

Insights from Social Media on Gender in Latin America

Deborah C. Batista
Tarcízio Silva
Max Stabile
Paula Castillo Páez
Matthew C. Kearney

Social Sector

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Deborah C. Batista debbiebatistanyc@gmail.com

Insights from Social Media on Gender in Latin America

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Deborah C. Batista; Tarcízio Silva; Max Stabile; Paula Castillo Páez; Matthew C. Kearney

Social media has become an increasingly important means of communicating for governments, practitioners, and activists in the Inter-American Development Bank's borrowing member countries in Latin America and the Caribbean. This Technical Note, commissioned as part of the IDB's strategic review of gender mainstreaming (Betts, Castillo Páez, and Kearney 2016), summarizes the relevant social media analysis methodology and reports the results of a pilot study to understand and describe communication related to gender issues on Facebook, Twitter, and blogs in Argentina, Brazil, Colombia, Guatemala, and Mexico. The pilot was conducted over a month-long period in November and December of 2015. This Technical Note analyzes the timing, content, and network structure of the captured communications from each country. It finds that social media can be a valuable communication and listening tool, but that usage patterns vary substantially from country to country. Understanding the characteristics of the network is critical to understanding when to communicate, how to communicate, and with whom to communicate.

Deborah C. Batista, Tarcízio Silva, and Max Stabile designed and conducted the research. Paula Castillo Páez lead the project and wrote the final version of the technical note together with Matthew Kearney based on initial reports written by the researchers. Victoria L. Lemieux served as external peer reviewer for the publication. We thank David Einhorn for editing the document.

Contact information : Debora C. Batista: debbiebatistanyc@gmail.com, Vitoria L. Lemieux: vlemieux@mail.ubc.ca; Paula Castillo Páez: pcastillo@iadb.org

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Foreword

Listening to our stakeholders has never been more important. Countries in Latin America and the Caribbean are experiencing continuous changes in their economic, social, and political landscape. To continually improve its operations, the Inter-American Development Bank (IDB) has long recognized the importance of listening to the diverse development partners with which it works, particularly those based in the IDB's 26 borrowing member countries. In 2012, the Bank institutionalized this process through its [External Feedback System](#) (EFS), which collects the perceptions of IDB stakeholders about the Region's challenges and the Bank's ability to help it address them. Consistently, partners have ranked the Bank's understanding of the priorities of Latin America and Caribbean as one of its strengths, with 90 percent of respondents reporting to be satisfied or very satisfied. One such challenge is gender equality, which is a crucial element of inclusive and sustainable economic development. Since the early 1990s, achieving gender equality has been and continues to be a key component of the IDB's agenda. In fact, gender equality is one of the three key cross-cutting issues of the IDB's Institutional Strategy.

In 2015, the IDB began leveraging the EFS instruments to understand how the Region's citizens and leaders regard the importance of gender equality for the development of their countries. The resulting [gender mainstreaming study](#) includes core EFS survey results, which we supplemented with gender-specific questions and other data collected specifically for the analysis, including in-depth interviews with IDB personnel and stakeholders, reviews of relevant strategic documents (e.g., IDB Country Strategies), analysis of social media (Twitter, Facebook, and the blogosphere), and a variety of other sources.

This Technical Note details the methodology and results of the social media analysis portion of the [gender mainstreaming study](#). It explains how the social media data were collected and analyzed, and provides summary reports for each of the countries studied: Argentina, Brazil, Colombia, Guatemala, and Mexico.

The social media analysis is a pilot study that seeks to understand how social media data can support the IDB's understanding of the Region and help decision-making regarding gender mainstreaming (e.g., through the use of a gender lens in Bank-supported activities). It also aims to show us how to better communicate the IDB's work on gender. The lessons from this undertaking can help identify the circumstances under which communications on social media can provide important lessons for policymakers by leveraging other data (such as broader perception surveys) in combination with social media monitoring. For example, social media analysis data cannot be extrapolated to broader audiences, so results must be contextualized to the specific time and platform from which the data are obtained. That said, the overall results of this analysis are consistent with analyses of other data employed in the gender mainstreaming study. For example, our social media analysis identifies violence against women as a salient theme within the conversation about gender on social media, and [UN Women](#) as an important player in the conversation on gender equality. Both findings are consistent with findings from other sources in the mainstreaming study.

As a qualitative research tool, social media analysis can provide insights surrounding a theme of interest, such as details on the importance of certain themes by country and in terms of key events or potential new partners who are influencing the conversation about gender on social media. Social media analysis thus can complement other approaches to analyzing gender mainstreaming.

Given the richness and depth of social media data, researchers employ a variety of strategies to analyze and understand events. Some focus on deeply describing data within a one- or two-day timeframe, while others take a broader view of trends over time. For our purposes, the pilot was followed up by another IDB study that examined year-long data, retroactively analyzing conversations from October 1, 2015 to September 31, 2016 for the five countries explored in the pilot. This longer analysis confirms that violence against women continues to be the most recurring theme in gender conversations, and that the peak date of social media activity relating to gender equality content is November 25th, which is the International Day for the Elimination of Violence Against Women.

Introduction

New technologies are helping make sense of so-called “big data,” transforming social media into a rich source of quantitative and qualitative data with the potential to help organizations and governments develop and implement public policies. Analyzing social media data can support the work of development practitioners by providing “digital smoke signals” that aid disaster prevention and management,¹ real-time data on consumer spending,² insights regarding citizens’ sentiments about implementation of policies,³ information on who is influencing the public online, and context and details of past and even ongoing events.⁴

In contrast to traditional analysis of public opinion or influential audiences, social network analysis cannot be statistically representative of a specific population. Instead, social network analysis can be thought of as a rich description of the dynamics of an amorphous virtual community. Why should such a description be interesting to the Inter-American Development Bank (IDB)? Or to the study of gender more generally? If the analysis is not representative, what is it telling us?

First, understanding online communities is important to the extent that online conversations affect real-world outcomes. Discussions on Twitter and Facebook are important means of communication, organization, debate, and advocacy for contemporary social movements. Tracking how and when those conversations happen is critical to understanding the movements themselves and how they react to institutions like the IDB. Second, while online networks are not representative of the population in a statistical sense, they often mirror the flow of ideas elsewhere in society. Studying social networks is an important tool, when used in conjunction with other data, to understand and monitor the origin and flow of ideas. Third, the Internet enables individuals to connect and express themselves as never before, and this connectivity and access to information profoundly changes power structures and, potentially, society itself.^{5,6,7} For example, it affects how citizens seek knowledge and how they relate to media. In the United States, consumers prefer learning about a new product through content such as an influencer post rather than through a traditional ad, so companies are spending \$255 million in Instagram influencer-sponsored posts per month as part of their advertising strategies.⁸ In addition, those seeking information in search engines are now likely to be directed to social media content in addition to other kinds of sites.⁹

For its part, the IDB produces a rich body of knowledge products to promote gender equality and mainstreaming, so understanding alternative communication strategies is crucial for effectively disseminating this content.

While the study of social network analysis is relatively new and changing rapidly, there is a rich body of literature that employs a vast array of data collection and analysis methods that we use here to inform our analysis.¹⁰ Quantitative methods are used to examine everything from the simple ebbs and flows of information (e.g., when peaks form, and the number of people talking) to more complex analyses that involve, for example, time series, predicting events, and exploring the structure of social networks and their most influential members.¹¹

¹ Leavey (2013).

² See the work of the JP Morgan Chase & Co. Institute at <https://www.jpmorganchase.com/corporate/institute/institute.htm>.

³ Leavey (2013).

⁴ Rogers (2014).

⁵ Castells (2009).

⁶ Rogers (2013).

⁷ Hansen and Smith (2010).

⁸ Rockwood (2017).

⁹ Yang, Li, and Kiang (2011).

¹⁰ Gaffney and Puschnann (2014).

¹¹ Dubois and Gaffney (2014).

Qualitative analysis of posts uses a variety of computer-assisted content techniques, including overviews of frequently used words and phrases; basic data visualizations (such as hierarchical tree diagrams); lemmatization of character strings (i.e., shortening to word stems and key words in context [KWIC]); and more complex techniques like speech-act analysis. This last type of analysis identifies users' intentions and tone (e.g., assertive, directive, authoritative, expressive, declarative, etc.) and facilitates the creation of categories by using existing theory or through induction and sentiment analyses.¹² Social media data provide vast opportunities for qualitative research, including ethnographic research,¹³ as the data are naturally occurring (not motivated by research intent)¹⁴ and because social media data are so rich that complex studies can be of very short duration.¹⁵

The IDB is interested in exploring how social media data can help practitioners gain a greater depth of knowledge about gender equality as part of an overall review of public perceptions of the Bank's cross-cutting strategic priorities. While the Bank has been conducting cutting-edge work relating to gender mainstreaming, stakeholders are often unaware of these activities. To better understand how stakeholders in the region communicate about gender issues, we carried out a pilot social media study from November 23 to December 22, 2015. We collected data relating to gender from Twitter, Facebook, and blogs in five countries: Argentina, Brazil, Colombia, Guatemala, and Mexico. The goal was to identify what individuals talked about on social media when referring to gender equality, which major campaigns (specifically hashtags) were most relevant, and who influenced the conversations. The broader aim was to inform knowledge-sharing dissemination strategies.

Approximately 1 million data points were obtained from Twitter, Facebook, and blogs using a broad query through a paid service. The results were filtered through lexical association techniques that identified approximately 21 percent of the data collected as being relevant to gender equality issues.¹⁶ We employed a multi-step strategy combining social networking analyses with a manual review of content and profile content to tag the users with a location. For each country, we examined the most frequent gender categories (which can be thought of as gender topics or gender themes that group the conversations), spikes in user activity, and the most relevant hashtags. We also analyzed the content of the tweets generated by a smaller group of influential users in each country identified by network analysis. We then generated a list of the top 10 influencers on gender in each country by ranking measures of influence across platforms and culling those influencers whose content and profiles were primarily geared toward gender issues.

At the end of this study are Country Profiles that summarize our findings for each of the five countries. We find that gender-based violence is a key gender topic across countries, and that the main peak for the conversations on gender during the period monitored was November 25th, which is the International Day for the Elimination of Violence Against Women. The hashtag #N25 was common across all countries, and both #NoalaViolenciadeGenero ("no to gender based violence") and #16dias (a campaign to rally activism against gender-based violence for 16 days starting on November 25th and ending December 10th, which is International Human Rights Day) were common across Spanish-speaking countries. Using the methods described above, we identified the top 10 influencers on social media for each country and analyzed each type of social network. Common nodes across countries include eight social media accounts, including UN Women.

¹² Einspanner, Dang-Anh, and Thimm (2014).

¹³ Marwick (2014).

¹⁴ Einspanner, Dang-Anh, and Thimm (2014).

¹⁵ For example, the Dubois and Gaffney (2014) study was conducted for less than a month (from March 12-26, 2013).

¹⁶ The word *género* (gender) in Spanish is also used to refer to categories (of music, or books, for example) and frequently employed by Twitter users in ways unrelated to gender equality.

We suggest that organizations like the IDB that are interested in disseminating knowledge related to promoting gender equality leverage these trends. They should also take into account each country's Internet penetration rates, as these rates change the communications dynamics. For instance, in countries with lower Internet penetration rates, we suggest approaching traditional media, while in countries with higher Internet penetration rates, we suggest partnering with international organizations and their local branches, and collaborating with local civil society organizations. There is also an opportunity to partner with government officials who are championing gender in their countries, as well as with national mechanisms that are online, particularly those that have a higher level within a governmental hierarchy (according to the [United Nations Gender Equality Observatory for Latin America and the Caribbean](#)). Finally, we suggest that international organizations tailor the content of their messages by mentioning information relevant to a specific country.

Methodology

Researchers use social media data to answer a variety of questions relating to behavioral sciences, including polling, marketing, and development topics. Because these data are so rich, studies can be of very short duration, although the length ultimately depends on the aim of the study.¹⁷ Twitter data alone contain various levels of information: conversation flows between individuals (@reply, tagging), #hashtag analysis, and the organic-type communities that continuously appear, change, and disappear around these exchanges; the metadata, which include the connections between individuals and information that is provided by the users themselves when registering for Twitter; and the content itself of the posts, which in addition to text can include links, videos, and photographs.¹⁸

Just as social media are multidimensional, there are an increasing amount of sophisticated analytical approaches used to make sense of those media.^{19,20} Temporal metrics can point to important events by examining spikes and lulls in user activity, detecting real-time issues, and even predicting event outcomes.²¹ Patterns within conversations are quickly constructed from algorithms. For instance, lexical association techniques allow unsupervised construction of dictionaries based on the frequency and distance between recurring words within a body of text²² in order to quickly and easily categorize large volumes of text.²³ Other types of machine learning and natural language processing can identify the key themes in political candidates' discourses.²⁴ These automated, computer-assisted content analyses are often paired with qualitative methods such as text analyses of a smaller sample of conversations.²⁵ Social media plays an important role in influencing ordinary citizens as well as key multilateral development bank stakeholders, and this makes it necessary to engage with those in social media who have influence.²⁶

Social network analysis metrics and qualitative methods of examining social media data can help define facets of an individual's influence. Four facets of that influence have been determined to be measurable.²⁷ The first is *having a following*, or having a wide audience, which positions a user to have influence, and which can be measured by the number of followers, eigenvector centrality, and indegree (another centrality measure). A second facet, *being seen as an expert*, assumes that being referenced by others is a reflection of influence, which can be measured through the number of mentions, retweets, shares, etc. The third facet is being *knowledgeable/having expertise*, which implies that content quality and relevance are important to being influential. One way to measure content quality is by calculating the ratio of posts with a specific theme of interest to other posts, and/or the good quality and relevance of posts as determined through qualitative analysis. The fourth facet of an individual's influence, *social embeddedness*, is the influence relative to a specific location, which has been measured using the clustering coefficient.²⁸

Cluster analyses of social networks are also useful to identify specific communities of practice within large networks²⁹ and how they use social media.³⁰ While there are many

¹⁷ For example, Dubois and Gaffney (2014) collected data for from March 12-26, 2013.

¹⁸ Bruns and Moe (2014).

¹⁹ Zimmer and Proferes (2014).

²⁰ For more examples of the wide array of methodologies available, see Silva (2012), and Silva and Stabile (2016).

²¹ Weller et al. (2014).

²² Araujo and Steimer (2016).

²³ See Princeton's categorization of Wikipedia entries at <http://www.princeton.edu/~achaney/tmve/wiki100k/browse/topic-presence.html>.

²⁴ For example, MIT Media Lab's Electome Project at <http://www.electome.org/>.

²⁵ Marwick (2014).

²⁶ Canhoto et al. (2015).

²⁷ Dubois and Gaffney (2014).

²⁸ Ibid.

²⁹ Blondel (2008).

sophisticated methods to conduct such analysis, there is also much uncharted territory. Some existing challenges range from how the data are collected³¹ to figuring out where the data come from.³² While social network analysis is a nascent field, there is already an extensive literature on ensuring its validity.³³ For descriptive, observational studies like this one, the key issue is to ensure that the results are consistent, representative of the conversation in social media for a given time, and not tool- or method-dependent. Toward that end, we follow the standard practices for data collection and analysis used by other researchers in the field.

As noted earlier, the goal of this study is not necessarily to measure the IDB's role in social media or any cause-and-effect more generally, but rather to simply describe the conversations surrounding gender on social media in the region as one piece of the broader puzzle of gender communication. Our hope is that this will contribute to better understanding the programming needs and demands of the region, as well as to improving communications about the IDB's existing work on gender.

Sampling

The pilot study was conducted from November 23 to December 22, 2015 and focused on collecting social media data from five IDB borrowing-member countries: Argentina, Brazil, Colombia, Guatemala, and Mexico. At the time of the study (November 2015), Argentina, Brazil, Colombia, and Mexico had the most Internet and Facebook users in the Region. These countries were chosen primarily for their high Internet penetration. Guatemala was chosen as a smaller country with relatively high Internet penetration (Table 1) to add variance to the sample. Together, these five countries represent 70 percent of the Latin American population. The study's aim is to explore how individuals discuss gender and gender equality. Hypotheses were not defined a priori; rather, we used a qualitative theoretical framework³⁴ to formulate the broadest query possible and develop categories from the data collected.

Approaching the subject as broadly as possible, and embracing the possibility that it is a complex, multidimensional topic that can encompass more than just male, female, individual, and societal subjects,³⁵ we began with a broad set of keywords to formulate the queries. These keywords in Spanish and Portuguese (Table 2) were used to collect data from Twitter, Facebook, and blogs using v-Tracker, a paid subscription. During the study period, v-Tracker submitted an automated request to the API for posts and publications containing given keyword(s) every 15 minutes (a standard data collection method for studies in the field) for length of the study. The API returned any data containing the keyword along with the author, link, time (of post/publication), content, how many interactions were involved, and physical location where the data were generated (when available).

³⁰ See Bardin (2011), Fragoso (2011), Gruzd and Roy (2014) and Thompson (2016) for examples.

³¹ Gaffney and Puschmann (2014).

³² Wilken (2014).

³³ Howison, et al. (2011).

³⁴ Anfara and Mertz (2014).

³⁵ Nathansohn (2013).

TABLE 1. INTERNET AND FACEBOOK PENETRATION RATES IN IDB BORROWING-MEMBER COUNTRIES

COUNTRIES	INTERNET USERS	FACEBOOK USERS	TOTAL POPULATION
Brazil	109,839,979	64,850,172	202,656,788
Mexico	59,181,034	39,694,596	120,286,655
Argentina	32,268,281	20,651,700	43,024,374
Colombia	28,487,103	17,573,213	46,245,297
Venezuela	14,549,717	9,815,285	28,868,486
Peru	12,571,689	9,948,819	30,147,935
Ecuador	12,116,514	5,322,500	15,654,411
Chile	11,685,901	9,723,781	17,363,894
Dominican Republic	6,054,598	2,794,430	10,349,741
Bolivia	4,199,437	1,807,353	10,631,486
Costa Rica	4,027,683	1,949,646	4,755,234
Guatemala	2,885,475	2,050,592	14,647,083
Paraguay	2,473,724	1,273,733	6,703,860
Uruguay	2,016,448	1,633,156	3,332,972
Panama	1,901,643	1,046,445	3,608,431
El Salvador	1,745,771	1,531,378	6,125,512
Honduras	1,599,332	1,203,799	8,598,561
Jamaica	1,582,227	58,601	2,930,050
Haiti	1,000,000	1,219,601	9,996,731
Nicaragua	906,539	58,486	5,848,641
Trinidad and Tobago	780,858	48,957	1,223,916
Guyana	294,957	14,711	735,554
The Bahamas	293,834	16,092	321,834
Suriname	214,418	11,466	573,311
Belize	140,000	108,048	340,844
Barbados	22,450	12,167	28,968

Source: *Internet World Stats* as of November 2015.

Note: Countries in bold are those included in the pilot program. Countries sorted by number of Internet users.

TABLE 2. KEYWORDS USED FOR V-TRACKER QUERIES

QUERY	KEYWORDS USED
Women + Location	<ul style="list-style-type: none"> • Mulher + Brasil • Mujer + Colombia • Mujer + Argentina • Mujer + México • Mujer + Guatemala
Gender + Location	<ul style="list-style-type: none"> • Gênero + Brazil • Género + Colombia • Género + Argentina • Género + México • Género + Guatemala

Data Analysis

As previously mentioned, the goal of this study is to identify what individuals talked about on social media when referring to gender equality, the main hashtags associated with the topic, the dates with the highest volume of conversation (peaks), and who influenced the conversation. The broader aim is to inform knowledge-sharing dissemination strategies. Through the methods described above, v-Tracker collected 1 million data points containing the keywords. To validate the relevance of the communications collected, we refined the data using lexical association techniques to categorize the information (for example, the word for gender in Spanish, *género*, can also refer to a “genre” more generally, such as a genre of music or literature). Approximately 21 percent of the data collected were validated as being relevant to gender equality issues. We eliminated data from the sample only when the content was unrelated to gender issues, but we left in comments that were derogatory or sarcastic.

During this validation phase, we conducted exploratory linguistics analysis using AntConc³⁶ software and the text-mining tool IramuTeQ. These tools facilitate qualitative analysis of the text being communicated through such mechanisms as lexical dictionaries, and from these word and keyword frequency generators, cluster and lexical bundle analysis, word distribution plotting, hierarchical classification, similitude analysis, and word clouds.^{37,38} This method of technology-assisted qualitative analysis of content is frequently employed in the field and allows a more precise and comprehensive cataloging of content compared to systems that are completely automated.³⁹

There is a growing amount of geocoded data that help identify the geographic location of users while they produce and post content on social media.⁴⁰ Yet only a very small percentage of Twitter users opt to have their actual physical location data included with their social media communications. For the remaining users, it is difficult to extract geographic

³⁶ Anthony (2005).

³⁷ Kami et al. (2016).

³⁸ Justo and Camargo (2014).

³⁹ Canhoto and Padmanabhan (2015).

⁴⁰ Barreneche and Wilken (2015).

data, particularly for Twitter users for whom profile details are often sparse.⁴¹ To identify the location of social media users, we employed a multi-step strategy based on observable user characteristics, including content of their posts (i.e., if the posts were queried with the name of the country), the information they provided in their profiles, and the location of others in their network (e.g., official accounts that had a clear location such as government and news sites).

International organizations were included in a country's conversation in a different way. Once the Facebook networks were formed, we reviewed who was in them and found that some of the major nodes were international organizations. For Twitter, we could identify the international organizations from the conversations (retweets, mentions) within a country as well as in the network structure. This was a finding in itself—we observed that the more specific posts by international organizations, possibly the more embedded and disseminated they were within a national network.

Once users were geographically tagged we calculated metrics by country⁴² to determine the most frequent gender categories mentioned (based on those that had been constructed earlier in the validation phase) (Figure 1); the largest data spikes (Figure 2); and the most frequent hashtags (Figure 3)⁴³ We then used network analysis tools to identify clusters and influencers in each medium within the relevant network. For Facebook, the network was constructed based on "follows," while for Twitter the network was constructed using @replies, and for blogs it was constructed using hyperlinks.⁴⁴ We generated and analyzed the network visualizations using the Gephi and Uberlink software packages. After constructing the networks and identifying clusters, we ranked users according to standard centrality measures (influence) in the network including eigenvector centrality, indegree, and by the number of followers within each cluster (see Figure 4 for an example of the cluster analysis of the Facebook social network, each color is a different cluster).

⁴¹ Wilken (2014).

⁴² For examples of applications of similar methodologies to peer-reviewed studies, see Ben-David and Fernández (2016), Devereaux et al. (2009), Freelon (2014), Gruzd, and Roy (2014), and Recuero et al. (2015).

