

# Enumerator and Respondent Challenges in the Context of Straight Lining Issues Using Kurtosis Analysis

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**Abstract:** *To ensure the representativeness of the data, it is imperative for the researcher to collect data from multiple regions, necessitating the involvement of third-party individuals known as enumerators. Due to the researcher's inability to accompany these enumerators in the data collection process, the phenomenon known as the enumerator effect comes into play. This effect can lead to various outcomes such as identical responses, straight lining, or flatlining of data across the indicators of any particular constructs. Subsequently, the utilization of Microsoft Excel becomes crucial for visually detecting instances of straight lining and conducting subsequent kurtosis analyses to further examine the data. Strategies for mitigating the occurrence of straight lining within the data will also be explored and discussed in this context.*

**Keywords:** Enumerator Effect, Respondent Frustration, Straight Lining, Kurtosis

## 1. Introduction

The predicament faced by the researcher arises when conducting a quantitative survey that spans across various regions simultaneously, posing a significant challenge. Consequently, the utilization of enumerators emerges as a valuable solution, facilitating the researcher in conducting data collection concurrently and expediting the process of completing both the Pilot-Test and the Actual Survey within a shorter time frame, as to conform the representativeness of the data gathered.

According to Shakespeare (2024), the benefits associated with conducting a Pilot-Test are manifold and include: (a) assessing the validity of the study; (b) gaining insights into the comprehensive scope of the project; (c) determining the readiness of a product for implementation or the necessity for updates; (d) offering an opportunity for practice; (e) evaluating reliability; (f) assessing timing; and (g) capturing data that may prove useful in the future.

Prior to embarking on data analysis for the Pilot-Test, the researcher must ensure that the data meets the minimum required number of rows for Pilot-Test and that SmartPLS is capable of performing bootstrapping. As suggested by Viechtbauer et al. (2015) calculator (Crutzen, 2024), a minimum of 59 respondents is recommended for the Pilot-Test to achieve a confidence level of 95% and a probability of 0.05. The tool SmartPLS introduced by Ringle et al. (2024) enables the testing of the statistical significance of various PLS-SEM results, including path coefficients, Cronbach's alpha, HTMT, and  $R^2$  values. However, in cases where the sample

data is insufficient and exhibits straight lining issues, the process of bootstrapping may encounter singularity errors. These errors can be attributed to the presence of identical responses, flatlining or straight lining among the indicators of constructs, which may be influenced by the handling of respondents by enumerators in an inadequate manner.

In the context of this conceptual paper, the researcher aims to investigate the potential relationship between straight lining issues and kurtosis analysis to identify the underlying causes associated with enumerators and their corresponding respondents. As described by Turney (2024), kurtosis serves as a metric for the tailedness of a distribution, reflecting the frequency of outliers. Excess kurtosis indicates the tailedness of a distribution concerning a normal distribution, with tails representing the likelihood or frequency of values that deviate significantly from the mean. Tails categorize distributions into three groups: (a) mesokurtic distributions with moderate kurtosis; (b) platykurtic distributions with low kurtosis and thin tails; and (c) leptokurtic distributions with high kurtosis and fat tails.

