Violence Against Women in Brazil

Exploring the Use of Twitter Data to Inform Policy

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Acknowledgments

Preface

Brazil is one of the most dangerous places in the world to be a woman. While the 2006 passage of the Maria da Penha Law on Domestic and Family Violence established an array of measures to guarantee women's rights and prevent the abuse of women, the rate of femicides in Brazil continues to increase.[1] Policymakers and other stakeholders working to address this salient issue point to several important gaps in the existing data on violence against women (VAW), which prevent policies from moving forward to improve women's safety.

This Capstone project, working in consultancy with UN Women, explored how social media data—especially Twitter data—can complement traditional data collection methods to help bridge these gaps in data and influence policy on VAW in Brazil. Specifically, this report provides insights and recommendations regarding how this data can best be harnessed by civil society organizations, government agencies, and other stakeholders to work more effectively towards achieving the United Nations Sustainable Development Goal (SDG) 5.2—to eliminate all forms of violence against all women and girls. This will provide value for UN Women, as the agency is currently working to develop a social media data framework to monitor progress towards SDG 5.2.

In order to address how Twitter data can be utilized to monitor VAW in Brazil, this Capstone team was asked to take a two-pronged approach. First, the team conducted a landscape analysis in order to establish a contextual understanding of the scope of the problem of VAW in Brazil and how it has been addressed in recent years. This analysis revealed a number of gaps in data on VAW in Brazil. Second, the team leveraged the insights gained from this analysis, in addition to knowledge conferred from interviews with data experts and further secondary research, to develop a model for analyzing Twitter data in the context of VAW in Brazil.

The essential context provided on VAW in Brazil in conjunction with this model for Twitter data analysis can help to shape and enhance policies pertaining to VAW in Brazil. Moreover, it provides a useful foundation upon which UN Women can advance their social media data framework. Our hope is that this research will ultimately be shared and applied to different global contexts. In this way, our analysis can play an informative role in aiding the international work of UN Women and other agencies that seek to utilize social media and Twitter data in their quest to achieve SDG 5.2 and eliminate VAW around the world.

Executive Summary

Section 1: Violence Against Women in Brazil

The first section of this report is a landscape analysis that tracks civil society organizations (CSOs) and government initiatives addressing violence against women (VAW) in Brazil between the years 2006 and 2017. The team has gathered key information on **opportunities and gaps** in VAW programming through comprehensive primary and secondary research conducted in São Paulo, Brasília, and Rio de Janeiro in Spring 2018. The report provides an overview of the organizational and legislative context that frames VAW operations, including an analysis of thirteen CSOs and public agencies that work to address VAW in Brazil. The main body of the report details key interventions, contributions, and methods of the five agencies interviewed in Brazil—Cepia, Coletivo Feminista, CEDAPS, Article 19 and the National Secretariat of Policies for Women (SNPM). Additional organizations are analyzed in Annex A.

The analysis section of this report consolidates key research findings and provides a holistic insight into VAW interventions by detailing the following:

- ➢ Project Duration
- ➢ Geographic Location
- ➢ Donors & Funding
- ➢ Target Populations

- ➢ Impacts
- ➢ State Partnerships
- ➢ Gaps in Data
- ➢ Best Practices

The analysis further highlights the issues of insufficient funding, insufficient data, and insufficient services provided to victims of VAW, particularly in peripheral and rural areas of Brazil.[2] Due to a widespread lack of public funding, CSOs are predominantly dependent on multilaterals and international aid agencies for financial support.[3] Furthermore, most analyzed projects were found to be short-term due to a lack of sustained funding.[4] Finally, the analysis finds that many CSOs working on VAW in Brazil have extremely limited capacity to measure their impacts due to this lack of funding and technical expertise.[5] Several of the organizations interviewed mention gaps in data being a significant obstacle to their work, as well, which further contributes to organizational challenges.[6] (Gaps in data are discussed in greater depth in *Section 2.*)

In spite of these challenges, many of the organizations interviewed have contributed extremely valuable advocacy, research, services, and programming to the field. Best practices of these organizations include an emphasis on intersectionality and developing partnerships. The report concludes with several recommendations for the Brazilian government, CSOs and UN Women to improve the effectiveness of interventions. These recommendations include **expansion of programming** to reach more marginalized/rural/low-income communities, **improvement of coordination** amongst stakeholders such as the public health division and public safety offices, **development of partnerships** between CSOs and government agencies, and **increased funding** directed towards VAW programs. Finally, it is recommended that all stakeholders incorporate an **intersectional approach** and utilize **participatory methodology** when researching and collecting data on VAW in Brazil.

Executive Summary

Section 2: Exploring the Use of Twitter Data to Measure Societal Dynamics Relating to VAW in Brazil

The second section of this report analyzes the limitations of traditional survey methods to collect data on VAW in Brazil and considers the potential of Twitter data to fill those gaps. In addition, the report identifies the opportunities and limits of utilizing Twitter data to inform policy on VAW in Brazil. The findings rely on comprehensive primary research conducted through interviews with data experts, Brazilian CSOs, and Brazilian government agencies in the Spring of 2018, as well as secondary research methods.

The report first provides an overview of the limits and gaps of the existing data on VAW in Brazil. One key limitation is that traditional survey data typically fails to capture the complexity and diversity of the various forms of VAW. In addition, qualitative issues arise with VAW data in Brazil due to the absence of a unified data collection system, which can lead to disjointed data and duplication issues.

The report subsequently gauges the potential of social media data (particularly Twitter data) to complement these traditional data collection methods. In particular, it addresses the question of how Twitter data can enhance a collective understanding of VAW, and how that understanding can be appropriately leveraged in policymaking. The findings indicate that social media and Twitter data offer opportunities to fill data gaps through:

- ➢ Situation Awareness and Response
- ➢ Knowledge Creation and Transfer
- ➢ Public Service Design and Delivery
- ➢ Prediction and Forecasting
- ➢ Impact Assessment and Evaluation

This section further identifies Twitter's ability to provide insight into an individual's *intent*, *sentiment* and *emotion*. This ability suggests that Twitter is particularly useful at capturing attitudes towards VAW but cannot accurately measure prevalence. In conclusion, this section highlights **key opportunities** for utilizing this data practically in the field of VAW.

Lastly, the analysis provides suggestions for effective data presentation. This includes conducting audience analyses for the target recipients of the research findings. Optimal data presentation combines both simple and clear data visualization and compelling narratives.

The report concludes with several **recommendations** for policymakers to improve use of Twitter data to address issues of VAW in Brazil. The team proposes further research be conducted on enhancing the capacity for using Twitter data and addressing the structural data limitations that result from the Brazilian government's decentralized data collection system. **By augmenting information on VAW with Twitter data and strengthening the country's data infrastructure, Brazil can be more impactful in its work to achieve SDG 5.2.**

Section 1: Violence Against Women in Brazil

I. Overview

A wide range of initiatives have been introduced between the years 2006 and 2017 to address violence against women (VAW) in Brazil. Spurred in part by the passage and implementation of the Maria da Penha Law on Domestic and Family Violence in 2006, VAW programs and interventions have expanded throughout the country. This literature review presents findings of primary and secondary research conducted to map CSO and CSO/multilateral organization-supported interventions, as well as government-backed interventions to address the problem of VAW in Brazil.

It is crucial to note that even while programs and interventions targeting VAW have expanded, reports indicate that Brazilian states such as the Rio Grande do Norte have seen substantial increases in rates of VAW during these same years.[7] In addition, femicide of black women in Brazil has increased by an alarming 54% between the years 2003 and 2013.[8] The vast majority of these femicides and other forms of VAW are committed by individuals known by the victim. Most commonly, the perpetrators are family members or current or former intimate partners.[9]

In addition, in spite of the particular prevalence of VAW in marginalized communities such as favelas, peripheral and rural areas, and other low-income regions, these communities are rarely explicitly targeted by public efforts to combat VAW.[10] Many of the organizations we interviewed discussed the need to address this discrepancy.[11]

The political climate of Brazil has also had a significant impact on organizations working to combat VAW. In particular, the political crisis of 2015-2016—which culminated in the impeachment of former President Dilma Rousseff—had especially negative repercussions for VAW organizations. This is because the 2016 change in presidential administrations resulted in the National Secretariat of Policies for Women losing its ministry status and thus losing a substantial portion of its funding.[12] This funding reduction, in turn, effectively limited the activities of VAW organizations throughout the country.[13]

Many VAW-focused organizations in Brazil have expressed a concern for the widespread lack of funding. They have also stressed that there is a particular need to focus VAW programming and research on women from low-income, rural, peripheral, and otherwise marginalized communities throughout Brazil.[14] This report will elaborate more on these themes and challenges in the subsequent sections.

II. Methodology

To produce this landscape analysis, we incorporated both primary and secondary research methods.[15] Between January and February 2018, a literature review[16] was conducted to compile and analyze existing reports, articles, and other documentation to provide an overview and timeline of the various interventions geared towards reducing VAW in Brazil between the years 2006 and 2017. Following the completion of the secondary research, the team undertook a field visit to the cities of São Paulo, Brasília, and Rio de Janeiro to fill information gaps between March 9th and March 17th, 2018. This field visit consisted of a series of interviews with prominent CSOs and government agencies including Cepia, Coletivo Feminista, CEDAPS, Article 19, and the National Secretariat of Policies for Women. Through semi structured[17] key informant interviews, the team acquired crucial information regarding programs, gaps and challenges.

