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Women's Empowerment in Colombia: A Multidimensional Approach

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Abstract

This article examines the topic of Women's Empowerment in Colombia. Over the past decades the Colombian government has shown progressive commitment towards women's rights, empowerment, advancement of gender equality and the achievement of equal opportunities. While those endeavours present a crucial advancement, they do not automatically translate into better outcomes for women. Although empowerment promotion strategies are evident, they are not based on a clear and measurable understanding of the concept of women's empowerment which facilitate tracking future progress. This article addresses this gap by proposing a multidimensional index of women's empowerment. This index puts forward specific indicators which allows for monitoring over time and can be adapted to monitor interventions and performance of programmes which target women's empowerment. Ultimately, this would help in the improvement of the design of policies and function as a starting point to create more favourable conditions for the empowerment of women. The index is operationalised using the 2015 DHS of Colombia.

Introduction

Women's empowerment has become an increasingly significant issue that is central to the well-being of women. It interlinks with many facets of their lives such as political representation and health, legal and educational rights, and income security. This growing importance calls for examining ways on how to better diagnose conditions and statuses of empowerment of women in a given context. One way to conduct such a diagnosis is by developing measurement tools which can be utilised, adapted, and observed overtime. Such measures can play a critical roles in designing strategies whose goal is to structurally address elements of (dis) empowerment.

The case of Colombia presents a relevant case to the study of women's empowerment as the country has been under an armed conflict for more than 50 years, with special impacts on women, not only as victims of: sexual violence, torture, homicide, human trafficking, forced displacement and enforced disappearance, but also as militants in illegal armed groups. While women's empowerment in Colombia has been steadily rising in the past few years, the gaps between rural and urban areas are evident in several aspects of their lives. Poverty, lack of resources,

unemployment, informality, poor social protection mechanisms and cultural reasons exacerbate inequality among women, making those in rural areas much more disempowered.

To contextualise women's empowerment in Colombia, it is important to highlight the different areas that have affected and could affect the trajectory of progress towards empowerment in the future. Below are the main issues.

1. Colombia's armed conflict and women

Colombia has been in an armed conflict since the late 1950s. Several armed groups both from left and right, as well as military forces had tried to overpower each other all over the country, but much deeper in the rural areas. According to the CMH (2013) between 1958 and 2012, 218.094 people have been killed, 81% of them were civilians, and as of 2019, 5.5 million people had been internally displaced due to conflict and violence (Internal Displacement Monitoring Centre, 2021).

The link between women's empowerment and the armed conflict is relevant for the Colombian context on two levels. First, pertaining to gender; as most victims of the armed conflict were women. They were subjected to sexual violence, torture, homicide, human trafficking, forced displacement and enforced disappearance (CPEM, 2012). However, women have also been part of guerrilla groups, for the case of FARC-EP, they represented around 30% of the members (Salazar, 2017) this means that not all of them were victims but some of them could have also been perpetrators of human rights violations. Secondly, pertaining to location. Since the conflict mainly took place in rural areas this represents another set of different conditions for the achievement of women's empowerment in the conflict-affected areas of the country.

2. Urban-Rural Socio-Economic Gap

Studies and reports on the topic of women's empowerment in Colombia generally focus on women's empowerment at the national level, or on the empowerment of the victims of the armed conflict, however few of them have also paid attention to the empowerment of rural women (Cediel Becerra et al., 2017, and Botello-Peñaloza & Guerrero-Rincón, 2017). Findings show that women

in rural areas spend significant time doing unpaid work including caregiving, domestic chores, and volunteering activities within their communities, which on average entails 12 more hours than men. Additionally, female heads of household who live in rural areas have limited access to land, training, financing and other benefits that are available generally only to men (Parra-Peña et al., 2013). Similarly, women in rural areas are in disadvantage when compared to men as they earn on average 25 percent less (Botello-Peñaloza & Guerrero-Rincón, 2017).

When comparing women living in urban versus rural areas, women in rural areas find themselves experiencing several disadvantages. First in terms of labour market participation and working conditions. This stems from the social views on the traditional role of women (which are more pervasive in rural areas), coupled with lower lack of job opportunities (Olivieri & Muller, 2019) which decreases women's likelihood to join the labour market. Secondly, there is reduced and insufficient access to education in rural areas (Gutiérrez, 2019).

3. Education, Labour Market Participation and Employment

A survey carried out by Observatorio de la Democracia in 2018 about male chauvinism in Colombia shows the importance of education on the transformation of gender roles, and this is especially true for people from the Caribe or the Atlantica region, followed by the central region (Sánchez, 2019). In terms of education indicators, women fare better than men in most of them in Colombia. Regarding primary education, there is no participation gap between men and women, however when it comes to secondary education there are more women than men enrolled, women study on average more years than men and they are also on average more literate than men (UNDP, et al., 2017). There is a higher percentage of women enrolled at university than men at least at the bachelor's level (55 percent compared to 44 percent in 2017) and dropout rates in the university are higher for men (Lara Sánchez, 2018). Even though women have lower dropout rates in almost all education levels, when they do drop out, it is mainly linked to gender roles, teenage pregnancy, domestic work and additional activities related with caregiving of children and elderly (Lara Sánchez, 2018).

Female participation in the labour market has increased substantially since the 1970s. Labour force participation of women in Colombia is one of the highest in Latin America and the Caribbean region, some of the most relevant factors associated with the increment of female labour participation are higher levels of education, lower fertility rates, variation in household structure, demographic dynamics and composition (CPEM, 2012; ONU Mujeres, 2018). However, there is still a gap of in the labour force participation rates between women and men, in 2017 labour force participation for women was of 57.7 percent whereas for men was 80.8 percent (Olivieri & Muller, 2019).

Nevertheless, upon entering the labour market women still experience more precarious conditions than men. First, there is a persistent gender pay gap, in most cases, Colombian women have higher levels of education than men but still, they are discriminated and receive lower wages despite working in the same economic sector, the same number of hours and in the same position as men (Sánchez-Torres, 2020). Second, the country has a large informal sector and women are more likely than men to be employed in it. Almost 50 percent of women work in the informal sector (Reyes, 2018), this represents inadequate working conditions and poor access to social protection and security such as affiliation to pension funds and the health system.

