Category	Flag	Description	Fail Criteria
Duration	Page Speeder	Submitted many pages too quickly relative to the number of questions shown.	Submitted >50% of pages in less than (3 seconds × number of items per page)
	Acceleration	Respondent sped up substantially over the course of the survey.	2nd third of survey submitted ≥2× faster than 1st; final third ≥2× faster than 2nd
	Speeder	Completed the survey much faster than typical respondents.	< 1/3 median total study duration
	Slower	Took unusually long to complete the survey.	> 10× median total study duration
Individual Variability	Avg Longstring Straightlining	Gave repetitive answers across items on average.	Outlier average longstring on two question batteries
	Max Longstring Straightlining	Provided a long sequence of identical responses.	Outlier max longstring on two question batteries
	IRV	Showed unusually low or high variability in responses compared to others.	Outlier intra-individual response variability across two batteries
Outlier	Mahalanobis Distance	Response pattern is statistically unusual compared to the overall sample.	Mahalanobis distance outlier at 99% CI across question batteries
Qualitative item	Open-end Gibberish	Open-ended response appears nonsensical or irrelevant.	Flagged as invalid via ChatGPT-based classification
Response Consistency	Psychometric Synonyms	Responses to similar items are not aligned, suggesting inconsistency.	Insufficient positive correlation across synonym item pairs
	Psychometric Antonyms	Responses to opposite items are not appropriately inverse.	Insufficient negative correlation across antonym item pairs

	HH Size consistency	Reported household size inconsistently across related questions.	Inconsistency across two household size items
	Logical consistency	Responses to logically related items contradict each other.	Inconsistency across two political ideology items
Suspicious Activities	ReCaptcha score	Algorithmic assessment suggests potentially automated behaviors	< 0.5 Qualtrics reCAPTCHA score
	Majority duplication	Most responses are identical to another respondent.	>70% duplication across all survey items
	Duplicate unique ID	Same respondent ID appears more than once.	Duplicate respondent ID detected
	Duplicate duration or finish time	Survey timing matches exactly with another case.	Identical duration or EndDate across respondents
Suspicious Response Patterns	Acquiescence bias	Tends to agree with statements regardless of content.	Selected top positive option for ≥2/3 of all ordinal items
	DK bias	Frequently selected “Don’t know” or skipped items.	≥2/3 of all items skipped or selected “Don’t know” or “Prefer not to respond”
	Exact duplicate across items	Responses exactly match another case across key sections.	Exact duplication across two key question batteries