

Solutions - Week 5 Assignment

1. As per the slides shown in the lecture, which of the USA police departments has highest number of followers on Twitter?
 - a. New York
 - b. Boston**
 - c. Baltimore
 - d. Seattle

2. Which of the following is the verified Twitter handle of Delhi Traffic Police?
 - a. @delhi_traffic
 - b. @delhitraffic
 - c. @dtptraffic**
 - d. @dtp_traffic

3. The best way to identify whether a Police handle on Twitter is legitimate or not is to:
 - a. Check the handle spelling.
 - b. Check the description of the profile.
 - c. Look for the verified sign on the profile.**
 - d. Examine the tweets made by the handle.

4. What was the average response time of police on citizens posts on their facebook page?
 - a. 10 minutes
 - b. 10 hours
 - c. 30 minutes
 - d. 30 hours**

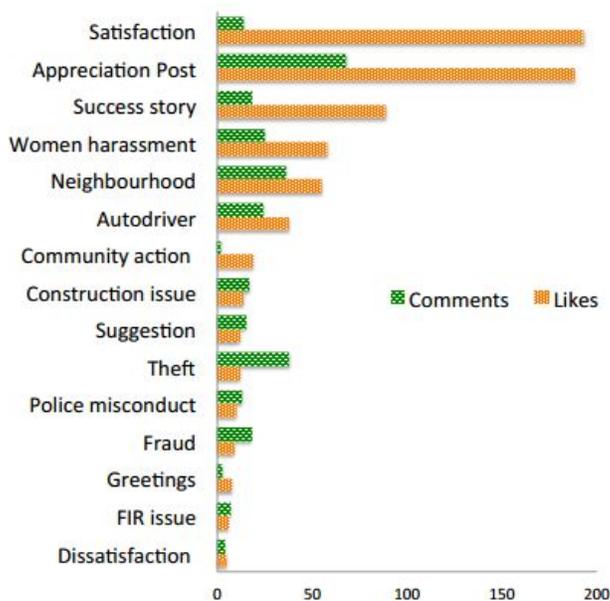
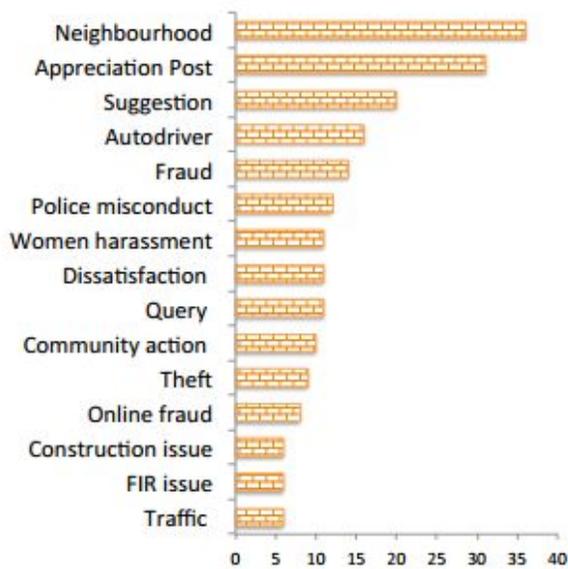
5. The engagement style followed by police while interacting with the citizens is:
 - a. Always formal.**
 - b. Always informal.
 - c. Sometimes formal, while sometimes informal.

6. *Police pages/handles on Facebook/Twitter has resulted in police holding itself accountable on these online platform for its actions.* This statement is:
 - a. True**
 - b. False

7. Which of the following is NOT a social and cognitive parameter of Measure of Behaviour?
 - a. Interpersonal Focus
 - b. Valence**
 - c. Social Orientation
 - d. Cognition

8. Police posts are mostly on which of the following:
- Advisories**
 - Status of different cases investigated**
 - Neighbourhood problems
 - Missing people
9. Citizens initiated threads show which of the following characteristics:
- Lower negative sentiment
 - High arousal**
 - Low arousal
 - Higher negative sentiment**
10. Which of the following statements is true?
- Police and citizen engagement is more when police generates content on OSN**
 - Police and citizen engagement is more when citizens generate content on OSN
 - Police and citizen engagement is same no matter who generates the content
 - None of the above
11. The ratio of the number of categories identified for public posts and the number of categories identified for police posts using thematic inductive analysis is
- 1
 - 2
 - 3.33
 - 4**

The following figure has two graphs, each of which plot data collected from the Facebook page of an Indian police department. The first graph plots the type of post versus the number of posts that belong to this type. The second graph plots the type of post versus the total number of likes and comments received by that type.