One of the reasons why women are less likely to join the labour market is the prevalence of the traditional role assigned to women, their huge importance in household and caregiving activities (Olivieri & Muller, 2019). Still today women spend more time than men on unpaid housework and care tasks, and this is more prominent among women with lower educational levels (ONU Mujeres, 2018). In general, females that are caregivers mostly declare their household activities as their main occupation and they can spend up to 45 percent of their daily working time providing care to specific members of the household (e.g. Children, people with disabilities or the elderly) (CPEM, 2012).

In a report of economic empowerment of women carried out by the Presidential Council for Women's Equity, Fonseca Galvis (2018) argues that women's participation in the labour market can also be explained by educational level. The more education women have the more likely that they participate in the labour market, and their levels of participation get closer to those of men,

whereas women with little education participate much less in the labour market and much less than men that also have little to no education. For instance, women without formal education have a participation rate of 32 percent, whereas men without formal education had a participation rate of 69 percent (as of 2017) (Fonseca Galvis, 2018).

4. Women's health and public health issues

In Colombia, there are different issues of public health that concern women, one of them is adolescent pregnancy; 17,4 percent of women between 15 and 19 years are mothers or have been pregnant, this figure increases in rural areas (Mojica, 2018). Most of those pregnancies are unwanted, which puts teenage girls and their babies in a precarious situation; another important problem is that this phenomenon affects disproportionately girls in a situation of poverty and with less education (Ramos, 2013). Adolescent pregnancy has different consequences for girls, it puts at risk their mental and physical health, they tend to drop out of school to take care of the baby and they enter the labour market at a young age in low paid jobs. Some challenges remain to further reduce adolescent pregnancy in the country, among them are the increase in the coverage of health services and the reduction of financial barriers for the young population to access them, but most importantly there is still missing the introduction of sexual education in the Colombian educational system (Murgueito, 2020).

Gender-based violence is another critical public health problem in the country. The impacts of gender-based violence range from physical and mental health issues but can also include sexual and reproductive problems, this type of violence can result in injuries, self-harm, homicide, depression or unwanted pregnancies (Harper, 2018). In Colombia, 3 in 10 women are victims of gender-based violence, every year there are high numbers of femicide cases, for example, in 2015 there were reported 1.007 and in 2018, 960 cases of women that have been killed (Bazán, 2019; Fajardo De la Espriella, 2016).

It should be acknowledged that gender-based violence is an issue that also affects men; however, women are disproportionately more affected (Ministerio de Salud y Protección Social, 2018). According to ONU Mujeres & USAID (2016), gender-based violence is a practice that is

normalised in the country through rooted discourses and cultural stereotypes, which include a social conception on the tolerance of violence against women.

Social views of the traditional role of women can reduce women's participation in the labour market, increase their participation in the informal sector and carry out more non-paid work than men by doing household chores and taking care of children and the elderly; they can also be a determinant for school or university dropout rates among women. Besides, it has been noted that these social views are more persistent in rural areas, putting at a higher disadvantage woman living in rural areas in comparison to women living in urban ones. On the other hand, it has been shown how social constructions of masculinity and femininity influence the acceptance of violence against women and the occurrence of this phenomenon in the Colombian society.

5. Changing societal dynamics

Over the past decades the Colombian government has shown progressive commitment towards women's rights, empowerment, advancement of gender equality and the achievement of equal opportunities. In addition to its participation in international conferences and treaties¹, the 1991 constitution was a significant step to improve the legal situation of women. It included references to gender equality in terms of rights and opportunities, freedom from discrimination and special protection of pregnant women and women heads of households (Article 43 and 53). Since 1995, the government became active in establishing entities and initiatives for advancing women's empowerment. Starting with the national directorate on gender equality, *Consejería Presidencial para la Equidad de la Mujer*- (CPEM, 2019a)-and until recently with establishing the initiative "*Casas de mujeres empoderadas*" (Houses of women empowered) in 2019 (CPEM, 2019b). In addition to those activities, advocacy for women's empowerment have become more prominent, and since 2018 reports on women's economic empowerment (Fonseca Galvis, 2018) and educational empowerment (Lara Sánchez, 2018) started to be published. Additionally, a newly created Gender Affairs Observatory (GAO) was established to research the situation of women

¹ The government has ratified numerous conventions, including the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW) and the Inter-American Convention on the Prevention, Punishment, and Eradication of Violence against Women, (Convention of Belém do Pará) (UN Women, 2018).

and gender equality in Colombia and to formulate recommendations for policies aimed at closing the gender gaps that persist in the country (CPEM, 2019a).

While those endeavours present a crucial advancement, they do not automatically translate into better outcomes for women (CPEM, 2018). Although empowerment promotion strategies are evident, they are not based on a clear and measurable understanding of the concept of women's empowerment which facilitate tracking future progress.

This article addresses this gap by proposing a multidimensional index of women's empowerment. This index puts forward specific indicators which allows for monitoring over time and can be adapted to monitor interventions and performance of programmes which target women's empowerment. Ultimately, this would help in the improvement of the design of policies and function as a starting point to create more favourable conditions for the empowerment of women.

This article is structured as follows. The first section of the article it arrives at a formulation of women's empowerment in Colombia. It then explains the creation of an index which captures the level of empowerment, and which dimensions it includes. The second section discusses the methodology research design of the study and how we operationalise our variables and compute our index. In the third section we present our principal findings. The discussion and conclusion section summarises our findings and presents directions for further research.

Arriving at a formulation of Women's Empowerment in Colombia

Women's Empowerment

Empowering women can have a profuse positive value for the society, and the task of understanding the factors of their empowerment is critical (Sen, 1999). Many scholars argue that to properly assess the level of empowerment, it is necessary to view it as process that necessitates moving from a position of disempowerment to a position of empowerment; this position of empowerment must entail elements of agency and the capability to make important decisions in

their lives while also being able to act on them (Mosedale, 2005; Chaban, et., al., 2017)). However, unless empowerment is empirically assessed the task of devising ways to empower women becomes very difficult (Jones et al., 2019).