III. Legislation

Law 11340—commonly referred to as The Maria da Penha Law of 7 August 2006—was a landmark legislation that served as a necessary measure to address domestic violence in Brazil. The law clearly defines domestic violence as including physical, psychological, sexual, patrimonial and moral forms of violence. The law also establishes that law enforcement must provide a level of protection and assistance in domestic violence cases. It further mandates that the judicial system establish protective measures by detaining aggressors or placing an order for physical distance from the victim.[18]

The Maria da Penha Law has prompted major changes in conversations and attitudes towards VAW. As one of the most commonly known laws in Brazil, it has made the general public aware of the repercussions associated with committing acts of VAW.[19] In addition, Lei Nº 10.224, Altera O Decreto-Lei Nº 2.848, De 7 De Dezembro De 1940—also referred to as the Código Penal of 2001—was amended in 2005 to include mandates regarding duration of sentencing for aggressors who perpetrate VAW.[20]

There are also recently-established constitutional provisions that address violence against women and girls. Article 226 of the Brazilian Constitution (2014) states that "The State shall assure assistance to the family...and shall create mechanisms to suppress violence within the family."[21] This effectively establishes a mandate for protection against violence within the home. In addition, Article 227 of the Constitution (2014) states, "The law shall severely punish abuse of, violence towards, and sexual exploitation of children and adolescents," which includes violence towards young girls.[22]

The timeline below outlines some of these key legislative advances, as well as the establishment of key organizations and campaigns discussed in this report. For more information on relevant legislation, see Annex A, which outlines additional policy initiatives.

Figure 1.1 Timeline of VAW Organizations & Legislation
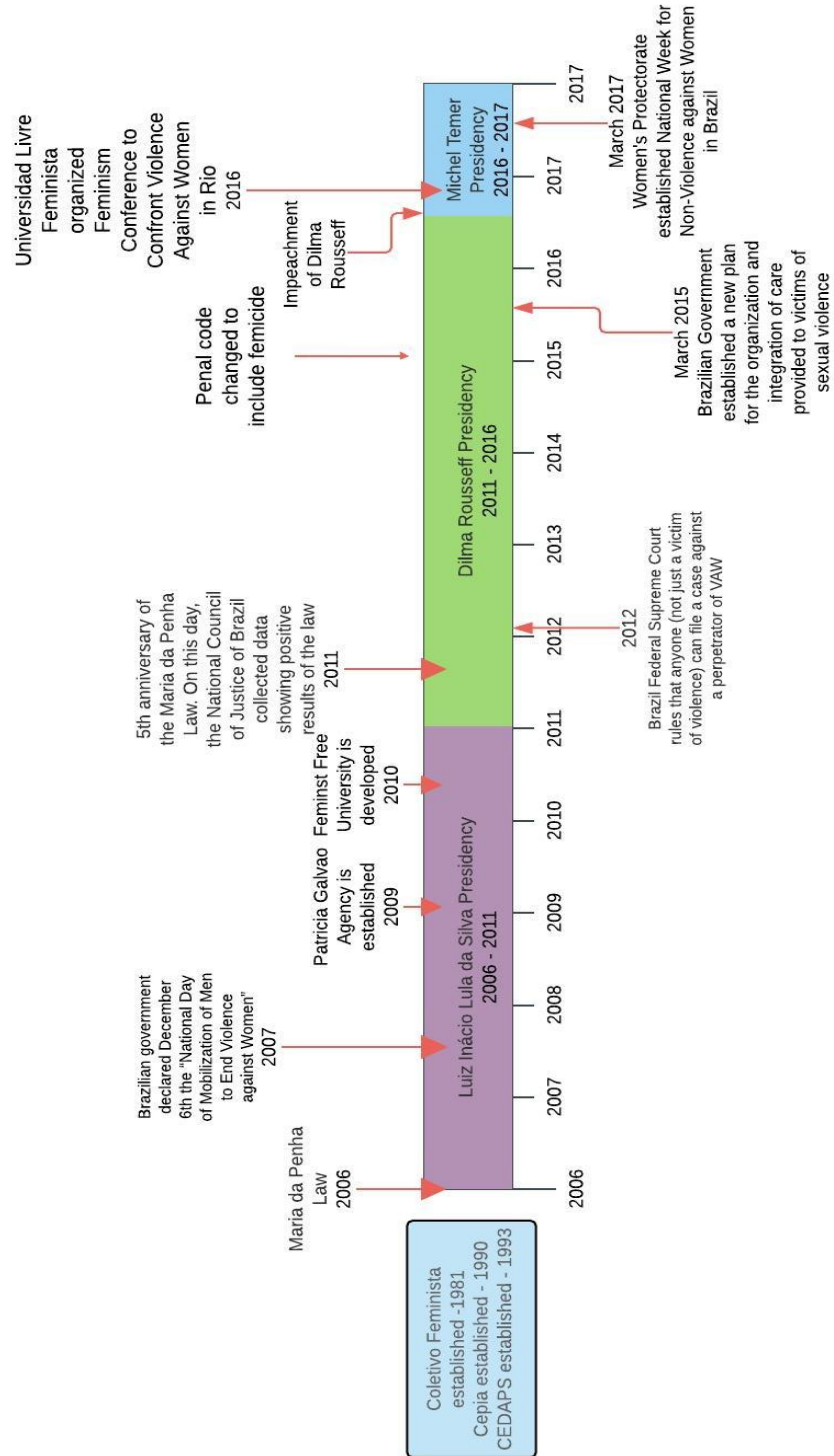
IV. Organizational Overview

Table 1.1 Landscape Analysis Overview: List of VAW Organizations Analyzed in Brazil (includes organizations reviewed in both primary and secondary research)

Landscape Analysis Overview		
CSOs/Multilateral-Backed Organizations	**CSOs**	**Government Agencies**
Coletivo Feminista	Cepia	National Secretariat of Policies for Women
Avon Foundation	Article 19	Joint Standing Committee to Combat Violence against Women
	CEDAPS	Commitment and Attitude for the Maria da Penha Law
	CAMTRA House of Women Workers	Brazil Observatory on Gender Equality
	Feminist Free University	Women's Special Prosecutor's Office
	Patrícia Galvão Agency	

*See Annex A for a detailed overview of organizations listed here that were not interviewed, including the Avon Foundation, CAMTRA, Feminist Free University, the Patrícia Galvão Agency, the Joint Standing Committee to Combat Violence against Women, Commitment and Attitude for the Maria da Penha Law, the Brazil Observatory on Gender Equality, and the Women's Special Prosecutor's Office.

1. CSO Interventions/CSO and Multilateral Organization Supported Interventions

A. Cidadania, Estudo, Pesquisa, Informação e Ação (Cepia) ["Citizenship, Study, Research, Information, and Action"]

Overview:

Cepia is a Rio de Janeiro-based non-profit organization, established in 1990,[23] that is credited as one of the co-creators of the Maria da Penha Law.[24] In fact, the original law was first drafted in their office.[25] Cepia conducts research and develops educational programming and social interventions on human rights issues, with a particular focus on gender and reproductive rights, VAW, and empowerment of women and girls. The organization also organizes seminars, workshops, classes, and dialogues with a wide range of stakeholders about these issues.[26]

Programs:

Cepia runs VAW programs under two streams framed under its interventions for "human and citizenship rights"—"Human Rights, Access to Justice and Violence Against Women" and

"Sexual and Reproductive Health and Rights" (SRHR).[27] Under the Human Rights interventions, Cepia plays a watchdog role on national and international legislation implementation through advocacy for governmental officials and CSOs.[28] It also engages in partnerships with CSOs to holistically address challenges to women's rights, including through capacity-building of public officials on topics including "access to justice, and sexual and domestic violence."[29]

Under its SRHR interventions, Cepia follows a similar approach in terms of monitoring legislation and facilitating capacity-building, but also incorporates an academic focus.[30] It facilitates courses at medical schools focusing on gender and conducts awareness-raising campaigns for the public through mass media.[31] It also runs courses at the School of the Magistrate to train judges on international human rights law and gender issues, in order to ensure that the Maria da Penha Law is implemented.[32] Under both forms of interventions, Cepia maintains a presence in national and international networks of reproductive health advocates.[33]

Furthermore, the organization is employing technology to support their programs. For example, they have introduced an app to convey concepts on consent and sexual health for youth in Rio and are seeking to expand it to cities such as São Paulo and Recife.[34]

Cepia is also producing research on women's responses to the Maria da Penha Law, the efficacy of public service efforts in holding perpetrators to account, and "access to justice" initiatives for women.[35] The organization further prides itself on its constant pursuit of state support for its efforts. Evidence of the success of this approach comes in the development of a public "women's police station," which was a direct result of Cepia's partnership with the state.[36]

B. Coletivo Feminista Sexualidade e Saúde ["Feminist Collective Sexuality and Health"]

Overview:
This São Paulo-based organization was originally established in 1981 as part of a growing movement for women's health and reproductive rights.[37] Today, Coletivo Feminista Coordinates a number of programs, including several that specifically address VAW in Brazil.