⁴³ Recuero et al. (2015).

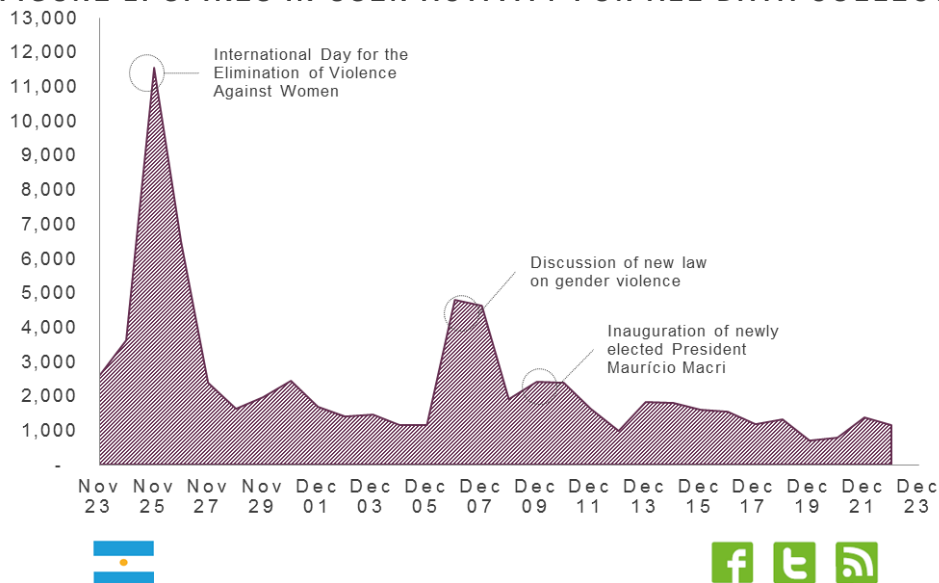
⁴⁴ Freelon (2014).

FIGURE 1. FREQUENCY OF GENDER CATEGORIES FOR ALL DATA COLLECTED



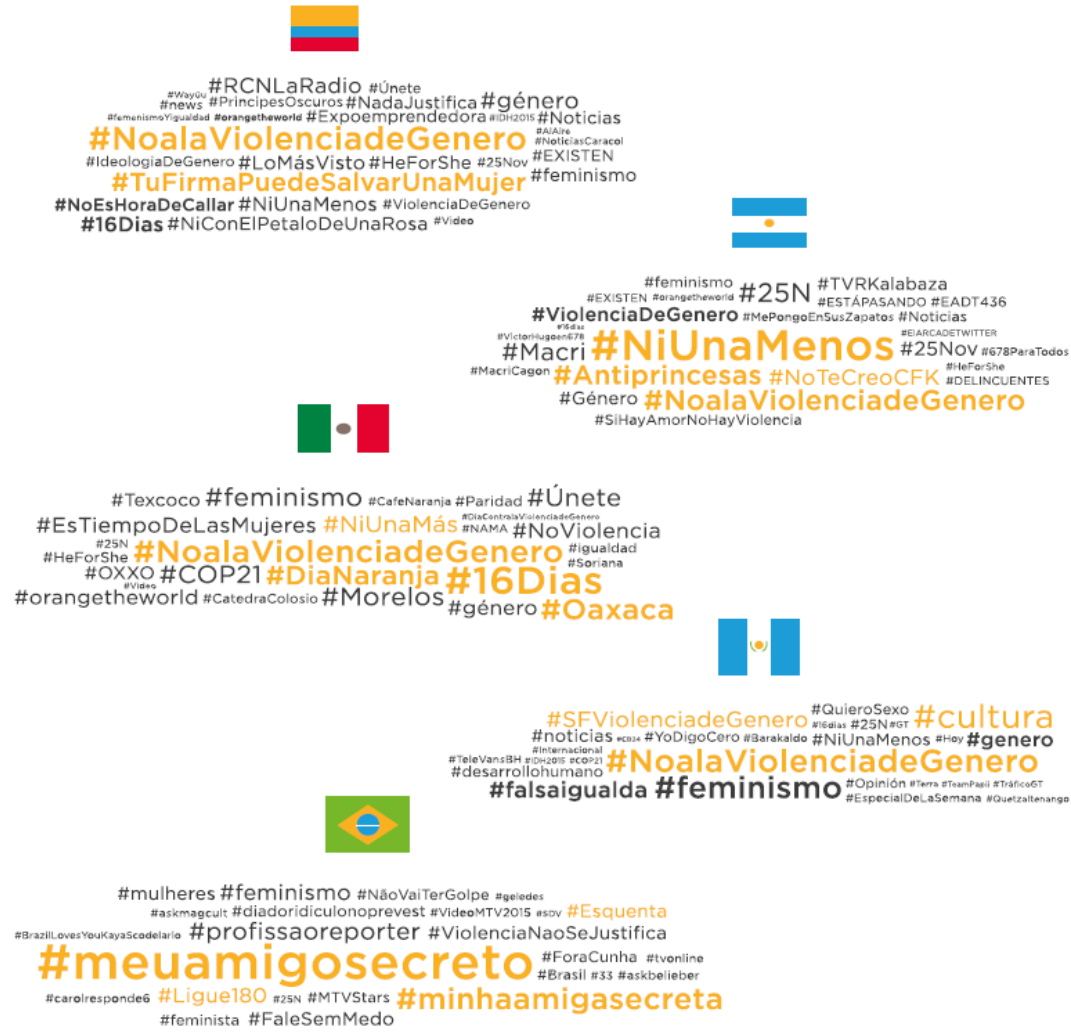
Note: Aggregated data for all five countries for the period from November 23–December 22, 2015. Data are not weighted.

FIGURE 2. SPIKES IN USER ACTIVITY FOR ALL DATA COLLECTED



Note: Aggregated data for all five countries for the period from November 23–December 22, 2015. Data are not weighted.

FIGURE 3. TOP HASHTAGS BY COUNTRY



Note: Data were from November 23–December 22, 2015.

FIGURE 4. EXAMPLE OF KEY INFLUENCERS BY CLUSTER OF FACEBOOK SOCIAL NETWORK, ARGENTINA



Note: Network analysis links constructed for Facebook from how users follow each other. Each color represents a cluster from the cluster analysis. Users shown have the highest centrality measures for each cluster. Data were collected from November 23 –December 22, 2015.

We performed a qualitative analysis of the content generated by these users to understand the context of each of the clusters within the network. We then compared the individuals with the highest centrality measures across the entire network to identify the top 10 influencers in each of the five countries. We ranked them by their centrality measures across all three platforms (most high-impact users employ at least two of the three platforms) and by the frequency of mentions received by other users. After generating a longer list of users, we culled the list by focusing only on the users whose primary focus is gender issues. Results are summarized in the Country Profiles.

Conclusions

While each of the countries studied faces different challenges in terms of gender equality, as shown by the differences in gender indicators, there are some common trends. The main gender theme in social media conversation is violence against women and the peak date for gender conversations is November 25th. The predominant hashtag across our sample was #25N, which was used across countries to refer to November 25th date. Spanish-speaking countries shared two additional hashtags: #NoalaViolenciadeGenero and #16Dias.

Organizations like the IDB that are interested in disseminating knowledge related to promoting gender equality can leverage these trends but should also consider each country's Internet penetration rates, as these rates change the communications dynamics. For instance, in countries with lower Internet penetration rates, we suggest approaching traditional media, while in countries with higher Internet penetration rates, we suggest partnering with international organizations, and their local branches, and collaborating with local civil society organizations. There is also an opportunity to partner with government officials who are championing gender in their countries, as well as with national mechanisms that are online, particularly those that have a higher level within a governmental hierarchy.

Across different countries there were entities, and sometimes clusters, that focus on disseminating gender-related content. We found that there is a rich community within each country, and the content of this information widely varies, from policies to art, and from reproductive rights to sociological studies of gender. We believe that organizations like the IDB can leverage these networks to disseminate content, but that they should carefully study the characteristics of the individuals, groups, and clusters to ensure that the messages are aligned.

Finally, posts from international organizations are possibly more likely to be disseminated within a national network if they have content that was specific to that country.

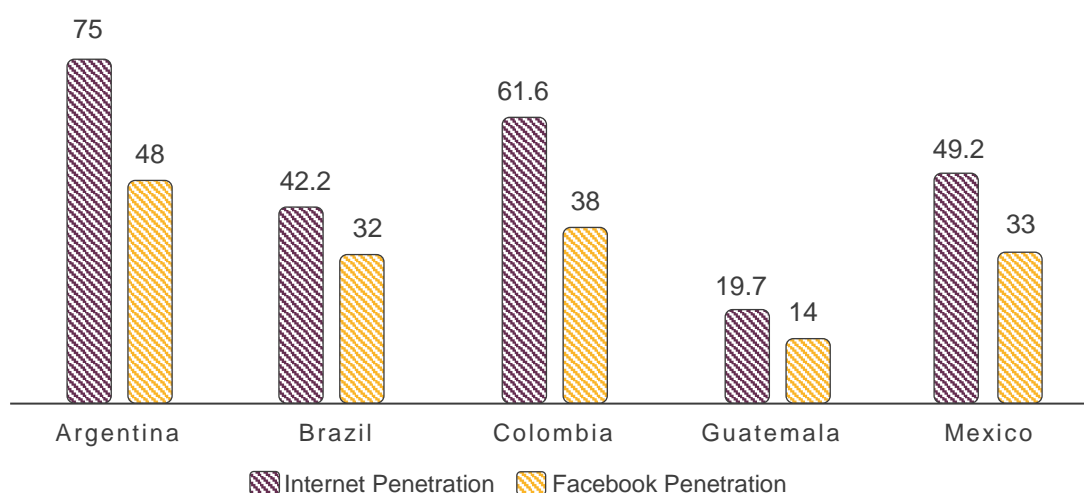
Country Profiles

Overview

The aim of this study is to support knowledge-sharing dissemination strategies by identifying the key gender topics that individuals talked about on social media, the main peaks of the conversation, the main hashtags associated with the topic of gender, and the “top influencers” on the topic. The Country Profiles summarize findings for each of the five countries in the study. A brief background is provided here regarding Internet and Facebook penetration and selected gender statistics to help contextualize the results.

The number of Internet and Facebook users in Argentina, Brazil, Colombia, and Mexico is the highest among the Latin American and Caribbean countries, and for this reason these countries were chosen to be part of the study (see Table 1 in the Methodology section). Guatemala was chosen as a point of reference for a smaller country with lower Internet and Facebook penetration (Figure 5). The 2015 **Measuring the Information Society Report** estimates that there are more female than male Internet users in the Americas, though this difference is small--approximately 5 percent or less in Brazil, Colombia, and Mexico.⁴⁵ Comparable gender-disaggregated indicators were not available for Argentina or Guatemala.

FIGURE 5. INTERNET AND FACEBOOK PENETRATION RATES FOR COUNTRIES STUDIED (PERCENT)



Source: *Internet World Stats as of November 2015*.

Each of the countries studied faces different challenges in terms of gender equality, as shown by the differences in gender indicators (Figures 6-13).⁴⁶ Yet, gender-based violence was the most prevalent topic of social media conversation during the monitoring period, and the most recurring hashtags from civil society movements and other campaigns also related to the elimination of gender-based violence. This may be influenced by the period covered, which included the peak conversation date of November 25th, which is the International Day for the Elimination of Violence Against Women (see Figure 2 in the Methodology section).

⁴⁵ ITU World Telecommunication/ICT Indicators database, Gender ICT Statistics 2012-2015. Available at: <http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx>.

⁴⁶ While the IDB's work to advance gender equality includes incorporating a gender perspective across all of the Bank's operational work (gender mainstreaming), there are a few areas that have been identified as priorities in the **Gender and Diversity Framework**: maternal mortality; economic gaps between men and women in labor force participation, earnings, and entrepreneurship; violence against women; adolescent pregnancy; and limited voice and agency of women. Indicators were chosen based on this framework.

Because of this finding, we retroactively analyzed conversations from October 1, 2015 to September 31, 2016 for the five countries explored in the pilot. However, this longer analysis also found violence against women to be the most recurring theme in gender conversations.

In the IDB’s broader **gender mainstreaming study**, which reviewed various sources of data including surveys, gender-based violence was found to be one of the priorities regarding gender equality for the various groups studied. Among high-level government officials in the region, including Ministers of Finance and Planning, 88 percent indicated that violence against women was one of the highest-priority gender-related issues for their country’s development agenda. The review of 22 national development plans in IDB borrowing member countries also noted that most plans (19 of them) mentioned specific activities related to gender-based violence.⁴⁷

Though the sample is quite small in our social media analysis (just five countries and one month of social media data harvesting), there are apparent relationships between some of the results – including the Internet usage data and gender data – that could be explored in future studies. For instance, in the countries with the highest numbers of Facebook users, the top 10 influencers have a higher number of Twitter followers and Facebook fans. Also, a correlation may exist between the number of Internet users and the centrality metrics of traditional media accounts, as Guatemala was the only country with traditional media channels among the top 10 influencers. On the other hand, this is a reminder to also include traditional media in countries with lower Internet penetration when contemplating a strategy to disseminate knowledge.

Another potential relationship is the level within the governmental hierarchy of national mechanisms to advance women, and whether those mechanisms are influential on social media, considering the country’s Internet penetration. In our sample, two of the three national mechanisms that have a high level within the governmental hierarchy (according to the UN Gender Equality Observatory) were also among the top 10 influencers (Table 3). If such a relationship exists, many opportunities may arise; national mechanisms that are at a high level within their government and are not taking full advantage of social media should consider doing so, particularly in countries with high Internet penetration. It also begs a larger question of whether a more effective organization (or an organization perceived to be effective) is more likely to be influential on the Internet. One other potential relationship that we see is women’s participation in government (Figure 10) and the number of influencers in the country. Those countries where women had a modest share of seats (over 20 percent) in Parliament had as many as six influencers in the top 10 who were government officials.

TABLE 3. LEVEL WITHIN GOVERNMENTAL HIERARCHY OF NATIONAL MECHANISMS FOR THE ADVANCEMENT OF WOMEN

COUNTRY	LOW	MEDIUM	HIGH
Argentina	X		
Brazil			X
Colombia		X	
Guatemala			X
Mexico			X

⁴⁷ Betts, Castillo Páez, and Kearney (2016).

Source: Economic Commission on Latin America and the Caribbean, United Nations Gender Equality Observatory for Latin America and the Caribbean.

There were some common trends across the five countries in addition to the top theme being violence against women and the peak date for gender conversations on social media being November 25th. These included #25N being used across countries to refer to this date, and Spanish-speaking countries sharing two additional hashtags: #NoalaViolenciadeGenero and #16Dias. The former is translated as “no to gender-based violence,” and the latter makes reference to a specific campaign to mobilize individuals to participate in 16 days of activism from November 25th through December 10th (Human Rights Day) to help eliminate violence against women. Table 4 lists the Facebook pages that had high centrality measures in all countries (although not all of them made it to all of the top 10 influencer lists).

TABLE 4. FACEBOOK PAGES REFERENCED IN ALL FIVE COUNTRIES, 2015

FACEBOOK PAGES	LIKES
Human Rights Watch	2,000,000
<i>Comisión Interamericana de Derechos Humanos</i> (Inter-American Commission on Human Rights)	322,000
<i>ONU Mujeres</i> (UN Women)	309,000
<i>Comisión Económica para América Latina y el Caribe (CEPAL)</i> (Economic Commission for Latin America and the Caribbean - ECLAC)	225,000
Global Fund for Women	176,000
<i>Estudios de Género en América Latina</i> (Gender Studies in Latin America)	142,000
<i>Campaña por los Derechos Sexuales y Reproductivos</i> (Campaign for Sexual and Reproductive Rights)	32,000
<i>Publicidad Sexista</i> (Sexist Publishing)	30,000
Cenicientas 3.0 (<i>Cinderellas 3.0</i>)	15,000
<i>El Comité de América Latina y el Caribe para la Defensa de los Derechos de las Mujeres</i> (CLADEM) (Latin American and Caribbean Committee for the Defense of Women's Rights)	6,000

Note: Facebook likes as of December 2015.

Gender Glossary and Indicators

BOX 1. GLOSSARY

Gender refers to the behavioral characteristics and roles that are socially attributed to women and men in a given historical, cultural, and socioeconomic context, beyond their biological differences, and that help shape the responsibilities, opportunities, and barriers encountered by women and men.

Gender analysis identifies the gender dimensions of any given issue or intervention to mainstream gender by assessing the differences in gender roles, activities, needs, and available opportunities of men and women.

Gender equality means that women and men enjoy the same conditions and opportunities to exercise their rights and reach their social, economic, political, and cultural potential.

Gender equity is the process of being fair to men and women which implies providing and distributing benefits and/or resources in a way that narrows the existing gaps, while recognizing that these gaps can harm both women and men.

Gender indicators are quantitative or qualitative factors or variables that reflect changes in gender-related results.

Gender mainstreaming is the process that seeks to have gender equality and the needs of women and men be identified, heard, and addressed in the design, implementation, monitoring, and evaluation of the Bank's interventions.

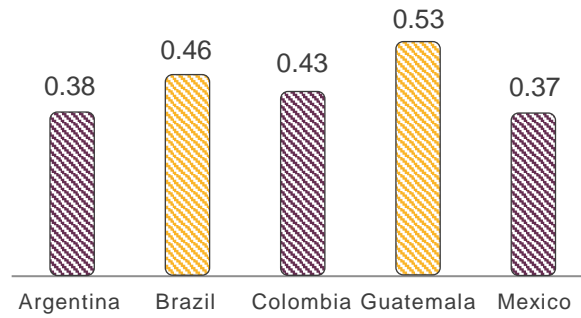
A **gender-related result** is defined as an output, outcome, or impact that contributes towards gender equality or women's empowerment.

Sex-disaggregated data refers to data (statistics, interview results, and other basic information) that clearly distinguishes between data applicable to women and data applicable to men.

Women's empowerment is understood to mean expanding the rights, resources, and capacity of women to make decisions and act independently in social, economic, and political spheres.

Source: IDB's Implementation Guidelines for the Operational Policy on Gender Equality in Development

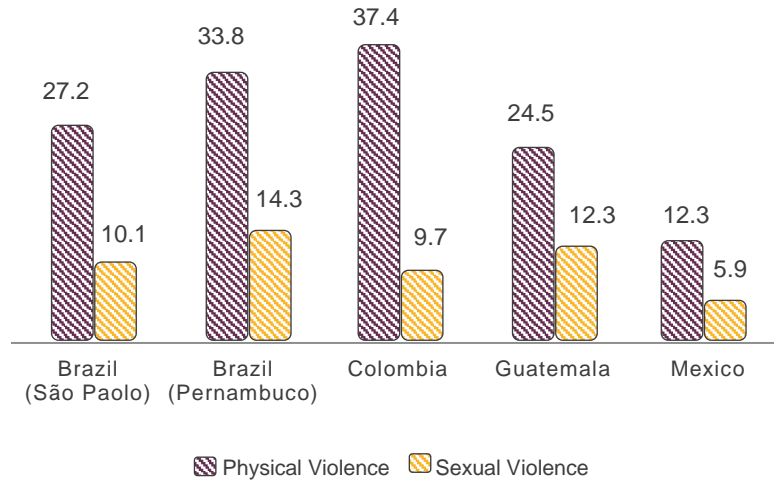
FIGURE 6. UNITED NATIONS GENDER INEQUALITY INDEX



Source: United Nations Development Program.

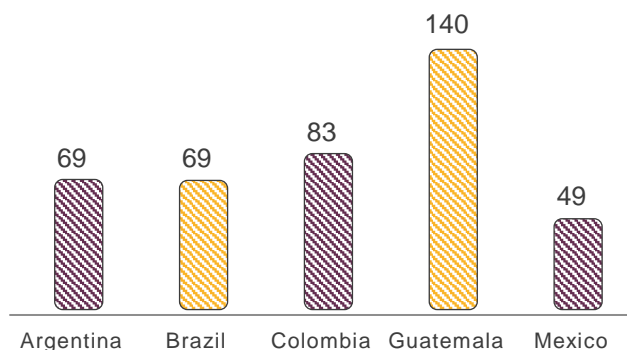
Note: 2014. The lower a country's score on the index, the less the gender inequality.

FIGURE 7. PREVALENCE OF VIOLENCE AGAINST WOMEN BY INTIMATE PARTNER (LIFETIME) (PERCENT)



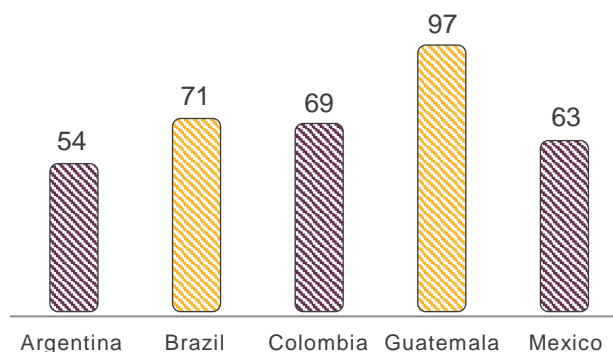
Source: United Nations, *The World's Women 2015: Trends and Statistics*. Data obtained from UNstats.org.
 Note: Data not available for Argentina. Data not available for Brazil at the country level. The data provided for Brazil were available only for the city of São Paulo and the state of Pernambuco. Note that each country calculates this indicator differently; refer to notes within source data for details.

FIGURE 8. MATERNAL MORTALITY RATIO, 2013



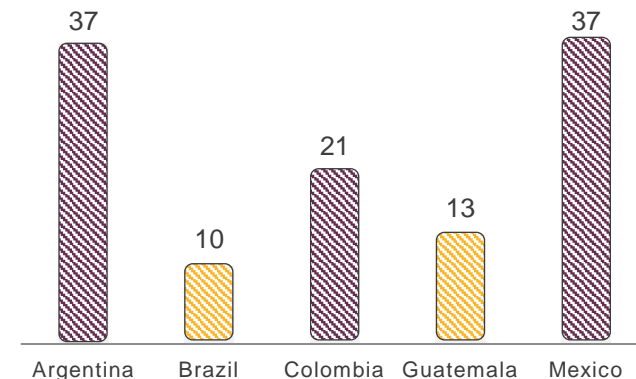
Source: United Nations Development Programme.
 Note: Deaths per 100,000 live births in 2013.