Literature about empowerment can be found in different fields such as education, psychology, as well as in the work of feminist and development organisations (Oxaal & Baden, 1997). For the purpose of the article, several concepts and definitions were reviewed (Malhotra & Schuler, 2002; Alsop, et., al., 2005 and Mosedale, 2005), and the choice was made to use the definition of Kabeer (1999) that empowerment is “*The expansion in people's ability to make strategic life choices in a context where this ability was previously denied to them*” (p. 435). From this definition, there are two important things to note, first that for a person to be empowered she had to be disempowered in the first place. Secondly, when referring to “strategic choices” those are choices that “are critical for people to live the lives they want” (p. 438).

Based on the concepts of resources, agency and achievements (Sen, 1985), for Kabeer (1999) the process of empowerment and the ability to exercise choice must be understood from these three inter-related components. *Resources* defined as access to material, human and social means. As resources are enabling factors of empowerment, indicators that measure women’s access or control over resources do not capture empowerment per se (Malhotra & Schuler, 2002). They rather signal potential choices women can make based on how they use such resources (Malhotra & Schuler, 2002; Rocca et al., 2009). Kabeer (1999) defines *Agency* “as the ability to define one’s goals and act upon them” (p. 438). Her understanding of agency is based on the writings of Sen (1985), who sees agency as intrinsically valued and where “acting freely and being able to choose are conducive to well-being” (as cited in Alkire & Ibrahim, 2007, p. 9). Finally, regarding *achievements*, they are defined as well-being outcomes, just as resources they should not be considered as empowerment per se but as outcomes of empowerment (Kabeer, 1999; Malhotra & Schuler, 2002).

From definitions to dimensions of empowerment

The concept of women’s empowerment is inherently multidimensional (Bayissa, et., al., 2018 and Sharaunga, et., al., 2019); therefore a central step is to arrive to an understanding of what are those dimensions (Bourguignon & Chakravarty, 2003). Multidimensionality should be interpreted in the sense of a ‘joint distribution’ of a complex set of functionings that can only be considered as

achievements through the measurement of individual indicators (Sen, 1995). Based on previous relevant studies, Malhotra & Schuler (2002) identify six main dimensions of empowerment; these include economic, socio-cultural, familial/interpersonal, legal, political and psychological. They also note that these dimensions can be operationalised in the household, community and broader arenas (e.g., regional or national levels). The following table (*Table 1*) presents examples empowerment indicators in each of these dimensions².

Table 1: Dimensions of women's empowerment

Dimension	Household arena indicators
Economic	Women's control over income, relative contribution to family support
Socio-cultural	Women's freedom of movement, lack of discrimination against daughters, commitment to educating daughters
Familial/ interpersonal	Participation in domestic decision-making, control over sexual relations, ability to make childbearing decisions, use contraception, control over spouse selection and marriage timing, freedom from domestic violence
Legal	Knowledge of legal rights, domestic support for exercising rights
Political	Knowledge of political system and means of access to it, domestic support for political engagement and exercising the right to vote
Psychological	Self-esteem, self-efficacy, psychological well-being

Source: Authors' construction. Adapted from Malhotra & Schuler (2002).

In addition to being a multidimensional concept, the actual process of empowerment can occur at different levels such as the individual, relational (e.g. close relationships) and collective (e.g. community level) (Rowlands, 1997). This article particularly focuses on the individual level of empowerment, which can be described as “developing a sense of self and individual confidence and capacity and undoing the effects of internalised oppression” (Rowlands, 1997, p. 15).

² Special attention is paid at the household level since the data that will be used for the construction of the index comes from the Demographic Health Survey (DHS), which is a household survey.

Methodology and Research design

The data

To build a women's empowerment index, the 2015 DHS of Colombia will be used (Profamilia & Ministerio de Salud y Protección Social, 2019). Specifically, the dataset used here contains the Individual Women's Data with 38,718 observations and the women surveyed were between 13 to 49 years³.

Methodology

The Colombian index of women's empowerment is constructed using the Alkire-Foster Counting methodology (Alkire et al., 2015; Alkire & Foster, 2011). The index assesses empowerment multidimensionally, while capturing the notion of disempowerment. The level of disempowerment is identified by the number of inadequacies a woman could experience in the empowerment dimensions. Using a dual cut-off counting approach; the first cut-off identifies whether a woman is deprived in a specific dimension, and the second cut-off defines the proportion of weighted inadequacies a woman has to be considered disempowered (Alkire & Foster, 2011). The methodology provides an intuitive visible headline which captures the multidimensionality of the internal structure of empowerment, as well as having the property of being disaggregated into its indicators.

Computing the index

The index is computed across the dimensions of empowerment, denoted M_0 , and the final index of disempowerment is computed as $1 - M_0$. The notation used for the construction of the index focuses on the percentage of disempowered women and the percentage of indicators in which they lack adequate achievements (Alkire et al., 2013). The steps taken to obtain a multidimensional measurement of empowerment can be divided into two: identification and aggregation (Alkire et al., 2015).

³ For a summary of the descriptives refer to the annex.

Identification

The first step, after choosing the indicators, is to assign a cut-off value to each indicator. Then according to the cut-off, a value of 1 is given if the woman is deprived in that indicator, 0 otherwise. The second step is to choose the relative weights for each indicator, the sum of the weights must be equal to 1. The third step is to compute an inadequacy score for each person, according to the inadequacies across the indicators a score is calculated by adding up the weighted inadequacies experienced. The score equals to 1 if the person has inadequacies in all the indicators and zero when there are no inadequacies. See equation 1 below.

$$Ci = w_1I_1 + w_2I_2 + w_3I_3 + \dots + w_dI_d \quad \text{Equation 1}$$

The fourth step is to set a second cut-off point, which represents the share of weighted inadequacies a woman must have to be considered disempowered, this is denoted by k (Alkire et al., 2013). For instance, if we have chosen cut-off of 20 percent (Alkire et al., 2013), therefore a woman is disempowered if her inadequacy score is greater than 20 percent. We decided to present the data at different values of the second cut-off, as research in counting methodologies with ordinal data has shown that the stricter the conditions imposed in comparisons the less robust the results are (Yalonetzky, 2014). Lastly, the inadequacies of the women who according to the score are considered empowered are censored, to do this their score is replaced by zero when their k is less or equal to the cut-off, this is denoted by $c_i(k)$.