Programs:
Coletivo Feminista introduced the Campanha Brasileira do Laço Branco ("The White Ribbon Campaign") in Brazil, in partnership with the Health Collective and ECOS - Communication and Sexuality.[38] This collaboration is part of the annual *16 Days of Activism to End Violence against Women* campaign in Brazil, which was initiated in 2003.[39] As part of the White Ribbon Campaign, men wear white ties as a form of commitment to fight against VAW. The campaign is the non-traditional in the sense that it puts men at the forefront to speak on VAW.[40] The campaign is also implemented in coordination with the public sector, NGOs, and UN bodies such as UN Women. [41]

> **"We believe the only way that [perpetrators] are actually going to change their actions is by introducing them to a different way of defining masculinity."**

-Leandro Andrade, Founder of "Masculinities" Program at Coletivo Feminista [translation][42]

A unique facet of this organization is its holistic approach to VAW programming. For instance, the organization provides gynecological services on site[43] and has a range of programming focusing on women's health—specifically maternal healthcare[44] and midwives' capacity building.[45] It also has a program that seeks to educate men about "gender inequality."[46] Like Cepia,[47] one of its most outstanding programs is the result of its work with a government agency[48]—the Ministry of Justice.[49] Under this partnership, men who are accused of perpetrating VAW are given the option of undergoing a 16-meeting behavioral change program that is facilitated by male psychologists.[50] Participation in such programs accords the men the opportunity of a shorter sentence and has reportedly had positive effects on behavior, with many participants leaving ashamed of their prior actions and vowing change.[51]

The organization also seeks to address the public sector in this line of programming. It intends to "sensitize" relevant officials in order to motivate them to develop and implement policies on "re-educating men and women on gender relations."[52]

C. Centro de Promoção da Saúde (CEDAPS) ["Health Promotion Center"]

Overview:
CEDAPS primarily serves as a health promotion center in the south zone of Rio de Janeiro. Since 1993, the organization has revitalized community health actions, leading to government support via the Ministry of Health for further initiatives. Furthermore, the organization aspires to reconstruct the internal narrative and public understanding of VAW. One of their main objectives is to assist women in recognizing the many forms of VAW, whether it be emotional, sexual, or physical.

> **"There is a lack of international funding for gender-related programs in Brazil…Funding comes through specific periods of times and are not linked to the actual needs of the organization."**

-Katia Edmundo, Executive Director of CEDAPS [translation][53]

Programs:
Since 2005, CEDAPS has continued to promote joint action from local communities in order to monitor and evaluate areas where further assistance in health is needed.[54] The extension of nearly 121 associations and affiliated community groups has induced positive change and public involvement. Currently in cooperation with UN Women Brazil, CEDAPS has reached out to community leaders in 10 different favelas conducting research on perception of VAW. The majority of communities assisted are have very dense populations, are low-income, largely afro-Brazilian, and have low access to public services, such as health and education. The Brazilian Institute of Geography and Statistics (IBGE) provides the organization with demographic data, however, it has been noted that anthropological data from favelas reflecting quality of life and locations of instances of VAW are needed.[55] The involvement of local stakeholders is crucial in

effective programing. Participatory methods are used at every stage and therefore stakeholders are placed at the center of the research.

In terms of financial support, the majority of funds are from donors who contribute to specific programs (UNICEF, UN Women, governments, and foundations). Gender-specific programs receive insufficient funding unless related to AIDS activities.

D. Artigo 19 ["Article 19"]

Overview:
Article 19 is an international CSO with a chapter located in São Paulo, Brazil. It is dedicated to protecting freedom of expression, in collaboration with the court of law, global and regional organizations, and civil society.[56] Much of the organization's work implicates VAW in Brazil.

Programs:
In March 2018, Article 19 published a report on femicide entitled "Dados Sobre Femicidio No Brasil" ("Data about Femicide in Brazil").[58] Their analysis focused on data measuring femicide and relevant laws enacted after the Maria da Penha Law. Research findings demonstrated that it is imperative to have adequate data in order to establish effective policies. They further found that lack of communication between public attorneys and hospitals made it difficult to measure the severity of VAW cases and their frequency. When requesting data from official organizations, Article 19 often found it difficult to receive responses.

With regards to funding, Article 19 has secured major regional and international donors such as Sida and the Ford Foundation. Overall, it has been most difficult to gather further financial support from the local government, particularly in the wake of the financial/political crisis in Brazil.[59]

> **"We always say that the lack of answers is already an answer."**
>
> -Barbara Paes, Article 19[57]

2. Government Initiatives

A. Secretaria de Políticas para as Mulheres da Presidência da República (SNPM)
["National Secretariat of Policies for Women"]

Overview:
The National Secretariat of Policies for Women is a government agency that was launched in 2003 under Brazil's Secretary of Government of the President of the Republic. The agency seeks to promote gender equality and combat gender-based discrimination by advancing progressive policies in this field, as well as by sponsoring programs and actions to support women's rights.[60] The agency also aims to provide data for academia, policymakers and the general public.

Programs:

 The National Secretariat coordinates several interventions and policy efforts to address VAW. One notable example is Ligue 180 (or "Line 180"), which is a nation-wide hotline and service center that offers a "direct guidance channel over public rights and services"[62] for women. In particular, it is a mechanism for women to report VAW, especially domestic and family violence. The call center also informs women about their rights and current legislation pertaining to VAW, and directs them to services and resources as necessary.[63]

With substantial data, the National Secretariat is reportedly able to identify the most urgent needs to be addressed through policy. The data acquired so far reflects race, age, marital status, and household size.[64] However, the agency has found it difficult to unify complex components and metrics in data collection, since one unified system of data collection across sectors affected by VAW has yet to be implemented.[65]

"It's very hard to harmonize the police, justice, and health system's data collection on violence against women. It is important to develop research on the journey of victims across those different systems."

-Pedro de Pina Viana, National Secretariat of Policies for Women[61]

V. Analysis

This analysis consolidates key research findings and provides a holistic insight into VAW interventions by detailing the following:

- ➤ Project Duration
- ➤ Geographic Location
- ➤ Donors & Funding
- ➤ Target Populations

- ➤ Impacts
- ➤ State Partnerships
- ➤ Gaps in Data
- ➤ Best Practices

A. Project Duration

Many projects reviewed were short-term due to a lack of sustained funding. These projects were often narrowly focused on specific issues and given a set time frame, as opposed to having the capacity to continually address and monitor a societal problem. For example, CEDAPS launched an app which facilitated access to services, but the app existed only for the duration of available funds. Another example is the loss of funding after a four-year research initiative on favelas, instituted by CEDAPS.[66] The termination of funding leads to an abrupt end to projects assisting local communities.[67]

B. Geographic Location

Most of the projects reviewed were based in urban centers in São Paulo, Brasília, and Rio de Janeiro. (This was a bias of the study, as the team focused on urban areas.) At the same time,

many of the CSOs interviewed, such as Article 19 and Minas Programam, seek to target rural communities in their work.[68]

Geography plays an important role in the politics of VAW funding and programming. For example, Article 19 employees discussed how even though data shows many of the violent acts against women occur in the rural and peripheral regions of Brazil, cities have built facilities to assist women without consulting the data. Led by political agendas, facilities were built in the central areas instead of the high-risk zones, such as the east and south of São Paulo.[69]

C. Funding

As demonstrated in Table 1.2 below, our research has indicated that CSOs are predominantly dependent on multilaterals and international aid agencies for the provision of funding.

Table 1.2: Funding Overview for Interviewed Organizations

Funding Overview	
Organization	**Funding**
Cepia	Ford Foundation, Oak Foundation, IPPF, UN Women, EMpower, UNFPA
CEDAPS	UNICEF, UN Women, Brazilian Government, other foundations
Article 19 / Minas Programam	Sida, Ford Foundation / FRIDA
National Secretariat of Policies for Women	Brazilian Ministry of Justice

Source: Field Visits in Brazil

Prior to the current political administration, there were national pacts that ensured funding for VAW organizations in Brazil. This funding flowed from the national budget. These pacts expired in 2015, and in the wake of the political crisis, they became frozen and were not reinstated. UN Women Brazil has hope that the funding may be recovered in the future.[70]

In addition, the Brazilian government's budget runs on a four-year cycle, which is an advantageous system for many CSOs. Since elections occur every two years, government-funded projects must be continued for the full four years with the same level of funding, regardless of the preferences of the new elected official.[71]

Virtually all organizations interviewed have identified lack of funding and lack of consistent funding as a primary challenge. For instance, for Coletivo Feminista, a lack of sufficient funding has resulted in staff needing to work multiple jobs in order to make ends meet. This has restricted the organization's ability to allot valuable time and resources towards programs.[72]

D. Target Populations

Organizations such as Cepia[73] and Coletivo Feminista[74] are working for and with women and girls, feminist leaders, the judiciary and the youth.[75] In addition, Minas Programam, which is an organization founded by Article 19 affiliates, targets its programming and outreach towards young girls from marginalized communities and rural areas.[76] The National Secretariat of Policies additionally targets academia and policymakers.[77]

Table 1.3: Overview of Interviewed Organizations' Target Populations

Target Populations Overview	
Organization	**Target Populations**
Cepia	Judiciary, leaders from feminist movements, public sector, youth
Coletivo Feminista	Women in need of healthcare/support, men who have been convicted of VAW
CEDAPS	Mostly low-income women Afro-Brazilian women, women with limited access to public services such as healthcare and education
Article 19 / Minas Programam	Brazilian government / Young girls of color from the peripheral areas of São Paulo
National Secretariat of Policies for Women	Academia, policymakers, the general public

E. Impacts

In general, our primary research has indicated that many CSOs working on VAW in Brazil have extremely limited capacity to measure their impacts due to lack of funding. For instance, organizations such as CEDAPS do not have the capacity to finance monitoring and evaluations activities, and so they must rely on informal feedback mechanisms.[78]

In addition, programs such as the men's groups at Coletivo Feminista claim they do not measure impacts due to a lack of funding and technical expertise.[79] Furthermore, they state that that even with funding, their impact would be difficult to measure since their work addresses attitudes and ambiguous aspects of human behavior.[80]

F. State Partnerships

UN Women indicated,[81] and our primary research has confirmed that the change in the administration and downgrading of the National Secretariat negatively affected the work of major CSOs, such as Cepia[82] and Coletivo Feminista,[83] which recognize the importance of state partnerships in achieving programmatic goals.[84] Specifically, relationships with the government

have been impacted. This is worrying, as in the past, such collaborations have resulted in the development of important institutions such as "women's police stations."[85] Another CSO, Article 19, claims that that public agencies are not supportive of their causes, citing, for instance, that the government is reluctant to prioritize data-collection on VAW due to high costs.[86]

G. Gaps in Data

Many of the organizations interviewed discussed **gaps in data** being a significant obstacle to their work. For example, there is insufficient data to capture the VAW that occurs in most poor and rural areas, including favelas, the Amazon, and other marginalized communities.[87] There is also an issue with a lack of integration of data collected by government agencies. On top of this, some organizations have collected substantial information on VAW but do not have the resources to file and share such information in an accessible manner publicly.[88] These issues relating to data will be discussed in greater depth in *Section 2*.