FIGURE 9. ADOLESCENT BIRTH RATE



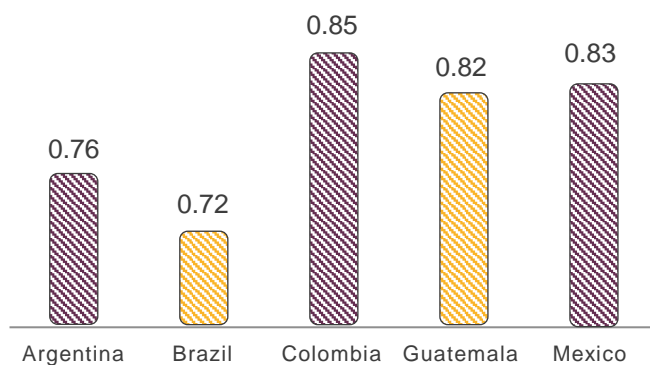
Source: United Nations Development Programme.
 Notes: Births per 1,000 women ages 15-19 for the annual average of projected values for 2010-2015.

FIGURE 10. PERCENT SHARE OF SEATS IN PARLIAMENT HELD BY WOMEN, 2014



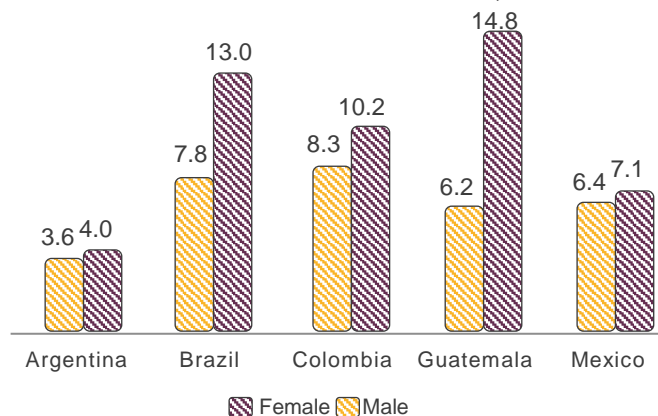
Source: United Nations Development Programme.

FIGURE 11. MONTHLY GENDER WAGE GAP



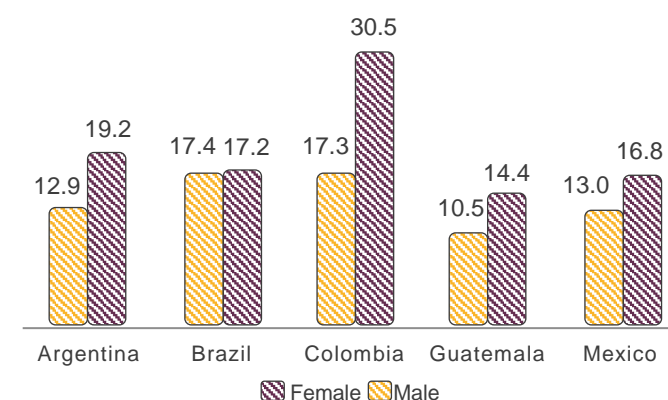
Sources: International Labour Organization; Economist Intelligence Unit calculation. Data obtained from NoCeilings.org.
 Note: Latest year available (2009/2011). Monthly wages of women divided by the monthly wages of men.

FIGURE 12. SAVED AT A FINANCIAL INSTITUTION IN THE PAST YEAR, 2011



Source: Global Findex. Data obtained from NoCeilings.org.
 Notes: Percentage share of individuals age 15+ who saved at a financial institution in the past year.

FIGURE 13. EARLY-STAGE ENTREPRENEURIAL ACTIVITY, 2013



Source: Global Entrepreneurship Monitor. Data obtained from NoCeilings.org.
 Notes: Percentage of persons ages 18-64 who are either nascent entrepreneurs or owner-managers of a new business.

Argentina

Argentina is among the most economically developed countries in the region, with the second-highest GDP per capita of the five countries included in the sample (only Brazil is higher). It is also the most urbanized of all the countries. The high level of development and urbanization is reflected in Argentina's level of Internet penetration: 75 percent of the population are Internet users and nearly 48 percent are Facebook users. Politicians and activists in Argentina frequently employ Twitter as a means of communicating with the public. Indeed, during the monitoring period, the run-off election for president between Mauricio Macri and Daniel Scioli was a frequent topic of tweets by users.

The high level of economic development and urbanization is reflected in Argentina's progress on gender issues. Argentina has among the lowest rankings in the region on the UNDP's Gender Inequality Index (GII) at 75th in the world (Mexico has the best GII ranking among the five countries studied here, at 74th in the world). Argentina also ranks relatively well in terms of measures of women's health such as the maternal mortality rate and adolescent births. Argentina is similarly progressive in terms of women's involvement in government. In 1991, Argentina was the first country in Latin America to adopt a quota law (the *ley de cupo*) requiring 30 percent of the legislative candidates submitted by each party be female.⁴⁸ Argentina recently had a female head of state⁴⁹ and presently has a legislature composed of 36.8 percent women, the highest share among the five countries studied here.

However, Argentina also poses a variety of challenges for women. The country's wage gap, as estimated by the International Labour Organisation (ILO), is 0.76, among the highest in our sample and the region. Prominent female politicians such as Elisa Carrio have criticized the depth of the representation of women's issues in the country's political parties, claiming that while the *ley de cupo* has succeeded in promoting the representation of women, few female legislators occupy influential positions within the very powerful political party structures.

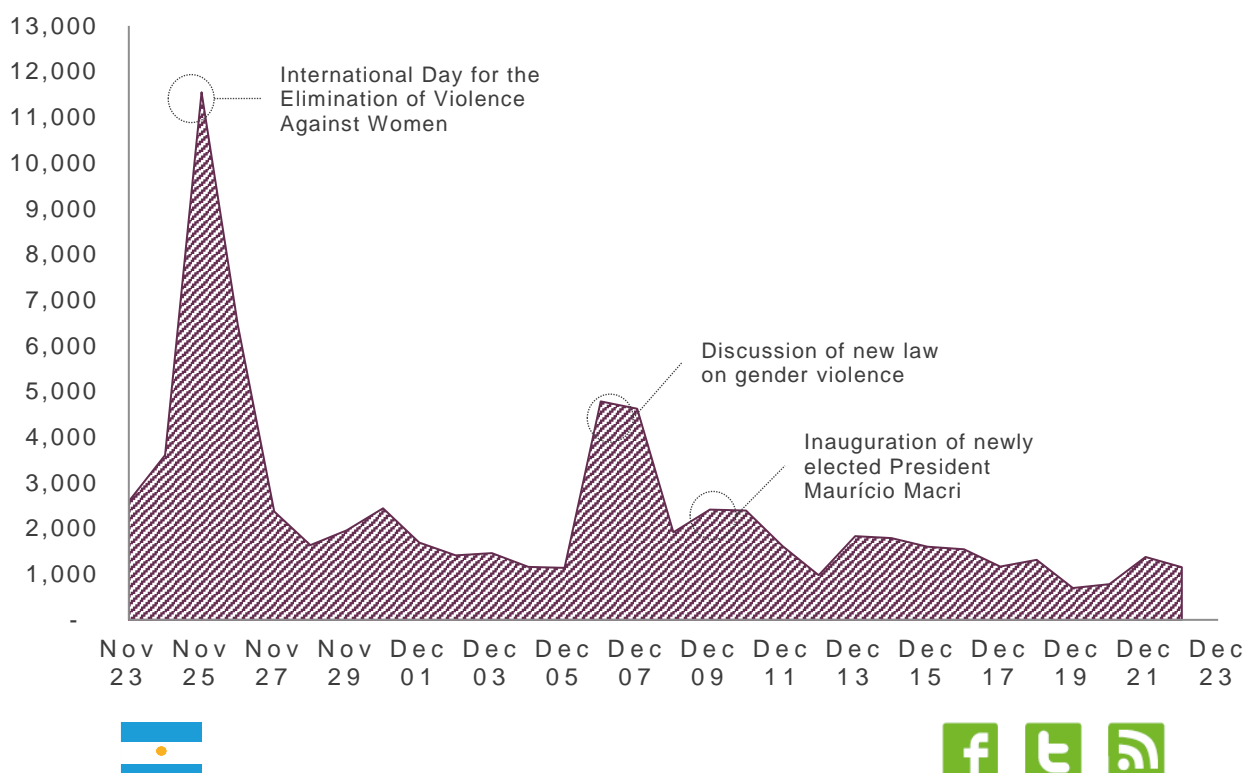
Overview of Data

Between November 23 and December 22, 2015, we collected 71,444 social media conversations on the subject of gender from Argentina. As is the case in many of the other countries, a small percentage of users focus on gender issues throughout the year, but gender-related traffic spikes surrounding a few salient events. In Argentina, the International Day for the Elimination of Violence Against Women (November 25th), the discussion of a bill in the Congress addressing violence against women (December 5th), and the transfer of power from Christina Kirchner to Mauricio Macri (December 10th) all coincided with large volumes of discussion of gender issues on social media (Figure 14).

⁴⁸ Argentina employs a closed-list electoral system in both chambers. The law governs the overall percentage of women from both houses and requires that women have equal chances of being elected (i.e., the parties cannot simply allocate all the women candidates to the bottom of the lists or to provinces where they are not competitive).

⁴⁹ Christina Kirchner was prevented by term limits from running in the most recent election for president.

FIGURE 14. PEAK DATES OF CONVERSATIONS RELATING GENDER ON SOCIAL MEDIA IN ARGENTINA, NOVEMBER–DECEMBER 2015



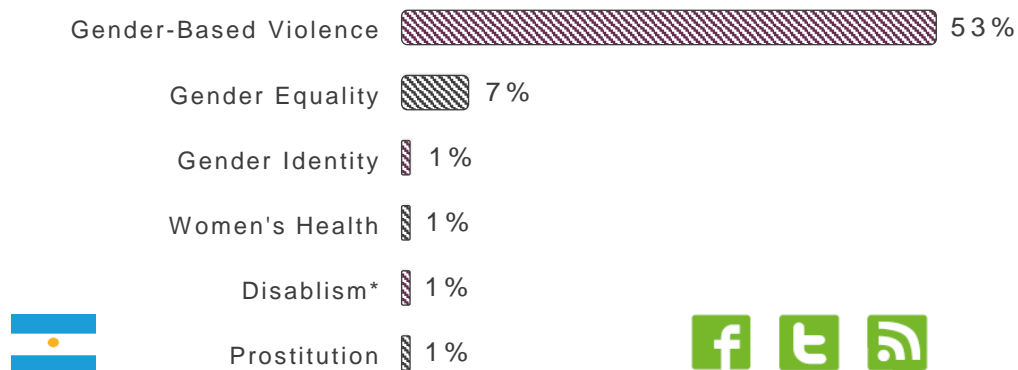
Note: Peaks observed in our sample of 71,444 gender mentions collected from November 22–December 23, 2015.

Gender Topics on Social Media

As noted in the introduction to this study, we analyze the content of social media posts using two main strategies: (1) examining the hashtags created by users, and (2) grouping the content of posts ourselves to measure the topics of discussion.

Looking first at the topics discussed on social media, we see that by far the most discussed topic was gender-based violence (Figure 15). This is also reflected in hashtags: we can see that #NiUnaMenos and #NoalaViolenciadeGenero were by far the most predominantly used hashtags on gender (Illustration 1). The topics discussed by users reflect this usage: nearly 53 percent of tweets related to gender specifically addressed the issue of violence against women. The content of tweets on violence against women (including the hashtags mentioned above) covers a variety of topics, including sharing stories of women affected by violence, promoting specific policy proposals to address violence, and describing political meetings or rallies on the issue of violence.

The second major salient issue area in Argentina was gender equality, representing around 7 percent of the conversations on gender. This issue also generated some of the most popular hashtags such as #AntiPrincesa, a reference to a collection of children’s stories where women defy stereotypes. Conversations on gender equality included both personal stories of experiencing discrimination or triumphing over adversity, as well as political campaigns such as the effort to improve the gender balance of the Argentine Supreme Court.

FIGURE 15. TOP GENDER TOPICS IN ARGENTINA, NOVEMBER–DECEMBER 2015

Note: Frequency of categories of gender content collected from November 23–December 22, 2015. Only those categories with a frequency of over 1 percent are shown.

** The word “disablism” is not found in formal dictionaries but is frequently used to describe discriminatory, oppressive, or abusive behavior arising from the belief that disabled people are inferior to others.*

Other topics mentioned less by users but still important included discussions about gender identity, women’s health, and reproductive rights. One important caveat to these findings is that the timing of the study may have an impact on the findings: the prevalence of hashtags related to the International Day for the Elimination of Violence Against Women shows the extraordinary effect that day had on social media conversations. The relative dearth of conversations on these other issues does not necessarily indicate they are less important, but simply that they were discussed less during the period in question.

Users and Groups on Social Media

Network analysis shows clear patterns of communication and association between users discussing gender. Illustrations 2 and 3, respectively, help visualize the connections between users on Twitter (connections here are retweets) and Facebook (connections here are follows). On Twitter, the major groupings very clearly coincide with support for the major national political party and their candidates in the presidential runoff election that coincided with our sampling period. High levels of partisanship on Twitter are unsurprising given the timing of the study. These conversations can be useful for identifying changes in public policy relating to gender in conjunction with other research methods.

Facebook follows, which are more stable over time, show a different pattern. Groupings in the network correspond to community mobilizing (including grassroots magazines and radio shows), and advocacy groups, such as those associated with international organizations, the Spanish-speaking international feminist movement, the national legal abortion movement, and the national reproductive rights movement. It also has a strong presence from international organizations, particularly the United Nations (**ONU Mujeres**).

Much of the activity at the center of each of the issue groups, both on Facebook and Twitter, is connected by a small number of individuals. Table 5 shows the top 10 most influential social media users in Argentina, identified by a combination of quantitative analysis and qualitative selection.

Illustration 4 is a visualization of how blogs and websites link to each other. One of the main clusters for this network focuses on information and knowledge dissemination. A further examination of these sites could help determine if there is a good alignment between the knowledge dissemination focus on these blogs and sites and what the IDB wants to disseminate.

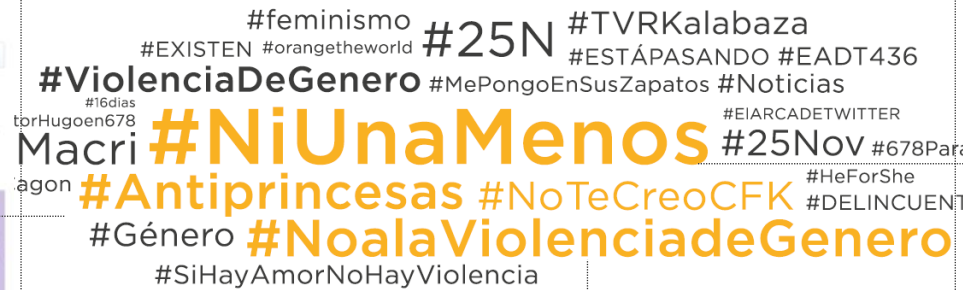
Lessons for Policymakers

- **Main themes.** Violence against women and gender equity are the most important gender issues in Argentina.
- **Peaks.** For communicating with the community, timing matters, as discussions on issues are centered on a small number of peak days. In our sample, peaks occurred on the International Day for the Elimination of Violence Against Women (November 25th), the day of discussion of a bill in the Congress addressing violence against women (December 5th), and the day of the transfer of power from Christina Kirchner to Mauricio Macri (December 10th).
- **Hashtags.** The hashtags #NiUnaMenos, #NoalaViolenciadeGenero, and #16Dias were the most predominantly used hashtags on gender in Argentina.
- **Top 10.** Influencers in Argentina are very diverse and include government officials and representatives from civil society and international organizations.
- **Network clusters.** Participants in the discussion of gender issues are a diverse group, so understanding and engaging the various issue networks is critical. Twitter conversations pointed to some of the changes in public policy relating to gender. Clusters in the Argentine social media networks included some that specialize in the dissemination of gender knowledge and information, including gender-focused media (magazines, radio). International organizations (particularly ONU Mujeres) are strong nodes in the Argentine Facebook network.

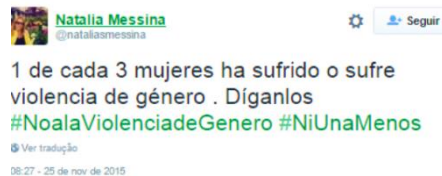
ILLUSTRATION 1. TOP HASHTAGS RELATING TO GENDER IN ARGENTINA, NOVEMBER–DECEMBER 2015



"**#Antiprincesas** [antiprincesses]: a collection of children's books challenging female stereotypes"













"March and act against violence against women. **#NiUnaMenos** [not one less] November 25, Rosario. Argentina."







"1 out of 3 women has suffered or suffers of gender-based violence. Tell us **#NoalaViolenciadeGenero** [no to gender-based violence] **#NiUnaMenos** [not one less]"

Note: Frequency of hashtags related to gender content collected from November 23–December 22, 2015.

TABLE 5. TOP 10 INFLUENCERS IN ARGENTINA, NOVEMBER 23–DECEMBER 22, 2015

ORGANIZATION/NAME	TWITTER	FACEBOOK
 Amnistía Internacional Argentina	9,935 followers @amnistiaar	55,440 fans facebook.com/Amnistiainternacionalargentina
 Cynthia García	103,484 followers @cyngarciaradio	27,137 fans facebook.com/347896875299550/
 Congressman Sergio Massa	629,748 followers @SergioMassa	902,325 fans facebook.com/SergioMassaOK
 Derechos en Zapatillas	122,071 followers @dzapatillas	18,225 fans facebook.com/dzapatillas
 <i>Dra. Alcira Pignata*</i>	<i>378,273 followers</i> @drapignata	
 Fundación FEIM	2,234 followers @FundacionFEIM	7,864 fans facebook.com/feim.org.ar
 Lorena Martins	5,751 followers @Low_Martins	1,539 fans facebook.com/lorena.martins.1675
 Malena Galmarini Massa, Secretary of Sanitation and Human Development Policy of the Tigre Municipality	44,482 followers @MalenaMassa	33,273 fans facebook.com/MassaMalena
 Ni Una Menos	1,507 followers @NiUnaMenos_	146,793 fans facebook.com/Ni-una-menos-351635908360931
 Revista Furias	1,971 followers @RevistaFurias	7,864 fans facebook.com/RevistaFurias

Legend

-  Civil society organization/Nonprofit organization
-  International organization
-  Government official/Official politician/Political staff
-  Political party
-  Journalist/Commentator/Blogger/Activist
-  National machinery for gender equality
-  Other government entity
-  Media outlet
-  Artist

* **Profile content ironic or comic**

Note: Fan/follower data as of December 22, 2015, listed in alphabetical order.

ILLUSTRATION 2. MAIN TWITTER NETWORK CLUSTERS AND NODES, ARGENTINA



Critical of Government

El Contra de Todo
@ElContraD1todo

A la señora a la que en 12 años NADIE NUNCA le dijo que no, le dijeron NO a algo y piensa q es violencia de género

La pastilla, abuela...

RETWEETS 314 LIKES 331

9:38 PM · 6 Dec 2015

“The lady to whom in 12 years NO ONE EVER said no to, someone said NO to something and she thinks its gender-based violence. Come on, lady...”

Legal News

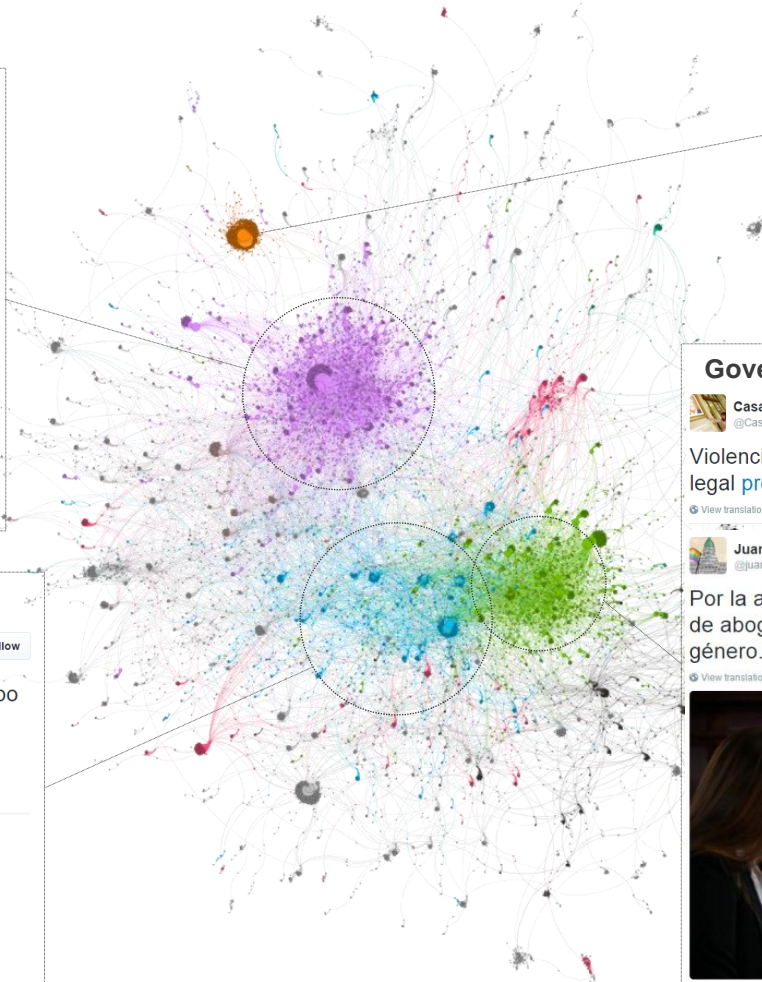
Derecho enZapatillas
@dzapatillas

Por nueva ley nacional, "se crea un cuerpo de abogados/as" que asesorará gratis en casos de violencia de género.

#NiUnaMenos

“Through a new national law, ‘a body of lawyers is created,’ to give free services in cases of gender-based violence.”

#NiUnaMenos [not one less]



Sarcasm

La Biblia De Los Pi
@BibliaDeLosPi

#NoalaViolenciadeGenero por esa profesora feminista, que desquita todo su odio en contra de los varones del curso, sin haberle hecho nada.

“#NoalaViolenciadeGenero [NotoGenderBasedViolence] for that feminist teacher who takes out her hate on the boys in the class who haven't said anything to her.”

Government/Pro-Government

Casa Rosada2003-2015
@CasaRosadaAR

Violencia de género: garantizan asistencia legal prensa.argentina.ar/2015/11/26/619...

