

## **A indústria transnacional do sexo na web: anúncios virtuais de brasileiras em Portugal e no Brasil**

### **The transnational sex industry on the web: virtual advertisements by Brazilian women in Portugal and Brazil**

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**Resumo:** *Objetivou-se analisar o comportamento das trabalhadoras sexuais de nacionalidade brasileira em anúncios de websites brasileiro e português. Foi realizada uma descrição estatística dos perfis anunciados, seguida de análise de padrões de distribuição e associação entre palavras por meio da mineração de dados. A amostra consistiu em 7.837 anúncios [5.303 – fatalmodel.com (Brasil) e 2.534 – classificadosx.net (Portugal)], entre 2020-2021. Foram observadas diferenças significativas entre os anúncios de brasileiras nos dois países. Os anúncios publicados no Brasil apresentaram maior proporção de comunicações sobre prevenção de risco à saúde e segurança. Dentre os bigramas mais mencionados nos textos das anunciantes, destaca-se “estilo namoradinha” no Brasil, que remete à maior intimidade e relação afetuosa; e “oral natural” em Portugal, que significa sexo oral-genital sem preservativo.*

**Palavras-chave:** Trabalho sexual; Anúncios virtuais; Internet; Imigrante; Mineração de dados.

**Abstract:** *The objective was to analyze the behavior of Brazilian sex workers in advertisements on Brazilian and Portuguese websites. A statistical description of the advertised profiles was performed, followed by analysis of distribution patterns*

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*and association between words through data mining. The sample consisted of 7,837 advertisements [5,303 – fatalmodel.com (Brazil) and 2,534 – classifiedsxn.net (Portugal)], between 2020-2021. Significant differences were observed between the advertisements of Brazilian women in the two countries. Advertisements published in Brazil had a higher proportion of communications about prevention of risk to health and safety. Among the most mentioned bigrams in the texts of advertisers, the “girlfriend style” stands out in Brazil, which refers to greater intimacy and affectionate relationship; and “natural oral” in Portugal, which means oral-genital sex without a condom.*

**Keywords:** Sex work; Virtual advertisements; Internet; Immigrant; data mining.

## Introduction

Increasingly, sex workers and their clients make contact using technology to facilitate personal services and arrange offline dates. Equally important, the digital revolution created a means through which sexual services are sold on online platforms. The internet-based sex market has become diffuse, facilitated by communication mediated by electronic devices through e-mails, chat rooms, social media forums and web-based advertising (PRUITT, 2005; SANDERS, 2008; ADRIAENSSENS; HENDRICKX, 2012; BLACKWELL; DZIEGIELEWSKI, 2013; KILLE *et al.*, 2017).

The internet allows for the consolidation and national and transnational promotion of sex work, in addition to simplifying the search for sexual services. Individuals commonly publish images of themselves, describe the services they offer, their physical attributes and indicate the price they charge for the services (GRIFFITHS *et al.*, 2016; CUNNINGHAM *et al.*, 2017).

However, there are specifics to online sex work advertisements which vary according to each nation as, for example, the market size, level of centralization, sex work types and services, target-group strategies and the languages used). These characteristics depend on offline peculiarities of each market, as well as cultural aspects and national policies (PAJNIK *et al.*, 2016).

Migrant sex workers may be at a disadvantage, affected by language skills and citizenship status. Although there is some evidence to suggest that migrants are becoming dominant in certain segments or geographic areas of the European sex markets, their online presence is not equally evident in numbers (SANDERS *et al.*, 2018).

In Portugal, prostitution is not a regulated activity, therefore, there is a lack of precise statistical data, making it difficult to carry out quantitative studies. In fact, much of the academic research is qualitative and restricted to the capital and the northern area of the country (RIBEIRO *et al.*, 2008; SILVA, 2013). Still, according to reports by Non-Governmental

Organizations (NGOs), it is estimated that the majority of immigrants in the sex trade in Portugal are of Brazilian nationality (OLIVEIRA, 2018).