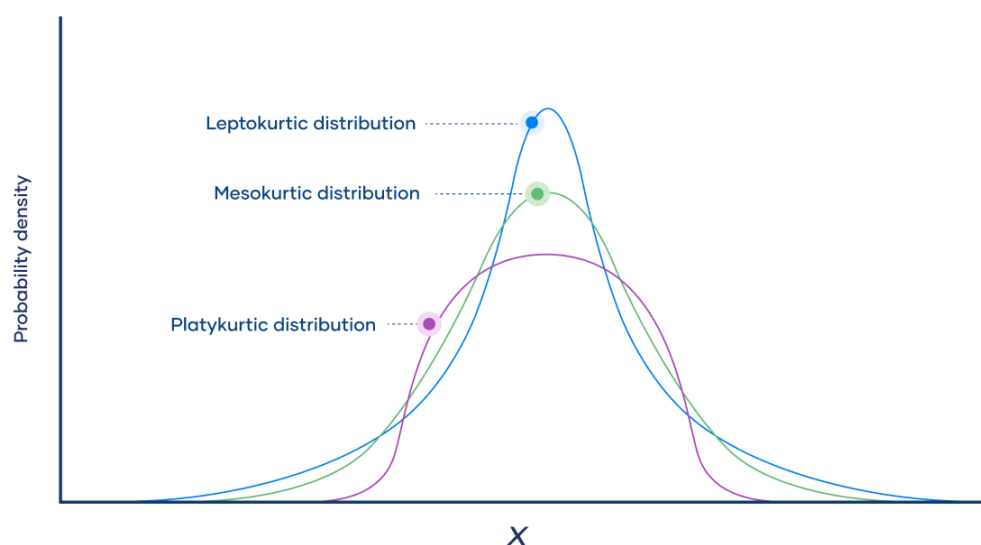


Figure 1: Type of Kurtosis (Turney, 2024)

## 2. Problem Statement

The process of data collection by means of administering a questionnaire by a third party, commonly known as an enumerator, entails a complex social interaction between the interviewer and the respondent. This interaction is susceptible to various factors that have the potential to influence the quality of the data obtained during the interview, encompassing both direct and indirect effects on the respondent. An example of a passive influence is the respondent's perception of the interviewer based on their visible characteristics, while an active influence could be the demeanor and personality traits exhibited by the interviewer. It is imperative to recognize the significance of assessing how this interaction may impact the accuracy and reliability of the data gathered, especially for individuals engaged in conducting surveys or utilizing survey data. Di Maio & Fiala (2020) have referred to these influences as enumerator effects, emphasizing the need to address them. Consequently, instances of identical responses, straight lining, or flatlining could arise.

Identical responses, straight lining, or flatlining may be attributed to errors made by either the respondents or the enumerators, or possibly a combination of both, as proposed by Thompson (2023). This could indicate a lack of attentiveness on the part of respondents towards a particular set of questions, or it could signify their frustration with an excessively lengthy

survey, prompting them to hurriedly provide the same response to each question in the battery. Straight lining, a common behavior observed among respondents during surveys, involves mechanically responding to questions in a repetitive manner without considering the content of the questions. Typically stemming from boredom or time constraints, this phenomenon reflects the respondent's desire to complete the survey swiftly, perhaps to appease the enumerators or obtain an incentive with minimal exertion. Similarly, instances of flatlining at the enumerator level might suggest inadequate data recording by a specific interviewer.

### 3. Methodology

Sitar-Tăut et al. (2021) have recommended a meticulous examination of data samples for duplicates, missing data, and straight-liners before processing, analysing, and visualising the data using Microsoft Excel. Initially introduced in 1985 as a spreadsheet application for the Macintosh operating system, Microsoft Excel has evolved into one of the most versatile and widely recognized tools for data analysis, catering to a user base exceeding one billion globally. Microsoft Excel serves as an indispensable instrument for professionals in the field of data visualisation, facilitating the processing, analysis, storytelling, and presentation of intricate data sets to derive meaningful insights, as highlighted by Ciat (2024).

Upon exporting the data from a repository such as Google Form, for instance, in Microsoft Excel format, the researcher is enabled to commence the process of data visualisation by pinpointing the identical responses, straight lining, or flatlining across all indicators of each constructs. In this particular research endeavor, the researcher is focused on observing a total of 9 (nine) constructs, necessitating the creation of 9 additional columns within the datasheet. To facilitate this analytical process, the researcher will leverage 3 (three) distinct Microsoft Excel functionalities, specifically, "IF", "MOD", and "SUM". To exemplify, consider the construct "Performance Expectancy (PE)" which comprises of 4 indicators; the subsequent steps entail: (a) aggregating all Likert Scale values using the "SUM" function; (b) applying the modulo operator "MOD" to divide the cumulative sum by the number of indicators and examining the remainder; (c) lastly, employing the "IF" function to determine whether the residual value is greater than zero, indicating the absence of identical responses, straight lining, or flatlining, or if it equals to 0, signifying the occurrence of identical responses, straight lining, or flatlining. The formula to be implemented in the new column within the Microsoft Excel sheet would be "=IF((MOD(SUM(L2:O2),4))>0,0,1)", resulting in a table structured as described below.