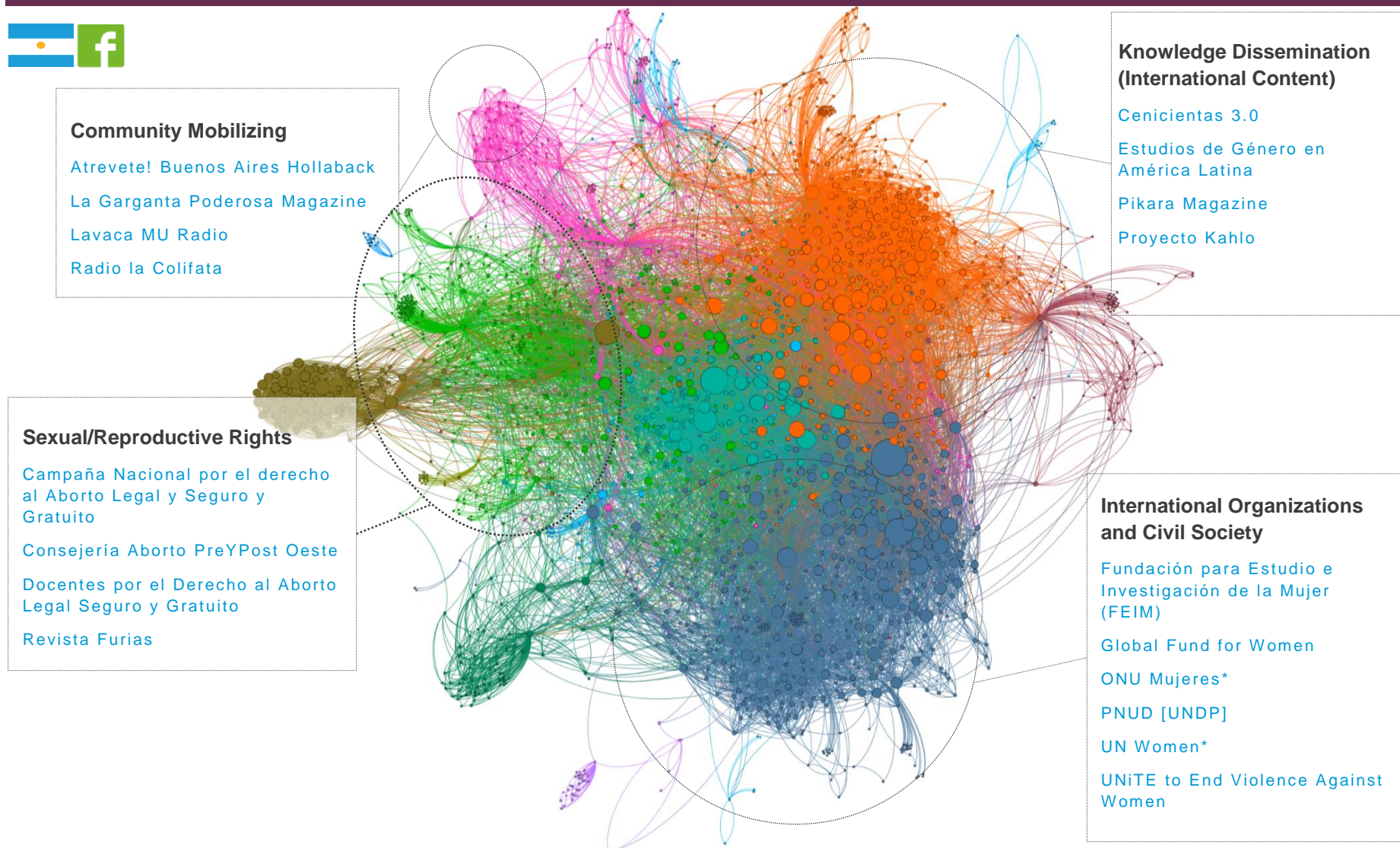
Juan Abal Medina
@juanabamedina

Por la asignación de presupuesto p/ cuerpo de abogados para víctimas de violencia de género. pagina12.com.ar/diario/supleme...

“Gender-based violence: legal assistance guaranteed...”

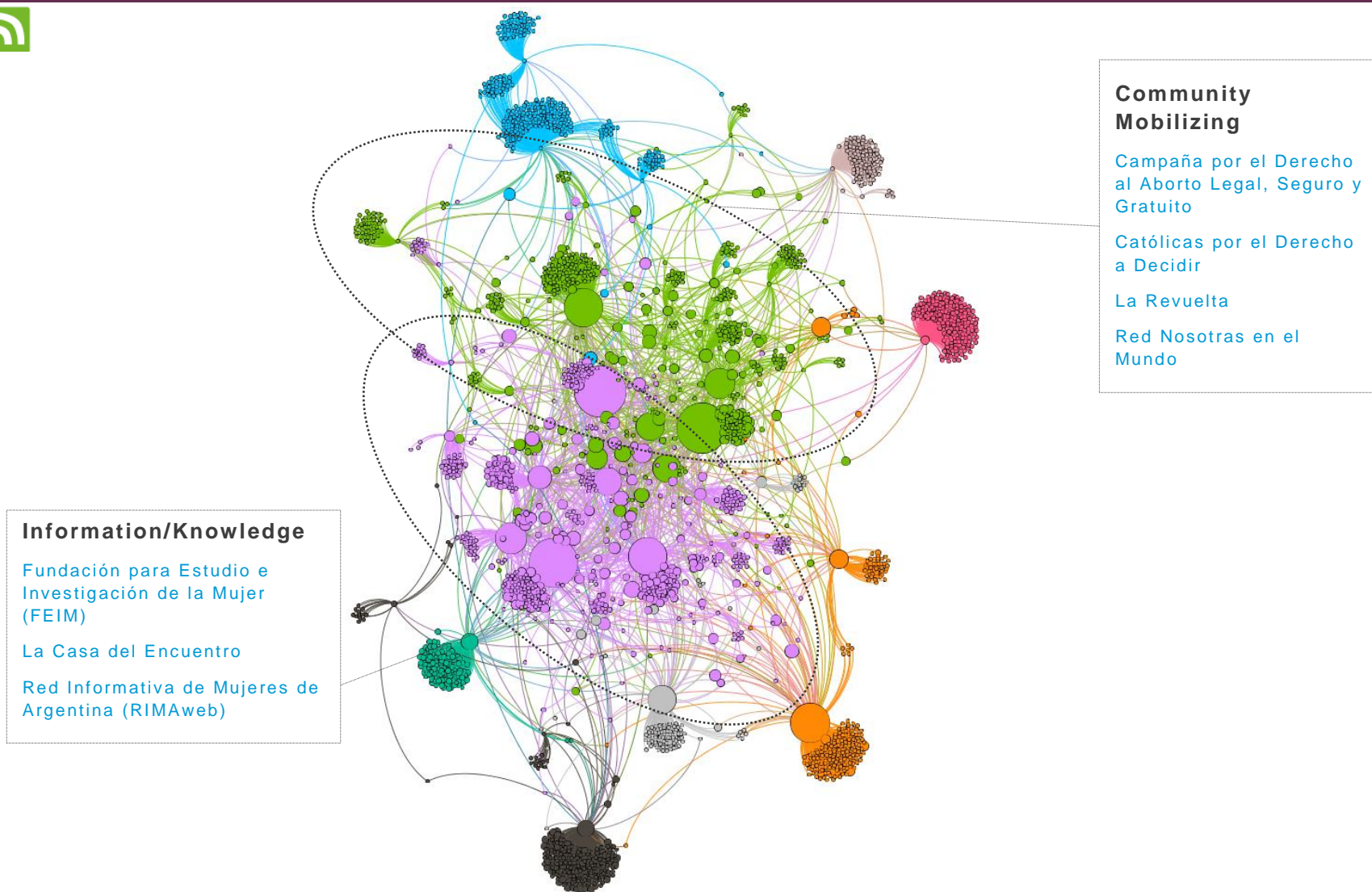
“In favor of the budget proposed by lawyers for victims of gender-based violence.”

ILLUSTRATION 3. MAIN FACEBOOK CLUSTERS AND NODES, ARGENTINA



Note: ONU Mujeres and UN Women are listed separately as they are two different Facebook accounts.

ILLUSTRATION 4. MAIN BLOG/SITE CLUSTERS AND NODES, ARGENTINA



Brazil

Brazil is the largest country in the sample and has the highest GDP per capita.⁵⁰ Brazil's population is also very urban, with 85.7 percent of the population living in cities.⁵¹ Both Internet (42 percent) and Facebook (32 percent) penetration are relatively low for the sample. Relatively low Internet penetration given the country's level of economic development may be linked to high levels of poverty in Brazil. Facebook penetration is linked to low levels of Internet access, while Twitter has emerged as a popular platform for social movements in Brazil, with social media messaging playing an integral role in the protest movements surrounding the 2014 World Cup, the 2016 Summer Olympics, and the 2016 corruption scandals (the initial stages of which occurred during our sampling period).

In general terms, Brazil lies near the middle of the sample with respect to gender equality indicators. Brazil is near the regional average in terms of the UNDP's Gender Inequality Index (GII) at 97th in the world. (Mexico has the best GII ranking among the five countries studied here, at 74th in the world). Brazil also ranks in the middle of the sample for measures of women's health such as maternal mortality and adolescent births. Despite an electoral quota of 30 percent of candidates (by party) for the lower house of the Brazilian legislature, women remain under-represented, holding only 10 percent of the seats. The lower house in Brazil employs an open list proportional representation system, which explains the disconnect between the number of female candidates and the number of females elected.⁵² Brazil also has the largest pay gap of all the countries included in the study.

Brazil is among the countries that have had a female head of state, although President Dilma Rousseff was impeached and removed from office in 2016 shortly after beginning her second term. Overall, despite progressive national politics and institutional support for gender equality in Brazil, many challenges remain ahead.

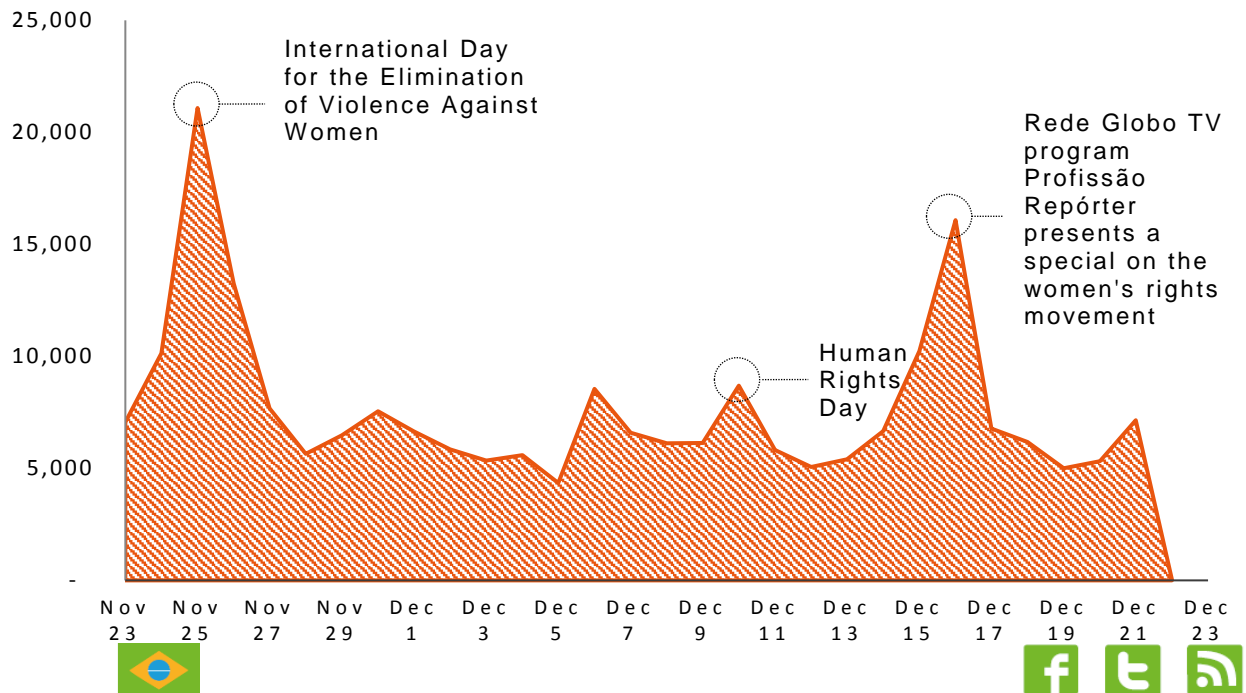
Overview of Data

Between November 23 and December 22, 2015, we collected 222,448 social media conversations on the subject of gender from Brazil. As is the case in many of the other countries, a small percentage of users focus on gender issues throughout the year, but gender-related traffic spikes surrounding a few salient events. In Brazil, the International Day for the Elimination of Violence Against Women (November 25th), the airing of an episode of a popular journalistic television program (*Profissão Repórter* on the *O Globo* network) on feminism in Brazil (December 16th), and International Human Rights Day (December 10th) all coincided with large volumes of discussion of gender issues on social media (Figure 16).

⁵⁰ Source: World Bank, World Development Indicators, 2015 (GDP per capita, constant 2010 U.S. dollars).

⁵¹ Source: World Bank, World Development Indicators, 2015 (Urban population, percent of total).

⁵² The open list system means that voters have the option to vote for individual candidates, and the individual candidate totals determine which candidates from each party's list are elected. Parties are required to nominate 30 percent women, but if voters favor the men fewer women will be elected.

FIGURE 16. PEAK DATES OF CONVERSATIONS RELATING TO GENDER ON SOCIAL MEDIA IN BRAZIL, NOVEMBER–DECEMBER 2015

Note: Peaks observed in our sample of 222,248 gender mentions collected from November 23–December 22, 2015.

Gender Topics on Social Media

As noted in the introduction to this study, we analyze the content of social media posts using two main strategies: (1) examining the hashtags created by users, and (2) grouping the content of posts ourselves to measure the topics of discussion.

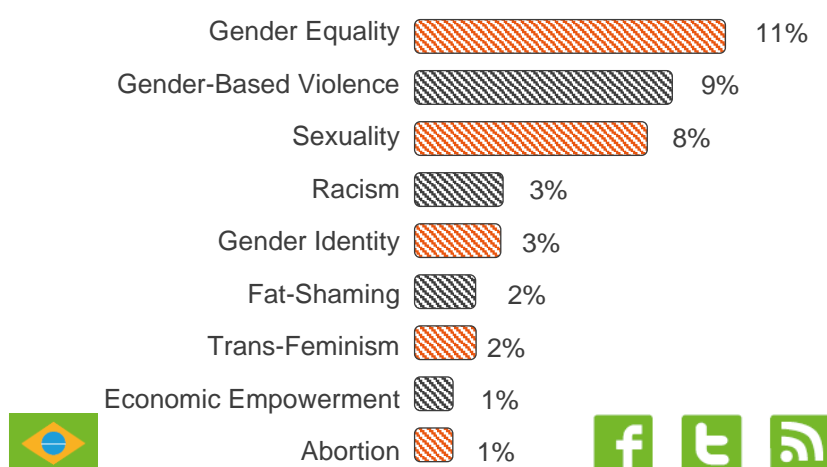
The most common topic of discussion on Brazil's social media (encompassing 11 percent of the conversations) was gender equality (Figure 17). The main focus of these conversations was the gender wage gap in Brazil, with specific references to a report published by the Organization for Economic Cooperation and Development (OECD) during the sample period that found Brazil to have a gap larger than that of any OECD country. Twitter users reacted to the report directly, as well as to subsequent journalism inspired by the report that delved into greater detail on the issue. Brazil's results are idiosyncratic, as the main topic of social media conversations encompassed just 11 percent of the entire gender conversation, while in other countries the main topics dominated a good portion of the conversation (from 29 percent in Mexico to 53 percent in Argentina). This may be because compared to the other countries studied the content of Brazil's social media presence is very strong – there is a lot of original local content.

The second major salient issue in Brazil was gender-based violence (9 percent). Twitter users recounted individual stories about violence against women using the #meuamigosecreto hashtag and by sending out pictures and stories about the November 25th marches in conjunction with the International Day for the Prevention of Violence Against Women. Activists used Twitter to highlight government statistics about violence against women and to advocate for programs aimed at reducing violence, such as a collaboration between UNDP and Brazil's penitentiary system to establish more effective protective orders against aggressors. Users also discussed a question on feminism and gender-based

violence in Brazil’s annual national high school exams (*Exame Nacional do Ensino Medio - ENEM*).

While gender-based violence ranked second in our topic groupings, we consider it to be the most salient in Brazil given the range of topics grouped under gender equality. This is reflected in the peak conversations surrounded November 25th, and in the fact that all the major hashtags referencing different campaigns about gender-based violence – #ENEM2015, #meuamigosecreto, #minhaamigasecreta, and #Ligue180 – were the most commonly used tags discussing gender (Illustration 5). Users discussed the recently established women’s hotline “Ligue 180,” and the publication of the Faculdade Latino-Americana de Ciências Sociais (FLACSO) “Mapa de Violencia,” a yearly mapping of crime and violence statistics that in 2015 focused on female homicides in Brazil. Beyond social media, the results of the report were discussed by Congresswomen Eliziane Range and Conceição Sampaio on national television, and featured in *Glamour Magazine*.

FIGURE 17. TOP GENDER TOPICS IN BRAZIL, NOVEMBER–DECEMBER 2015



Note: Frequency of categories of gender content collected from November 23–December 22, 2015. Only those categories with a frequency of over 1 percent are shown.

Other topics mentioned less by users but that were still important included discussions about sexuality, racism, gender identity, and fat-shaming. One important caveat to these findings is that the timing of the study may have an impact on the findings: the discussions surrounding the International Day for the Elimination of Violence Against Women and the OECD statistics on the pay gap show the extent to which social media conversations reflect current events. The relative dearth of conversations on these other issues does not necessarily indicate they are less important, but simply that they were discussed less during the period in question.

Users and Groups on Social Media

Network analysis shows clear patterns of communication and association between users discussing gender. Illustrations 6 and 7 are visualizations of the connections between users on Twitter (connections here are retweets) and Facebook (connections here are follows). On Twitter, the major groupings very clearly coincide with the major national political parties (e.g., either for or against the Workers’ Party or *Partido dos Trabalhadores* – PT) and the corruption scandal in the news at the time when the president was implicated, as well as the very popular #meuamigosecreto campaign.

Facebook follows, which are more stable over time, show a different pattern. Groupings in the network correspond to advocacy groups, such as those associated with international

organizations, feminist activism in Brazil, progressive politics more generally in Brazil, and the national reproductive rights movement.

Much of the activity at the center of each of the issue groups, both on Facebook and Twitter, is connected by a small number of individuals. Table 6 shows the top 10 most influential social media users in Brazil, identified by a combination of quantitative analysis and qualitative selection. In Brazil, the government agency widely perceived as effective (*Secretaria Especial de Direitos para Mulheres* – SPM) is among the top 10, along with several NGOs and individuals. Many of the top 10 influencers are highly prominent nodes across networks, including blogs and websites (Illustration 8), and focus on the dissemination of gender content.

Lessons for Policymakers

- **Main themes.** Violence against women and gender equity (particularly regarding the gender wage gap) are the most important gender issues in Brazil.
- **Peaks.** Large volumes of discussion of gender issues occurred on the International Day for the Elimination of Violence Against Women (November 25th), on the day of the airing of an episode of a popular journalistic television program (*Profissão Repórter* on the *O Globo* network) on feminism in Brazil (December 16th), and on International Human Rights Day (December 10th).
- **Top 10.** Social media influencers in Brazil are very diverse and include government officials, and representatives of civil society and international organizations as well as the national machinery for advancing gender equality (*Secretaria Especial de Políticas para as Mulheres*).
- **Hashtags.** #ENEM2015, #meuamigosecreto, #minhaamigasecreta, and #Ligue180 were the predominant hashtags in Brazil.
- **Network clusters.** Brazil has a rich presence on social media compared to the other countries studied. All of the networks have clusters that range from politics to art activism, and feature gender information and knowledge dissemination that includes specialized media outlets.

ILLUSTRATION 5. TOP HASHTAGS RELATING TO GENDER IN BRAZIL, NOVEMBER–DECEMBER 2015



#mulheres #feminismo #NãoVaiTerGolpe #geledes
 #askmagcult #diadoridiculonoprevest #VideoMTV2015 #SDV #Esquenta
 #BrazilLovesYouKayaScodelario #profissaoreporter #ViolenciaNaoSeJustifica
#meuamigosecreto #ForaCunha #tvonline
 #Brasil #33 #askbelieber
 #carolresponde6 #Ligue180 #25N #MTVStars #minhaamigasecreta
 #feminista #FaleSemMedo

EBC ebcnarede @ebcnarede Seguir

#MeuAmigoSecreto se diz feminista, mas não respeita mulher trans. Conheça nosso especial: ebc.com.br/trans youtu.be/1yRdtDZgePM

YouTube

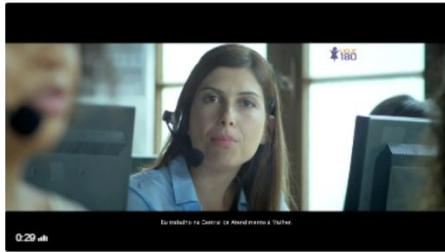


Eu, trans - "É a minha natureza ser uma mulher trans", diz entrevis...
 Mulheres transexuais e transgênero apresentam sua realidade e revelam o sofrimento pela discriminação que sofrem no dia a dia. Confira: ebc.com.br/trans
[Ver na web](#)

"#MeuAmigoSecreto [MySecretFriend] says he's a feminist, but doesn't respect a trans woman. Get to know our program: ebc.com.br/trans youtu.be/1yRdtDZgePM"

Portal Brasil @portalbrasil Seguir

A ligação é gratuita e todos podem denunciar. #Ligue180. Assista ao video. goo.gl/3T3eSO



0:29 min

"The call is free of charge and everyone can inform. #Ligue180 [Call180]. Watch the video. Goo.gl/3T3eSO"











Tami @taminobrega Seguir

#minhaamigasecreta fica pagando de anti feminista só pra parecer mais legal pros caras e receber uns elogios, e acha que ta arrasando


"#minhaamigasecreta [mysecretfriend] is acting like an antifeminist just to look cool to the guys and to get their attention, she thinks she's hot"

Note: Frequency of hashtags related to gender content collected from November 23–December 22, 2015.