In Brazil, the legislation on sex work is similar to that of Portugal (GRAÇA; GONÇALVES, 2016). Nonetheless, sex work is integrated into the Brazilian Classification of Occupations as a result of Gabriela Leite's campaign to recognize sex work as an occupation. In this way, sex workers can contribute to pension funds and, when they retire, they receive the corresponding benefits (LENZ, 2015). Even so, currently, there is a lack of statistical data on the number of sex workers in Brazil.

Quantitative studies on advertisements of Brazilian prostitution on the internet are scarce (PASSOS; ALMEIDA-SANTOS, 2020a), and, as far as we were able to investigate, no quantitative studies were found on Brazilian prostitution advertised on Lusophone websites, especially in Brazil and Portugal. Therefore, the general objective of the present study was to analyze the behavior of Brazilian sex workers in advertisements on Brazilian and Portuguese websites. The specific goal is to differentiate the communication in advertisements of Brazilian women posted in their country of origin from that of those who migrated in order to practice prostitution in another country.

## **Materials and methods**

### **Outline and population**

This is a descriptive and exploratory quantitative study of data extracted from advertisements by sex workers published on a Brazilian website [<https://fatalmodel.com>] and on a Portuguese website [<https://www.classificadosx.net/pt>], between March, 2020, and February, 2021.

The websites were chosen primarily based on their estimated organic traffic ranking according to a research by the information technology company, Similar Web [[www.similarweb.com/](http://www.similarweb.com/)], a company that functions as a search engine optimization (SEO) website. The subsequent selection criteria were: large number of advertisements

and a consistent and well-formed data structure (in other words, each profile must be designed to allow biographical information about the sex workers to be presented in a standardized online model).

In 2019, Fatalmodel.com took the 1<sup>st</sup> place among sex trade websites in Brazil, 103<sup>rd</sup> place among all the most visited websites in the country, and 107<sup>th</sup> in the world rankings in the “adult content” category. In total, there are over fifty thousand contact ads that are divided into three categories (Women; Transsexuals; Men). The advertisements can be viewed for free, the customer pays no fees and has no need to register. On the other hand, in the same year, Classificadosx.net also took the 1<sup>st</sup> place among sex trade websites in Portugal, 124<sup>th</sup> place among all the most visited websites in the country, and 1.115<sup>th</sup> in the world ranking of the “adult content” category. In total, there are over twenty thousand contact ads that are divided into fifteen categories (Women; Men; Couples & Swing; Massages; Male Massages; Transvestites & Transsexuals; Gays; Female Stripper; Male Stripper; BDSM & Fetish; Reduced Mobility; Accommodation & Recruitment; Virtual Sex & Sex Phone; Sexshops & others).

The chosen websites use a content management system in order to display information about each sex worker and feature several resource items in standard format for each sex worker. The dynamic nature of the website changes on a daily basis, therefore, the manual collection of advertisement data was carried out on pre-defined dates and at different shifts. Due to the possible temporary nature of internet ads, the images were captured using the “print screen” tool and stored in a password-protected folder.

Contact and registration information from the website were classified and used to identify duplicates of the dataset. All textual information was extracted from each ad. Based on previous researches into the content of the information reported in internet sex trade advertisements (BLACKWELL; DZIEGIELEWSKI, 2013; MANNING; BUNGAY, 2017; KILLE *et al.*, 2017), we used a coding system which includes specific relevant variables. Some variables were coded as dichotomous

(“yes” or “no”) in order to document presence or absence in the advertisement (Table 1).

Table 1 - Grouping of variables and their operational definitions

Grouping of the study's variables and operational definitions.					
Demographic characteristics	Age	Color of skin <sup>a</sup>	Body	Current geographic location (country region)	Country of origin
Health	Communication that speak specifically about practices related to health which could be considered protective or not (for example, the use of condoms or not) <sup>b</sup>			Mentions of the COVID-19 pandemic	
Security and Marketing	Place where sex services are provided <sup>b</sup>	Restriction communication for certain sexual services or customer profile	Communications of requirements imposed on the customer	Visible facial photo <sup>b</sup>	Visible genital photo <sup>b</sup>
Business	Business practices refer to communications detailing the amounts in Reais associated with the cost of sexual services <sup>b</sup>				

Notes: a.Ethnic-racial classification of Brazil in terms of color (white, brown, black) according to the images and/or textual self-declaration of the ad

b. Variables coded as “yes” or “no”.

