Can Women Break the Glass Ceiling?: An Analysis of #MeToo Hashtagged Posts on Twitter

Naeemul Hassan Manash Kumar Mandal Mansurul Bhuiyan Aparna Moitra Syed Ishtiaque Ahmed

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Presented By:

Adiba Shaira (1605097) Muntaka Ibnath (1605106) Meher Afroz Sworna (1605114)

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Introduction

 October 15, 2017: Tweeter news feed exploded by a tweet of Alyssa Milano

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Introduction

- October 15, 2017: Tweeter news feed exploded by a tweet of Alyssa Milano
- More than 4.5 million posts within 24 hours



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Previous Works

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Apps for security of women such as:Hollaback,Safetipin, Protibadi ,Circle of 6

Data Collection

City	#Tweets	Male	Female	Female(%)
Dallas	1249	144	471	76.59
Dhaka	82	32	22	40.74
Indianapolis	1203	180	452	71.52
Kansan City	448	61	208	77.32
Karachi	250	44	55	55.56
Mumbai	2778	724	674	48.21
New York	1878	267	754	73.85
North Dakota	110	18	34	65.38
Portland	849	146	316	68.4
Saint Louis	619	92	224	70.89
Tehran	114	13	32	71.11

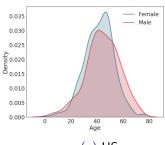
Analysis

Age and Gender Distribution

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Analysis

• Age and Gender Distribution



(a) US

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Analysis

Age and Gender Distribution

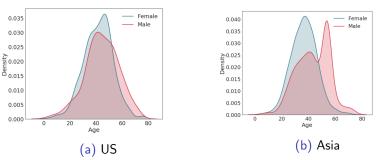


Figure: Age distribution of female and male users

Harassment Claims in a Particular Form

Men used to catcall me while I waited for mum to pick me up. I was 12 years old. #metoo

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Then later @18 by my Boss. I quit.

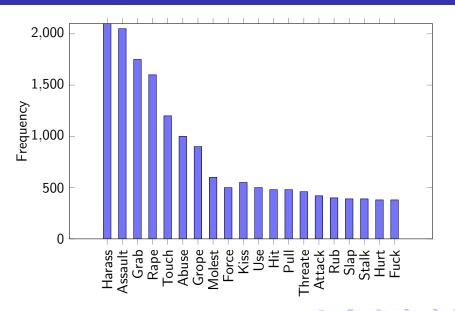
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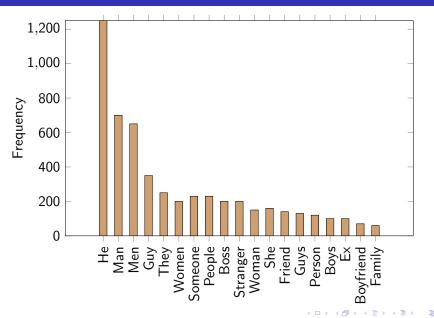
#MeToo
sex harassment charges
hit Silicon Valley . Robert
Scoble says, 'I feel ashamed'.

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Harassment Categories

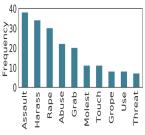


Frequency of Harasser Roles



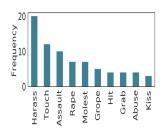
Frequency in Different Regions





(a) USA





(b) Asia

Figure: Top 10 harassment categories in different regions

Topic Distribution

Relevance of a word with respect to a topic, r(w, k), is calculated using the following equation :

Equation

$$r(w, k) = \lambda * \log(\sigma_{kw}) + (1 - \lambda) * \log\left(\frac{\sigma_{kw}}{P_w}\right)$$

Here,

 σ_{kw} = The probability of word w for topic k

 $P_w =$ The marginal probability of term w in the whole dataset

 $\lambda = \mathsf{Tuning} \; \mathsf{parameter}$

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Dataset(1)



(a) Recognition

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Dataset(1)



(a) Recognition



(b) Weinstein Effect

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Dataset(1)





(a) Recognition

(b) Weinstein Effect



(c) Advertisement

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Dataset(2)



(a) Nature and Location

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Dataset(2)



(a) Nature and Location



(b) Young Victims

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Dataset(2)