Table 1: Visualisation of identical responses, straight lining, or flatlining

B2	PE1	PE2	PE3	PE4	EE1	EE2	EE3	EE4	S1	S2	S3	S4	S5	S6	FC1	FC2	FC3	FC4	HM1	HM2	HM3	HM4	HM5	HM6	HM7	HM8	HM9	HM10	HM11	HM12	HM13	HM14	HM15	HM16	HM17	HM18	HM19	HM20	HM21	HM22	HM23	HM24	HM25	HM26	HM27	HM28	HM29	HM30	HM31	HM32	HM33	HM34	HM35	HM36	HM37	HM38	HM39	HM40	HM41	HM42	HM43	HM44	HM45	HM46	HM47	HM48	HM49	HM50	HM51	HM52	HM53	HM54	HM55	HM56	HM57	HM58	HM59	HM60	HM61	HM62	HM63	HM64	HM65	HM66	HM67	HM68	HM69	HM70	HM71	HM72	HM73	HM74	HM75	HM76	HM77	HM78	HM79	HM80	HM81	HM82	HM83	HM84	HM85	HM86	HM87	HM88	HM89	HM90	HM91	HM92	HM93	HM94	HM95	HM96	HM97	HM98	HM99	HM100	HM101	HM102	HM103	HM104	HM105	HM106	HM107	HM108	HM109	HM110	HM111	HM112	HM113	HM114	HM115	HM116	HM117	HM118	HM119	HM120	HM121	HM122	HM123	HM124	HM125	HM126	HM127	HM128	HM129	HM130	HM131	HM132	HM133	HM134	HM135	HM136	HM137	HM138	HM139	HM140	HM141	HM142	HM143	HM144	HM145	HM146	HM147	HM148	HM149	HM150	HM151	HM152	HM153	HM154	HM155	HM156	HM157	HM158	HM159	HM160	HM161	HM162	HM163	HM164	HM165	HM166	HM167	HM168	HM169	HM170	HM171	HM172	HM173	HM174	HM175	HM176	HM177	HM178	HM179	HM180	HM181	HM182	HM183	HM184	HM185	HM186	HM187	HM188	HM189	HM190	HM191	HM192	HM193	HM194	HM195	HM196	HM197	HM198	HM199	HM200	HM201	HM202	HM203	HM204	HM205	HM206	HM207	HM208	HM209	HM210	HM211	HM212	HM213	HM214	HM215	HM216	HM217	HM218	HM219	HM220	HM221	HM222	HM223	HM224	HM225	HM226	HM227	HM228	HM229	HM230	HM231	HM232	HM233	HM234	HM235	HM236	HM237	HM238	HM239	HM240	HM241	HM242	HM243	HM244	HM245	HM246	HM247	HM248	HM249	HM250	HM251	HM252	HM253	HM254	HM255	HM256	HM257	HM258	HM259	HM260	HM261	HM262	HM263	HM264	HM265	HM266	HM267	HM268	HM269	HM270	HM271	HM272	HM273	HM274	HM275	HM276	HM277	HM278	HM279	HM280	HM281	HM282	HM283	HM284	HM285	HM286	HM287	HM288	HM289	HM290	HM291	HM292	HM293	HM294	HM295	HM296	HM297	HM298	HM299	HM300	HM301	HM302	HM303	HM304	HM305	HM306	HM307	HM308	HM309	HM310	HM311	HM312	HM313	HM314	HM315	HM316	HM317	HM318	HM319	HM320	HM321	HM322	HM323	HM324	HM325	HM326	HM327	HM328	HM329	HM330	HM331	HM332	HM333	HM334	HM335	HM336	HM337	HM338	HM339	HM340	HM341	HM342	HM343	HM344	HM345	HM346	HM347	HM348	HM349	HM350	HM351	HM352	HM353	HM354	HM355	HM356	HM357	HM358	HM359	HM360	HM361	HM362	HM363	HM364	HM365	HM366	HM367	HM368	HM369	HM370	HM371	HM372	HM373	HM374	HM375	HM376	HM377	HM378	HM379	HM380	HM381	HM382	HM383	HM384	HM385	HM386	HM387	HM388	HM389	HM390	HM391	HM392	HM393	HM394	HM395	HM396	HM397	HM398	HM399	HM400	HM401	HM402	HM403	HM404	HM405	HM406	HM407	HM408	HM409	HM410	HM411	HM412	HM413	HM414	HM415	HM416	HM417	HM418	HM419	HM420	HM421	HM422	HM423	HM424	HM425	HM426	HM427	HM428	HM429	HM430	HM431	HM432	HM433	HM434	HM435	HM436	HM437	HM438	HM439	HM440	HM441	HM442	HM443	HM444	HM445	HM446	HM447	HM448	HM449	HM450	HM451	HM452	HM453	HM454	HM455	HM456	HM457	HM458	HM459	HM460	HM461	HM462	HM463	HM464	HM465	HM466	HM467	HM468	HM469	HM470	HM471	HM472	HM473	HM474	HM475	HM476	HM477	HM478	HM479	HM480	HM481	HM482	HM483	HM484	HM485	HM486	HM487	HM488	HM489	HM490	HM491	HM492	HM493	HM494	HM495	HM496	HM497	HM498	HM499	HM500	HM501	HM502	