H. Best Practices

Figure 1.2 Overview of Emerging Themes from Programs Analyzed
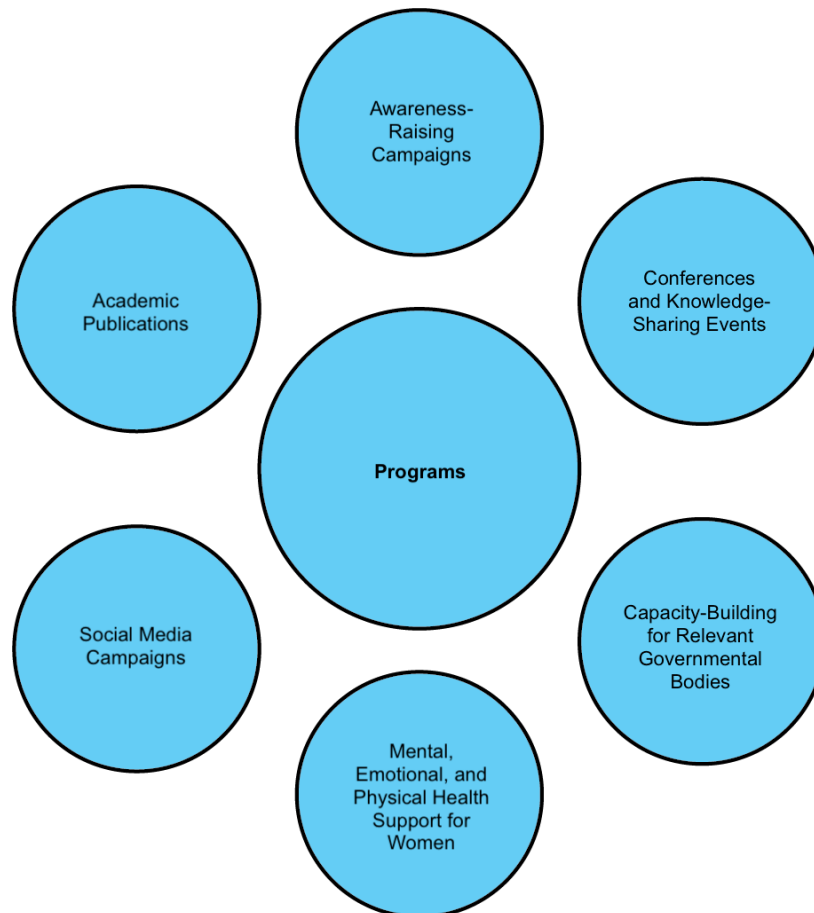
These themes are extracted from the analysis presented in the organizational overview.

Highlights of Best Practices:

1. Carolina Ferracini from UN Women Brazil explains that, "We do not discuss gender without discussing race and class."[90] This was a common sentiment articulated by nearly every CSO that we met with in Brazil. Because of this, it is clear that focusing on marginalized communities (i.e. the periphery and favelas, communities of color, indigenous communities, etc.) and integrating an intersectional approach to VAW programming is crucial.

2. Many organizations find it beneficial to establish partnerships with other agencies that share common goals and values.

3. Involving men in uprooting VAW is unconventional but impactful according to agencies such as Coletivo Feminista, since such programs address the root causes of violence (i.e. unhealthy concepts of "masculinity").[91]

4. Organizations such as CEDAPS discussed the need to involve local stakeholders in programming and to utilize participatory methodology in research. For example, when CEDAPS is conducting research on VAW in a particular community, they make sure members of that community are involved with every level of the research process.[92]

> **"We do not discuss gender without discussing race and class."**
>
> -Carolina Ferracini, UN Women Brazil[89]

VI. Recommendations

Recommendations for UN Women:

- There is a need to support the collection of **more comprehensive data** on the prevalence of VAW in Brazil while simultaneously collecting data on societal attitudes.[93] This is due to the problem of gaps in data on prevalence of VAW in Brazil that many organizations have highlighted. *Section 2* will address this issue in greater depth.
- An **intersectional analysis** and approach is crucial when addressing the problem of VAW. In Brazil, particular attention needs to be paid to more vulnerable and marginalized communities of women, such as women living in the periphery, favelas, the Amazon, or rural areas, as well as women who are low income, indigenous women and women of color, trans and LGBTQ-identified women, and incarcerated women.[94]
- When funding and supporting VAW programs, it is beneficial to take a comprehensive and holistic approach that seeks to **address root causes of violence**, in addition to supporting the safety of victims. Such an approach can include the promotion of **educational and preventative programming**.

Recommendations for CSOs:
- **Use of technology** (such as the use of apps to convey information on sexual health, which organizations such as Cepia have implemented) should be considered for topics such as women's rights, in order to ensure implementation of the law.[95]

- While tensions with the state seem to be simmering, experiences of certain CSOs reveal that VAW objectives can be most effectively met via proactive pursuit of **partnerships** with the federal government and should be considered by other CSOs.[96]
- **Participatory methodology** is a highly recommended strategy for organizations conducting research on VAW.[97] It is recommended that stakeholders and communities are involved with the research process when their communities are being researched.
- Agencies require assistance in developing their capacities to successfully **fundraise locally** for their interventions, so as to not be primarily reliant upon external and international sources of funding.[98]
- There is a need to tailor interventions to the needs of marginalized communities, such as favelas, peripheral and rural areas, and other low-income regions. This is because many VAW interventions—particularly state interventions—focus primarily on urban areas.[99]
- For organizations that wish to engage in preventive and/or educational programming pertaining to VAW, it is important to **address the root cause** of the problem by addressing men who perpetrate VAW.[100]

Recommendations for Brazilian Government:
- **Improve coordination** among stakeholders such as the public health division and public safety offices. This coordination should include the creation of a centralized system for accumulating data on VAW in Brazil.
- **Expand funding** directed towards programs that address VAW in Brazil. Funds should ensure sustainable programs and not just short-term projects.

Section 2: Exploring the Use of Twitter Data in the Context of VAW in Brazil

I. Overview

This report examines the potential for social media and Twitter to help fill the gaps in VAW data in Brazil. As mentioned in *Section 1: Violence Against Women in Brazil*, there is currently insufficient data to capture the extent of the problem of VAW in Brazil. One way to complement the available data sources is to utilize social media data. **Social media data can potentially be transformational with regard to filling these gaps**, **thanks to its various platforms, its immense size, and its diversity.**

Obtaining accurate data on VAW is crucial for informing policy and developing programs to effectively address the problem of VAW in Brazil. This data is also essential for keeping the public informed and exposing VAW. Moreover, this exposure is critical since it helps women to recognize situations of violence, to stay informed about their rights, and to understand the services they can access to protect themselves.[101] This report explores the potential of Twitter data to give insights that can help to inform such policies and programs.

Specifically, this report examines the potential for social media and Twitter data to increase and improve the available information regarding prevalence and societal attitudes towards VAW in Brazil. There is certainly potential for this. While Internet, Facebook, and Twitter penetration are relatively low in Brazil (42%, 32%, and 9%, respectively),[102] Twitter has become a popular tool for social movements in the country, 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.[103]

Data experts interviewed for this report have shared many of their insights regarding best practices for utilizing Twitter for social good and gender analyses. They have also shared challenges and opportunities associated with collecting data through social media. One key insight reiterated by many experts is that **Twitter data on VAW works best as a complement for data gathered by traditional survey methods**, rather than as a substitute.[104] Specifically, Twitter can help measure *intent*, *sentiment*, and *emotions* both on the individual and the societal level, and thus is more useful for measuring societal attitudes than for measuring prevalence of VAW.[105] When presenting this data to policymakers, experts recommend adapting to specific audiences, with visual aids that are easily accessible and highlight key problems.