## Data analysis

Initially, the coded categorical variables are presented in absolute number and percentages. The measures of association between categorical variables are analyzed using Pearson's chi-square test. Numerical variables are presented as average and pattern deviation. The comparisons between two groups are performed using Student's t-test with Satterthwaite's degrees of freedom, in order to adjust for possible variance heterogeneity.

After that, a quantitative content analysis was performed using the data mining technique. More specifically, through data mining it is possible to quantify non-quantitative and many times textual information. The method can be applied to information in various formats. It

demonstrates object composition and corpus clipping from mined data in an automated extraction process in databases, data warehouses, the web or any other kind of massive repository or data flow. Researchers who employ content analysis use coded unities. These keywords and codes vary according to the type of data (ZARGHAMI *et al.*, 2008; HAN; KAMBER; PEI, 2011; GHAEDI; GOLSHANI, 2016).

Since this is a study designed with a special focus on the quantitative assessment of textual elements, various techniques of extraction, systematic manipulation and analysis of data in text form were employed. A statistical approach to the most frequent terms was used and categories were created which represent classification patterns, that is, textual aggregates.

Natural language processing tools were employed to investigate distribution patterns and association between words. Before performing the quantitative analysis, the texts went through several stages during preparation, such as: exclusion of punctuation marks, symbols and numbers; transforming all words into lowercase in order to avoid problems related to the distinction between lowercase and capital letters; replacing misspelled words; removing blank spaces; applying a dictionary of “stop words” or “filler words” to exclude words that do not convey true meaning, such as “and”, “this”, “for”; segmentation and tokenization of sentences, therefore, transforming each valid word into a true count variable.

Subsequently, we calculated the lexical diversity, whose formula is the number of unique words divided by the entire number of words. The unique words were analyzed by country and overall. In addition, we presented sequences of two frequently combined words, also known as “bigrams”.

The frequency distribution graphics were used to illustrate the distribution pattern of the most common words. We estimated the weighted prominence of words through word cloud graphics, where the importance of each word is given by its respective size and boldness. All estimates and graphics were performed in Python, version 3.7.10.

## Ethical aspects

The research began after the approval by the Research Ethics Committee of the University of Tiradentes, on December 18, 2018, through opinion 3.092.950 (CAAE: 85367418.3.0000.5371).

The terms of the website agreement were evaluated to guarantee open access for all. Consent was not necessary because the research is carried out by the download of messages from the commercial website, and there is no intervention or interaction. The people who wrote the ads were kept anonymous.

## Results

The sample was composed of 7.837 profiles of Brazilian female sex workers (Table 2), with 2.534 (32,33%) ads on the Portuguese website and 5.303 (67,67%) on the Brazilian website. The predominant age group varied between the two countries ( $p < 0,001$ ), being 18 to 23 years old (53,88%) in Brazil and 24 to 30 years old in Portugal (47,26%). The majority profile in both countries is of sex workers with white skin color (Brazil – 43,45%; Portugal – 53,00%;  $p < 0,001$ ) and body structure of normal pattern or “midsize”, popularly known as “neither fat nor thin” (Brazil – 70,24%; Portugal – 59,79%;  $p < 0,001$ ). It should be noted that the advertisement presents a self-evaluation of the body, not based on technical parameters.

