changing cohort composition and the nature of women's empowerment. It is noteworthy that empowerment by definition entails agency—that is, making choices and decisions in spite of barriers, as women are not just passively reacting to existing social norms or structural constraints at the time (principle *c*).

Furthermore, the timing of events and experiences in the life course shapes outcomes (principle *d*), and a woman's sense of empowerment/disempowerment is closely tied to her shared network of relationships (principle *e*). For example, despite restricting reproductive choice, China's one-child policy, along with its economic reform, has increased opportunities for urban and rural women

since the 1980s. For young mothers, low fertility means less time devoted to childcare and more time in paid labor, increasing their economic independence and paving the way for their daughters' future progress. For their daughters who were born after the initiation of the one-child policy, not having to compete with brothers for parental investment in education and resources has meant that the gender gap in educational attainment has reduced, which, in turn, has implications for later labor market experiences (Liu et al. 2020, Yeung 2013). Additionally, ethnographic work by Fong (2002) showed that the empowerment of urban singleton girls (due to stricter enforcement of the one-child policy in urban China) was indeed a negotiating process playing out at the individual and household levels: They had more decision-making power than ever before to challenge Confucian patriarchal gender norms, as they did not have to compete with brothers for parental support and investment and were the ones who would provide their parents with old-age support.

In sum, establishing a theoretical linkage between the life course perspective and women's empowerment could help scholars to identify: (a) the intermediate mechanisms that translate resources into achievement in different life stages; (b) the interdependent pathways in different life domains, such as work and family; and (c) the moderating factors operating in the dimensions of both time (social and historical) and place (on the institutional, community, and societal levels).

6.3. Innovation in Data Design/Collection

While the intersectionality and life course perspectives may help provide unique theoretical lenses on women's empowerment research, substantial progress has been made on the fronts of data collection and design, which are critically important to address some of the challenges identified in the existing literature.

First, we see promising growth of longitudinal data collection and its application. As mentioned above, data sources such as DHS are incredibly useful resources for research on women's empowerment, particularly when it comes to gauging trends over time. However, repeated cross-sectional designs are limited in their ability to address issues such as reverse causality and endogeneity, or to sort out age, period, and cohort effects. In comparison, longitudinal panel design is superior in these aspects, as it follows the same households/individuals over time and is able to monitor changes at different levels.

A full integration with the life course perspective is thus possible, as longitudinal data are uniquely suited to examine the synchronization of life events and the implications for women's empowerment across the life span and to identify critical turning points. Panel survey data are still relatively rare in the Global South as it is often expensive to collect such data, requires an enormous amount of time, and is prone to attrition problems in areas where labor migration is prevalent. Nonetheless, tremendous progress has been made in the past decades in longitudinal data collection and its application in the Global South. Examples include the India Human Development Survey, China Family Panel Studies, Indonesia Family Life Survey, and Cebu Longitudinal Health and Nutrition Survey, with most of these covering multiple domains of women's empowerment, including intrahousehold decision-making, freedom of mobility, control of resources, and various outcome measures for women and children. Recent studies have taken advantage of panel data and have investigated topics such as the durability and diffusion of women's empowerment; the influences of early life events, such as reproductive transitions, on women's empowerment; the health consequences of chronic life strain; and the cumulative disadvantages women face across the life span (Akter & Chindarkar 2020, Chen et al. 2019, Reed 2021).

Another notable advance on the data front is that data collection modes have become increasingly diverse. Survey data rely on self-reports, and women who are the most disadvantaged may be the least likely to report being disempowered. Research on intimate partner violence often notes the challenge that women may be afraid of reporting victimization due to the fear of

provoking further violence (Ellsberg & Heise 2002). This suggests a need to seek alternatives to self-reporting. Although a majority of the studies reviewed in this article made use of survey and administrative data, alternative approaches, including randomized controlled trials (RCTs) and quasi-experiments, have made important contributions to our knowledge on women's empowerment. The advantages of these data collection methods, compared with observational studies, are that they help reduce selection biases and that they provide a tool to rigorously examine causal relationships and understand mechanisms, particularly if the aim is to evaluate the effectiveness of intervention programs, a cornerstone of the missions of many nongovernmental organizations that support women's empowerment. Chang et al. (2020) provide a comprehensive review of 160 studies that used RCTs or quasi-experimental designs to evaluate interventions targeting women or girls in low- and middle-income countries. Their review documents the effectiveness of a wide range of intervention programs, including cash transfer, microcredit programs, and adolescent girls' programs; programs aiming to increase women's participation in politics and community decision-making; and programs seeking to influence women's agency in multiple domains, including family formation, labor force participation, and political and community participation. Although these studies often involve smaller and nonrepresentative samples, the results are consistent with those based on large-scale survey data and yield insights related to identifying the pathways in which women make progress in gaining agency across different contexts and societies. Additionally, in these programmatic assessments, qualitative data often play an important role in providing rich contextual data for assessing empowerment and are often used to strengthen quantitative measures (Glennerster et al. 2018, Pavanello et al. 2015, Richardson 2018).

Finally, we note that the field is likely to benefit from the explosion of digital forms of data, including big data, as well as the development of new methods in machine learning tools (Molina & Garip 2019). Throughout this review, we have noted the challenges in measuring certain aspects of women's empowerment, particularly in nonmaterial spheres such as gender norms. A recent study based on a machine learning model (Dehingia et al. 2021), which used millions of tweets related to increasing misogynistic content from South Asian countries since the onset of the coronavirus disease 2019 (COVID-19) pandemic, gives a glimpse into a better way of capturing shifts in gender norms and their impact on women's empowerment beyond the conventional multilevel approach.

In recent years, advocacy for improving the measurement of women's empowerment has gained considerable attention. A focus on measuring progress toward SDGs and increased feminist advocacy within major foundations, multilateral agencies, and national statistical offices has led to increased attention toward identifying indicators of women's empowerment. However, as this review indicates, better integration of theoretical and methodological considerations will yield fruits that go far beyond a focus on cross-nationally comparable indicators collected via national statistical systems.

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