II. Using Traditional Methods to Collect VAW Data in Brazil: What are the Gaps?

Most of the available data on VAW in Brazil today comes from official population surveys and administrative data.[106] The country's primary source of data on femicide is from the Mortality Information System, within the Ministry of Health's Secretariat of Health Surveillance.[107] In addition, starting this year, Brazil is implementing a household survey with a section on VAW.[108]

There are several concerns regarding both the quality of data and gaps in data collection that arise when relying exclusively upon these data collection methods. This section discusses these concerns and challenges. Overall, it is clear that while administrative data can provide important clues on the societal response to reported cases of VAW and on services available for victims, it does not provide an accurate estimate of the prevalence of VAW within a population.[109]

1. Quality of Data

Given that VAW most commonly occurs in the home or in the private sphere, it is notoriously difficult to measure.[110] As such, data collection is highly dependent on victim reporting. Moreover, despite the recent increase in the number of notifications, the number of reports still does not correspond to the actual incidence of cases.[111] Respondents may be reluctant to report instances of VAW because of taboos, fear, or feelings of guilt and shame.[112] In particular, women may not be willing to share their experience in an interview where the interviewer is a man, or where they are unsure about the privacy and confidentiality of their answers.[113] Furthermore, due to the sensitive nature of VAW, the training of the interviewer will also influence the respondent's comfort and level of disclosure.[114] **The data collected in surveys therefore cannot realistically be relied upon as accurate or fully representative.**

In addition, large-scale surveys take time, are expensive, and are difficult to use to monitor policy implementations. Many surveys are designed to address a large array of crime- or health-related issues and only collect limited data, which cannot capture the complexity of incidents of VAW.[115] For example, surveys often ask direct questions about specific acts of violence such as rape or sexual assault, instead of asking more general questions about respondents' experiences. In such surveys, respondents are not encouraged to share all relevant information about the violence that ought to be collected.[116]

Another issue concerns the delimitation of VAW and the **absence of standard measures** for non-physical violence, such as financial and emotional abuse.[117] For example, humiliation and forced isolation may not be recognized as forms of VAW, in spite of the negative repercussions such forms of abuse have on women's health and safety.[118] Many surveys fail to account for such psychological violence as a component of VAW, which is a notable gap.[119] Similarly, few surveys include questions on non-partner sexual violence.[120] For these reasons, cases of VAW are often underrepresented in survey collection methods. The data available clearly does not reflect the full extent and nature of the problem.[121]

Figure 2.1 Prevalence of VAW: Data vs. Reality[122]
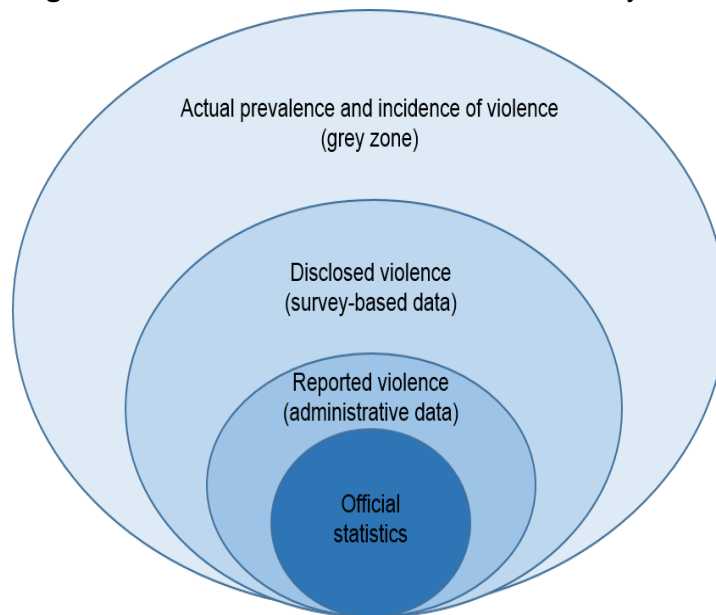
In Brazil, there is an additional problem that arises when government agencies do collect data, but do not collaborate or share the data with other government agencies.[123] Currently, there is **no unified or centralized system** collecting data across all sectors affected by VAW in Brazil.[124] For example, if a woman has suffered violence and goes first to the police and then to a hospital or public attorney, those institutions are not connected and do not share any data or information with one another.[125] This leads to a problem of disjointed data and duplication issues.[126] Since the data on VAW that *is* collected is not categorized uniformly among agencies, much of the nuanced information regarding incidents of VAW is lost—particularly demographic information of victims and geographic data.

Relatedly, the data that is collected by the Ministry of Health is considered to be much more comprehensive and reliable than the data collected from the justice and security systems,[127] and yet, the National Secretariat for Policies on Women only utilizes data collected through the justice system.[128] At the same time, the data that is collected from the Ministry of Health takes longer to be collected and verified—up to two years.[129]

2. Gaps in Data

There are also issues with gaps in data with the current data collection methods. One issue stems from the **lack of representation of the sample data points**, as compared to the population. Most surveys that collect data on VAW target women between 15 or 18 to 49 years old, which excludes girls below 15 and women above 49, who certainly experience VAW as well.[130] More data points are needed to interpret the incidence of VAW for these age groups.

Similarly, surveys tend to focus mostly on urban areas, with an increased **risk of selection bias** against rural areas.[131] In Brazil, there is insufficient data to capture the VAW that occurs in poor

and rural areas. This includes areas such as the periphery or favelas, the Amazon, and other marginalized communities outside of city centers.[132] In addition, current databases on VAW in Brazil fail to capture nuances of race, transgender identity, and poverty status.[133] Thus, there is a need for more data on the prevalence of VAW that is more representative of the Brazilian population. Only one comprehensive study has been done on prevalence of VAW in the Northeast of Brazil,[134] and this data still lacks important information, such as the specific locations of the acts of violence.[135]

Finally, measuring attitudes towards VAW is crucial for gauging the effectiveness of VAW programs,[136] but the current priority of the government is to measure the prevalence of the acts of violence themselves.[137] A stronger focus on measuring societal attitudes is also needed.

III. Social Media Data for Social Good (Particularly Twitter)

As discussed in the previous section, there are many gaps when it comes to collecting complete data on VAW in Brazil. It is important to understand what methods can be taken to fill these gaps. One of the potential solutions is to use big data sources – particularly social media. **Social media data can potentially be transformational with regard to filling these gaps, thanks to its various platforms, its immense size, and its diversity.**

This section first explores how social media data can be used for social good in a broad sense, before narrowing in on the unique potential of Twitter. It also discusses the need for social media data to be used in conjunction with other data collection methods and reforms. Lastly, this section discusses the specifics of how Twitter data can be used to address VAW in Brazil.

1. Uses of Social Media Data for Social Good

Largely because of social media, humanity is more interconnected than ever before. Social media networks allow individuals to "actively observe, report, collect, analyze, and disseminate information" from all over the world.[138] For these reasons, social media platforms have created arguably the largest, richest, and most dynamic evidence base in the history of humanity.[139]

However, the rise of big data and social media does not signify that traditional data sources (i.e., the survey sources described in the previous section) will lose importance. On the contrary, it is imperative that these new approaches be used **in conjunction with** traditional approaches. Analyzing only social media data without any validation samples or counterfactuals leads to difficulties and bias in identifying causal relationships.[140]

The problem of gaps in VAW data in international datasets requires a **holistic solution**, as it is not solely a technical problem that can be solved with more robust collection methods.[141] This is because the larger problem of VAW, which stems from sexism, actually informs the quality of data that is collected. For example, the low prioritization of VAW by the state results in less funding for VAW programs and studies that seek to collect accurate data on VAW. For this

reason, social media data cannot work on its own, and instead needs to "catalyze the creation of new partnerships to advocate for scientific, policy, and political reforms that include women and girls in all spheres of social and economic life."[142]

With this need for a holistic approach in mind, it is possible to observe how social media data can be used to measure social impact in a general sense. As indicated by the Inter-American Development Bank, "social media analysis can provide insights surrounding a theme of interest, such as details on the importance of certain themes by country and...key events or potential new partners who are influencing the conversation about gender on social media."[143] Studies show that there are currently five main methods for using social media data for social good:[144]

- **Situation Awareness and Response:** Social media data currently helps CSOs, humanitarian organizations and public sector agencies better understand demographic trends, public sentiment, and the geographic distribution of various phenomena. For example, social media can showcase the use of data for population density assessments and disaster maps, as can be seen with Facebook Disaster Maps with the Safety Check feature following the 2015 earthquake in Nepal.[145]

- **Knowledge Creation and Transfer:** Social media datasets are currently being combined and analyzed to create new knowledge, thereby ensuring that more useful information becomes available for more people. For example, data on job markets have historically been opaque. Even though data on the types of jobs available, skills desired, and the diversity of sectors does exist, these datasets often do not intersect. In 2014, LinkedIn sought to address this challenge by increasing access and use of such economic data with their Economic Graph Challenge.[146]

- **Public Service Design and Delivery:** Social media can increase access to previously inaccessible datasets, which can aid the public sector in their design and implementation of social policies. For example, a Zika response in Brazil[147] demonstrated that social media can act as a vehicle for efficiently delivering timely and relevant public service announcements to a wide audience that may not utilize traditional media.

- **Prediction and Forecasting:** The ability to predict and forecast social concerns has been strengthened by access to social media datasets. This has assisted the institutions that are responsible for forecasting to be more proactive in mitigating issues and averting crises. For example, a 2011 health research paper by Johns Hopkins researchers showed that there was a 29 percent increase in accuracy when combining Twitter data with existing CDC flu data. This allowed for the CDC to forecast further interventions with more complete data.[148]

- **Impact Assessment and Evaluation:** Social media data can help institutions monitor and evaluate the real-world impacts of policies. For example, in 2013, the Government of El Salvador was able to use Twitter data to analyze public sentiment on a fuel subsidy policy reform. This confirmed the potential of social media data to complement household surveys.[149]

2. Why Twitter Data

Social media data can be used in many ways to address social issues, but not all platforms are alike. Twitter, for example, has certain characteristics that can make it a uniquely insightful platform. Through a tweet, a person can express (1) *intent,* (2) *sentiment*, and (3) *emotion*.[150]

1) The *intent* of a tweet can inform us whether the Twitter user—also known as a 'Tweeter'—is expressing a transactional intent, seeking information, or sharing information.[151]
2) A Tweeter's *sentiment* can highlight attitudes and opinions expressed within an online mention. Sentiment analysis is perhaps the most valuable and most commonly used tool for interpreting Twitter data.[152]
3) A Tweeter's *emotion* is often embedded implicitly within the tweet. For that reason, an emotional analysis or identification of emotions tends to be a much less precise process than an analysis of intent or sentiment. Yet, an emotional analysis of tweets, when done correctly, can give great insight—particularly when measured in response to events.[153]

In addition, Twitter data expressing *intent*, *sentiment*, and *emotion* can be analyzed on both the individual and the societal level. When the tweets of individuals begin to engage with larger populations, they become a "source of group level actions...leading to the evolution of human dynamics in the social network."[154] Because of this, Twitter can be particularly useful for measuring *intent*, *sentiment* and *emotion* at both individual and societal levels.

