Sex Work Population Project

Digital Desirability: Analyzing Client Preferences and Success Metrics in Canadian Classified Ads for Sex Work

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Sex Work Population Project

Overview

- About Me
 - Background + Theoretical approach
- What is the Sex Work Population Project?
 - Data is available!
 - Published research
- The Study: Playing the Name Game
 - Anatomy of the site
 - Ad views
 - Effect of demographic variables: race/ethnicity, age, service type, etc.
 - What do successful advertisers say in ads?
 - Who spends the most on advertising?
 - Conclusions



About Me



Image source: https://liartownusa.com/



About Me



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About Me



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What is the Sex Work Population Project?

- Started in 2021 to process, analyze and possibly publish articles on two large collections of online classified ads
- Added new datasets in 2022 and 2023
- Published three peer reviewed articles, two preprints and one conference paper
- Goals:
 - Collaborate with other researchers (still waiting ...)
 - Make data available
 - Involve industry participants in research

Sex Work Population Project

Data is Available!

All papers have **publicly available data**. (Replication is important!)

Anonymized Canadian Classified Ads 2007-2023. https://doi.org/10.17605/OSF.IO/ZG9HP

- Contains all ad texts used in our studies
 - Includes **full database** used for *Playing the Name Game*
- Cleaned text with available demographic information
 - Age, hourly rate, province, date range, ethnicity
- Identifying information is removed
- Use the link above to connect to the osf.io project and request access



Papers: The Silent Majority

The silent majority: The typical Canadian sex worker may not be who we think. PLOS ONE 17(11): e0277550. https://doi.org/10.1371/journal.pone.0277550

- **Best known paper** (over 8000 views so far)
- At least a dozen people contributed (mostly editorial comment)

Main conclusions:

- Advertisers do not typically advertise for long periods
- Over time this means that many more have industry experience than we would think looking at short term population estimates
- There is a significant problem with sampling in research
 - Previous studies are likely not representative of the industry



Papers: Estimating Turnover and Industry Longevity

Estimating turnover and industry longevity of Canadian sex workers. PLOS ONE, 19(3), e0298523. https://doi.org/10.1371/journal.pone.0298523

Corrected PDF: https://populationproject.ca/Turnover

- Provides the most compelling evidence that the majority worker is not in the industry for long periods of time
- Used random sampling to identify relevant advertisers
- Traced 3545 workers associated with 76 collectives over a year
- **12%-16% turnover** monthly
- Workers were associated with collectives mean 5.5 months (SD 4.5)



Papers: The Changing Meaning of "No"

The changing meaning of "no" in Canadian sex work. PLOS ONE 19(4): e0301600. https://doi.org/10.1371/journal.pone.0301600

Corrected PDF: https://populationproject.ca/No

- Considered the history of the usage of the word "no" over a 15 year period in classified advertising
- Showed that attitudes of advertisers had changed significantly from the earliest period (2007-2009) to the latest (2022)
 - Advertisers were much more likely in later periods to restrict clients based on behavior, services offered, and client race
 - Race restrictions were overwhelmingly directed at Black clients
 - Why has this not been discussed before in the literature?



Papers: Power Users

Power users: Technology, trust, and the social networks of Canadian sex workers. SocArXiv. https://doi.org/10.31235/osf.io/u5kd2

- Qualitative companion study to the "Estimating Turnover" study
- Identified the themes: **security**, **health**, **identity**, and **social networks**
- Many advertisers expend considerable effort building relationships with prospective clients
 - Is this an example of bridging social capital?
- Main conclusions:
 - Social capital = Safety
 - Policy interfering with the development of social capital in the industry endangers both workers and clients



Papers: What was the Effect of End Demand Legislation?

What was the effect of end demand legislation on Canadian sex worker populations? SocArXiv. https://doi.org/10.31235/osf.io/87u29

- Did the the PCEPA significantly reduce the number of people in the industry?
 - Number of charges were miniscule compared to worker estimates
 - In **2016** there was a **significant increase** in the number of workers
 - In **2023 fewer workers were seen**: 87736 (95% CI 87288 88184)
 - 10% reduction from 2015, 20% reduction from 2016
- More (and larger) collectives
- **Increases** in BIPOC, Trans workers
- Online services were common but did not replace in person



Current Study: Playing the Name Game

Playing the Name Game: A review of advertising practices and success of Canadian sex workers. https://populationproject.ca/NameGame

- During July 2023 **calculated daily views** from a "Viewed ... times" field in over 62,000 ads from one prominent Canadian classifieds site
- Compared daily views to various demographic variables:
 - Ethnicity, Service Type (massage, escort etc.), Age, Gender
 - Also considered: Hourly rates, image use, number of ads, BMI
- Content analysis of ads with few views or many views
- Lastly, what did advertisers spend?



