

Topic Modeling – LSA – Flu vaccination

Exemplary dataset derived from

https://data.ncl.ac.uk/articles/dataset/Interview_Transcripts/14242040

Publication: Price, T., McColl, E. & Visram, S. Barriers and facilitators of childhood flu vaccination: the views of parents in North East England. *J Public Health (Berl.)* 30, 2619–2626 (2022). <https://doi.org/10.1007/s10389-022-01695-2>

Method:

Approach: Latent Semantic Analysis (LSA)

Input: 12 interview transcripts

Output: 10 topics with each 20 words

Headings in brackets are interpreted and introduced by human-based approach

Results:

(parental perception) Topic 1: feel, come, obviously, younger, school, guess, nhs, health, kid, interesting, young, speak, happen, ill, effect, letter, appointment, remember, cold, definitely

(trust in medical authorities and science) Topic 2: wife, straightforward, pretty, faith, obviously, seek, letter, beneficial, medical, uk, website, alright, important, garden, world, scientist, certainly, science, personally, text

(condition of child) Topic 3: son, team, specialist, blood, health, daughter, problem, visitor, today, advice, unwell, help, june, form, allergic, particularly, eat, play, laughter, necessarily

(fear of flu) Topic 4: daughter, feel, season, jab, mind, guess, issue, definitely, book, covid, friend, come, protect, vulnerable, mainly, strain, immunization, outbreak, importance, public

(appointment scheduling) Topic 5: son, specialist, team, unwell, phone, guess, faith, available, come, organize, clinic, arrange, word, medical, food, bear, horrible, reception, allergic, trust

(concern and fear of flu) Topic 6: practice, guess, concerned, invite, try, rest, cost, fear, speak, provide, important, correct, ring, occur, mention, june, contact, winter, recover, frustrating

(social norms) Topic 7: blood, age, discuss, versus, guess, necessarily, cell, circumstance, particularly, understanding, community, wise, calpol, nurse, term, affect, body, red, cost, laughter

(appointment and convenience) Topic 8: honest, hour, practice, ago, course, appointment, unwell, injection, nursery, nasal, normally, week, school, experience, straight, wait, fine, issue, point, finish

(appointment scheduling) Topic 9: accept, expert, book, mind, daughter, suppose, immunize, visitor, chest, beneficial, practice, faith, small, important, night, especially, pneumonia, speak, let, immunization

(trust in vaccination) Topic 10: faith, beneficial, massive, stuff, ill, poorly, straight, somebody, trust, young, interesting, situation, base, check, medical, birth, bring, proper, parent, boy