TABLE 6. TOP 10 INFLUENCERS IN BRAZIL, 2015

ORGANIZATION/NAME	TWITTER	FACEBOOK
 Camila Pitanga	352,571 followers @CamilaPitanga	114,540 fans facebook.com/caiapitanga
 Clara Averbuck		27,451 followers facebook.com/averbuck
 Geledés Instituto da Mulher Negra	10,881 followers @geledes	368,905 fans facebook.com/geledes
 Lola Aronovich	24,722 followers @lolaescreva	25,765 fans facebook.com/EscrevaLolaEscreva
 Maria Clara Araújo	9,057 followers @BlogNegras	20,052 fans facebook.com/mariaclaraaraujodospassos
 PNUD Brazil	71,204 followers @PNUDBrasil	81,886 fans facebook.com/PNUDBrasil
 Sara Winter	1,564 followers @_SaraWinter	52,808 fans facebook.com/oficialsarawinter/
 Secretaria Especial de Políticas para as Mulheres	39,950 followers @spmulheres	61,238 fans facebook.com/SPMulheres
 Think Olga	15,055 followers @thinkolga	84,288 followers facebook.com/thinkolga
 ONU Mulheres Brasil	857 followers @ONUMulheresBR	31,510 fans facebook.com/onumulheresbrasil

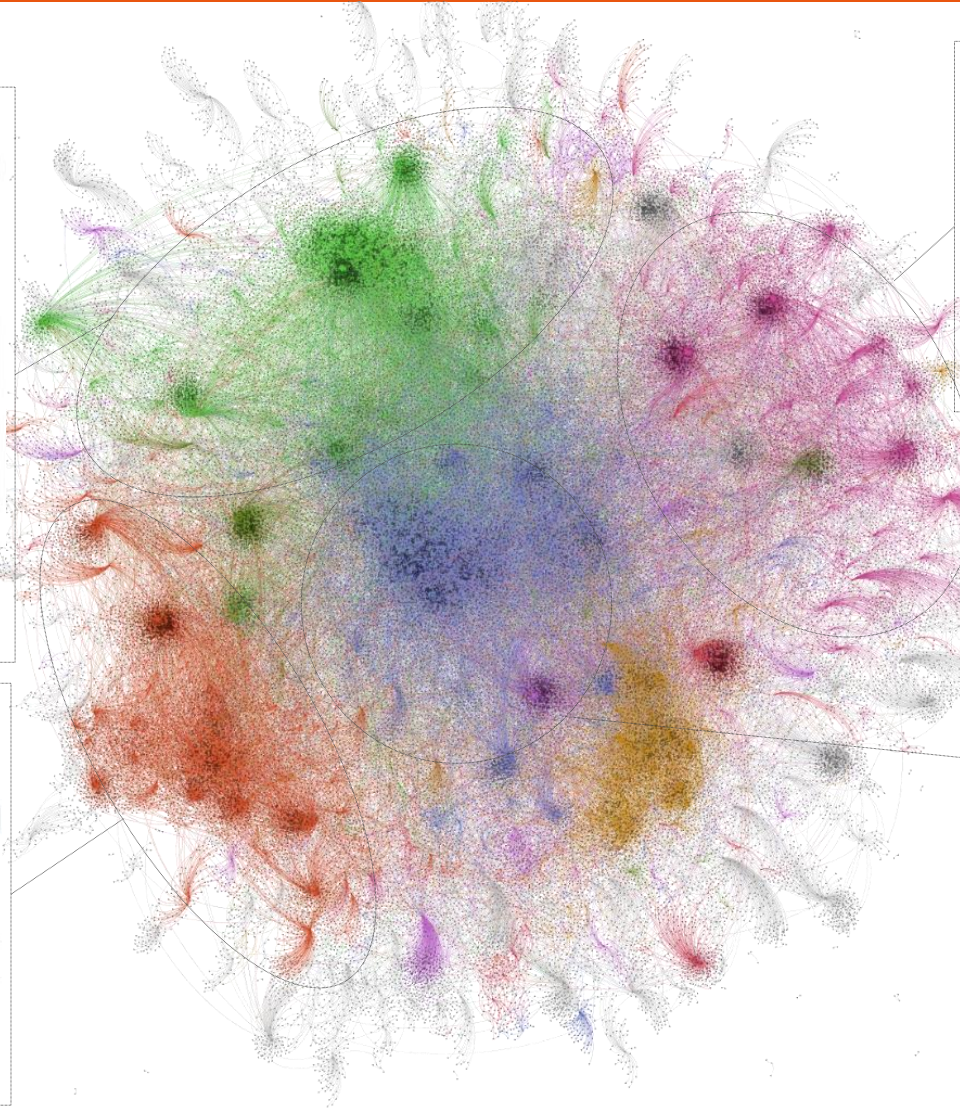
Legend

-  Civil society organization/Nonprofit organization
-  International organization
-  Government official/Former government official/Politician/Political staff
-  Political party
-  Journalist/Commentator/Blogger/Activist
-  National machinery for gender equality
-  Other government entity
-  Media outlet
-  Artist

* **Profile content ironic or comic**

Note: Fan/follower data as of December 22, 2015, in alphabetical order.

ILLUSTRATION 6. MAIN TWITTER NETWORK CLUSTERS AND NODES, BRAZIL



Gender policy news

Portal Brasil @portalbrasil

Qualquer pessoa pode denunciar. Clique e saiba mais. #Ligue180 goo.gl/Omb9P6

Não aceite violência contra a mulher. Ligue pra gente.

RETWEETS 1.339 CURTIDAS 2.514

“Any person can inform. #Ligue180 [Call180] goo.gl/Omb9p6”
 “Don’t accept violence against women. Call us.”

Pop Culture

little @lovatodrw

eu amo aquele discurso da emma watson sobre feminismo p ONU

RETWEET 1

20:21 - 9 de dez de 2015

“I loved Emma Watson’s speech about feminism for the United Nations”

Critical of gender movement associated with PC (political party)

Bolsonaro Zuero @BolsonaroZuero

Ontem eu bani um monte de feminista no facebook. Chamei tal atitude de operação lava prato

RETWEETS 117 CURTIDAS 210

20:16 - 23 de nov de 2015

“Yesterday I unfriended a bunch of feminists from Facebook. I called this, operation dish washer.”

Activism

dri @albu_dri

#MeuAmigoSecreto prega feminismo na rede social, porque ta na moda, porque é cool. E faz mamãe de empregada. Não lava nem o prato que sujou.

RETWEETS 489 CURTIDAS 473

“MeuAmigoSecreto [mysecretfriend] preaches about feminism on social media, because it is trendy, because it’s cool. And makes mom the maid. Doesn’t wash a single dish that was used.”

ILLUSTRATION 7. MAIN FACEBOOK NETWORK CLUSTERS AND NODES, BRAZIL

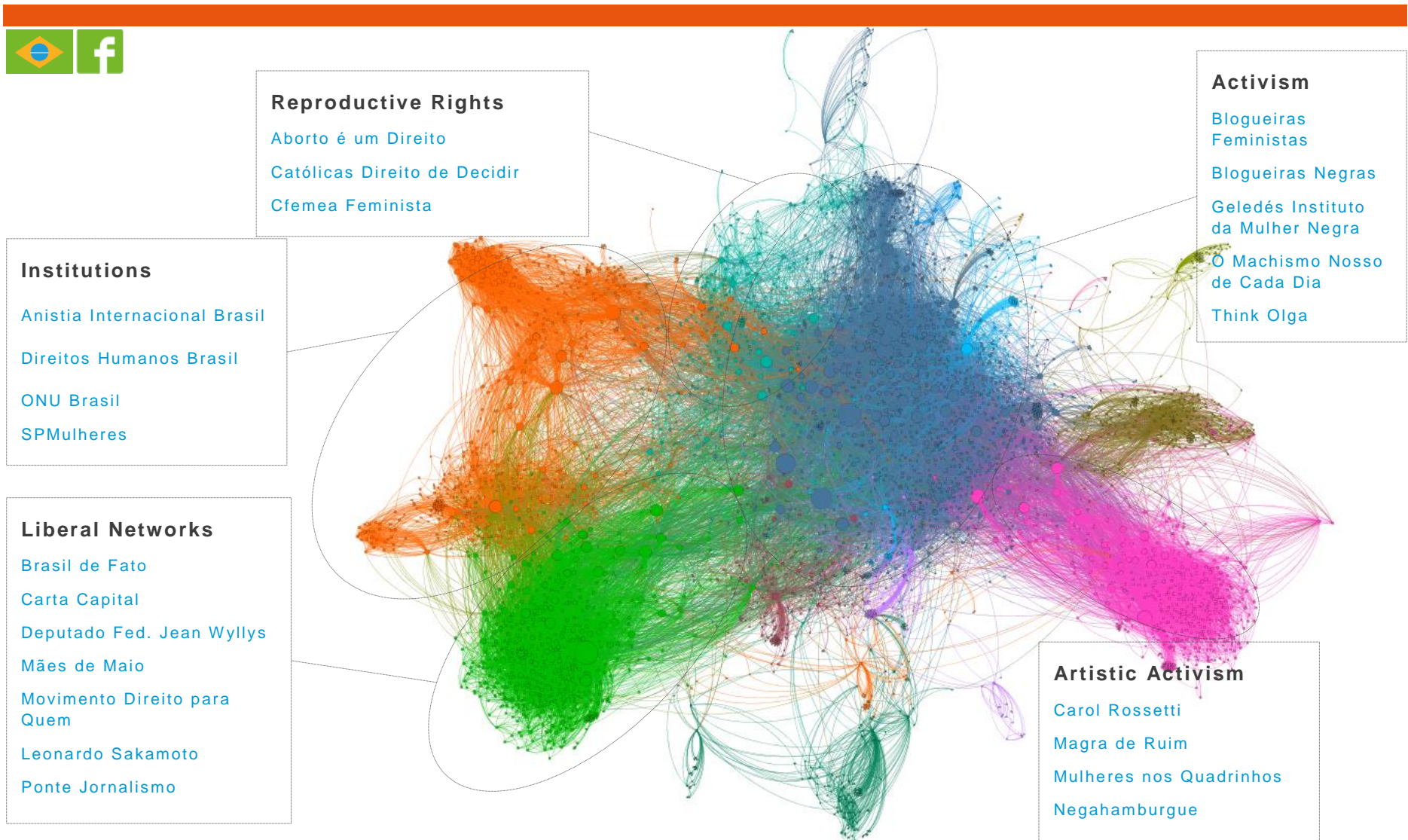
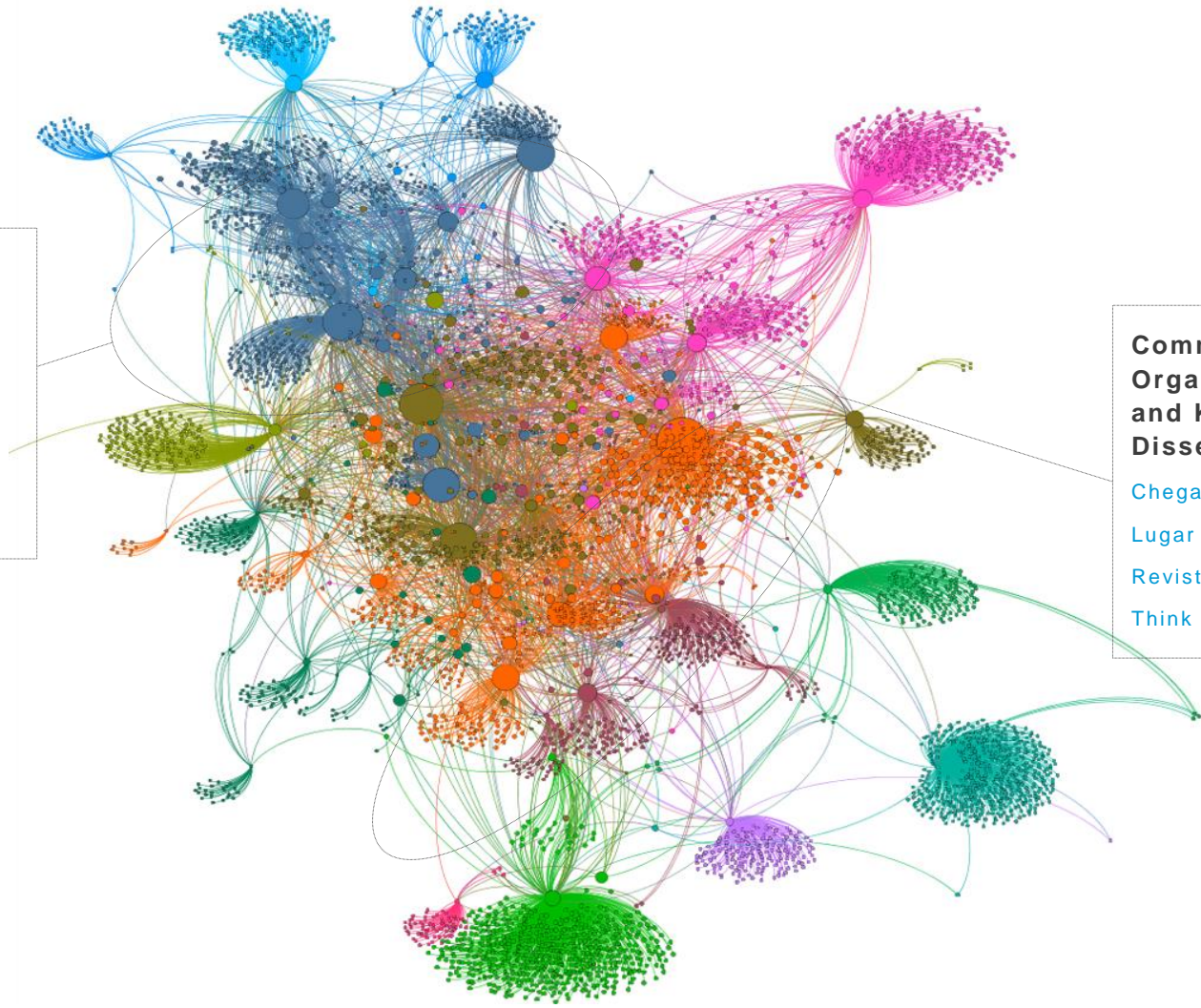


ILLUSTRATION 8. MAIN BLOG/SITE NETWORK CLUSTERS AND NODES, BRAZIL



Gender, Race, and Gender-Based Violence
Blogueiras Negras
Geledés – Instituto da Mulher Negra
Mapa da Violência (FLACSO)



Community Organizing/Information and Knowledge Dissemination
Chega de Fiu Fiu
Lugar de Mulher
Revista Capitolina
Think Olga

Colombia

While Colombia's history is fraught with armed internal conflict, the country has recently experienced strong economic growth and has moved towards long-term peace with the *Fuerzas Armadas Revolucionarias de Colombia* (FARC). GDP per capita is in the lower half of the sample, higher than Guatemala but lower than the other three countries, and 76 percent of Colombia's population is urban. Internet penetration is 62 percent and Facebook penetration is 38 percent. Political candidates and parties actively use social media as a tool in Colombia, and in 2015 there was extensive discussion of the ongoing peace talks with the FARC on Twitter.

Colombia is in the middle of the sample in general measures of women's rights. The UNDP's Gender Inequality Index ranks Colombia 92nd in the world, and the wage gap in Colombia is 0.85, the lowest in our sample. Like many countries in Latin America, Colombia has a quota law, which it adopted in 2011. The quota requires that 30 percent of all candidates be female and provides extra funding according to the proportion of female candidates on a party's list. The legislature currently has 21 percent female membership, with the lower number being because of the party-list proportional representation (PR List) system.⁵³ The 30 percent quota applies to offices at all levels and to the Colombian civil service as well.

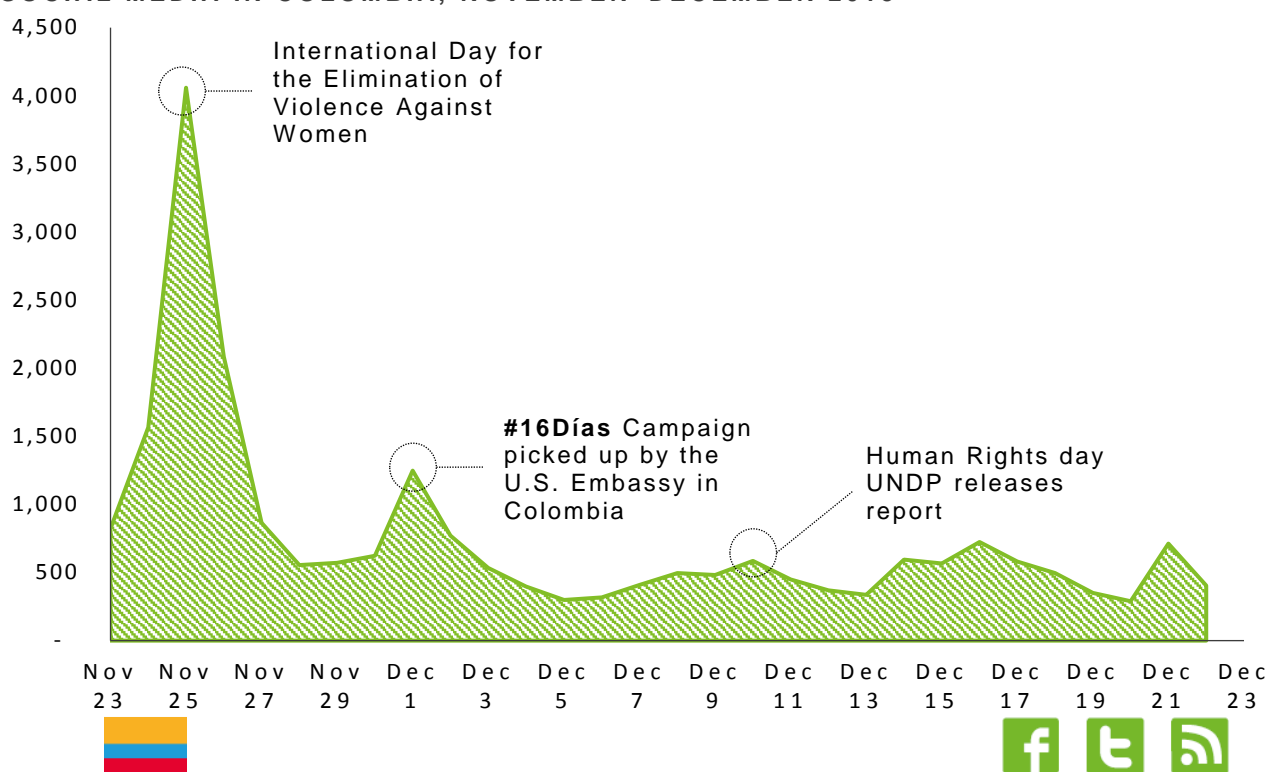
Despite progress on gender inequality in Colombia, challenges remain. The long-term armed insurgency in rural parts of the country has both reinforced traditional gender roles and enabled perpetrators of domestic violence. Mitigating the harm done by this conflict will be a challenge for many years. The Congress has taken several steps in recent years to address domestic violence, such as Law 1275, which improves access to the courts for victims of domestic violence.

Overview of Data

Between November 23 and December 22, 2015, we collected 17,198 social media conversations on gender from Colombia. As is the case in many of the other countries, a small percentage of users focus on gender issues throughout the year, but gender-related traffic spikes surrounding a few salient events. In Colombia, the International Day for the Elimination of Violence Against Women (November 25th), the 16 days campaign aimed at mobilizing individuals to combat domestic violence for 16 days starting on November 25th, got additional traction from the online support it received from the U.S. Embassy in Colombia (November 30th), and the release of a UNDP report on gender inequality on Human Rights Day (December 10th). These events coincided with large volumes of discussion of gender issues on social media (Figure 18).

⁵³ In Colombia parties choose whether to make their lists open (i.e., voters choose candidates) or closed (i.e., voters choose only the party).

FIGURE 18. PEAK DATES OF CONVERSATIONS RELATING TO GENDER ON SOCIAL MEDIA IN COLOMBIA, NOVEMBER–DECEMBER 2015



Note: Peaks observed in our sample of 17,198 gender mentions collected from November 23–December 22, 2015.

Gender Topics on Social Media

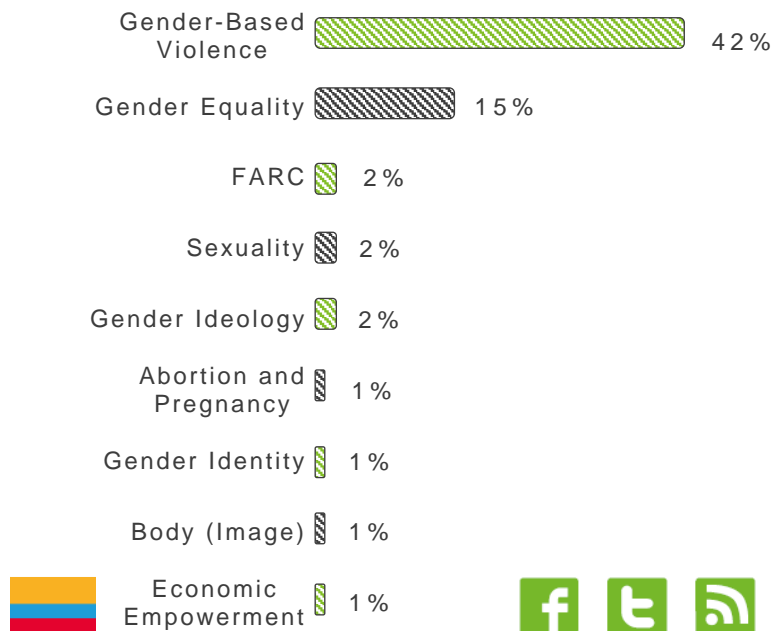
As noted in the introduction to this study, we analyze the content of social media posts using two main strategies: (1) examining the hashtags created by users, and (2) grouping the content of posts ourselves to measure the topics of discussion.

Looking first at the topics discussed on social media, we see that by far the most discussed topic was gender-based violence (Figure 19). This is also reflected in the hashtags: the #NoalaViolenciadeGenero and the #16Dias hashtags were by far the most predominantly used hashtags on gender (Illustration 9). The topics discussed by users reflect this usage: nearly 43 percent of tweets related to gender specifically addressed the issue of violence against women. The content of tweets on violence against women (including the hashtags above) focused both on violence related to the conflict with the FARC (the FARC specifically was the third most common topic, representing 2.3 percent of the tweets), but also more generally. One focus of many tweets was the ongoing effort to stop the disturbingly common acid attacks on women in Colombia. Others were more general in promoting national-level policy changes to address the problem, as was the case of the approval of Law No. 171 of 2015 that increases sentences for attackers using acid or other chemical agents with similar disfiguring effects that aim to inflict greater psychological pain on women. Another example was the campaigns to reduce domestic violence, such as those mentioned above as well as #TuFirmaPuedeSalvarUnaMujer (your signature can save a woman), a campaign to publicize a petition by the nongovernmental organization Casa de la Mujer presented to the President of Colombia to request various reforms to address levels of violence against women in the country.

The second major topic related to gender in Colombia was gender inequality, with 15.1 percent of the tweets referring to inequality in some way. Many of the conversations on

gender equality were driven by international organizations that promote gender issues, such as a video released by Fabrizio Hochschild, UN Colombia Coordinator, presenting data on the gender employment gap, and by female domestic political leaders promoting social change. The content of conversations on gender inequality focused on highlighting statistics showing the wage and employment gap, promoting specific policy proposals to address the problem, and highlighting existing laws that can be used to address gender inequality.