Playing the Name Game: Anatomy of the Site

The site studied is a classified site that has been in existence for **over** a **decade**

It is one of the **main venues** where sex workers advertise in Canada

- The site is a **collection of listing pages** with links to ads
- Listing pages are distinguished by Service Type and Region
- Service Type can be one of Female Escorts, Female Massage, Shemale Escorts, Male Escorts, and Dom-Fetish
- Advertisers pay to "bump" ads to the top their respective listing page



Playing the Name Game: Anatomy of the Site

When analyzing classified sites we distinguish between **3 entities**:

- Ads: actual downloaded content (what we mostly studied here)
- Advertisers: authors of ads as identified in ad content
- Workers: subjects of the ads (can also be advertisers)

Heuristics:

- The number of Advertisers is greater than the number of authors
- The number of advertised Workers is less than the number of actual workers



Playing the Name Game: Daily Views

Daily views were calculated by keeping **daily copies of ads** when they appeared in the main page and recording the "Viewed ... times" field

 The main pages for each region and service type were checked every 10 minutes from July 9, 2023 to August 10, 2023

Statistics:

• **Median daily views:** 128 (IQR 64-128)

• Mean daily views: 195 (SD 234)

All distributions of ad view statistics are long tailed

• Some ads could have thousands of daily views



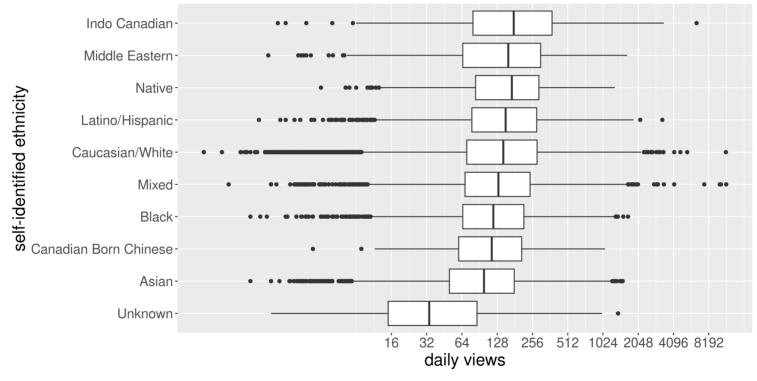
Playing the Name Game: Demographic Variables

- All demographic variables studied were significant but only *Service Type* showed a **large effect size**.
- Ethnicity was the most surprising: popularity of ads for people of color were divided
 - Some groups (East Indian, First Nations, Hispanic) typically had more views than White (the majority) and some, especially Asian and Black had less ...
- There were **significant interaction effects** between *Service Type*, *Ethnicity*, and *Age Group*



Playing the Name Game: Ethnicity

Ethnicity vs Daily Views





Playing the Name Game: Ethnicity

Why do ads for some ethnic groups tend to get **fewer views**?

Some possible reasons:

- Ads for **Black** workers had the **highest median hourly rate** (\$280)
- Asian advertisers bought more ads per advertiser (too many ads?)
- The second most common Service Type for Asian ads was Female Massage; for Black ads was Male Escorts



Playing the Name Game: Other Variables

Previous research had shown that there were significant associations between some variables and hourly rates

- We attempted to replicate some of these results:
 - BMI correlation with hourly rates: -0.18
 - However, correlation weakens w.r.t. daily views: -0.05
 - Age correlations: -0.09 (daily views) -0.06 (hourly rates)
 - All correlations were significant (p < 0.001)

In general **we did not find strong support** for the findings of previous studies.



Playing the Name Game: Other Variables

Daily views and other variables

- Hourly rates and daily views were weakly positively correlated (0.02, p < 0.001)
- Having face images was weakly positively correlated with daily views (0.02, p < 0.001)
- Having more images was weakly negatively correlated with daily views (-0.02, p < 0.001)
- Advertisers having **more ads** was **weakly negatively correlated** with average daily views (-0.2, p < 0.001)



Playing the Name Game: Male Advertisers

Male advertisers who cater to women and couples

- Out of 1210 male escorts advertisers:
 - **593** catered to **women** (median views 64, IQR 27 113)
 - **261** catered to **couples** (median views 76, IQR 31 128)
- Estimated that up to 5900 prospective clients viewed ads for male workers who catered to women or couples in any given day
- Advertised in Ontario (200), Quebec (121), Alberta (97), and BC (96)



Playing the Name Game: Content Analysis

How do the more successful ads contrast with less successful ads?