Aggregation

Three steps are followed in the aggregation. The first step is to compute the proportion of people who have been identified as multidimensionally disempowered, which is given the disempowered headcount ratio (H_p):

$$H_p = \frac{q}{n} \quad \text{Equation 2}$$

Where q is the number of women that are disempowered, and n is the total population.

The second step is to compute the intensity of disempowerment (A_p), given by

$$A_p = \frac{\sum_{i=1}^n C_i(k)}{q}$$

Equation 3

Where $C_i(k)$ is the censored inadequacy of woman i and q is the number of disempowered women. In the last step, M_o is obtained by multiplying H_p times A_p . The disempowerment index (M_o) is also known as the adjusted headcount ratio.

Finally, the empowerment index is calculated as

$$\text{Women's empowerment index} = 1 - M_o$$

Equation 4

Women's Empowerment Index for Colombia

As indicated in the previous section, the dimensions in the Women's Empowerment Index for Colombia are constructed based on the definition of empowerment by Kabeer (1999). The first dimension is resources, the second and third dimensions deal with agency, with the second dimension involving women's participation in domestic decision-making, the third relating to women's decision-making on personal matters and the fourth dimension deals with achievements. In total nine indicators are used to measure women's empowerment; these can be seen in *Table 2* below with their respective weights, each indicator is given an equal weight⁴. It is important to highlight that practically not all the indicators used for the index can fully reflect women's ability to make "strategic life choices" as per Kabeer's definition of empowerment. Strategic life choices are infrequent choices that women make throughout their lives (Malhotra & Schuler, 2002), and household-level data like the one from the DHS does not capture these type of choices, therefore the indicators can be considered as proxies, which capture "empowerment in small things" (Malhotra & Schuler, 2002, p. 28), that can help us in ultimately inform the bigger picture.

⁴ A caveat in the methodology does not allow to report percentage of population when different weights are applied, therefore the decision to weight each indicator equally. This decision is taken into consideration as we will perform results for both rural and urban areas, and robustness considerations following Yalonetzky (2014) are considered.

Resources dimension

Education is chosen as a proxy for the resources dimension. Women with higher levels of education in the country tend to participate more in the labour market and are less likely to face issues like teen pregnancy and most importantly they are more prone to reject gender roles and traditional views of women and men (Fonseca Galvis, 2018; Sánchez, 2019).

The *education indicator* used for the index captures the highest educational level attained by a woman; from 1) no education to 6) higher education. A woman is considered to have adequacy in this indicator if at least she completed secondary education. This is based on the idea that there are more positive benefits for women associated with secondary over primary schooling. Girls' completion of secondary education increases drastically their lifetime earnings, decreases their fertility and mortality rates; additionally, there is an economic advantage given that girls are more likely to reap economic benefits of education when they complete secondary school, whereas men tend to enter the labour force earlier in life often after completing primary school (United Nations Girls' Education Initiative & Global Partnership for Education, 2014). Moreover, according to Sen (1999) as cited in Kabeer (2005), the access to secondary education has an important role in enhancing women's capacity to exercise control in their lives through the combination of literacy and numeracy skills and enhanced self-esteem.

Domestic decision-making dimension

This dimension is composed of three indicators that capture women's agency in the form of decision-making inside the household. The first indicator is about women's participation in household decision-making regarding large household purchases. The literature is not conclusive as to whether sole decision-making in household matters reflects greater women's empowerment (Acosta et al., 2020), however basing the justification of various discussions over prioritising sole over joint decision-making (e.g., Ewerling et al., 2017; Alkire et al., 2013 and Do & Kurimoto, 2012). This study considers that a woman achieves adequacy in the indicator if she decided alone, with her partner or with someone else.

The *second and third indicators* reflects women's agreement on gender relations statements related to decision making. According to Hanmer & Klugman (2016) to evaluate agency and

empowerment, the indicators chosen should also capture whether the decisions women make are challenging existing gender norms or other constraints that they face when they want to pursue their goals. For the second indicator, women's opinion on the statement "Men have the last word on household decision-making" is considered an indication of how assertive they are regarding their sense of agency. As for the third indicator, the statement "A good wife always obeys her husband" is considered. Those that disagree with these statements are considered to have adequacy in the indicator, those that answered something different are considered to have inadequacy⁵.

Decision-making on personal matters

This dimension is composed of four indicators which capture women's agency in the form of decision-making on personal issues. The *first indicator* is constructed based on a question about the women's healthcare, which is about the "person who usually decides on respondent's health care", the *second indicator* is related with the woman's freedom of movement and the question is about the "person who usually decides on visits to family or relatives. The same six answers as for household decision-making are possible 1) no one, 2) respondent alone, 3) respondent and husband or partner, 4) respondent and another person, 5) husband or partner alone and 6) someone else.

A woman's ability to decide independently on personal matters which includes freedom of movement, their capacity to influence their own lives and make effective choices is considered as something with intrinsic value and a key dimension of women's well-being (World Bank., 2012). Therefore, a woman has adequacy in these indicators only if she decides on her own.

The *third indicator* is built based on women's agreement on gender relations statements related to personal matters, specifically, women who agree that "Women are free to decide if they want to work" are considered to have adequacy in this indicator, whereas those that answer something differently have inadequacy. The *fourth indicator* covers the tolerance of violence against women. Women who disagree with the statement that "Sometimes it is right to hit women" are considered

⁵ It is important to point out that while midpoint responses like "neither agree nor disagree" can be interpreted in different ways. On the one hand, it can mean that she has "no opinion" on the statement and therefore represents neutrality, on the other hand, it can also mean less interest or involvement in the topic, and therefore due to a lack of effort, the respondent provides such answer just to satisfy the requirements of the survey (Truebner, 2021). Thus, agreeing with this statement or having "no opinion" on it, is an indication of women that are less assertive regarding their sense of agency.