3. Current Use of Twitter Data to Understand VAW

Currently, in the fields of VAW and women's rights, social media data is primarily being utilized in the context of prevention efforts and information-sharing campaigns.[155] As seen in the working paper *Using Twitter data as a complement to surveys on violence against women in Brazil,*[156] over the past eight years, there have been over ten Twitter campaigns in four countries (the United States, Pakistan, Argentina and India) to address issues of gender discrimination and gender-based violence. The most famous example of this was the *#MeToo* movement, which gained international recognition and various contextual and colloquial spin-offs. In addition to this, a study conducted in India, China, and Vietnam explored the ways that social media can be used in communications campaigns aimed at preventing VAW.[157]

Furthermore, some studies have analyzed how social media can be used to assess attitudes and societal perceptions related to gender issues. For example, *Big Data and the Well-Being of Women and Girls Applications on the Social Scientific Frontier*[158] uses many forms of big data— from geospatial information to records of internet activity and social media—to help capture detailed information on the lives of women and girls and to address the widespread lack of disaggregated data on gender. The report finds that social media data "can help monitor public perceptions and measure global development priorities and impact. It can also provide insights into the differences and inequalities between people of different income, sex, age, race, ethnicity, migratory status, disability status, geographic location, and other characteristics."[159]

Finally, several studies seek to use social media to gauge attitudes specifically on VAW, but this literature is more scarce. *Gender-Based Violence in 140 Characters or Fewer: A #BigData Case Study of Twitter*[160] is one example that focuses specifically on gender-based violence (GBV) and Twitter. This study finds that computational social science (i.e. Twitter) can inform GBV policy design and anti-GBV campaigns. Ultimately, it concludes that big social media data can complement more controlled but slower survey-based data collection and analysis methods.

4. Challenges and Opportunities for Twitter Data in VAW

Twitter can be a useful tool in supplementing the lack of disaggregated data on gender and VAW. In particular, **Twitter data is able to confirm certain trends**[161] by giving us a deeper understanding on how specific populations perceive gender and VAW in a traditionally male-dominated society, such as Brazil.[162] Also, the collection of Twitter data can be done in real time, thereby mitigating the cumbersome processes of traditional data collection methods.[163] Lastly, Twitter data, in comparison with other social media platforms, is one of the easiest types of social media data to acquire.[164]

Still, there are challenges to consider in order to maximize effective utility of this data. Two significant challenges and opportunities to overcome them are listed in **Table 2.1** below.

Table 2.1: Challenges and Opportunities when Utilizing Twitter Data to Measure Attitudes Towards VAW

| Challenges and Opportunities when Utilizing Twitter Data to Measure VAW ||
Challenges	**Opportunities**
1. <u>Access & Representation</u>: • Not everyone in Brazil has Internet access, and not everyone with Internet access uses Twitter. Twitter will never be statistically representative of an entire population; rather, it can be thought of as "a rich description of the dynamics of an amorphous virtual community."[165]	• **Awareness of Demographics and Biases:** → By fully understanding who the users are (i.e. collecting data on race, age, gender, socio-economic status, geographic location, etc.)—and by deconstructing these biases within the model—Twitter data *can* confirm certain trends regarding societal attitudes on VAW. If it is understood that Twitter captures only a certain demographic, then the data will be representative for this population.[166] • **Localized Validation:** → Localized validation refers to the need for the data to have a representative validation sample from the population to confirm whether the analysis is valid. Particularly in a large country such as Brazil, the degree of potential bias might vary significantly across regions. Therefore, a robust model must ensure that validation samples are regionally representative.
2. <u>Fake Accounts</u>: • A major hurdle in social media data collection today is the influx of fake accounts in social media. The increase in such "bots," or software applications that runs automated tasks pretending to be humans, has led to an uptick in bias and a greater difficulty in disaggregating meaning from social media data. Regardless of the identification of users or the validation of the data, fake accounts pose a serious threat to the credibility of social media data.[167]	• **Incorporate Methods to Decipher Fake Accounts:** → A robust Twitter analytical model—particularly when analyzing VAW—needs to incorporate methods to decipher fake accounts. Otherwise, the subsequent analyses may be compromised.

It is by acknowledging and leveraging limitations that analyzing Twitter data can be most useful. Thus, with these provisions in mind, there is a discernible value-added to using Twitter data as a to complement traditional data collection methods when addressing VAW.

IV. Best Practices for Presenting Data

Bringing such research to government agencies and CSOs will enable and inform evidence-based policy interventions. Therefore, it is imperative that the findings of UN Women's future analysis of Twitter data from Brazil (subsequently referred to as the **Twitter Data Analysis**) be presented effectively to the stakeholders in a manner that is both accessible and informative. Successful data presentation will facilitate understanding and draw the necessary connections that policymakers should note when crafting interventions.

1. Audience Analysis

A comprehensive understanding of the target audience is essential for effective data presentation. Regardless of background, the audience will have certain expectations for the presentation. It must (1) establish the credibility of the researchers and the findings, (2) provide rationale for data interpretation, and (3) make recommendations for how to act given this new information.[168] Moreover, researchers should examine the different factors that influence how an audience processes information, particularly quantitative data. Such factors include:

- Cognitive processing limits (i.e. individuals' limited capacity to process large amounts of information at one time)[169]
- Tendency to read until satisfied and then stop reading[170]
- Expectations of experts to have experience and credentials to provide definitive, prescriptive information[171]
- Tendency to scan information and draw conclusions[172]
- Use of contextual cues to better process information [173]
- Resistance to persuasion [174]
- Role of emotion[175]

Researchers must consider each of these factors when presenting their findings to their audiences, thinking strategically about how to interest, persuade, and inform their viewers.

Analysis of Stakeholders in Brazil

A preliminary analysis of Brazilian stakeholders working in or affected by VAW reveals potential strategies for data presentation. This analysis focuses on CSOs, government agencies, and the Brazilian public. Findings are outlined below.

- **Civil Society Organizations (CSOs):** CSOs are concerned with creating or improving programming to combat VAW. The findings of the Twitter Data Analysis are useful to them because the data can inform and shape their interventions. Consequently, data should be presented to these groups with useful contextual information such as geographic location, timing relative to public events or incidents of violence, and how the trends have evolved over time. Some Brazilian CSOs, such as Coletivo Feminista, are

weary of receiving data that draws unconfirmed conclusions, such as an implied causal correlation between certain demographic or geographic characteristics and VAW.[176] Data presenters should be careful to avoid drawing unverified conclusions when sharing the findings of the Twitter Data Analysis and instead share data in the context of changing trends and relevant events.

- **Government Agencies:** Government agencies such as the National Secretariat for Women's Policies and the Brazilian Institute of Geography and Statistics will be willing recipients of the findings of UN Women's Twitter Data Analysis and will likely view the report as a credible information source.[177] Government agencies would find locational data most compelling as it could help them identify and validate where they understand the problem to be occurring.[178] Additionally, as the National Secretariat acknowledged, existing data does not capture the complete demographic profiles of victims of VAW; thus, when presenting findings to government agencies, it is imperative to disaggregate the data through relevant identifiers, including sex, age, race and ethnicity, socioeconomic status, and geographic location.
- **Brazilian Public:** When targeting the general Brazilian public, it is important to consider the communication channels with wide distribution and recognized legitimacy. Social Good Brasil identified television as the most popular communication channel in the country.[179] It would therefore be prudent to consider presenting UN Women's findings via this channel. Additionally, as suggested by Data2x, data visualization must be "intuitive and easily graspable;" thus, one should utilize memorable and informative visuals to develop these television campaigns.[180] The findings will be more convincing to the Brazilian public if presented through familiar context and pre-existing frames.

2. Twitter Data Visualization

It is highly recommended that data be presented through **visual aids**—specifically charts or graphs—rather than data tables. A 2014 study, "The Persuasive Power of Data Visualization," concludes that data presented in charts is more persuasive than simple tables.[181] Additionally, in order to create memorable data visualization, experts suggest having **(1) a clear center of interest, (2) clear titles and supporting text, and (3) related and recognizable images.[182]**

The Data Visualization and Human Rights project is a useful resource for researchers seeking to translate large data findings into visual aids to promote human rights advocacy. One insight it offers is that bar graphs are preferable to scatter plots. It also suggests that it is essential to maintain simplicity in all data visualization to promote better understanding by the viewer.[183]

Moreover, data should be packaged so that key problems are easily identifiable. Cyber security expert Gregory Falco suggests presenting findings to policymakers through **topic clusters**, to give an understanding of the extent of the problem, and through **heat mapping**, to identify where the problem is occurring.[184] Topic clusters can be a provocative visual but must be labeled clearly, provide additional explanations to facilitate interpretation, and acknowledge any assumptions. **Figure 2.2** provides an example of a topic cluster, which demonstrates how aggregates of tweets can be presented visually to showcase different themes.