FIGURE 19. TOP GENDER TOPICS IN COLOMBIA, NOVEMBER–DECEMBER 2015



Note: Frequency of categories of gender content collected from November 23–December 22, 2015. Only those categories with a frequency of over 1 percent are shown.

Other topics mentioned less by users but that were still important included discussions about pregnancy and abortion, gender identity, and economic empowerment. One important caveat to these findings is that the timing of the study may have an impact on the findings: the prevalence of hashtags related to the International Day for the Elimination of Violence Against Women and the 16 Dias campaign shows the extraordinary effect that day and the subsequent campaign had on social media conversations. The relative dearth of conversations on these other issues does not necessarily indicate they are less important, but simply that they were discussed less during the period in question.

Users and Groups on Social Media

Network analysis shows that, overall, the Twitter network in Colombia is much sparser than the networks in Argentina and Brazil. Illustrations 10 and 11 are visualizations of the connections between users on Twitter (connections here are retweets) and Facebook (connections here are follows). Twitter shows very small clusters around national media outlets and some prominent national figures. This indicates that Twitter users in Colombia use the platform to receive and react to national news in a narrow way, but have not formed broader thematic communities of interest that discuss issues.

Facebook has more defined communities, likely because the platform has been popular in Colombia for a longer period. While most of the major nodes in the networks on Facebook

include international organizations and civil society organizations from abroad, they also include a rich group of domestic feminist activism groups, and domestic political groups.

On Twitter, conversation is driven almost exclusively by the media outlets or users at the center of each cluster. Table 7 shows the top 10 most influential social media users in Colombia, identified by a combination of quantitative analysis and qualitative selection.

In comparison, the networks on blogs and websites (Illustration 11) are formed by a small group of local actors (nodes), the subtopics are more diffused, and the largest node, *Fundación Ideas para la Paz*, focuses on peace topics but they do not focus specifically on gender.

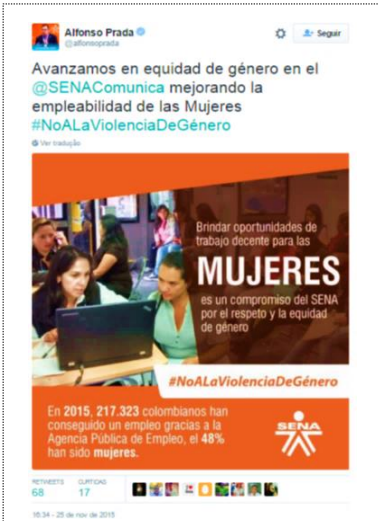
Lessons for Policymakers

- **Main themes.** Violence against women and gender are the most important gender issues in Colombia.
- **Peaks.** Large volumes of discussion of gender issues occurred on the International Day for the Elimination of Violence Against Women (November 25th), the day marking support from the U.S. Embassy in Colombia for the 16 days campaign (November 30th), and day of the release of a UNDP report on gender inequality on Human Rights Day (December 10th).
- **Top 10.** Social media influencers in Colombia are very diverse and include government officials, artists, representatives from civil society and international organizations, and the U.S. Embassy in Bogota.
- **Hashtags.** #NoalaViolenciadeGenero and the #16Dias, and #TuFirmaPuedeSalvarUnaMujer were the predominant hashtags.
- **Network clusters.** News and politics have a strong presence on the Colombian Twitter network. The clusters on Facebook are more varied and include International organizations, art and culture, and women's rights (including sexual and reproductive rights), and are related to peace news networks.

ILLUSTRATION 9. TOP HASHTAGS RELATING TO GENDER IN COLOMBIA, NOVEMBER–DECEMBER 2015



#Wayúu #RCNLaRadio #Únete
 #news #PrincipesOscuros #NadaJustifica #género
 #femenismoYigualdad #orangetheworld #Expoemprendedora #IDH2015 #Noticias
#NoalaViolenciadeGenero #AlAire #NoticiasCaracol
 #IdeologiaDeGenero #LoMásVisto #HeForShe #25Nov #EXISTEN
#TuFirmaPuedeSalvarUnaMujer #feminismo
#NoEsHoraDeCallar #NiUnaMenos #ViolenciaDeGenero
#16Dias #NiConElPetalodeUnaRosa #Video



“At @SENAComunica we are advancing gender equality by improving women’s employability #NoAlaViolenciaDeGenero”



“Gender-based violence costs over 1.6% of GDP in Latin America #NoEsHoraDeCallar”













“#16días of activism against gender-based violence. Share and join the campaign @CEquidad”








“#TuFirmaPuedeSalvarUnaMujer sign to protect them #NoalaViolenciadeGenero”

Note: frequency of hashtags related to gender content collected from November 23–December 22, 2015.

TABLE 7. TOP 10 INFLUENCERS IN COLOMBIA, NOVEMBER–DECEMBER 2015

ORGANIZATION/NAME	TWITTER	FACEBOOK
 Andres Cepeda	2.5 million followers @andrescepeda	2.4 million fans facebook.com/andrescepedaoficial
 Carlos Alberto Baena, Former Senator	18,000 followers @Baena	
 Casa de la Mujer	9,100 followers @casa_la	17,300 fans facebook.com/CasaMujerColombia
 Diana Muñoz Castellanos	16,400 followers @DianaMunozC	
 Governor Dilian Francisca Toro	11,200 followers @DilianFrancisca	37,729 fans facebook.com/DilianFranciscaT
 La Mesa por la Vida	839 followers @mesaporlavida	10,130 fans facebook.com/mesaporlavida
 Mar Candela Castilla, Feminista Artesanal	3,394 followers @femi_artesanal	15,381 fans facebook.com/MovimientoInternacionalFeminismoArtesanal
 Mujeres Farianas	10,400 followers @mujerfariana	
 Red Nacional de Mujeres	3,181 followers @RNMColumbia	10,130 fans facebook.com/RedNacionaldeMujeresColombia
 U.S. Embassy in Bogota	119,000 followers @USEmbassyBogota	

Legend

-  Civil society organization/Nonprofit organization
-  International organization
-  Government official/Official politician/Political staff
-  Political party
-  Journalist/Commentator/Blogger/Activist
-  National machinery for gender equality
-  Other government entity
-  Media outlet
-  Artist

* **Profile content ironic or comic**

Note: Fan/follower data as of December 22, 2015, in alphabetical order.

ILLUSTRATION 10. MAIN TWITTER CLUSTERS AND NODES, COLOMBIA



News Clusters

EL TIEMPO @ELTIEMPO

Ni con el Pétalo de una Rosa, el festival que promueve la no violencia contra las mujeres ow.ly/UYvKR



RETWEETS: 21 | CURTIDAS: 23

“[Women should not be touched] even with a Rose Petal, the festival that promotes no violence against women ow.ly/UYvKR”

Noticias RCN @NoticiasRCN

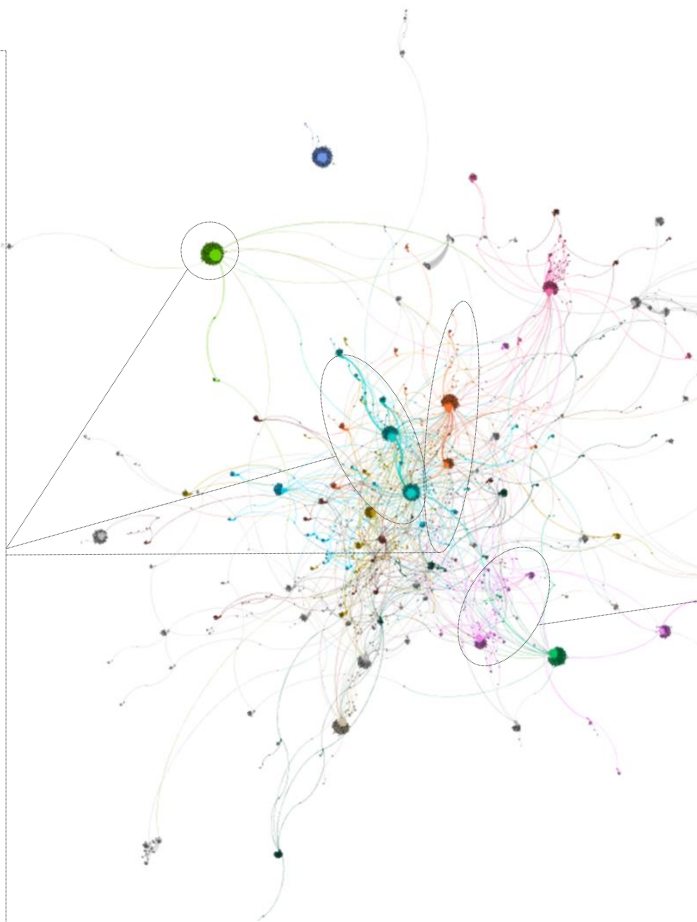
Mujeres atacadas con agentes químicos desfilan en contra de la violencia de género. bit.ly/119kcg7



RETWEETS: 7 | CURTIDAS: 20

19:30 - 16 de dez de 2015

“Women who have been attacked by chemicals, parade against gender-based violence bit.ly/119kcg7”



Politics

Iván Cepeda Castro @IvanCepedaCast

Violencia de género cuesta más del 1,6 % del PIB en América Latina eltiempo.com/politica/justi... via @ELTIEMPO



RETWEETS: 17 | CURTIDAS: 6

“Gender-based violence costs over 1.6% of GDP in Latin America...via @ELTIEMPO”

ILLUSTRATION 11. MAIN FACEBOOK CLUSTERS AND NODES, COLOMBIA

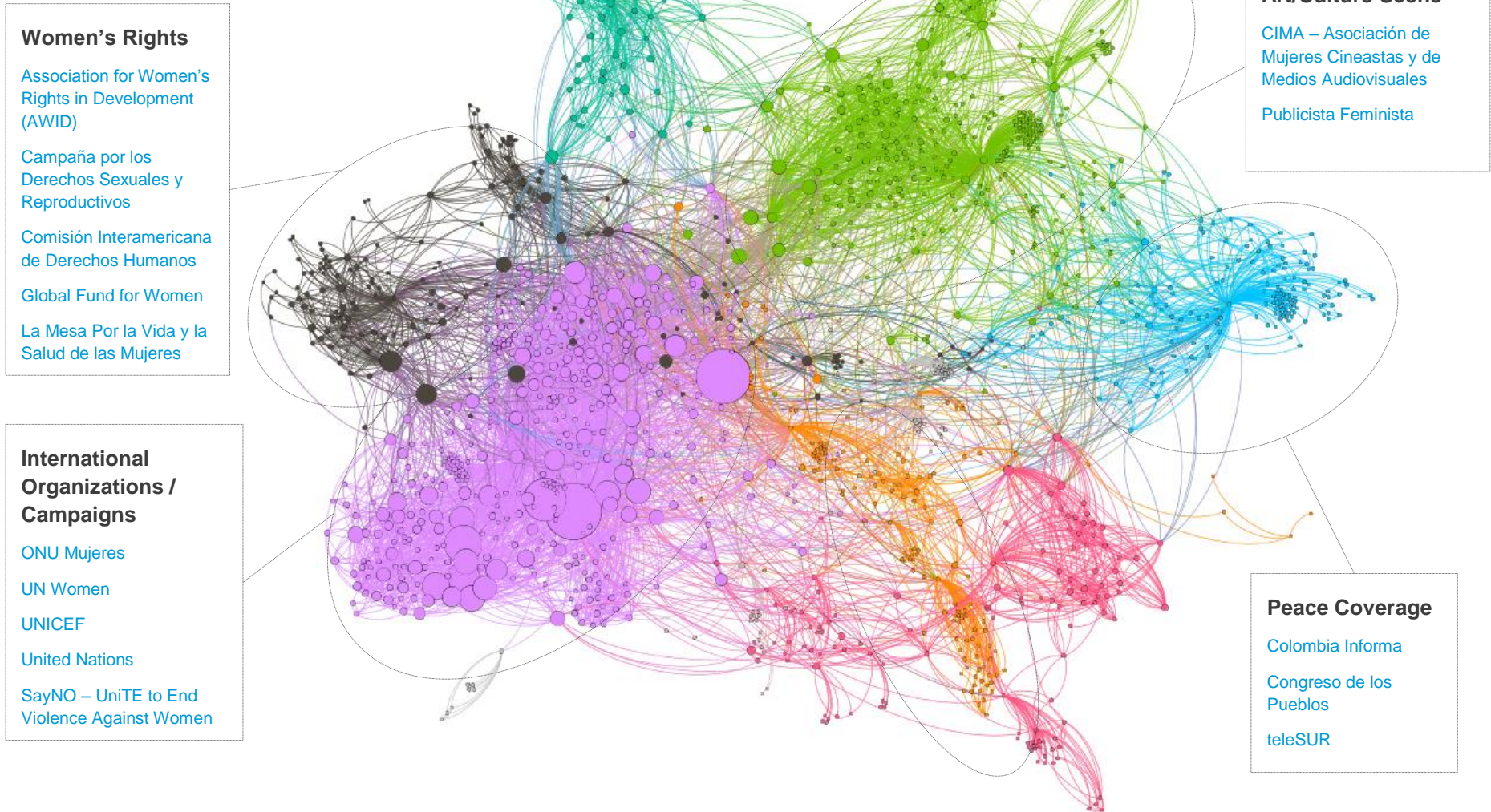
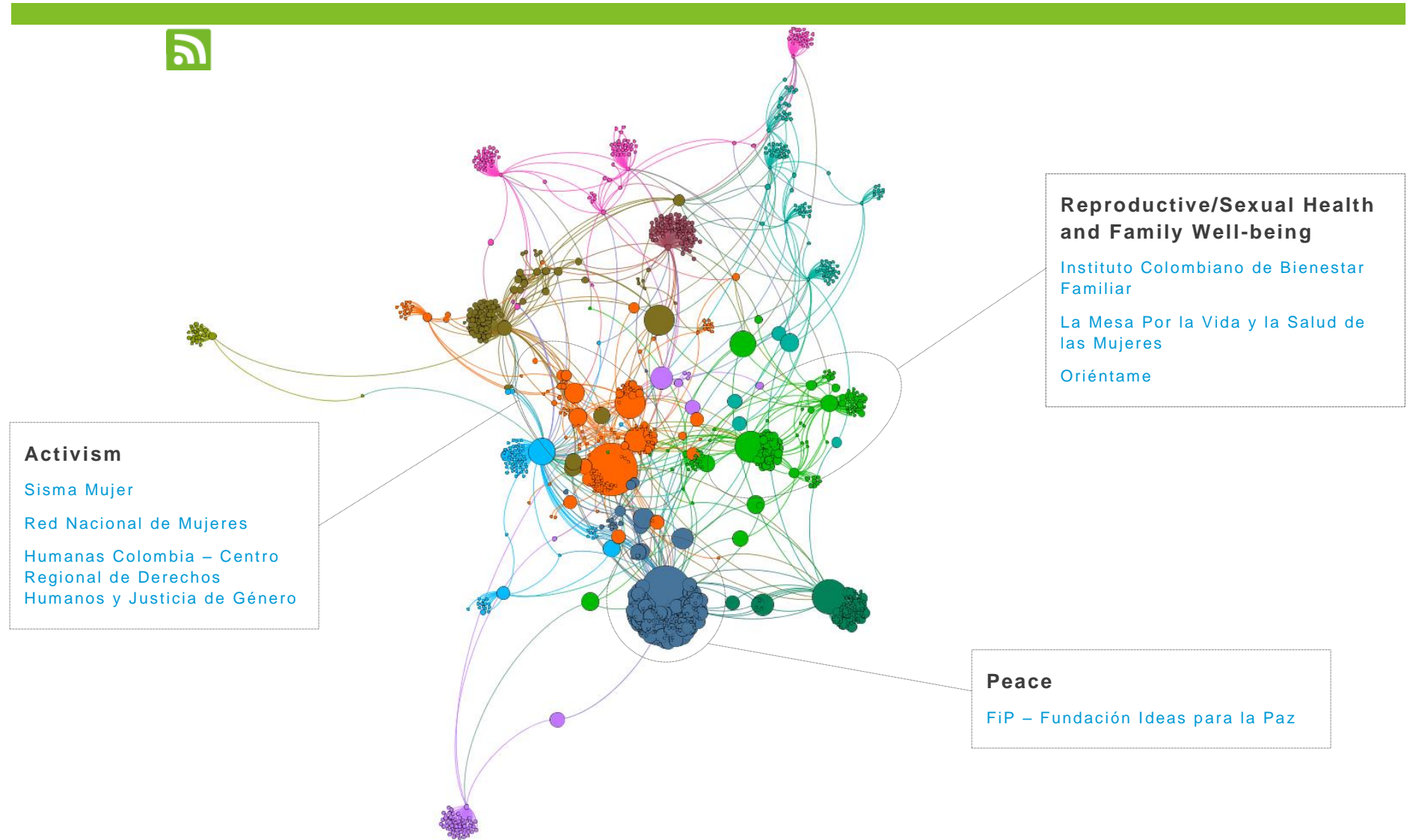


ILLUSTRATION 12. MAIN BLOG/SITE CLUSTERS AND NODES, COLOMBIA



Guatemala

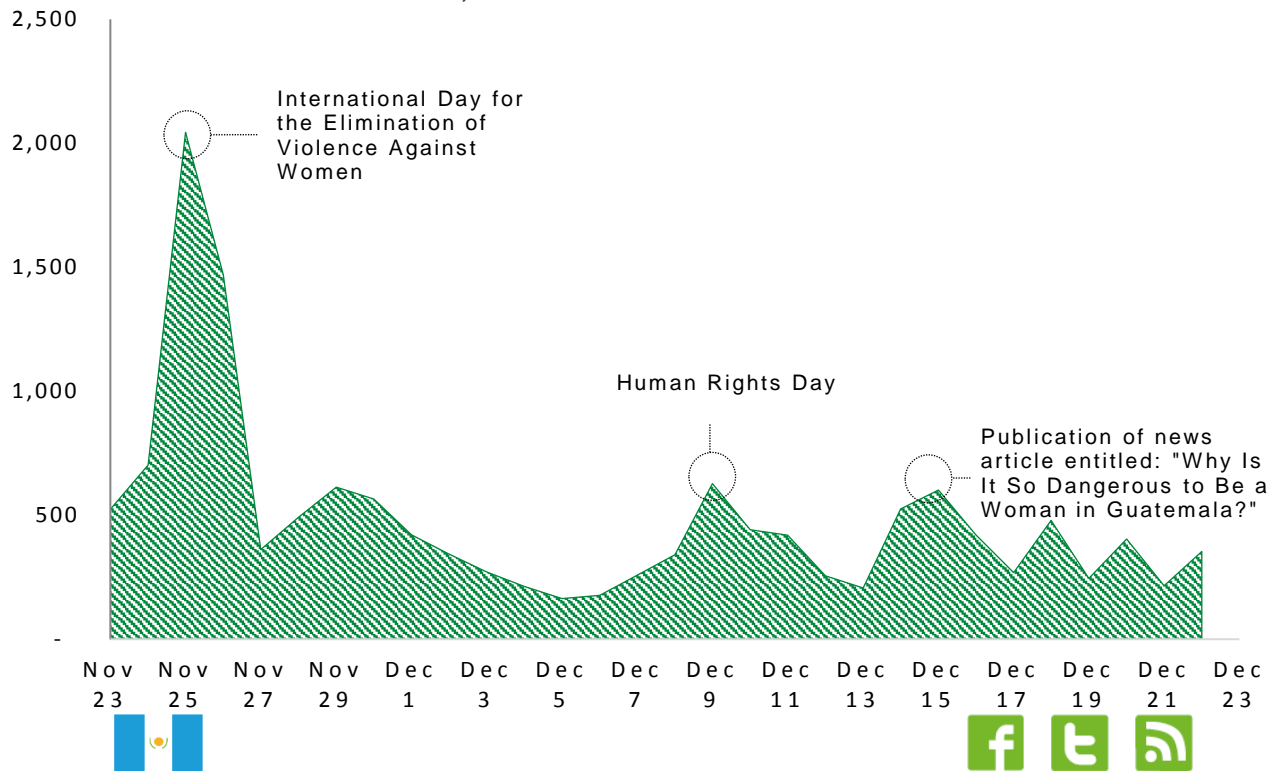
Guatemala is the least economically developed, the most rural, and the smallest of the countries included in the sample. Only 52 percent of the population of Guatemala lives in an urban setting. As a result, access to the Internet in Guatemala is far more limited than in other countries in the sample: only 19.7 percent of Guatemalans are Internet users and only 14 percent are on Facebook. While most of the major political campaigns and news organizations use Twitter and Facebook, these platforms do not hold the same national status and importance as vehicles for discussion and debate that they do in Argentina and Brazil.

Guatemala's limited economic development has meant limited opportunities for women in many parts of the country. Its ranking on the UNDP's Gender Inequality Index is the highest in the sample at 119th in the world, although the pay gap is small compared to other countries in the sample. Women's health also suffers because of low economic development: maternal mortality is more than twice the rate in Argentina, Brazil, and Mexico. Unlike the other countries in the sample, Guatemala does not have any sort of gender quota for candidates for political office. However, several of the parties have adopted voluntary internal quotas as part of their campaign platforms. Only 13 percent of legislators are women, although it should be noted that that number is higher than in Brazil, where quotas have been in place for many years.

Women in Guatemala face many challenges. Violence against women is a significant problem that has been partially linked to the recent internal conflict. Gender activists may face retribution both from the military and from violent members of other conservative groups. Indeed, international news about the high levels of gender-based violence in Guatemala was among the most tweeted-about subjects during the study period.

Overview of Data

Between November 23 and December 22, 2015, we collected 6,333 social media conversations on the subject of gender from Guatemala. As is the case in many of the other countries, only a small percentage of users focus on gender issues throughout the year, but gender-related traffic spikes surrounding a few salient events. In Guatemala, the International Day for the Elimination of Violence Against Women (November 25th), International Human Rights Day (December 10th), and the publication of a BBC investigation entitled "Why Is It So Dangerous to Be a Woman in Guatemala" (December 15th) all coincided with large volumes of discussion of gender issues on social media (Figure 20).

FIGURE 20. PEAK DATES OF CONVERSATIONS RELATING TO GENDER ON SOCIAL MEDIA IN GUATEMALA, NOVEMBER–DECEMBER 2015

Note: Peaks observed in our sample of 6,333 conversations with gender mentions collected from November 23–December 22, 2015.