Table 2: Women's empowerment index for Colombia Indicators and weights

Domain	Domain weight	Indicator	Indicator weight
Resources	1/9	Education	1/9
Domestic decision-making	3/9	Decision on large household purchases	1/9
		Men having the last word on household decision-making	1/9
		Obedience to husband	1/9
Decision-making on personal matters	4/9	Decision on woman's healthcare	1/9
		Freedom of movement	1/9
		Freedom to decide to work	1/9
		Tolerance violence against women	1/9
Achievements	1/9	Employment	1/9

Source: Authors' construction

to have adequacy in this indicator, those that agree or neither agree nor disagree are considered have inadequacy.

Achievements dimension

Just like the resources dimension, employment is used as a proxy for achievement, by assuming that women that are employed have an increased ability to exercise choice (Kabeer, 1999; Kishor & Subaiya, 2008). To build the *employment indicator* the variable that is used is about the respondent's occupation. There are eight different categories, that should not be considered cardinal: 1) not working and has never worked, 2) professional/ technical/managerial, 3) clerical, 4) sales, 5) agricultural, self-employed, 6) services, 7) skilled manual and 8) unskilled manual. For the cut-off, the women that are not working and have never worked are considered to have an inadequacy in this indicator. Given that employment is considered an outcome of empowerment, a woman that has never worked could signal that she does not have enough resources or the agency to participate in the labour market and it is also likely that this woman does household or caretaking activities that are not remunerated.

Findings

Overall population

The empowerment index results for the overall population can be found in Table 5 below. With a cut-off of 20 percent for disempowerment, 71.7 percent of women experience disempowerment, this means that their inadequacy score is equal to or greater than 20 percent, the average inadequacy score shows that these women have on average inadequate achievements on 40.8 percent of the dimensions. Given that M_0 is calculated by multiplying H_p times A_p (71.7 percent times 40.8 percent), then the disempowerment index is equal to 0.2925 since all the indicators weight the same, this means that the women that are disempowered experience 29.25% of the total possible inadequacies that the Colombian women could experience.

Table 3: Results for the overall population

Indexes	Value
Disempowered headcount (H_p)	71.7%
Average inadequacy score (A)	40.8%
Disempowerment index (M_0)	0.292
Empowerment index ($1 - M_0$)	0.707
Number of observations	38,718

Source: Authors' construction based on the Colombian DHS (2015).

Table 4 below shows how the index is decomposed and it shows the censored headcount ratios in each indicator⁶. Among the disempowered, in the dimension of *resources* and for the indicator of *education*, 41.47 percent of women have inadequacy in this indicator, this means that these women have not completed secondary school. For the dimension of *domestic decision-making*, the highest censored headcount ratio is on the indicator of *obedience to husband* in which 44.83 percent of women present inadequacy. The second highest headcount ratio is for the indicator of *decision on large household purchases*, where 36.45 percent of women have inadequacy, which means that they do not have decision-making power on this matter. Lastly, the indicator of *men having the*

⁶ For a table with the raw headcounts refer to the appendix (Table 2).

last word on household decision-making has the lowest censored headcount ratio with 24.31 percent of women lacking adequacy.

Table 4: Disempowerment censored headcount ratios by indicator

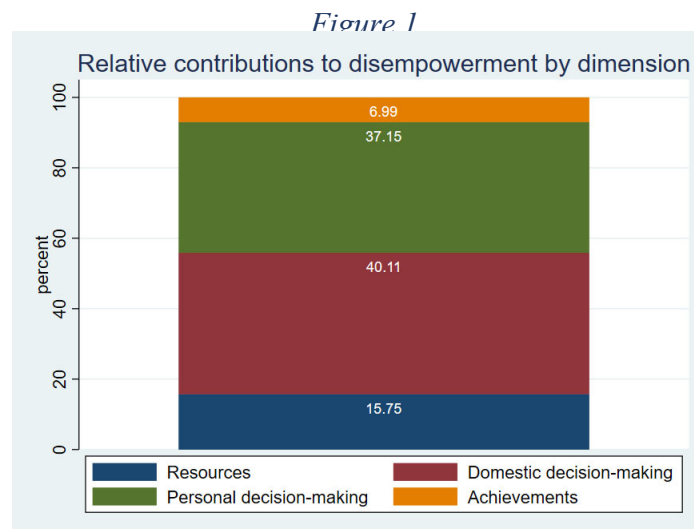
Indicator	Headcount ratio(H_p)
Resources	
Education	41.47%
Domestic decision-making	
Decision on large household purchases	36.45%
Men having the last word on household decision-making	24.31%
Obedience to husband	44.83%
Decision-making on personal matters	
Decision on woman's healthcare	32.06%
Freedom of movement	55.65%
Freedom to decide to work	6.17%
Tolerance of violence against women	3.90%
Achievements	
Employment	18.39%
Number of observations	38,087

Source: Authors' construction based on the Colombian DHS (2015).

In the dimension of *decision-making on personal matters*, the highest censored headcount ratio is in the indicator of *freedom of movement*, in which 55.65 percent of women have inadequacy, which means that they do not decide on their own on matters of visits to family or relatives, this shows that their freedom of movement is restricted to some extent, also among all indicators this is the one with the highest censored headcount ratio. For the indicator of *decision on woman's healthcare* 32.06 percent of women do not decide for themselves on matters that concern their health.

The indicators of *freedom to decide to work* and *tolerance of violence against women* are, among all indicators, the two with the lowest censored headcount ratio, 6.17 percent and 3.90 percent respectively, thus a very low percentage of women lack adequacy in these indicators. This means that most Colombian women, for the year 2015 considered that they had the agency to decide whether they can go to work or not and most of them disagree with the statement "sometimes is

right to hit women”. Finally, for the dimension of *achievements* in the indicator of *employment* the headcount ratio is of 18.39 percent, those that have inadequacy are women that do not work and have never worked. Overall, 9.08 percent of women have adequacy in all indicators, most of the population lacks adequacy between 1 and 4 indicators and only 0.04 percent have inadequacy in all nine indicators⁷. Figure 1 below shows the relative contributions by dimension to the adjusted headcount ratio (29.25percent).