Figure 2.2 A sample cluster analysis from IDB's
"Insights from Social Media on Gender in Latin America" report[185]
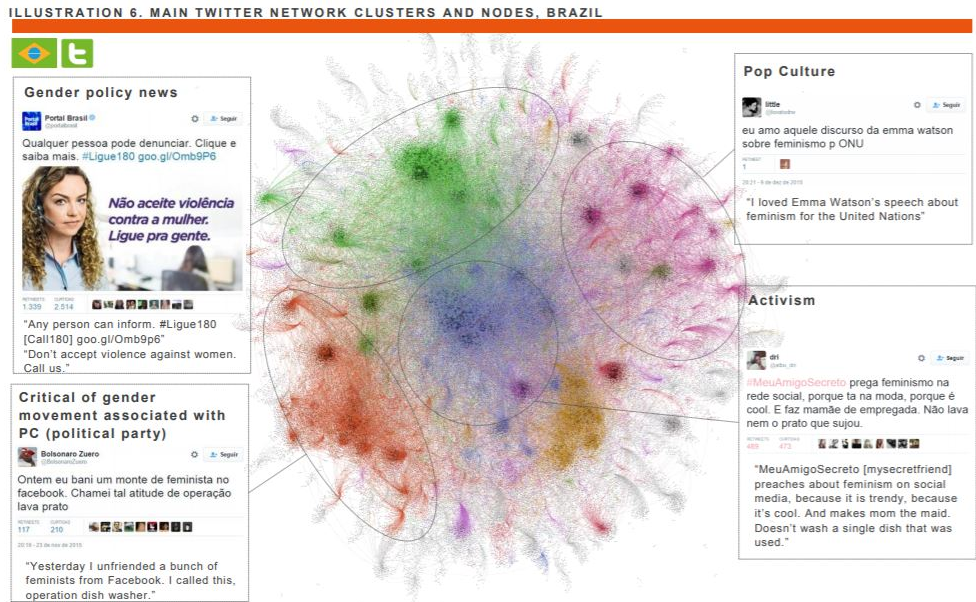
Heat maps can be generated through the locational data associated with tweets when users enable GPS. While the data won't capture all tweets—as not every user has the GPS feature enabled—heat mapping can be used to validate findings from traditional data collection. **Figure 2.3** provides an example of a heat map depicting homicide rates in different regions of Brazil.

Figure 2.3 A heat map of homicide rates in Brazil's municipalities[186]
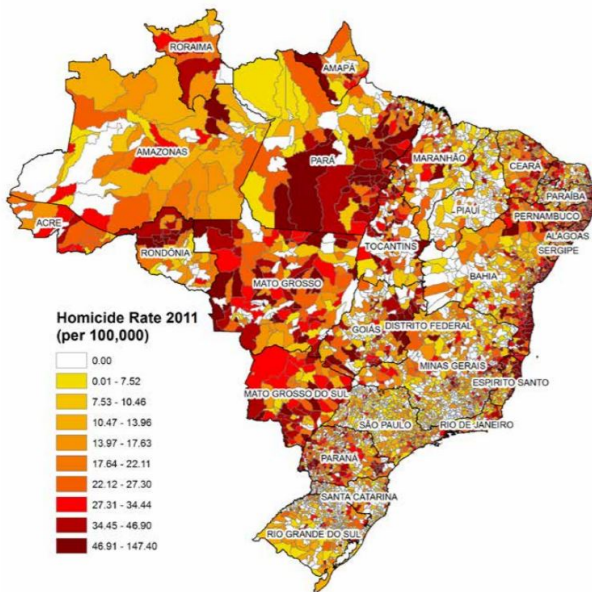
Another informative method of presenting findings of the Twitter Data Analysis would be a time series that indicates evolving trends in online discussions of VAW.[187]

Most importantly, according to Falco, when utilizing such methods, data analysts must contextualize findings so that the audience can grasp the big picture.[188] Metaphors and narratives can supplement data visualization by making the research findings more relatable and proximate to the audience.[189] **The most effective data presentation thus consists of a combination of data visualization and testimonials.[190]** Storytelling is especially compelling, so data presenters should work to build a narrative with the data so that the audience can relate to the findings and be galvanized to act.

V. Conclusion and Next Steps

The existing data on VAW in Brazil is incomplete. Most data is collected through official population surveys which are expensive, time-consuming, and cannot measure the impact of policy interventions. These surveys also fail to capture comprehensive data on different types of VAW, such as emotional abuse or non-partner sexual violence. Furthermore, there is no centralized system for collecting and sharing data on VAW among government agencies, which exacerbates the problem of VAW being underrepresented in the data in Brazil.

Social media data—specifically, Twitter data—offers opportunities to fill these data gaps. Social media data can be used for (1) Situation Awareness and Response, (2) Knowledge Creation and Transfer, (3) Public Service Design and Delivery, (4) Prediction and Forecasting, and (5) Impact Assessment and Evaluation. Moreover, Twitter can provide insight into an individual's *intent*, *sentiment*, and *emotions* regarding an issue. In the future, Twitter data can be enhanced to provide locational data utilizing GPS coordinates from tweets, and to capture more nuanced demographic data such as race and ethnicity, transgender identity, and socioeconomic status. These enhancements would strengthen UN Women's social media data framework and enable more effective interventions to address VAW in Brazil.

In addition, in order to maximize the utility of Twitter data, it is crucial to leverage knowledge of its limitations. To address challenges relating to access, representation, and fake accounts, the following steps can be taken:

- ❖ Research demographics and deconstruct biases within the model in order to confirm the population the data represents.
- ❖ Utilize localized validation to ensure validation samples are regionally representative.
- ❖ Develop and incorporate methods to decipher fake accounts.

Finally, it is essential to present the findings of the Twitter Data Analysis to stakeholders in a compelling and accessible manner. To do this, one must first conduct an audience analysis of the different target audiences to inform communications strategies. The most compelling messages will consist of a combination of data visualization and narrative story-telling.

Future research should be dedicated to enhancing the capacities of utilizing Twitter data to monitor the prevalence of and societal attitudes around VAW in Brazil. Furthermore, researchers should work with the Brazilian government and CSOs to build a centralized data collection system that is publicly accessible and can be used to inform policy interventions and grassroots programming. By augmenting information on VAW with Twitter data and strengthening the country's data infrastructure, Brazil can be more effective as it works to achieve SDG 5.2 and eliminate VAW throughout the country.

Annex A: Overview of Additional VAW Organizations in Brazil (Not Interviewed)

I. CSO Interventions / CSO and Multilateral Organization Supported Interventions

A. Agência Patrícia Galvão ("Patrícia Galvão Agency")

This agency was founded as an initiative of the Patrícia Galvão Institute[191] in 2009. The agency aims to broaden and deepen the discourse surrounding Brazilian women's rights in the media by enhancing media coverage and influencing editorial behavior. They accomplish this objective by producing and disseminating news, data, and multimedia content on women's rights in Brazil, and they focus on both traditional and social media. Moreover, one of the agency's six areas of focus is VAW. Their VAW program contributes substantially to the field by initiating and publishing news, reports, data and research, books, and other useful resources, such as the "Violence Against Women Dossier" and the "Femicide Dossier," discussed below.

The Violence Against Women Dossier ("Dossiê Violência contra as Mulheres") is an impressive digital dossier that compiles, systematizes, and makes publicly available official data, perception surveys, and other information and analyses specifically about the problem of VAW in Brazil.[192] This online tool is regularly updated and enables the public to access a comprehensive database including relevant research, data, organizations, as well as a bank of contacts, which includes biographies and contact information for hundreds of VAW experts across the country.[193] In fact, several of the individuals and organizations interviewed for this study were found through use of the Dossier. Moreover, the Dossier provides a special focus on domestic and sexual violence, and on the intersection of gender violence with racism and homophobia.

Another project launched by the agency is 2016 is known as the Femicide Dossier. This Dossier serves as a support tool for journalists, researchers, media, activists, and the public. Its purpose is to present a database of sources, research, chronology of rights, legislation, national guidelines, library of infographics and elements to understand the importance of criminalization of the crime of femicide.[194]

B. Casa da Mulher Trabalhadora (CAMTRA; "House of Women Workers")

Based in Rio de Janeiro, CAMTRA has a focus on preventing VAW with a community-based approach that specifically addresses the trafficking of young girls.[195] Its stakeholder groups include girls, the youth, and community leaders. Further, it focuses on advocacy through the production and dissemination of materials, through capacity-building for stakeholders, and through information "tents" in mainstream locations such as malls. The organization also practices political organization, including organizing marches on behalf of marginalized women.[196]

It is important to note that the organization has an explicit focus on marginalized women of color and young girls, and this line of programming is funded by UN Women.[197] Like Cepia, CAMTRA also invests in partnerships with similar organizations to meet its objectives. Additionally, in 2014, it ran a program to create awareness on sexual health and social rights at a high school.[198]

C. Instituto Avon ("Avon Foundation for Women: Justice Institute on Gender-Based Violence")

The Avon Foundation's Justice Institute on Gender-Based Violence is a training program that is run in collaboration with several other organizations. It falls under the umbrella of the "Voices Against Violence" initiative, which is comprised of stakeholders such as Vital Voices, the U.S. Department of State's Office of Democracy, Human Rights, and Labor, and the Avon Foundation. Through these public-private partnerships, the organization addresses all forms of gender-based violence. For victims who have endured extreme violence, a short-term financial support program has been created as part of this initiative.[199] Funding for the program is primarily derived by donations made from the U.S Department of State.