HM503	HM504	HM505	HM506	HM507	HM508	HM509	HM510	HM511	HM512	HM513	HM514	HM515	HM516	HM517	HM518	HM519	HM520	HM521	HM522	HM523	HM524	HM525	HM526	HM527	HM528	HM529	HM530	HM531	HM532	HM533	HM534	HM535	HM536	HM537	HM538	HM539	HM540	HM541	HM542	HM543	HM544	HM545	HM546	HM547	HM548	HM549	HM550	HM551	HM552	HM553	HM554	HM555	HM556	HM557	HM558	HM559	HM560	HM561	HM562	HM563	HM564	HM565	HM566	HM567	HM568	HM569	HM570	HM571	HM572	HM573	HM574	HM575	HM576	HM577	HM578	HM579	HM580	HM581	HM582	HM583	HM584	HM585	HM586	HM587	HM588	HM589	HM590	HM591	HM592	HM593	HM594	HM595	HM596	HM597	HM598	HM599	HM600	HM601	HM602	HM603	HM604	HM605	HM606	HM607	HM608	HM609	HM610	HM611	HM612	HM613	HM614	HM615	HM616	HM617	HM618	HM619	HM620	HM621	HM622	HM623	HM624	HM625	HM626	HM627	HM628	HM629	HM630	HM631	HM632	HM633	HM634	HM635	HM636	HM637	HM638	HM639	HM640	HM641	HM642	HM643	HM644	HM645	HM646	HM647	HM648	HM649	HM650	HM651	HM652	HM653	HM654	HM655	HM656	HM657	HM658	HM659	HM660	HM661	HM662	HM663	HM664	HM665	HM666	HM667	HM668	HM669	HM670	HM671	HM672	HM673	HM674	HM675	HM676	HM677	HM678	HM679	HM680	HM681	HM682	HM683	HM684	HM685	HM686	HM687	HM688	HM689	HM690	HM691	HM692	HM693	HM694	HM695	HM696	HM697	HM698	HM699	HM700	HM701	HM702	HM703	HM704	HM705	HM706	HM707	HM708	HM709	HM710	HM711	HM712	HM713	HM714	HM715	HM716	HM717	HM718	HM719	HM720	HM721	HM722	HM723	HM724	HM725	HM726	HM727	HM728	HM729	HM730	HM731	HM732	HM733	HM734	HM735	HM736	HM737	HM738	HM739	HM740	HM741	HM742	HM743	HM744	HM745	HM746	HM747	HM748	HM749	HM750	HM751	HM752	HM753	HM754	HM755	HM756	HM757	HM758	HM759	HM760	HM761	HM762	HM763	HM764	HM765	HM766	HM767	HM768	HM769	HM770	HM771	HM772	HM773	HM774	HM775	HM776	HM777	HM778	HM779	HM780	HM781	HM782	HM783	HM784	HM785	HM786	HM787	HM788	HM789	HM790	HM791	HM792	HM793	HM794	HM795	HM796	HM797	HM798	HM799	HM800	HM801	HM802	HM803	HM804	HM805	HM806	HM807	HM808	HM809	HM810	HM811	HM812	HM813	HM814	HM815	HM816	HM817	HM818	HM819	HM820	HM821	HM822	HM823	HM824	HM825	HM826	HM827	HM828	HM829	HM830	HM831	HM832	HM833	HM834	HM835	HM836	HM837	HM838	HM839	HM840	HM841	HM842	HM843	HM844	HM845	HM846	HM847	HM848	HM849	HM850	HM851	HM852	HM853	HM854	HM855	HM856	HM857	HM858	HM859	HM860	HM861	HM862	HM863	HM864	HM865	HM866	HM867	HM868	HM869	HM870	HM871	HM872	HM873	HM874	HM875	HM876	HM877	HM878	HM879	HM880	HM881	HM882	HM883	HM884	HM885	HM886	HM887	HM888	HM889	HM890	HM891	HM892	HM893	HM894	HM895	HM896	HM897	HM898	HM899	HM900	HM901	HM902	HM903	HM904	HM905	HM906	HM907	HM908	HM909	HM910	HM911	HM912	HM913	HM914	HM915	HM916	HM917	HM918	HM919	HM920	HM921	HM922	HM923	HM924	HM925	HM926	HM927	HM928	HM929	HM930	HM931	HM932	HM933	HM934	HM935	HM936	HM937	HM938	HM939	HM940	HM941	HM942	HM943	HM944	HM945	HM946	HM947	HM948	HM949	HM950	HM951	HM952	HM953	HM954	HM955	HM956	HM957	HM958	HM959	HM960	HM961	HM962	HM963	HM964	HM965	HM966	HM967	HM968	HM969	HM970	HM971	HM972	HM973	HM974	HM975	HM976	HM977	HM978	HM979	HM980	HM981	HM982	HM983	HM984	HM985	HM986	HM987	HM988	HM989	HM990	HM991	HM992	HM993	HM994	HM995	HM996	HM997	HM998	HM999	HM1000
Johor	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