Source: Authors' own construction based on the Colombian DHS (2015)

If we divide the inadequacies from high to low, we find that the dimension of *domestic decision-making* is the one with the highest contribution with 40.11 percent. The second highest contribution is from the dimension of *personal decision-making* that contributes with 37.15 percent. The dimension of *resources* has a contribution of 15.75 percent. The lowest is the dimension of *achievements*, which only has the indicator of employment contributes 6.99 percent.

Breakdown of results by population subgroups

Urban and rural

The disempowerment index is higher in rural areas 0.41 compared to 0.26 in urban ones (see *Table 5* below), this means that urban women have higher adequacy scores and are more empowered than rural women.

⁷ Refer to *Table 3* in the appendix.

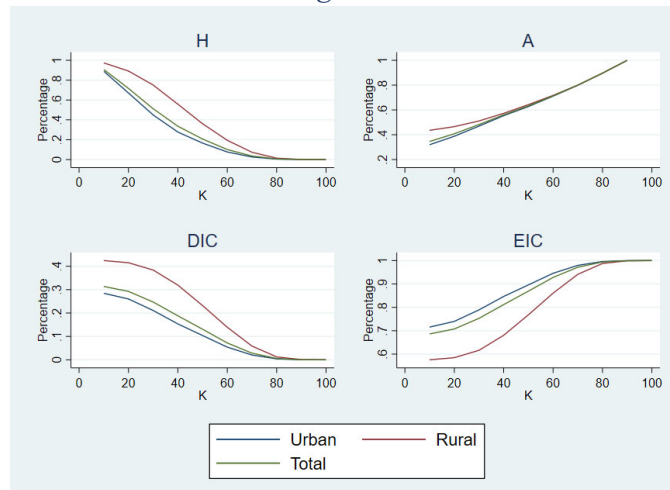
Table 5: Results by urban and rural area

Indexes	Urban	Rural
Disempowerment index (M_0)	0.26	0.41
Empowerment index ($1 - M_0$)	0.74	0.58
Number of observations	28,473	9,715

Source: Author's construction based on the Colombian DHS (2015).

Figure 2 below presents the headcount ratio the average inadequacy score, the disempowerment and empowerment indices by urban and rural areas, over all possible cut-offs. The results show that the headcount ratio for $k=20$ for the rural areas is comparatively higher than in urban ones, 89 percent compared to 67 percent. Women in rural areas also experience on average more inadequacies that women in urban ones. The average inadequacy score in rural areas is 46.5 percent, whereas in urban areas is 38.8 percent. By looking at the censored headcount ratios in each of the indicators with a breakdown of urban and rural areas it can be observed that women in urban areas fare better in all nine indicators in comparison with their counterparts that live in rural areas⁸.

Figure 2



Source: Authors' own construction based on the Colombian DHS (2015)

⁸ Refer to Table 4 in the appendix.

The starkest differences are found in the indicators of *education* and *obedience to husband*. In the indicator of *education*, 70.94 percent of rural women experience inadequacy compared to 33.68 percent of urban women. For the indicator of *obedience to husband*, 66.17 percent of women lack adequacy in rural areas, whereas only 39.18 percent of urban women lack adequacy.

The indicators of *Freedom to work* and *Tolerance of violence against women* are the ones with the lowest censored headcount ratio for both women in rural and urban areas, 6.09 percent of women in urban areas and 6.45 percent of women in rural areas lack adequacy in the indicator of *Freedom to work*; whereas only 3.07 percent of urban women have inadequacy in the indicator of *Tolerance of violence against women* compared to 7.04 percent of rural women.

By contrasting the relative contributions to disempowerment by dimension of rural areas with urban ones it is found that in both cases the dimension of *domestic decision-making* has the highest contribution⁹, 40.05 percent in rural areas and 40.14 percent in urban ones. The second dimension with the highest contribution is the one of *personal decision-making*, in this case, the contribution is higher for urban areas with 38.55 percent compared to 33.82 percent for rural areas. For the dimension, of *achievements*, the contribution to disempowerment in rural areas is of 7.14 percent whereas in urban ones is of 6.92 percent. The breakdown of results by urban and rural areas are in line with the contextual background of the country and with what was expected to find from the index's results, women in rural areas are at a disadvantage compared to urban women and this is reflected in the significant differences by indicators when looking at the censored headcount ratio.

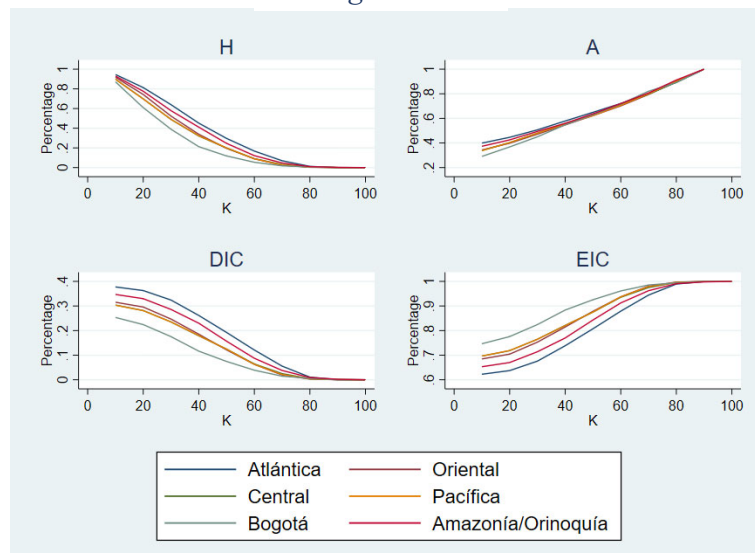
Region

Figure 3 below shows the headcount ratio, adjusted headcount ratio, the disempowerment and empowerment indices for six different regions in Colombia. The highest headcount ratio when the cut-off is set to 20% of the indicators is found in the Atlántica region, where 81.3 percent are disempowered, followed very closely by 77.6 percent of disempowered women in the Orinoquía/Amazonía region, these women have on average inadequate achievements on 44.6

⁹ Refer to *Table 5* in the appendix.

percent and 42.5 percent of the indicators, respectively. The two regions with the lowest headcount ratio are Pacífica and Bogota (the capital) region with 69.7 percent and 60.9 percent, respectively.