- Used **log likelihood** to identify unique terms (Dunning 1993, Rayson 2003, 2008)
- Sampled ads from the top 7% (**584 or more daily views**) and bottom 7% (**32 or fewer daily views**)
- Terms were selected from the top 50 unique terms



Playing the Name Game: Content Analysis

a) High daily views

b) Low daily views

- "black" generally means the advertiser won't accept Black men
- "party" getting high as a service (GHAAS)
- Low view ads tended to be for online or massage services

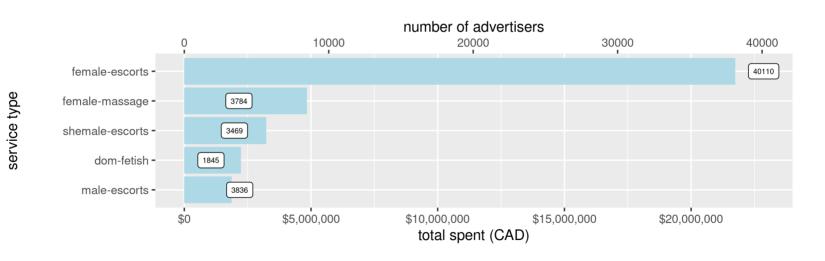
respectful age gents freshlydeposit black ask bare punjabi showered greek eyes verified independent party





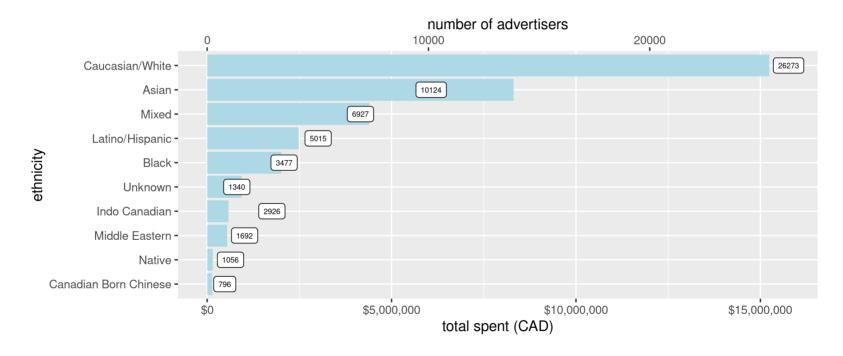
Ad spending was estimated by **counting the number of days** an ad was visible in 2023 and multiplying days by the base **cost to bump** the ad

Per Capita spending by Service Type (most vs least): **Female Massage** \$1280, **Female Escorts** \$542, **Male Escorts** \$486





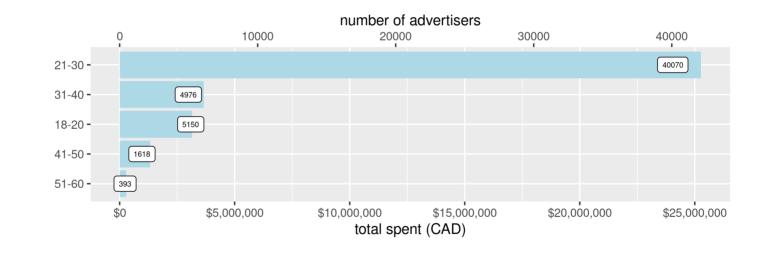
Per Capita spending by Ethnicity (most vs least): **Asian** \$820, **Indo Canadian** \$197, **Canadian Born Chinese** \$170





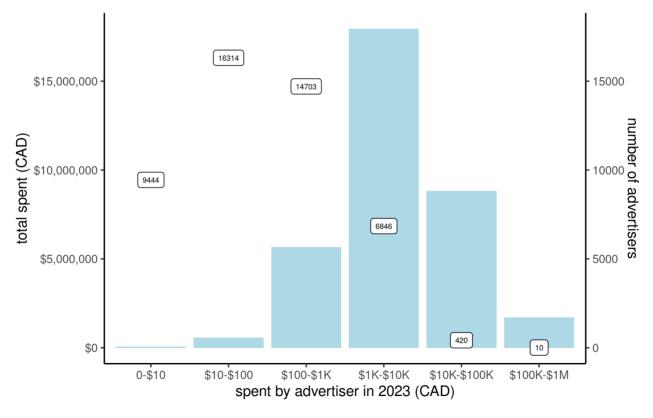
Per Capita spending by Age Group (most vs least): **41-50** \$819, **21-30** \$630, **18-20** \$613

self-identified age





Ten advertisers **spent over \$100k** with the top spending over \$350k





Playing the Name Game: Conclusions

What were my **take-aways** from this study?

- Like sex workers, clients represent many different backgrounds
- Some client groups experience significant discrimination (Why?)
- Relationships between variables relating to sexual fitness described in previous work did not appear to be strong
- Using hourly rates as a metric of desirability may not be valid:
 - Based on hourly rates, Black workers would appear to be the most successful but their ads get fewer views
- Future work: investigate the relationship between views and actual contacts with workers



Thank You!

More information:

https://populationproject.ca/