Table 2 – Profile of sex work advertisers on Brazilian and Portuguese websites

	Brazil		Portugal		p-value *
	N	%	N	%	
Age group					<0,001
18 to 23 years old	2.854	53,88	577	22,78	
24 to 30 years old	1.847	34,87	1.197	47,26	
31 to 36 years old	361	6,82	440	17,37	
37 to 43 years old	170	3,21	248	9,79	
44 to 49 years old	44	0,83	56	2,21	



50 to 56 years old	19	0,36	12	0,47
≥ 57 years old	2	0,04	3	0,12
<hr/>				
Skin color / ethnicity	<0,001			
White	2.304	43,45	1.343	53,00
Brown	1.940	36,58	985	38,87
Black	960	18,10	196	7,73
Indigenous	45	0,85	10	0,39
Oriental	54	1,02	–	–
<hr/>				
Body	<0,001			
Athletic	256	4,83	436	17,21
Thin	884	16,67	417	16,46
Normal	3.725	70,24	1.515	59,79
Chubby	418	7,88	134	5,29
Extra	20	0,38	32	1,26
<hr/>				
Stature	–			
Short	–	–	173	6,83
Medium	–	–	1.939	76,52
Tall	–	–	422	16,65
<hr/>				
Hair	–			
Black	–	–	831	32,79
Dark brown	–	–	579	22,85
Light brown	–	–	257	10,14
Blonde	–	–	783	30,90
Red	–	–	84	3,31
<hr/>				
Eye color	–			
Dark brown	–	–	1.319	52,05
Light brown	–	–	946	37,33
Green	–	–	205	8,09
Blue	–	–	64	2,53
<hr/>				
Languages	–			
Native	–	–	1.288	50,83
Bilingual	–	–	618	24,39
Trilingual	–	–	418	16,49
Multi-lingual	–	–	210	8,29

\*Chi-squared test

The Portuguese website presents a more stratified characterization structure than the Brazilian website (Table 2). In addition to the aforementioned variables, also declared in the ads are the profile of height (average – 76,52%), hair color (black – 32,79% and blonde – 30,90%), eye color (dark brown 52,05%), and languages (native only – 50,83% and bilingual – 24,39%).

Even though the ads published in Brazil have a greater volume of text, those published on the Portuguese website have greater lexical diversity (Portugal – 9,2%; Brazil – 8,2%). Therefore, Brazilian sex workers in Portugal use more vocabulary and less repetition of lexemes when producing the advertisement.

In Brazil, the ads commonly present more photos than in Portugal ( $p < 0,0001$ ), with averages of approximately  $17 \pm 72$  e  $4 \pm 2$  photos per ad, respectively. In addition to photos, the Brazilian ads feature videos as comparison media options, an average of approximately  $2 \pm 9$  videos per advertisement. The average price for sex work offered by Brazilian women is lower in their country of origin (R\$ 186,3  $\pm$  79,9) than those who offer the service in Portugal (R\$ 275,5  $\pm$  186,7) ( $p < 0,0001$ ) (Table 3).

In both countries, the media presented in the ads, for the most part ( $p < 0,001$ ), do not feature media with a face (Brazil – 85,69% and Portugal – 94,71%) and visible genitals (Brazil – 78,67% and Portugal – 73,20%). In Brazil, the website specifies the target audience of clients for each advertisement. The vast majority are available for men (99,04%), 61,87% of individuals are available for couples and 43,90% are available for women (Table 3).

In Brazil, just over half of the advertisers (51,05%) have their own place for service. In both countries, female sex workers tend to accept commuting *in* ( $p < 0,001$ ), that is, commuting to hotels and/or domiciles (Brazil – 90,59% and Portugal – 68,94%) and not to accept commuting *out* ( $p < 0,001$ ), that is, trips to other cities/localities (Brazil – 63,06% and Portugal – 52,92%). Only 1,43% in Brazil and 0,12% in Portugal offer sex exclusively online ( $p < 0,001$ ) (Table 4).