12. Most citizen posts tend to address which of the following concerns?

- a. Police misconduct
- b. Fraud
- c. Neighbourhood**
- d. Theft

13. Appreciation posts

- a. Are more frequent than neighbourhood posts, and have more comments and likes compared to the neighbourhood posts

- b. Are less frequent than neighbourhood posts, and have fewer comments and likes compared to the neighbourhood posts
- c. Are more frequent than neighbourhood posts, but have fewer comments and likes compared to the neighbourhood posts
- d. **Are less frequent than neighbourhood posts, but have more comments and likes compared to the neighbourhood posts**

Consult the following key and answer the questions that follow.

$P_{P\&C}$	Police initiated discussion threads where both police (P) and citizens (C) left comments and were part of discussion
P_C	Police initiated discussion threads where only citizens left comments
$C_{P\&C}$	Citizen initiated discussion threads where police and citizens both left comments
C_C	Citizen initiated discussion threads where only citizens left comments

	Total Posts	w/ ≥ 1 Comment	P&C	C
	85,408	46,845	5,519 $P_{P\&C}$	41,326 P_C
	47,474	24,984	17,196 $C_{P\&C}$	7,788 C_C

14. What percentage of the total posts made by police departments received comments from both citizens and the police?

- a. 5.46
- b. **6.46**
- c. 8.56
- d. 9.56

15. What percentage of citizen-initiated posts had at least one comment?

- a. 32.6
- b. 42.6
- c. 52.6**
- d. 60

Use the following table to answer Q16 and Q17.

Table 5: Mean, median and standard dev. of comments and 'likes' on posts of different discussion threads. ** $p < .01$ and * $p < .05$, per Mann Whitney U tests.

	Comments			'Likes'		
	Avg	Std dev.	Med	Avg	Std dev.	Med
$P_{P\&C}$	19.68	86.17	7	114.71	805.55	22
P_C	9.88	74.92	3	88.05	1025.53	22
<i>z</i> -score	-48.25**			-1.19		
$C_{P\&C}$	3.34	19.19	2	9.4	253.85	2
C_C	3.69	13.79	2	13.38	201.57	3
<i>z</i> -score	-2.275*			-19.54**		

16. Consider the following statement S.

S: The average number of comments in $P_{P\&C}$ threads is _____ than the average number of comments in P_C threads.

Fill in the blank.

- a. Lower
- b. Higher**

17. Consider the following statement S.

S: The average number of likes in $C_{P\&C}$ threads is _____ than the average number of likes in C_C threads.

Fill in the blank.

- a. Lower**
- b. Higher

In the following table, consider the row marked with a red box around it. The second and fourth columns in the row give the average percentage of the word 'I' in $C_{P\&C}$ and C_C threads respectively. Let these values be denoted by X and Y.

	$C_{P\&C}$		C_C	
ppron	0.062	0.059	0.045	0.056
i	0.008	0.017	0.014	0.033
shehe	0.002	0.01	0.003	0.003
they	0.005	0.013	0.008	0.008

18. What is the value of $(Y - X)/X$?

- a. **0.75**
- b. -0.75
- c. 0.42
- d. -0.42

19. Consider the following statement, S.

S: Discussion threads involving just citizens are highly self-attention focussed.

Which of the following relationships between X and Y support S?

- a. $X > Y$
- b. **$X < Y$**
- c. $X = Y$
- d. $X = e^Y$

20. In the context of policing, actionable information is

- a. **Specific, consistent and credible information that can be used to make a decision**
- b. Information that informs the police of an action
- c. Information that will cause the police to take action against the poster
- d. Information posted to the Facebook page of a police department