Figure 3



Source: Author's own construction based on the Colombian DHS (2015)

The highest disempowerment index (adjusted headcount ratio) is found in the Atlántica region, the disempowered women that live there, experience 36 percent of the total possible inadequacies that could be experienced in that region. The second highest disempowerment index is found in the Orinoquia/Amazonia region, whereas for the regions of Oriental, Central and Pacífica the disempowerment index is between 28 and 29 percentage which is the same as for the overall population. The region of Bogota is the only one where the disempowerment index is lower than for the overall population (22.4%).

The Atlantica region together with the Orinoquia/Amazonia are the regions in which women are doing worse in terms of empowerment. As was earlier pointed out, the Atlantica region is one of the regions with the highest prevalence of male chauvinism in the country, whilst this could be one of the explanations more research is needed to understand the regional disparities regarding empowerment. For what regards the Orinoquia/Amazonia region, among all regions is the one that has the highest percent of rural area (34 percent), this could also be an explanation of the results obtained in the index. Finally, it is not surprising to find that Bogota is the region in which

Colombian women fare better in the indicators given the huge advantages that women that live in cities have in comparison to women living in the rural parts of the country.

Limitations

Kabeer's definition of empowerment is understood as a process that entails evolution from the state of disempowerment to the state of empowerment, and this implies that for the measurement of empowerment panel data would therefore be ideal. However, since the data from the Colombian DHS survey of 2015 is cross-sectional it is not possible to evaluate whether women made progress from a condition of disempowerment to one of empowerment. Additionally, as this is secondary data, when choosing the indicators to build the index of women's empowerment for the dimensions of resources and achievements there were not enough indicators; ideally, each dimension should have at least two to three indicators and this was not the case for these two dimensions. Some of the results were being driven by only one indicator per dimension. Thus, more indicators for education and employment would have improved the construction of the index and the analysis of women's empowerment in the country, having more indicators per dimension would have also increased the validity of the results.

Discussion and Conclusion

Our study has aimed to show the multidimensionality of women's empowerment. This finding emphasises that while much has been achieved in terms of women's empowerment, the results on the disempowerment indicators show that there is still much work to be done on the ground.

In this section we briefly reflect on the results from both the empowerment and disempowerment angles. We will start with the areas where we found women to be empowered in, and follow it with the areas that they are disempowered in. A discussion on the results of the decompositions will be presented and the paper will be concluded with a few recommendations on the next steps.

Overall Empowerment and Disempowerment

The results of the index reveal that for the group of women that are considered disempowered in the overall index (with the 20 percent cut-off), two indicators signal empowerment: first in Freedom to decide to work, and tolerance of violence against women from the dimension of personal decision-making as less than 7 percent of women in each indicator presented inadequacy. This means that more than 90 percent of women considered that they were free to decide if they wanted to work and more than 90 percent of women disagree with the statement "sometimes is right to hit women", this demonstrates a high rate of rejection of violence against women.

The third indicator that signals higher accomplishment of outcomes of empowerment is employment from the dimension of achievements. In this indicator less than 20 percent of women presented inadequacy. Although this shows that most women have been or are part of the labour market, this is driven by the cut-off value, and that one indicator was used as a proxy in this dimension. Both the dimension of personal decision-making and achievements were the ones that had lower relative contributions to disempowerment, they came in the third and fourth place respectively.

When it comes to Disempowerment the results show that the indicator of education is the one in which Colombian women experience serious inadequacy in. As it was identified in the contextual background of Colombia, some of the reasons why women do not enter or finish secondary education are related either with teenage pregnancy or with the traditional gender roles assigned

to women such as domestic work and caregiving activities. Given that education in this article is considered as a pre-condition of empowerment these results are troubling considering all the advantages of completing secondary education in comparison to only completing primary education that have been identified before. Women that complete secondary school have more economic advantages, they can exercise more control over their lives, and they are more likely to participate in the labour market. Therefore, if women lack adequacy in the indicator of education, this could mean that they will have fewer resources and choices to act in their interest, which will be translated in lower agency and an obstacle for the achievements of empowerment (e.g. Employment and formal labour participation).

Another indicator that signals disempowerment is the one of freedom of movement from the dimension of Personal decision-making in which a high percentage of Colombian women experience inadequacy. It is expected that the woman herself can decide on the visits she does to her family or relatives without asking somebody else in her household, still, among the women that are disempowered, almost 55 percent are not able to decide on this matter on their own, this shows that these women have a reduced ability to decide independently and make effective choices to influence their lives for what regards freedom of movement.

The third indicator in which a higher percentage of women are disempowered is the one of obedience to husband from the dimension of Domestic decision-making. Those that lack adequacy in this indicator agreed or responded, “no opinion” to the gender relations statement “A good wife always obeys her husband”. Given that this dimension is supposed to capture women’s agency in the domestic sphere, what the results show is that at least 44 percent of women are less assertive regarding their sense of agency by accepting male dominance in marriage.

Decompositions by Urban, Rural and Regions

When decomposing the results for rural and urban areas it was found, as expected, that there are lower levels of empowerment among women in rural areas. The same three indicators in which women for the overall population present higher inadequacy are the indicators in which women in rural areas also elapse (education, freedom of movement and obedience to husband), only that the

differences with the urban women are quite significant. For the indicator of education, it was found again that is the one with the highest censored headcount, in which more than 70 percent of women in rural areas experience adequacy. One of the factors that could explain this is the presence of traditional gender roles which are more prevalent in the mindset of people living in rural areas. If women are expected to be mainly responsible in the household and caretaking activities then they have less opportunity to focus on their studies, and as it was identified before, women in rural areas spend on average more hours carrying such activities than rural men or urban women. Another explanation is that women in rural areas have lower access to education given that the supply of education for preschool and secondary school is deficient.