Table 3 – Characteristics of the ads for Brazilian sex workers on Brazilian and Portuguese websites

	Brazil			Portugal			p-value †
	Min-Max	Average ± SD	CI at 95%	Min-Max	Average ± SD	CI at 95%	
Number of photos	0 – 1860	16,9 ± 71,7	14,9 – 18,8	1 – 20	4,3 ± 2,3	4,2 – 4,4	<0,0001
Number of videos	0 – 273	1,5 ± 8,6	1,2 – 1,7	–	–	–	–
Price per hour *	50 – 900	186,3 ± 79,9	184,0-188,3	65,9 – 988,5	275,5 ± 186,7	247,8-305,8	<0,0001
	N	%		N	%		p-value *
Visible face (media)							<0,001
No	4.544	85,69		2.400	94,71		
Yes	759	14,31		134	5,29		
Visible genital (media)							<0,001
No	4.172	78,67		1.855	73,20		
Yes	1.131	21,33		679	26,80		
Available for men							–
No	51	0,96		–	–		
Yes	5257	99,04		–	–		
Available for women							–
No	2975	56,10		–	–		
Yes	2328	43,90		–	–		
Available for couples							–
Não	2.022	38,13		–	–		
Sim	3.281	61,87		–	–		

SD = Standard deviation; CI = Confidence interval. \* Brazilian currency. Values converted to ads in Portugal (1 Euro □ 6,59 Brazilian Reais, Feb. 24. 20:01 UTC). † Student's Hest. \*Chi-squared test

Table 4 - Health and safety communications in the service of sexual work advertisers on Brazilian and Portuguese websites

	Brazil		Portugal		p-value *
	N	%	N	%	
Own place					-
No	2.596	48,95	-	-	
Yes	2.707	51,05	-	-	
Commuting (in)					<0,001
No	499	9,41	787	31,06	
Yes	4.804	90,59	1.747	68,94	
Commuting (out)					<0,001
No	3.344	63,06	1.341	52,92	
Yes	1.959	36,94	1.193	47,08	
Online (exclusively)					<0,001
No	5.227	98,57	2.531	99,88	
Yes	76	1,43	3	0,12	
Available 24 hours/day					<0,001
No	1.105	20,84	432	17,05	
Yes	4.198	79,16	2.102	82,95	
Restrictions					-
No	4.966	93,68	-	-	
Yes	335	6,32	-	-	
Requirements					-
No	5.064	95,53	-	-	
Yes	237	4,47	-	-	
Independent					-
No	-	-	214	8,45	
Yes	-	-	2.320	91,55	
Condom use					0,199
No	5.153	97,17	2.475	97,67	
Yes	150	2,83	59	2,33	
No condom use					<0,001
No	4.856	91,57	1.945	76,76	
Yes	447	8,43	589	23,24	
Covid-19					<0,001
No	5.285	99,66	2.499	98,62	
Yes	18	0,34	35	1,38	

\*Chi-squared test

In the discourses of the ads published on the Brazilian website, it was possible to notice some patterns of restriction (6,32%) and requirements (4,47%). The restrictions were mostly on anal sex, use of psychoactive substances and the non-service of customers with telephones without an identification number and/or lack of photo on social media. The requirements were mostly about hygiene and/or the customer's politeness. This type of communication was not found in the ads by Brazilian women in Portugal. The Portuguese website segregates the profiles into independents (91,55%) or not (2,33%), that is, those who are managed by pimps and/or work in brothels (Table 4).

As for health-related aspects (Table 4), 2,83% of the profiles advertised in Brazil and 2,33% of the profiles advertised in Portugal communicate the requirement of sex with condoms, and there is no significant difference in the proportion between the two countries ( $p=0,199$ ). On the other hand, there is a lower proportion of sex without condoms being offered in Brazil compared to the offer in Portugal (8,43% and 23,24%, respectively,  $p<0,001$ ). Regarding the topic of Covid-19, there are more ads with reports of compliance with protection measures in Portugal than in Brazil (1,38% and 0,34%, respectively,  $p<0,001$ ).

An estimate was made in the form of "word cloud", in which the font scale of each word is proportional to its frequency (Figures 1 and 2). Among the words most frequently found in the ads on the Portuguese website (Figure 1), it is observed that they derive from attributes related to sexual service [pleasure, oral (natural), complete], related to commercial transactions (service, I do), personal characteristics (woman, brunette, sweet, tender, gorgeous, blonde), marketing strategy (photos, real, novelty, complete) and greeting (hello).