(a) Nature and Location

(b) Young Victims

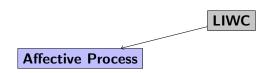


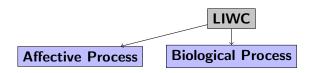
(c) Media Coverage

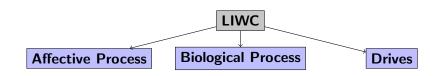
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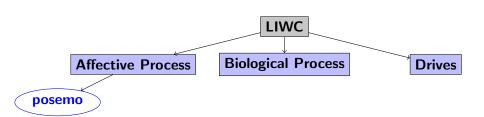
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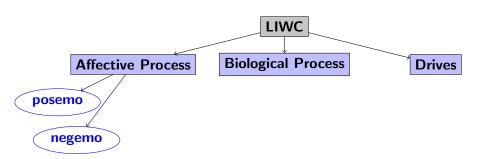
LIWC

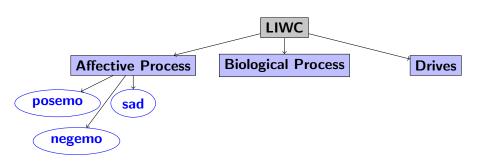


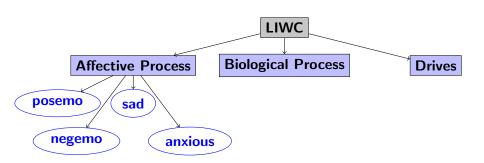


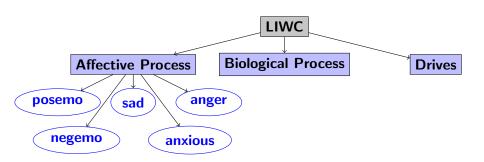


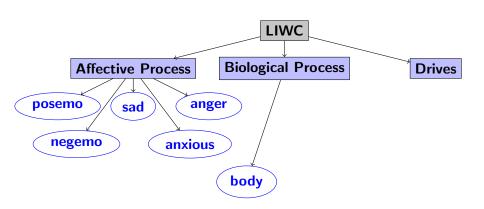


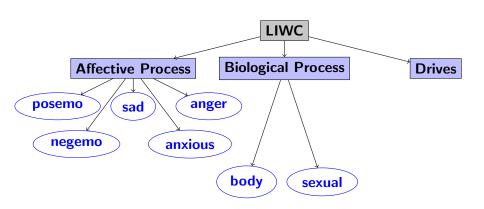


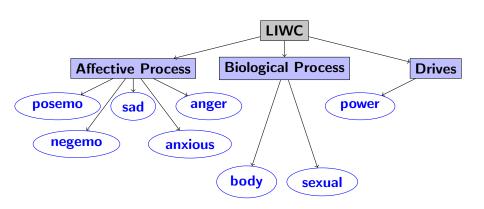


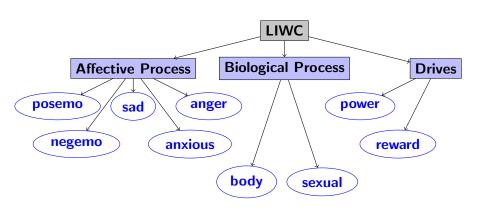


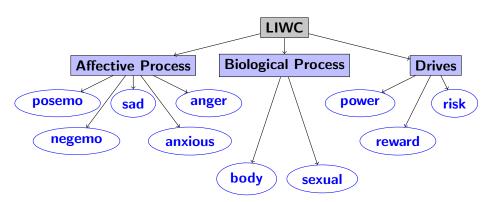






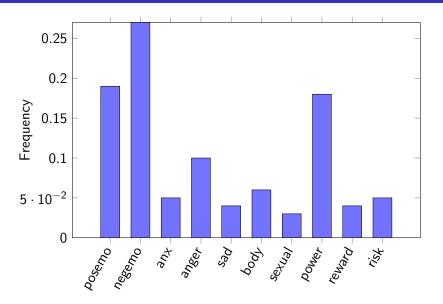






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LIWC Term Distribution in Asia



Limitations

• Findings may not be generalized

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- Not the representation of the whole movement

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- Findings may not be generalized
- Not the representation of the whole movement
- Misrepresentation on social media

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Conclusion





Figure: #MeToo Movement

Thank You