Gender Topics on Social Media

As noted in the introduction to this study, we analyze the content of social media posts using two main strategies: (1) examining the hashtags created by users, and (2) grouping the content of posts ourselves to measure the topics of discussion.

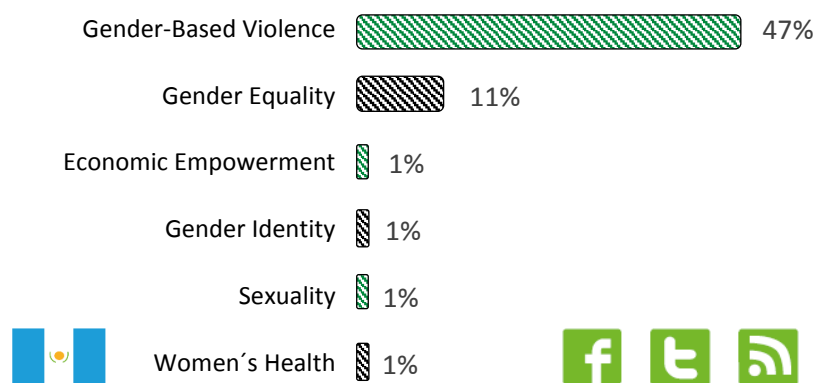
The topics discussed by users reflect the deep problems with gender-based violence in Guatemala: nearly 47 percent of content related to gender specifically addressed the issue of violence against women (Figure 21). The content of conversations on violence against women, as reflected in hashtags, focused primarily on international campaigns such as the *Día Naranja* campaign organized by the UN to end violence against women, the International Day for the Elimination of Violence Against Women, reaction to the BBC story on gender-based violence in Guatemala, and reaction to a Venezuelan news story about violence in Guatemala (Illustration 13). In contrast to other countries there were relatively few conversations that focused on sharing experiences.

The second major salient issue area in Guatemala was gender equality, representing around 11.3 percent of the conversations on gender. Once again many of the conversations were references to campaigns such as the #HeForShe initiative, which organized artists from around the world to support gender equality. In contrast to some of the other countries where Twitter has larger penetration, there was less personal interaction and sharing of stories about gender inequality. One specific focus was promoting the campaign to adopt gender-based quotas for political candidates in Guatemala.

Other topics mentioned less by users but that were still important included discussions about sexual and gender identity, and male support for gender equality. One important caveat to these findings is that the timing of the study may have an impact on the findings. The

prevalence of hashtags related to the International Day for the Elimination of Violence Against Women shows the extraordinary effect that day had on social media conversations. The relative dearth of conversations on these other issues does not necessarily indicate they are less important, but simply that they were discussed less during the period in question.

FIGURE 21. TOP GENDER TOPICS IN GUATEMALA, NOVEMBER–DECEMBER 2015



Note: Frequency of categories of gender content collected from November 23–December 22, 2015. Only those categories with a frequency of over 1 percent are shown.

Users and Groups on Social Media

Network analysis shows clear patterns of communication and association between users discussing gender. Illustrations 14 and 15 are visualizations of the connections between users on Twitter (connections here are retweets) and Facebook (connections here are followers). Given the relatively low level of penetration, the networks are extremely sparse compared to Brazil, Mexico, and Colombia. For Twitter, news organizations (including international ones) are clearly the most central, indicating that people use Twitter largely for following news updates and less for interactive communication. Indeed, the most central user is the BBC Mundo. Several clusters exist around the type of news, but are only loosely grouped.

Despite its sparse usage, Facebook displays a far denser network in Guatemala. As in other countries, the Facebook clusters are organized around communities of interest, with the largest one focusing on the international women's movement and including groups such as UN Women and Amnesty International (Table 8). Other groups include national political organizations and national feminist organizations.

In Guatemala, much of the discussion on Twitter and Facebook is driven by mainstream domestic and international news organizations. Activists and civil society groups have adopted Twitter as a means of communicating with the public, but due to relatively low penetration and limited access to the Internet in the country, much of the interactive communication still appears to take place off line. The effects of a smaller audience and participation may be reflected in the small blog and website network (visualized by Illustration 16), and the fact that much of the social media content observed originated from international organizations (but is often tailored by the local social media profiles).

Lessons for Policymakers












- **Main themes.** Violence against women is a highly prevalent issue in Guatemala's social media.
- **Peaks.** Large volumes of discussion of gender issues occurred on the International Day for the Elimination of Violence Against Women (November 25th), International Human Rights Day (December 10th), and upon the launch of the publication of a BBC investigation entitled "Why Is It So Dangerous to Be a Woman in Guatemala" (December 15th).
- **Top 10.** Social media influencers in Guatemala are less varied than in the other countries in our sample and are comprised mostly of civil society organizations and individuals, as well as a few media outlets.
- **Hashtags.** #NoalaViolenciadeGenero and the #16Dias, and #HeforShe were the predominant hashtags.
- **Network clusters.** Much of the activity on Twitter is still driven by traditional media, while on Facebook there is a strong international scene. The blogs have more local actors embedded. Overall, social media in Guatemala acts more as a one-way communication tool than as a place for conversation, with few exceptions (local influencers).

ILLUSTRATION 13. TOP HASHTAGS RELATING TO GENDER IN GUATEMALA, NOVEMBER–DECEMBER 2015








Notes: Frequency of hashtags related to gender content collected from November 23–December 22, 2015.

TABLE 8. TOP 10 INFLUENCERS IN GUATEMALA, NOVEMBER–DECEMBER 2015

ORGANIZATION/NAME	TWITTER	FACEBOOK
 Andrea Ixchú	3,049 followers @Andreakomio	
 Asociación de Mujeres de Guatemala	2,552 followers @mujeresdeguate	3,276 fans facebook.com/MujeresdeGuatemalaAMG
 Brenda Hernandez	1,202 followers @BrendaH2O66	
 Fer Espina	199 followers @fespina	
 Fondo Centroamericano de Mujeres (FCAM)	831 followers @fcmujeres	3,935 fans facebook.com/fcmujeres
 Fondo de Población de las Naciones Unidas Guatemala	2,152 followers @UNFPAGuatemala	2,860 fans facebook.com/UNFPA.Guatemala
 Iniciativa Mesoamericana de Mujeres Defensoras de Derechos Humanos	2,718 followers @IM_Defensoras	2,457 fans facebook.com/IM-Defensoras-445371165543920
 Plaza Pública	28,800 followers @PlazaPublicaGT	24,780 fans facebook.com/PlazaPublicaGT
 Prensa Libre	790,000 followers @prensa_libre	1.7 million fans facebook.com/prensalibregt
 Unión Nacional de Mujeres Guatemaltecas	889 followers @unamgt	2,309 fans facebook.com/UNAMGT
 Informe Nacional de Desarrollo Humano	457 followers @indh_guatemala	3,208 fans facebook.com/desarrollohumanogt

Legend

-  Civil society organization/Nonprofit organization
-  International organization
-  Government official/Official politician/Political staff
-  Political party
-  Journalist/Commentator/Blogger/Activist
-  National machinery for gender equality
-  Other government entity
-  Media outlet
-  Artist

* **Profile content ironic or comic**

Note: Fan/follower data as of December 22, 2015, in alphabetical order.

ILLUSTRATION 14. MAIN TWITTER CLUSTERS AND NODES, GUATEMALA

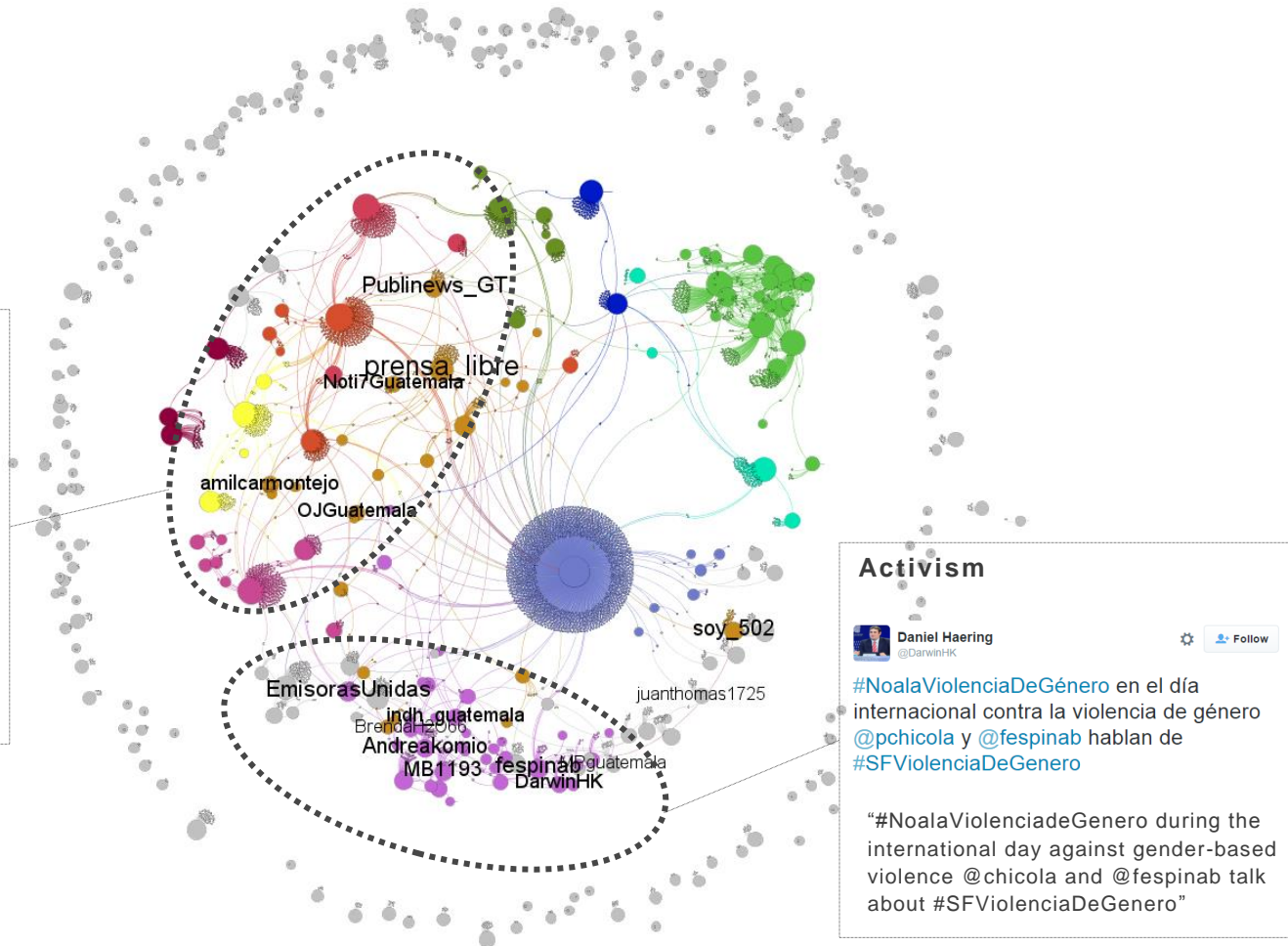


Information/News

 **Amilcar Montejo**
@amilcarmontejo Follow

Ultran mujer peatón. 6avenida Ruta7 zona4. PMT Guatemala coordinó y auxilian CBM e ingresan a hospital San Juan, según reporte [#TráficoGT](#).

“Woman on the street beaten. Avenue 6 Rout 7 zone 4. PMT Guatemala coordinated and helped enter San Juan hospital according to [#TraficoGT](#)”



Activism

 **Daniel Haering**
@DarwinHK Follow

[#NoalaViolenciaDeGénero](#) en el día internacional contra la violencia de género @pchicola y @fespina hablan de [#SFViolenciaDeGenero](#)

“[#NoalaViolenciadeGenero](#) during the international day against gender-based violence @chicola and @fespina talk about [#SFViolenciaDeGenero](#)”

ILLUSTRATION 15. MAIN FACEBOOK CLUSTERS AND NODES, GUATEMALA

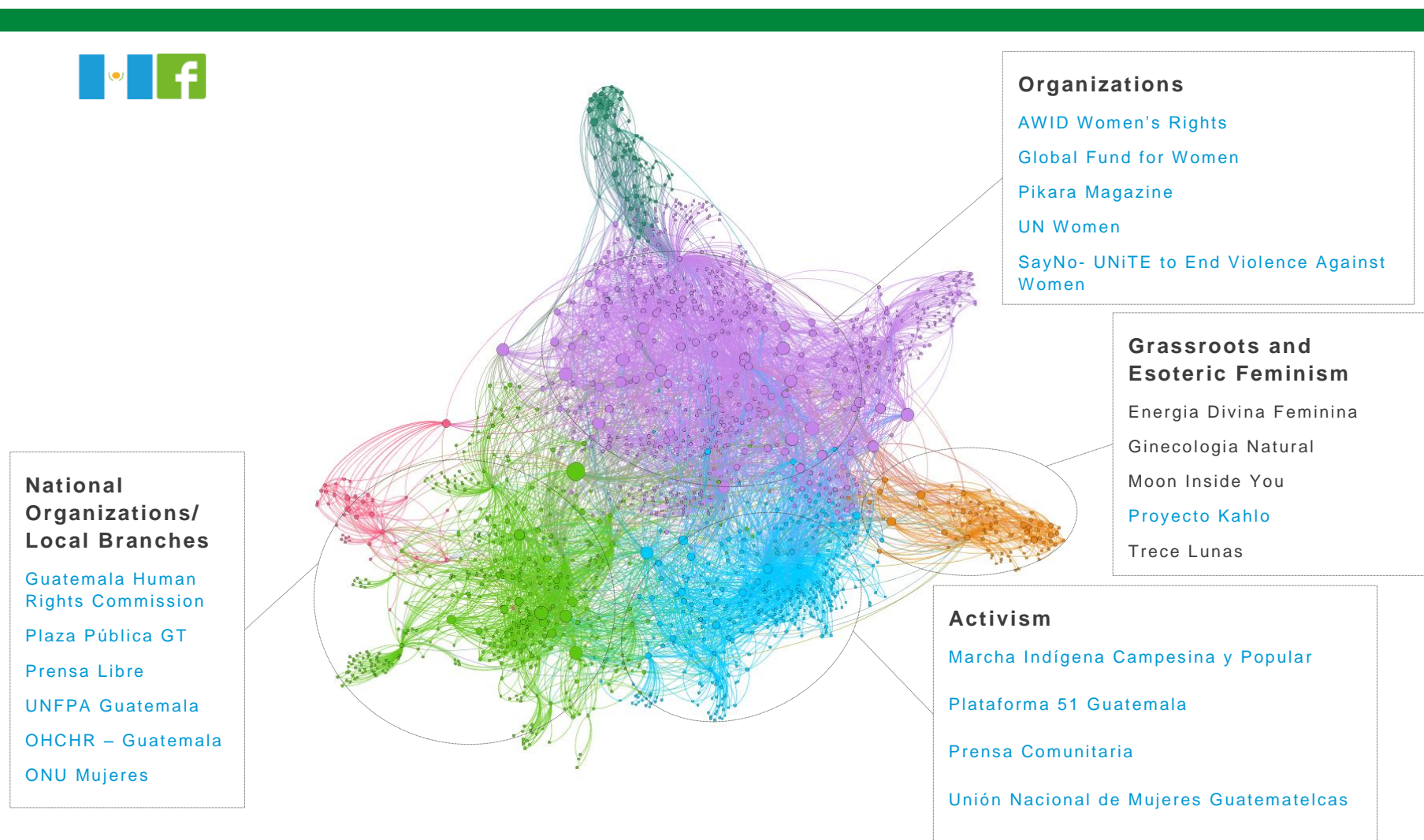
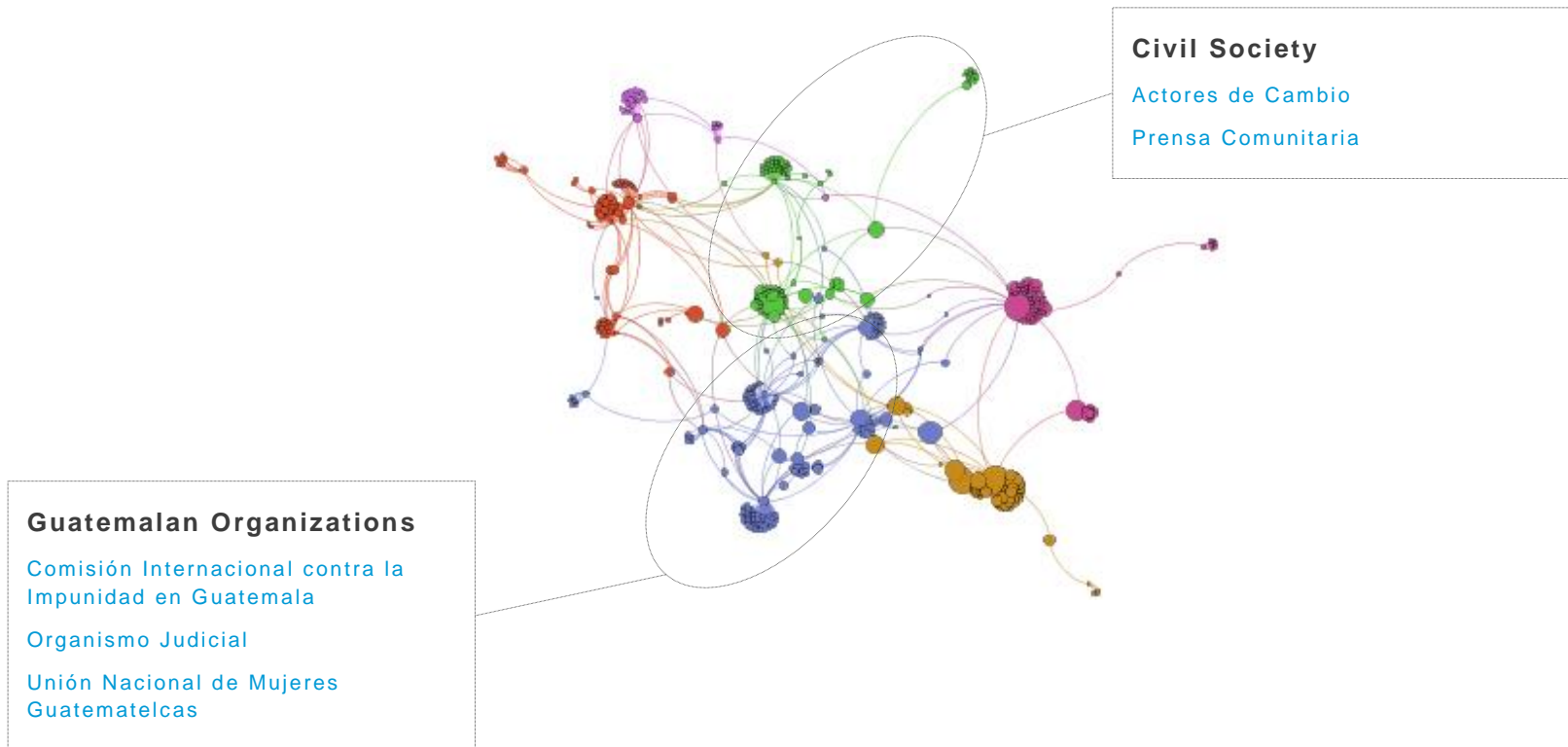


ILLUSTRATION 16. MAIN BLOG/SITE CLUSTERS, GUATEMALA



Mexico

Mexico is among the most economically developed countries in the region, with the third-highest GDP per capita among the five countries in the sample (below Argentina and Brazil), but well above the mean. The population is also relatively highly urbanized, with 79 percent of the people living in cities. Internet penetration is relatively low given the level of development: only 49 percent of Mexico's population are Internet users and only 33 percent are Facebook users (compared to over 80 percent for the United States). Despite Mexico's lower penetration rate than Argentina and Brazil, Twitter is a popular platform among politicians and other public figures in Mexico and is used extensively throughout the country (possibly because of its proximity to the United States).

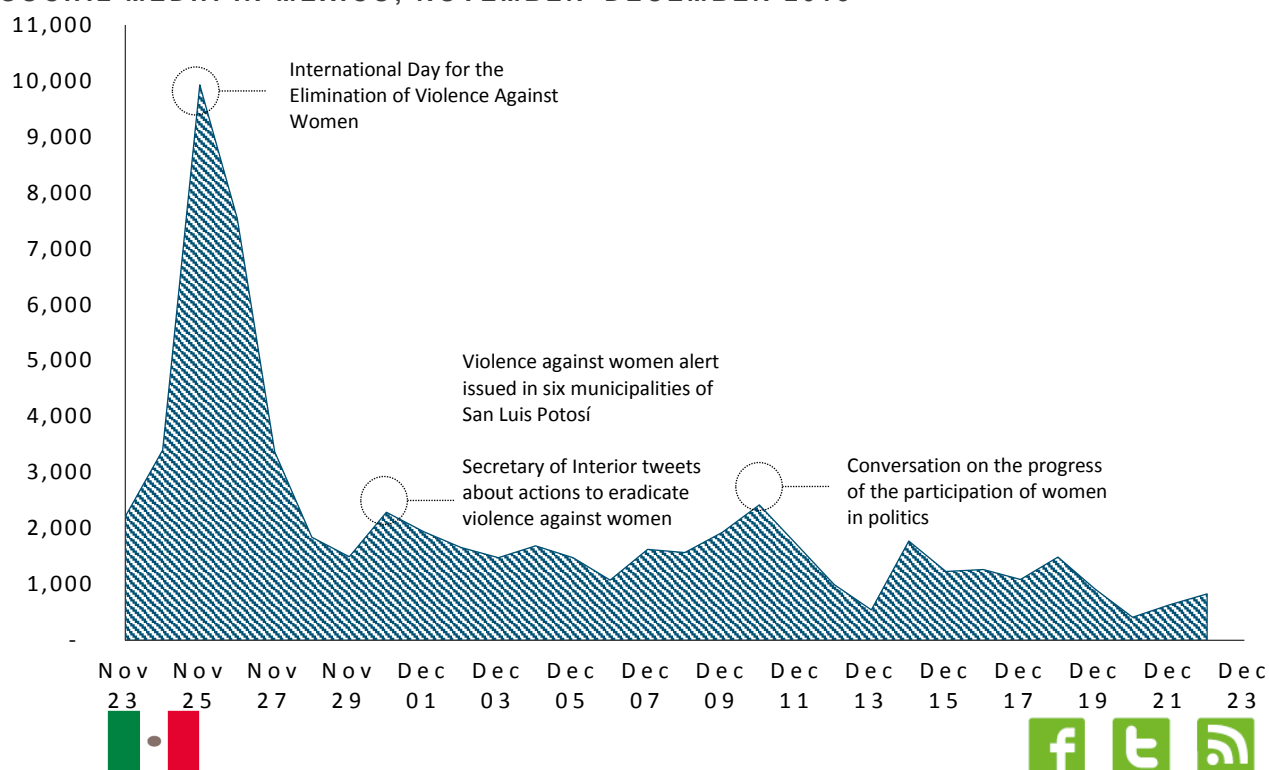
Among the countries in the study, Mexico has the best UNDP Gender Inequality Index ranking at 74th in the world. Mexico also has one of the lowest wage gaps in the region and very good gender-specific health indicators. Like many countries in the region, Mexico has a quota law requiring 40 percent of candidates from each party to be women. In reality, 37 percent of the legislature is comprised of women, slightly lower than what the law requires because (1) parties with open primary elections are exempted, and (2) 300 of the 500 seats are chosen by single-member district elections, so if the women lose disproportionately they remain underrepresented. Indeed, some women have accused parties of putting up female candidates in elections where their party is not competitive.