Figure 1 – Cloud of the most frequent words on the Portuguese website [classificadosx.com]



Among the words most frequently found in the ads on the Brazilian website (Figure 2), it is observed that they derive from attributes related to greeting and introduction [hello, (my name) is, (come meet) me], to sexual service [girlfriend (style), kiss, pleasure, (very) delicious, escort, (no) frills, anal], related to commercial transactions (service, customer, available, place, I do, to do, I like), and personal characteristics (hot, brunette, woman).

Figure 2 - Cloud of the most frequent words on the Brazilian website [fatalmodel.com]

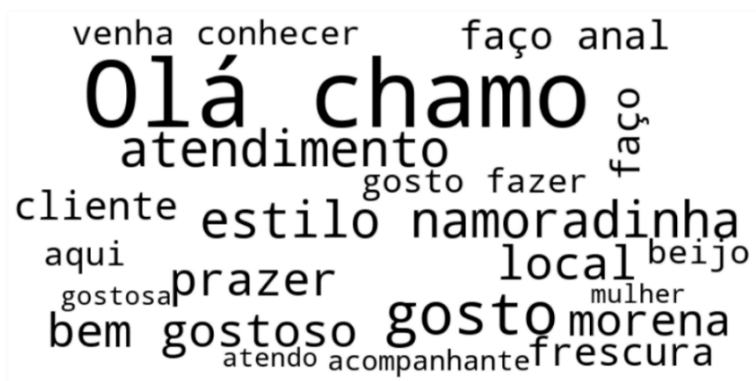
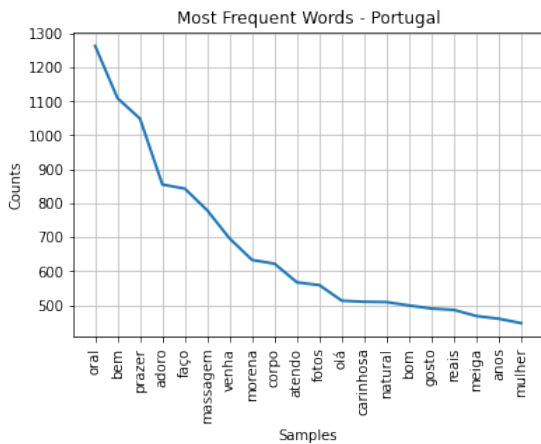
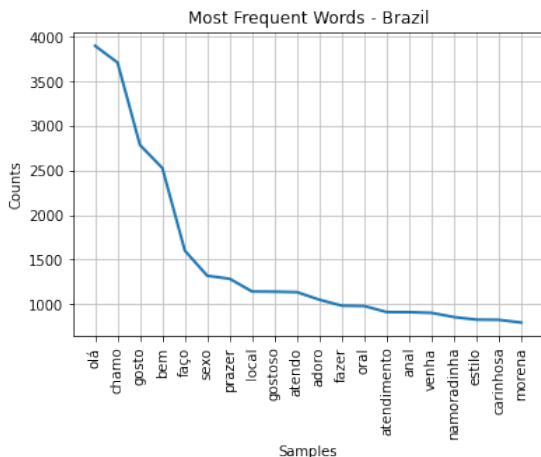
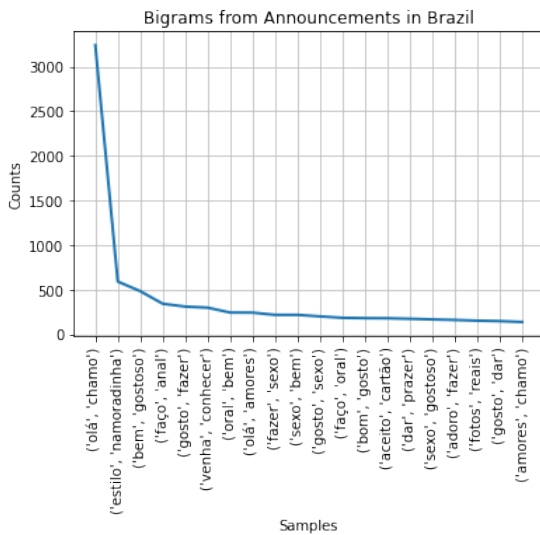
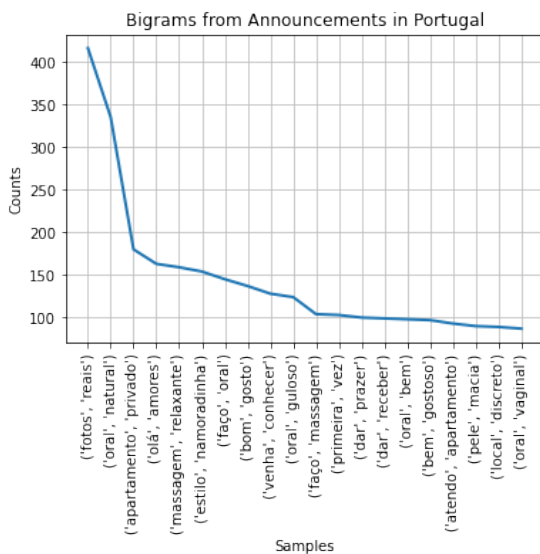