Please take note that any instances of identical responses, straight lining, or flatlining, where all responses yield a consistent rating of 5 (five) on the Likert Scale questionnaire across all 44

indicators, will be excluded from the analysis of the Actual Survey at the end of this quantitative research study.

**Table 2: Occurrence of identical responses, straight lining, or flatlining**

	B2	PE	EE	SI	FC	HM	PV	HA	TD	BI	TOT
Johor	1	1	1	1	1	1	1	1	1	1	9
Johor	1	1	1	1	1	1	1	1	1	1	9
Johor	1	1	1	1	1	1	1	1	1	1	9
Johor	1	1	1	1	1	1	1	1	1	1	9
Johor	1	1	1	1	1	1	1	1	1	1	9
Penang	1	1	1	1	1	1	1	1	1	1	9
Penang	1	1	1	1	1	1	1	1	1	1	9
Penang	1	1	1	1	1	1	1	1	1	1	9
Penang	1	1	1	1	1	1	1	1	1	1	9
Selangor	1	1	1	1	1	1	1	1	1	1	9
Selangor	1	1	1	1	1	1	1	1	1	1	9

The researcher, in the subsequent step of the analysis process, would proceed to arrange the rows in the dataset according to two key variables: the geographical location of the respondents and the aggregate count of potential matching responses. This categorization is pivotal within the analytical framework under consideration, with a specific emphasis on a threshold of up to 9 (nine) occurrences. Data is collected from 3 (three) different regions: Johor, Penang, and Selangor; with total number of data is n=206, which comprised of Johor n=39, Penang n=95, and Selangor n=72. Consequently, the resulting presentation of data in tabular form would exhibit a structured layout as illustrated below.

**Table 3: Frequency of identical responses, straight lining, or flatlining**

Number of occurrences	Johor	Penang	Selangor
9 out of 9	5	4	2
8 out of 9	0	1	5
7 out of 9	3	1	4
6 out of 9	4	0	9
5 out of 9	1	5	8
4 out of 9	1	9	12
3 out of 9	4	14	8
2 out of 9	8	23	10
1 out of 9	12	23	12
0 out of 9	1	15	2

There is an available online analysis for kurtosis that researchers can utilize to upload a Microsoft Excel file containing the data intended for analysis. The Microsoft Excel datafile comprises the summary of 9 (nine) constructs indicating the presence of identical responses, straight lining, or flatlining as in Table 2 above. Subsequently, this datafile will be divided into 3 (three) separate Microsoft Excel datafiles based on 3 (three) different regions namely Johor, Penang, and Selangor. These distinct Microsoft Excel datafiles will then be submitted to the WebPower (2024) website separately for further processing and analysis. The outcome of the kurtosis analysis will be presented in a tabular format.