As for the breakdown by regions, the findings show that women in the regions of Atlantica and Orinoquia/Amazonia are the ones that fare worse in the indicators and therefore have higher levels of disempowerment, there is not much information about the reasons why this differences among regions are present; however, the Atlantica region is considered as the most “male chauvinist” region of the country and this might affect the conditions under which women exercise their agency in this part of Colombia. On the other hand, it might also be that the region of Orinoquia/ Amazonia presented high levels of disempowerment given that is the most rural region among all the six regions of the country. For the Pacifica, Central and Oriental regions the results from the disempowerment index were the same (0.27) which is the same as for the overall population, whereas for Bogota the index was much lower. This is not shocking given that, women in urban areas of Colombia are in a better environment, with more opportunities and choices like better access to education and the labour market.

Conclusion

As we noted, there are reasons to believe, based on the six different dimensions in which women can be empowered identified by Malhotra & Schuler (2002), the dimensions that are being captured with the indicators of the index constructed in this thesis are socio-cultural and familial/interpersonal and to some extent economic. However, the other dimensions; namely the psychological, political and legal were not considered due to data availability. This means that future research could also explore in more detail which type of indicators could capture the

empowerment of women in these dimensions. Additionally, in order to evaluate more comprehensively women's empowerment in a given setting (culture, society or country) the collection of primary data is better than the use of secondary data, in this way the researcher can build an index of women's empowerment based on survey questions that have been designed by her.

Additionally, in order to capture the "process" of women's empowerment the researcher should aim to collect panel data rather than cross-sectional data, in this way it would be clearer the tracking of the development from the state of disempowerment to the state of empowerment. A more ideal dataset would have included, for example, regarding education indicators about school attendance and enrolment, school dropout and reasons to dropout. In this way, it would be easier to identify the reasons why women do not finish secondary school and how this can be mitigated through public policies. As for employment more information should be gathered about informal work given that this is a common and pressing issue among Colombian society. Other variables that could be useful to capture women's economic empowerment are women's relative contribution of income to the household and women's control over income.

Finally, for the Colombian context, it would be interesting to make a more in-depth analysis to understand why education was one of the indicators in which women presented higher inadequacy. For instance, research on the reasons why women do not finish school, whether there are other obstacles women face to access education apart from the reduced provision of education in rural areas and the pervasiveness of traditional gender roles in the country. This would ultimately be the basis to help increase adequacy in the education indicator for women. Moreover, more research must be done on the regional differences in women's empowerment given that there was not enough information to understand why the Atlantica and the Orinoquia/ Amazonia region were the ones with the highest disempowerment indices.

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Annex

Table 1: Sample descriptive statistics Colombian women

Region	Percent
Atlantica	21.38
Oriental	17.08
Central	24.69
Pacifica	17.19
Bogota	17.15
Orinoquia/Amazonia	2.50
Ethnicity	
Indigenous	5.60
Gypsy (rom)	0.03
Raizal from archipelago (San Andres)	0.11
Palanquero from San Basilio	0.17
Black/mulato/afro-Colombian/afro-descendant	8.49
None of the above	85.60
Current marital status	
Never in union	35.59
Married	17.09
Living with partner	32.59
Widowed	1.32
Divorced	0.65
No longer living together/separated	12.76
Place of residence	
Urban	79.18
Rural	20.82

Number of observations **38,718**

Note: Weights have been applied to restore the representativeness of the sample. Based on the Colombian DHS (2015).

Table 2: Disempowerment raw headcount ratios by indicator (N=38,087)

Indicator	Headcount ratio (H_p)
Resources	
Education	43.4%
Domestic decision-making	
Decision on large household purchases	39.1%
Men having the last word on household decision-making	24.9%
Obedience to husband	48.2%
Decision-making on personal matters	
Decision on woman's healthcare	32.3%
Freedom of movement	65.2%
Freedom to decide to work	6.7%
Tolerance of violence against women	4.2%
Achievements	
Employment	18.5%

Source: Authors' own construction. Based on the Colombian DHS (2015).

Table 3: Percentage of women that lack adequacy in # of indicators (N=38,087)

# inadequacy indicators	Overall	Resources	Domestic decision-making	Personal decision-making	Achievements
0	9.08%	55.85%	28.28%	27.97%	81.45%
1	18.84%	42.82%	38.52%	38.71%	18.55%
2	20.17%	-	23.46%	28.15%	-
3	17.43%	-	8.42%	3.60%	-
4	12.75%	-	-	0.25%	-
5	10.42%	-	-	-	-
6	6.45%	-	-	-	-
7	2.87%	-	-	-	-
8	0.60%	-	-	-	-
9	0.04%	-	-	-	-
missing	1.33%				
Total	100%	100%	100%	100%	100%

Source: Authors' own construction. Based on the Colombian DHS (2015).

Table 4: Disempowerment censored headcount ratios by indicator and urban/rural

Indicator	Urban (H_p)	Rural (H_p)
Resources		
Education	33.68%	70.94%
Domestic decision-making		
Decision on large household purchases	34.79%	42.72%
Men having the last word on household decision-making	19.97%	40.75%
Obedience to husband	39.18%	66.17%
Decision-making on personal matters		
Decision on woman's healthcare	29.07%	43.38%
Freedom of movement	51.98%	69.51%
Freedom to decide to work	6.09%	6.45%
Tolerance of violence against women	3.07%	7.04%
Achievements		
Employment	16.19%	26.69%
Number of observations	28,473	9,614

Source: Authors' own construction. Based on the Colombian DHS (2015).

Table 5: Relative contribution by dimension to disempowerment (Urban/ Rural)

Indexes	Urban	Rural
Resources	14.39%	18.98%
Domestic decision-making	40.14%	40.05%
Personal decision-making	38.55%	33.82%
Achievements	6.92%	7.14%

Source: Authors' own construction. Based on the Colombian DHS (2015).

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