Figure 3 illustrates the most frequent words and bigrams in the ads by Brazilian sex workers on each website.

Figure 3 – Most frequent words and bigrams in the ads by Brazilian sex workers on the Brazilian website [fatalmodel.com] and on the Portuguese website [classificadosx.com]





**Note:** a. Most frequent words on the Brazilian website. b. Most frequent words on the Portuguese website. c. Most frequent bigrams on the Brazilian website. d. Most frequent bigrams on the Portuguese website.



The majority of the ads in Brazil included an introduction greeting (hello; my name is); the offer of the “little girlfriend style” sexual service; and the qualification of the service (very delicious). On the other hand, the ads of Brazilian women in Portugal are usually more direct. The three most frequent binomials on the Portuguese website were: “real photos”; “natural oral”; and “private apartment” (Figure 3). It is worth noting that “natural oral” refers to the practice of oral sex without a condom.

## Discussion

The study results are based on emerging empirical understanding of the content of web-based advertisements (KILLE *et al.*, 2017; CUNNINGHAM *et al.*, 2018; CAMPBELL *et al.*, 2019; SANDERS *et al.*, 2016, 2018, 2021). In these ads, sex workers communicated significant information that reflected demographic characteristics as well as their personal health and security practices (for example, the use of condoms, fitness, restrictions). These health communications provide important information about the nature and the norms of sexual service on the internet and the practices, health behavior and general well-being of those who advertise in this context.

The discoveries also provide some new insights into the characteristics of the population in prostitution ads such as the predominance of young people and white skin color. These characteristics are similar to those described in other researches on sex work based on the internet (CASTLE; LEE, 2008; GROV *et al.*, 2014; KILLE *et al.*, 2017) and in direct contrast with researches located in street markets (MIMIAGA, 2009, LIMA *et al.*, 2017), which demonstrate a larger number of non-white population over the age of 30 and different financial arrangements where the prices charged are values for service with lower income potential.

Differences between participants in Brazil and Portugal would be expected because sex work has been officially recognized as a profession in Brazil, but not in Portugal. In addition, authors consider that Brazilian

society is much more lenient to sex work than the Portuguese society (MULLET *et al.*, 2020).

Brazilian women in Brazil list more security communications in general and they do that by communicating restrictions and requirements, especially about services, behavior, payment, identification and substance use. Brazilian women in Portugal communicate minimum safety details. This discovery adds nuances about how strategies can be different among sex workers to mitigate the risks of violence according to demographic characteristics. In addition to demonstrating the role of internet-based communications within the area of traded exchange to prevent risks related to safety (MOORMAN; HARRISON, 2016; SANDERS; CONNELLY; KING 2016; SANDERS *et al.*, 2018; CAMPBELL *et al.*, 2019). The attempts to maintain privacy and security were also reflected in the pictures provided in the ads. A minority of advertisements, both in Brazil and Portugal, contained identifiable facial photos.

