

Hotel Review Analyses Using A-Priori Method

2019.09.13

A Priori Method

- We pre-selected a set of countries that have been shown to be low in VI: Australia, Norway, Sweden, Switzerland, and Finland; We also pre-selected two countries that have been shown to be high in VI: UK and US. Notice that we selected a subset of UK reviews and US reviews because the majority of the reviewers were from these two countries.
- This method gives us overall 75,889 reviews (reviews from high VI countries: $N = 37,945$, reviews from low VI countries: $N = 37,944$).

Highly Frequent Service-Relevant Words

	Australia	Finland	Norway	Sweden	Switzerland	United Kingdom	United States
staff	1841	111	157	263	682	1075	135
service	687	59	80	124	399	553	51
reception	582	39	83	114	240	420	21
people	442	41	50	72	322	250	30

Reviews that contain “service” are mostly about different service items provided by the hotels, such as room service, cleaning service, internet service, laundry service, etc.

Reviews that contain “people” are mostly about complaints of crowdedness (e.g., “the room is too small for 2 people”, “there are too many people in the lobby”)

Negative reviews that contain “staff” or “receptionist” are mostly about unfriendly service (not necessarily rude).

➤ Therefore, reviews that contain “staff” or “receptionist” were selected as service-relevant reviews.

Main Effect of VI on Review Scores

(Using the whole sample)

	Mean of review scores	SD of review scores
Low VI	8.41	1.55
High VI	8.52	1.61

$$F[1,75,887] = 83.376, p < .001$$

Reviews from low VI countries had overall lower (i.e., more negative) scores than reviews from high VI countries.

Main Effect of VI on Review Scores

(Using only the sample whose negative reviews are service-relevant)

	N	Mean of review score	SD of review score
Low VI	2832	6.96	1.80
High VI	2804	6.94	1.93

$$F[1,5634] = .177, p = .674$$

Among reviewers whose negative reviews are service-relevant, review scores of reviewers from low VI countries and reviewers from high VI countries were similar.

Main Effect of VI on the Amount of Service-relevant Reviews (among all negative reviews)

		Service-Relevant	
		No	Yes
VI_group	Low VI	35111	2832 (7.5%)
	High VI	35141	2804 (7.4%)

$$X^2(1) = .152, p = .697$$

Reviewers from low VI countries and reviewers from high VI countries had similar amount of service-relevant negative reviews.

Main Effect of VI on the Amount of Service-relevant Reviews (among all positive reviews)

		Service-Relevant	
		No	Yes
VI_group	Low VI	23223	14721 (38.8%)
	High VI	22967	14978(39.5%)

$$X^2(1) = 3.643, p = .056$$

Reviewers from high VI countries had slightly more service-relevant positive reviews than reviewers from low VI countries.