**Table 4: kurtosis values for each constructs and for each regions**

Construct	Johor	Penang	Selangor
Performance Expectancy (PE)	-1.9592	-1.1884	-2.0043
Effort Expectancy (EE)	-2.0839	-0.6762	-2.0547

Social Influence (SI)	-2.1081	-0.3353	-1.7718
Facilitating Condition (FC)	-2.1081	0.6054	-1.6991
Hedonic Motivation (HM)	-1.0404	-0.9564	-1.6160
Price Value (PV)	-1.5405	-1.6728	-1.9735
Habit (HA)	-1.9592	-1.4646	-1.9353
Transaction Data Awareness (TD)	-1.3187	0.9162	-1.8893
Behavioral Intention (BI)	-1.7166	-0.5143	-1.8893

#### 4. Conclusion and Recommendations

The kurtosis analysis conducted for the state of Johor demonstrates consistently low values across all variables, pointing towards a prevalent tendency among respondents to exhibit straight-lining behavior in their survey responses. This is evident when examining specific variables such as Performance Expectancy (PE) with a kurtosis value of -1.9592, Effort Expectancy (EE) at -2.0839, Social Influence (SI) recorded as -2.1081, and similarly, Facilitating Condition (FC) also at -2.1081. Furthermore, other variables including Hedonic Motivation (HM), Price Value (PV), Habit (HA), Transaction Data Awareness (TD), and Behavioral Intention (BI) showcase comparably low kurtosis values within the range of -1.0404 to -1.7166. This consistent trend suggests that respondents in Johor tend to provide uniform or closely similar ratings across various survey questions, resulting in distributions that deviate significantly from a standard normal distribution. The prevalence of such a high degree of straight-lining behavior indicates potential challenges within the survey administration process in Johor, possibly stemming from issues such as respondent disengagement or survey fatigue. Addressing this issue may require the enumeration team in Johor to undergo additional training aimed at enhancing respondent engagement levels and encouraging a more diverse and thoughtful range of responses. Exploring factors like survey length, question clarity, and respondent fatigue could offer insights into the underlying causes of this straight-lining behavior, thereby enhancing the overall quality and dependability of the survey data gathered from this particular state.

For Penang, in contrast to Johor, the kurtosis values signify a more diverse and less clustered response pattern from participants. The variables exhibit a combination of lower and higher kurtosis values, with Performance Expectancy (PE) at -1.1884, Effort Expectancy (EE) at -0.6762, and Social Influence (SI) at -0.3353, indicating less frequent straight-lining patterns compared to Johor. Notably, Facilitating Condition (FC) displays a positive kurtosis value of 0.6054, suggesting a more peaked distribution, while Transaction Data Awareness (TD) also shows a positive kurtosis value of 0.9162. Other factors like Hedonic Motivation (HM), Price Value (PV), Habit (HA), and Behavioral Intention (BI) still present negative kurtosis values, albeit less extreme than those in Johor. This variability in kurtosis values implies that respondents in Penang offered more diverse and thoughtful responses, leading to distributions closer to or even sharper than a normal distribution. This indicates that surveyors in Penang were more successful in involving respondents and eliciting genuine feedback. The techniques and approaches utilized by surveyors in Penang could be adopted as exemplary standards for other regions, thereby enhancing the overall quality and dependability of survey data.

Similar to Johor, the kurtosis analysis for Selangor reveals low values across most variables, indicating a prevalence of straight-lining behavior among respondents. Performance Expectancy (PE) exhibits a kurtosis value of -2.0043, Effort Expectancy (EE) -2.0547, and Social Influence (SI) -1.7718. Facilitating Condition (FC) and Hedonic Motivation (HM) similarly display low kurtosis values of -1.6991 and -1.6160, respectively. Price Value (PV),

Habit (HA), Transaction Data Awareness (TD), and Behavioral Intention (BI) demonstrate kurtosis values ranging from -1.9353 to -1.8893. These findings indicate that respondents in Selangor frequently offered straight-lining or highly similar ratings across various questions, leading to distributions that are less peaked compared to a normal distribution. This suggests potential issues within the survey administration process in Selangor, potentially stemming from lack of engagement or respondent fatigue. Enhancing enumerator training in Selangor could be advantageous for improving respondent engagement and eliciting more diverse and thoughtful responses. Addressing these concerns and possibly adopting best practices from regions like Penang could significantly enhance the data quality and the reliability of survey results in Selangor.

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