In Brazil, there is more security for the customer as well, since the platform encourages the attachment of comparison media to generate more credibility to the profiles. The comparison media consists of a video that is displayed on the announcer's profile and shows the person from various angles (front, side and back) holding a nameplate, with no editing and wearing underwear only. Since there is no such comparison media resource in Portugal, customers are more insecure about the real visual identity of the sex worker. This is reflected in the most mentioned bigram by Brazilian women in Portugal ("real photos"). The need to show credibility in the ad's discourse is noticed. Besides, the lexical diversity in a shorter text can be a rewarding communication strategy to convince the audience to consume the services offered.

Narrowing the modalities of anchoring an activity or daily interaction, is here referred to as anchors or parenthesis (brackets), also as the markers pointed out by Goffman (2012). The episodic conventions, announcers of initial or closing acts, can be analyzed, following what Goffman (2012) dismembered as external parenthesis (delimiters of an interactional episode) and external parenthesis (internally structuring

the scenic acts or the rounds). The initial word “Hello” in the ads represents the anchoring use of an interaction, it is an evidence of internal parenthesis applied to the mediatization of the interaction of sex workers with their clients.

The “little girlfriend style” bigram, defined as the offer of the activity of dating, sex and affectionate activities that would be expected in a non-commercial adult relationship, appeared with greater frequency in the ads by Brazilian women in their country of origin. According to a study carried out in Spain, in the last decades, a series of sexual services that offer company, conversation and, more generally, what is understood as “girlfriend experience”, are increasingly offered to middle and upper-middle class customers (CARBONERO; GÓMEZ-GARRIDO, 2018).

In Portugal, the “natural oral” bigram, which means oral-genital sex with no condom, stood out. Although there is growing evidence that many sex workers can have similar or lower rates of sexually transmitted infections (STIs) similar or inferior to the general population (DONOVAN *et al.*, 2012; WORLD HEALTH ORGANIZATION, 2013; PASSOS; ALMEIDA-SANTOS, 2020b), the lack of condom requirement for oral-genital sex can still represent a significant health threat (BIMBI; PARSONS, 2005; BUNGAY *et al.*, 2013; KOLAR; ATCHISON; BUNGAY, 2014). For example, STIs such as syphilis, gonorrhea and chlamydia can be transmitted through oral-genital contact and may be asymptomatic.

In both countries, a small proportion mentions the COVID-19 pandemic in terms of compliance with social distancing, protective measures and online sex offers. These findings corroborate a study carried out on sex work ads on the internet in the Ibero-American context (PASSOS; ALMEIDA-SANTOS, 2020c).

### **Limitations**

Regarding the limitations of the work in question, the present sample derives from a secondary source with information limited to what has been published on websites and ads by sex workers. Additionally,

differences between the structures of the websites prevented comparisons between variables only available on one of them. However, we sought to shed light on information and analysis about a growing market: as the internet continues to expand as a mechanism that facilitates relationships between individuals, it is estimated that a growing number of sex workers will announce services through this medium. The results of this investigation may generate policies focused on public health campaigns aimed at individuals who are directly or indirectly involved with sex work sold on the internet.

### **Final considerations**

Content analysis through data mining revealed codes in the communication referring to personal characteristics, sexual services offered and risky practices. The language norms of the sex industry were evident in the titles of the works and in the physical features communicated throughout the ads with variations that mapped the gender.

The ability to advertise via the internet continues to contribute to changing the dynamics of adult commercial sex work by creating opportunities for sex professionals to determine how they will conduct their business and to allow greater control over their work. Still, the results suggest that Brazilian women who advertise on a website in their country of origin have communications that are less risky and more protective regarding health and security than those who migrated to practice and advertise sex work in Portugal.

Online communication continues to offer opportunities to connect, mobilize and spread information among direct service organizations. Important information can be obtained through the quantitative analysis of advertising content about practices of the industry. With this information, it becomes feasible to develop more effective health and safety education programs to better support the health of sex workers and their customers.

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