D. Universidade Livre Feminista ("Feminist Free University")

The Feminist Free University operates as a constant work-in-progress[200] in the form of an online platform that seeks the unadulterated peer-to-peer dissemination of "knowledge on feminism."[201] Launched in 2010[202] by the Feminist Center for Studies and Advice—which was further supported by several feminist organizations and movements[203]—the organization today has three sets of interventions.[204] The first focuses on the use of the creative arts to convey feminist messages.[205] The second focuses on the provision of "online courses" that deliver "feminist education"[206] through the use of free software tools.[207] The final intervention is premised on the provision of "lectures" on contemporary "political and...feminist struggles," where listeners can engage in real time with the topic through chat features.[208] Three thousand individuals are subscribed to the online platform and it claims up to five thousand hits on its "news portal."[209] (It is unclear if this is an aggregate number of hits or yearly/monthly/daily figure). While the organization's operations are promising, it seems to be suffering from resource constraints that limit the outreach of its activities.[210]

II. Government Initiatives

A. Procuradoria Especial da Mulher ("Women's Special Prosecutor's Office" or "Women's Procuratorate")

The Women's Procuratorate is an institutional body that is run through the Brazil Senate and was founded in 2015. Their mission is to defend and promote gender/racial equality, to improve representation of women, and to address all forms of discrimination and VAW and girls by creating mechanisms of empowerment in situations of injustice.[211]

They have undertaken a vast array of projects and legislative reforms to address VAW, including reforms that expand upon the Maria da Penha Law to enhance victims' rights, and other laws that increase accountability for perpetrators. For example, Senate Bill No. 9 of 2016 establishes that judges may require aggressors' attendance at educational and rehabilitative centers in situations of domestic violence and VAW.[212] They also worked to pass laws that increase accountability and articulate harsher repercussions for public officials who fail to report instances of VAW or who fail to comply with emergency protective measures relating to VAW.[213]

The Women's Procuratorate also pushed for a law creating a National Week for Non-Violence against Women in Brazil, which was successfully passed in March 2017. This law further established that during the week, activities such as lectures, debates, seminars, and other events would be hosted and sponsored by the public sector—in collaboration with civil society— with the goal of increasing public awareness regarding violations of women's rights.[214]

In addition, the Procuratorate backed Senate Resolution No. 64 of 2015, which resulted in the creation of the Observatory of Women Against Violence. And lastly, since their founding, the Procuratorate has coordinated and facilitated many events pertaining to VAW. They have co-sponsored the "16 days of activism to end violence against women" campaign (which had a budget of approximately $3,765 USD in 2017[215]),[216] and they also held events such as, "Women's Agenda: Femicide as Political Violence" and "Sexual Violence Against Women with Disabilities" in 2017.[217]

B. Comissão Permanente Mista de Combate à Violência contra a Mulher ("Joint Standing Committee to Combat Violence against Women")

The Joint Standing Committee to Combat Violence against Women is a standing committee of Brazil's National Congress, based in Brasília. The committee hosts public hearings and seminars and also publishes texts and reports with the goal of encouraging federal policy and government action to combat VAW in Brazil. It also contains one active sub-committee, which is the Subcommittee on the Fight Against Rape, and works in close collaboration with agencies such as the Women's Special Prosecutor's Office in the Senate, the Attorney of the Women's House of Representatives, and the Observatory of Women Against Violence.[218] Topics of the Committee's public hearings have ranged from discussions on how best to implement and advance the Maria da Penha Law, to sessions on creating mechanisms to combat abuse of women on the Internet, to debates on how to confront violence against women in prison.[219]

In 2016, the Committee also sent letters to all Brazil's states and to the Federal District to inquire about their respective actions taken to confront femicide. They did this with the goal of compiling complete data on this subject for all of the federal units. Their success was limited in this endeavor, as participation was sporadic and not widespread. One of their goals moving forward is to obtain complete data, with the help of the Observatory of Women Against Violence in the Senate.[220]

Also in 2016, the Committee published an Activities Report to delineate their activities from 2015-2016. This report also presents a public policy assessment of Brazil's policies to address VAW on a federal level.

C. Compromisso e Atitude: Lei Maria da Penha - A Lei É Mais Forte ("Commitment and Attitude for the Maria da Penha Law - The Law is Stronger")

This is a public sector initiative involving the legal institutes of the national government, including the Secretariat of Policies for Women of the Presidency of the Republic.[221] The mandate of this program is to ensure the appropriate implementation of the Maria da Penha Law across all levels of governance. This includes supporting activities that are focused on changing norms related to VAW, in order to ensure effective implementation of the Maria da Penha Law.[222] To this end, it engages in communications and advocacy campaigns among other mobilization efforts.[223]

D. Observatorio Brasil da Igualdadede Genero ("Brazil Observatory on Gender Equality")

The Brazil Observatory on Gender Equality aims to broadcast information pertaining to the Brazilian government's actions on gender issues.[224] This gives the general public access to further information on the evaluation and monitoring of plans to implement policies geared towards the improvement of women's livelihood. More specifically, the program aims to foster an open dialogue between the state and society to ensure inclusion and participation relating to political decisions on II National Plan of Policies for Women (II PNPM).[225] In order to effectively monitor and evaluate current actions, a Women's Policy Body and State and Municipal Council for Women's Rights was created. This agency contributed heavily to the establishment of the CEDAW in 1981 and the Fourth World Conference on Women 1995. Since 2007, there has been a national increase in Women's Policy Bodies. Figures reflect 155 such bodies in July 2007, as compared with approximately 238 in June 2009, all of which are scattered across various regions in Brazil.[226]

Annex B: Information on Organizations and Individuals Interviewed

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I. Brazil/VAW Organizations

1. <u>Organization</u>: Artigo 19 ("Article 19") & Minas Programam
- **Location of Interview**: São Paulo, Brazil
- **Date of Interview**: March 12, 2018
- **Interview Participants**:
  - Bárbara Paes
    - Project Advisor for the Brazilian Team of Access to Information, Article 19
    - Co-founder, Minas Programam
  - Fernanda Balbino
    - Co-founder, Minas Programam

2. <u>Organization</u>: Coletivo Feminista Sexualidade e Saúde ("Feminist Collective Sexuality and Health")
- **Program:** O Grupo Reflexivo de Homens ("The Reflective Group of Men")
- **Location of Interview:** São Paulo, Brazil
- **Date of Interview:** March 12, 2018
- **Interview Participants:**
  - Leandro Feitosa Andrade
    - Coordinator of the Reflective Group of Men Program
    - Doctorate in Social Psychology
  - José Luis Querido
    - Psychologist, the Reflective Group of Men
  - Tales Furtado Mistura
    - Clinical Psychologist, the Reflective Group of Men
  - Raquel Pereira
    - Account and Finance Manager

3. <u>Organization</u>: ONU Mulheres Brasil ("UN Women Brazil")
- **Location of Interview:** Brasília, Brazil
- **Date of Interview:** March 13, 2018
- **Interview Participants**:
  - Carolina Ferracini
    - Gender, Development and Human Rights Specialist, UN Women

4. Organization: Secretaria de Políticas para as Mulheres da Presidência da República [SNPM] ("National Secretariat of Policies for Women")
- **Location of Interview:** Brasília, Brazil
- **Date of Interview:** March 13, 2018
- **Interview Participants**:
  - Pedro de Pina Viana
    - Technical Team, Brazil Observatory on Gender Equality

- ○ Carolina Vaz
  - ■ General Coordinator, Fight Against Violence Department (DEV)

5. Organization: Centro de Promoção da Saúde [CEDAPS] ("Health Promotion Center")
- **Location of Interview:** Rio de Janeiro, Brazil
- **Date of Interview:** March 15, 2018
- **Interview Participants**:
  - ○ Katia Edmundo
    - ■ Executive Director, CEDAPS
    - ■ Doctorate in Social Psychology

6. Organization: Cidadania, Estudo, Pesquisa, Informação e Ação (Cepia) ("Citizenship, Study, Research, Information, and Action")
- **Location of Interview:** Rio de Janeiro, Brazil
- **Date of Interview:** March 15, 2018
- **Interview Participants**:
  - ○ Leila Linhares Barsted
    - ■ Executive Director/Lawyer at Cepia

II. Data Experts/Organizations

1. Organization: Data2x
- **Location of Interview:** Virtual Meeting
- **Date of Interview:** February 28, 2018
- **Interview Participants**:
  - ○ Bapu Vaitla
    - ■ Co-Coordinator, "Big Data and the Global Gender Data Gap" Project
    - ■ Research Associate, Harvard University
    - ■ Research Fellow, UN Foundation

2. Organization: Social Good Brasil
- **Location of Interview:** Virtual Meeting
- **Date of Interview:** March 19, 2018
- **Interview Participants**:
  - ○ Bruno Evangelista
    - ■ Manager of Technology and Communities, Social Good Brasil

3. Organization: Kno.e.sis – Ohio Center of Excellence in Knowledge-Enabled Computing
- **Location of Interview:** Virtual Meeting
- **Date of Interview:** March 26, 2018
- **Interview Participants**:
  - ○ Hermant Purohit
    - ■ Researcher, George Mason University

4. <u>Organization</u>: Data Visualization for Human Rights Advocacy
- **Location of Interview:** Virtual Meeting
- **Date of Interview:** March 28, 2018
- **Interview Participants**:
  - ○ Oded Nov
    - ■ Associate Professor of Technology Management and Innovation, NYU Tandon School of Engineering

5. <u>Organization</u>: United Nations Population Fund (UNFPA)
- **Location of Interview:** Virtual Meeting
- **Date of Interview:** April 2, 2018
- **Interview Participants**:
  - ○ Sabrina Juran
    - ■ Technical Specialist, Data and Population Analysis, UNFPA

6. <u>Organization</u>: World Bank, Information Management Unit
- **Location of Interview:** Virtual Meeting
- **Date of Interview:** April 10, 2018
- **Interview Participants**:
  - ○ Victoria Lemieux
    - ■ Senior Public Sector Specialist, Information Management

7. <u>Organization</u>: Columbia University
- **Location of Interview:** New York City, NY
- **Date of Interview:** March 26, 2018
- **Interview Participants**:
  - ○ Gregory Falco
    - ■ Lecturer at Columbia University School of International and Public Affairs (SIPA)
    - ■ Global Expert in Cyber Security for Smart Cities and Internet of Things (IoT) Technology

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