Mexico is a large and diverse country and presents a range of challenges for gender equality. Gender-based violence is a serious problem, particularly in the border area and in regions plagued by violence connected to drug and human trafficking. In many of the urban parts of the country women are considerably less at risk, but nonetheless face issues related to gender inequality.

Overview of Data

Between November 23 and December 22, 2015, we collected 61,837 social media conversations on the subject of gender from Mexico. As is the case in many of the other countries, a small percentage of users focus on gender issues throughout the year, but gender-related traffic spikes surrounding a few salient events. In Mexico, the International Day for the Elimination of Violence Against Women (November 25th) and a speech on gender-inequality-related regulation by Congresswoman Mariana Benitez to support for more female participation in politics (December 12th) spurred an online conversation on the topic. There were also social media discussions around the approval to expand the Gender Violence Alerts to six municipalities of San Luis Potosí, and around Secretary of the Interior Miguel Ángel Osorio Chong's tweet regarding the specific activities conducted to eradicate violence against women along with UN Habitat Mexico (November 30th) (Figure 22).

FIGURE 22. PEAK DATES OF CONVERSATIONS RELATING TO GENDER ON SOCIAL MEDIA IN MEXICO, NOVEMBER–DECEMBER 2015



Note: Peaks observed in our sample of 61, 837 conversations with gender mentions collected from November 23–December 22, 2015.

Gender Topics on Social Media

As noted in the introduction to this study, we analyze the content of social media posts using two main strategies: (1) examining the hashtags created by users, and (2) grouping the content of posts ourselves to measure the topics of discussion.

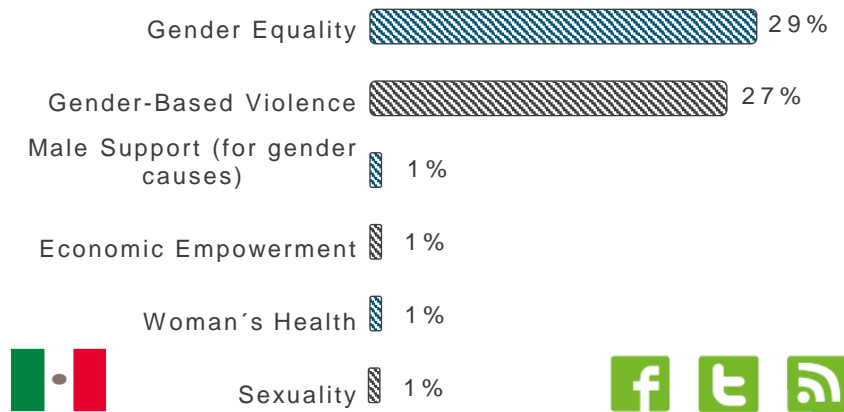
Looking first at the topics discussed on social media, we see that by far the most discussed topic was gender-based violence (Figure 23). This is also reflected in the hashtags: we can see that the #Oaxaca, #16Dias, #DiaNaranja, and #NoalaViolenciadeGenero hashtags were all widely used hashtags on gender (Illustration 17). The topics discussed by users reflect this usage: nearly 29.4 percent of content related to gender specifically addressed the issue of gender equality. Many of these conversations involved prominent national political debates including tweets between candidates in the national presidential elections about allegations of sexism and tweets regarding a major change that would incorporate gender parity into the state constitution of Oaxaca.

The second major salient issue area in Mexico was gender-based violence, representing around 27.3 percent of the conversations on gender. This issue generated a variety of commentary, including national-level discussion of gender-based violence alerts issued by the national government about the levels of violence in some states. Others discussed anti-violence campaigns conducted by NGOs and a campaign called #RompeElSilencio involving altered pictures of celebrities that encouraged victims of violence to speak out.

Other topics mentioned less by users but that were still important included discussions about male support for feminist causes, economic empowerment, and women’s health. One important caveat to these findings is that the timing of the study may have an impact on the findings. The prevalence of hashtags related to the International Day for the Elimination of

Violence Against Women shows the extraordinary effect that day had on social media conversations. The relative dearth of conversations on these other issues does not necessarily indicate they are less important, but simply that they were discussed less during the period in question.

FIGURE 23. TOP GENDER TOPICS IN MEXICO, NOVEMBER–DECEMBER 2015



Note: Frequency of categories of gender content collected from November 23–December 22, 2015. Only those categories with a frequency of over 1 percent are shown.

Users and Groups on Social Media

Network analysis shows clear patterns of communication and association between users discussing gender. Illustrations 18 and 19 are visualizations of the connections between users on Twitter (connections here are retweets) and Facebook (connections here are follows). On Twitter, the major groupings very loosely coincide with a community of people discussing the national political issue of gender-based alerts and another grouping discussing national political issues. Overall, the communities are less connected and less concentrated compared to other countries in the study. Nonetheless, there are some important feminists at the center of several of the clusters.

Facebook follows, which are more stable over time, show a different pattern. Groupings in the network correspond to advocacy groups, such as those associated with international organizations, the Spanish-speaking international feminist movement, the national legal abortion movement, and the national reproductive rights movement.

Much of the activity at the center of each of the issue groups, both on Facebook and Twitter, is connected by a small number of individuals. Table 9 shows the top 10 most influential social media users in Mexico, identified by a combination of quantitative analysis and qualitative selection. Of the five countries studied, Mexico had the largest number of government officials among the top 10 influencers. Mexico has a very active Twitter network (as visualized in Illustration 18) and various clusters center on this group of individuals. Their tweets are informative about current gender news in public policy in the country and have a relatively large audience. Engaging them in the conversation would be crucial for successful content dissemination on social media, particularly Twitter.

During the monitoring process, over 2,800 blogs and websites with gender content were identified for Mexico alone. Illustration 20 is a visualization of how blogs and websites link to each other. Most networks are highly diffused, with the exception of a few nodes that look like they have high centrality metrics, including [CIMAC](#) and [CIMAC Noticias](#), which specifically focus on the dissemination of gender information and knowledge,

Lessons for Policymakers

- **Main themes.** Gender equality and violence against women are critical issues in Mexico.
- **Peaks.** Large volumes of discussion of gender issues occurred on the International Day for the Elimination of Violence Against Women (November 25th), International Human Rights Day (December 10th), and upon the launch of the publication of a BBC investigation entitled “Why Is It So Dangerous to Be a Woman in Guatemala” (December 15th).
- **Top 10.** Of the five countries studied, Mexico had the largest number of government officials in the top 10 influencers; their tweets are informative about current gender news in public policy in the country and have a relatively large audience. The national governmental entity in charge of gender (*Instituto Nacional de las Mujeres*) is among the top 10 influencers, representing a potential partner for disseminating content for Mexico.
- **Hashtags.** #NoalaViolenciadeGenero and the #16Dias, and #HeforShe were the predominant hashtags.
- **Network clusters.** Twitter clusters include political content, but also gender news. On Facebook, clusters include activism, international clusters, and links to more general news. Blogs have more local clusters that include gender information and knowledge information topics.

ILLUSTRATION 17. TOP HASHTAGS RELATING TO GENDER IN MEXICO, NOVEMBER–DECEMBER 2015



Jose Manzur @Manzur_Jose

Sumemos esfuerzos contra la violencia de género. Mañana también
#NoalaViolenciadeGenero @CEAVmex

RETWEETS 194 | CURTIIDAS 68

20.05 - 25 de nov de 2015

"Let's join forces against gender-based violence. Tomorrow as well
#NoalaViolenciadeGenero [NotoGenderBasedViolence] @CEAVmex"

#Texcoco #feminismo #CafeNaranja #Paridad #Únete
#EsTiempoDeLasMujeres #NiUnaMás #DíaContraLaViolenciadeGenero #NAMA #NoViolencia
#25N #HeForShe #NoalaViolenciadeGenero #igualdad #Soriana
#OXXO #COP21 #DiaNaranja #16Dias
#Video orangetheworld #CatedraColosio #Morelos #género #Oaxaca

Mariana Benítez @marianabenitez

Hagamos valer nuestro derecho a una vida sin violencia de género. Sigamos promoviendo @inmujeres #DiaNaranja

"Let's make the right to a life free of gender-based violence worth its value. Let's continue promoting @inmujeres #DiaNaranja [orange day]"

IEEPCO @IEEPCO

Continúa curso "Igualdad de Derechos y Paridad de Género en los S.N.I" imparte Mtra. Roselia Bustillo. #Oaxaca

"The course on 'Equal Rights and Gender Equity in Indigenous Legal Systems' facilitated by Teacher Roselia Bustillo. #Oaxaca"












Prevencción de Delito @Cenepred_Tab

#16días de activismo contra la Violencia de Género #Únete #PrevenciónSocial #JuntosCuidamosTabasco



"#16days of activism against Gender-Based Violence #únete [join] #PrevenciónSocial [Social Prevention] #JuntosCuidamosTabasco [TogetherweCareforTabasco]"

Note: Frequency of hashtags related to gender content collected from November 23–December 22, 2015.

TABLE 9. TOP 10 INFLUENCERS IN MEXICO, NOVEMBER–DECEMBER 2015

ORGANIZATION/NAME	TWITTER	FACEBOOK
 Amnistía Internacional México	13,9016 followers @AIMexico	321,441 fans facebook.com/amnistiamexico
 Claudia Ruiz Massieu, Former Secretary of Foreign Affairs	21,964 followers @ruizmassieu	11,719 fans facebook.com/ClaudiaRuizMassieu
 Congresswoman Carolina Monroy del Mazo	63,145 followers @CarolinaMonroy_	30,357 fans facebook.com/CarolinaMonroyDM
 Congresswoman Mariana Benitez Tiburcio	21,059 followers @marianabenitez	56,509 fans facebook.com/MarianaBenitezT
 Fondo Semillas	16,368 followers @FondoSemillas	20,982 fans facebook.com/Fondo-Semillas-309520537353
 Instituto Nacional de las Mujeres	45,935 followers @inmujeres	17,719 fans facebook.com/InmujeresCDMX
 ONU Mujeres México	13,719 followers @ONUMujeresMX	
 Partido Revolucionario Internacional (PRI)	18,6164 followers @PRI_Nacional	281,586 fans facebook.com/PRI oficial
 Rosario Robles, Secretary of Social Development	203,970 followers @Rosario_Robles_	18,409 fans facebook.com/rosarioroblesberlanga
 Senator Ana Lilia Herrera Anzaldo	69,878 followers @AnaLiliaHerrera	20,869 fans facebook.com/analilia.herreraanzaldo
 Senator Diva Gastélum	27,350 followers @DivaGastelum	53,870 fans facebook.com/DivaGastelumB/

Legend

-  Civil society organization/Nonprofit organization
-  International organization
-  Government official/Official politician/Political staff
-  Political party
-  Journalist/Commentator/Blogger/Activist
-  National machinery for gender equality
-  Other government entity
-  Media outlet
-  Artist

* **Profile content ironic or comic**

Note: Fan/follower data as of December 22, 2015, in alphabetical order.

ILLUSTRATION 18. MAIN TWITTER CLUSTERS, MEXICO



Criticism of Public Statements

Beatriz Gutiérrez @BBeatrizGM

Una mujer no debiera apelar al género para "defenderse" y atacar a sus contrincantes. Si buscamos equidad, le entramos parejo. Valemos mucho

1:28 PM - 25 Nov 2015

“A woman should not appeal to gender to ‘defend’ herself and attack her adversaries. If we are looking for equality, we should enter as equals. We are worth a lot.”

Revista Emoequis @emoequis

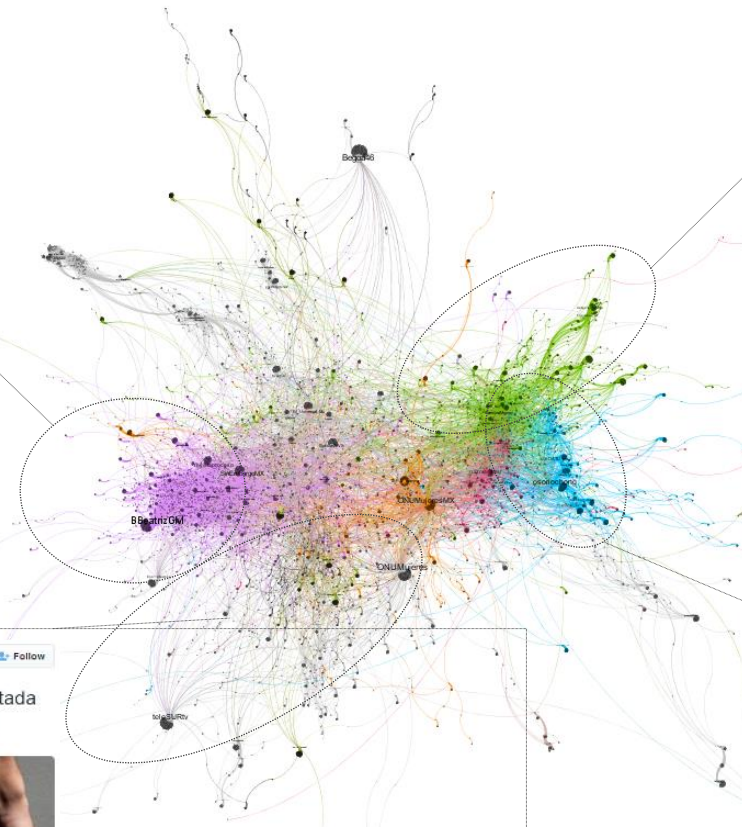
Alerta de género en San Luis es aceptada por la Segob m-x.com.mx/?p=253668



1:03 AM - 30 Nov 2015

Gender News

“Gender alert in San Luis is accepted by the Segob [Secretary of State]”



PRI Clusters

Carolina Monroy @CarolinaMonroy_

#ConoceMás el Fondo de Igualdad de Género de @ONUMujeres invertirá 7.26mdd para impulsar el empoderamiento económico ow.ly/W4ES1

“Get to know more about @ONUMujeres [UNWomen] Gender Equality fund which will invest USD \$7.26 Million to boost economic empowerment ow.ly/W4ES1”

Miguel A. Osorio Chong @osoriochong

Con @ONUHabitatMex estamos erradicando la violencia de género con acciones puntuales. #Únete con hechos.



18:28 - 30 de nov de 2015

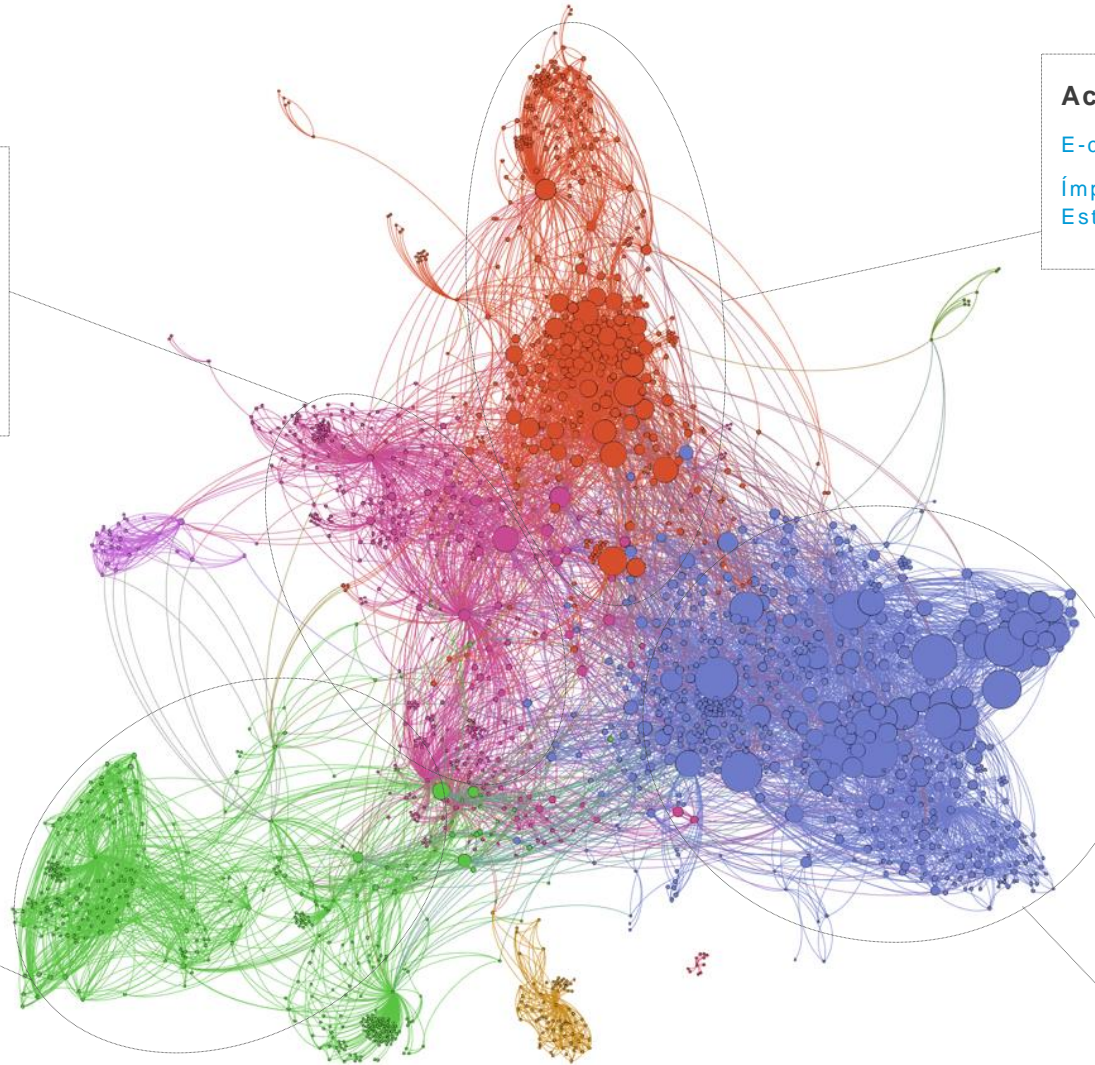
“With @UNHabitatMex we are eradicating gender-based violence with specific actions. #únete [join us] with facts.”

ILLUSTRATION 19. MAIN FACEBOOK CLUSTERS, MEXICO



International Networks
Cenicientas 3.0
Faktoria Lila
Feministas Siempre
Pikara Magazine

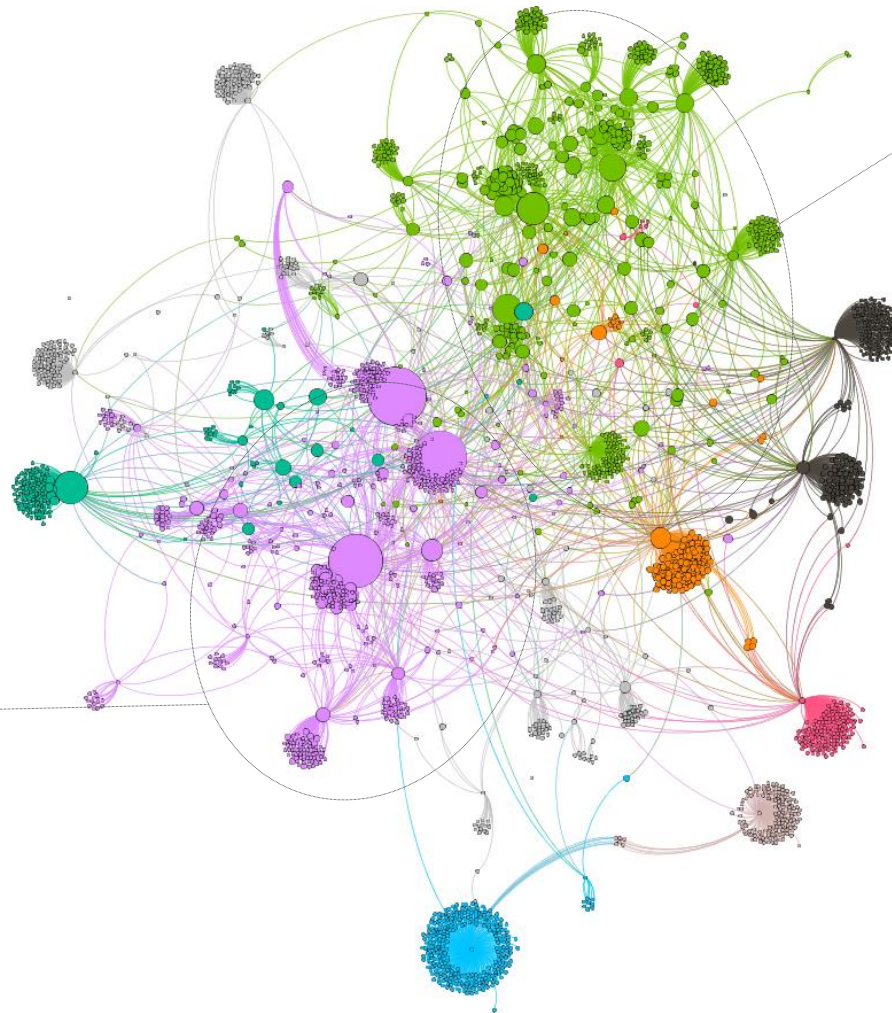
General News
Canal 22 México
El Universal Online
La Jornada



Activism
E-cards Feministas
Ímpetu Centro de Estudios

**Civil Society/
International Organizations**
Fondo Semillas
Global Fund for Women
Guttmacher Institute
Ipas (International Pregnancy Advisory Services)
ONU Mujeres

ILLUSTRATION 20. MAIN BLOG/SITE CLUSTERS, MEXICO



Activism
Nuestras Hijas de Regreso a Casa
Mujeres sin Miedo
Comité Digna

**Information/
Knowledge**
CIMAC
CIMAC Noticias
Grupo de Información en Reproducción Elegida (GIRE)
Instituto de Liderazgo Simone de Beauvoire (ILSB)

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