

Use TextSmart for fast, reliable, complete analysis of open-ended survey responses



TextSmart™ is a breakthrough in survey research that makes analysis of responses to open-ended questions fast and affordable. With TextSmart, you finally have a reliable means of doing quantitative analysis on text-based responses.

TextSmart stands above other coding software because it makes cleaning, filtering and categorizing open-ended responses a snap – instead of a time-

consuming chore. You spend dramatically less time coding responses and more time on productive analysis.

Using state-of-the-art linguistics technology and proven statistical algorithms, TextSmart creates meaningful categories from open-ended survey responses. Plus, TextSmart gives you powerful tools for creating and revising categories to your needs. You get a complete, accurate picture

of your respondents' attitudes, opinions and perceptions, and produce more valuable surveys.

You can't afford to sacrifice vital findings that can give you an edge on your competition. Look inside to see how much value you can extract from open-ended responses with TextSmart.

TextSmart 

Discover new op

Gain a higher level of understanding about your respondents' attitudes, perceptions and opinions – ideas that can shape your strategies.

If you work in survey research, TextSmart is the tool to make your surveys more productive and successful. Where other methods fail, TextSmart gives you the opportunity to analyze open-ended survey questions for a comprehensive understanding of your respondents.

TextSmart automates the time-consuming tasks involved in coding responses and reduces to hours what used to take days. Now you can reliably and efficiently ask the questions you really want to ask – for survey answers you can really use.

“The time and effort saved by using TextSmart will make this program a must-have tool for those who want extensive free-form textual questions in their surveys.”

PC Magazine

TextSmart surveys

TextSmart is used across a wide range of applications, including:

- Customer satisfaction surveys
- Employee satisfaction surveys
- Brand and image surveys
- Production surveys
- Social and political research
- Health and lifestyle research
- Consulting research
- Patient satisfaction surveys
- Comment fields in databases

opportunities in your

Import and automatically filter responses

It's easy to get started with TextSmart. An intuitive Import Wizard guides you through the process of importing your responses in a tab-delimited (ASCII) file format. As responses are introduced, TextSmart automatically cuts through the clutter by stemming, aliasing and excluding words to focus on terms important to creating meaningful categories.

- A stemming process uses powerful linguistics technology to comb through responses, searching for derivations of common root words, and combining terms to create stemmed aliases (i.e., find, finding, finds).
- An aliasing technique combines synonyms (i.e., smart, wise, intelligent) into aliases automatically.
- An excluding process filters trivial words (i.e., be, is, the, of), creating a list of included terms which are valuable for building meaningful categories.

TextSmart is “dictionary-free,” so there’s no burden of creating a coding scheme or “concept” dictionary prior to beginning your analysis.

Refine terms with powerful tools

TextSmart offers powerful, flexible tools which make it a snap to clean and refine the group of terms (words and aliases) created by the import process. These tools include:

- Integrated spell-checking (for both American and British spellings) to enhance the automatic categorization process.
- A drag-and-drop feature to easily choose terms to include or exclude for automatic categorization.
- A custom alias feature that enables you to create aliases which supplement the aliases created with TextSmart’s automated stemming and aliasing procedures.

Here’s how TextSmart quickly and easily transforms open-ended responses into meaningful categories you turn into opportunities:

A rental car company is considering selling its pre-driven vehicles. To sell the right car to the right buyer, the company undertakes an in-depth market survey. The rental car company asks a sample of people in its target market to describe – in their own words – what factors appeal to them when evaluating vehicles. The following steps show how well TextSmart works on the open-ended question: *“Why do you like the car/truck that you own?”*

1 The analyst begins by importing the complete text of each response. TextSmart automatically filters the text by stemming, aliasing and excluding words. Plus, TextSmart offers powerful tools that give the analyst the flexibility to spell-check words, include or exclude terms and group terms into aliases. In a matter of minutes, the analyst acquires a thorough list of terms conveying her respondents’ opinions and is now ready to begin analysis.

Responses	Included
1 Why do you like the car/truck that you own?	Word Count
Case Response	good 25
3203 "It is attractive, safe, reliable, and it has good pick up"	comfort 22
3213 "Good new buy finance deal, reputation of reliability"	drive... 22
3355 It is completely reliable and reasonably priced	rely 22
3362 "It's comfortable, reliable, and gets good gas mileage"	great 20
3367 It's cheap to maintain and very reliable	reli 18
3399 It is sturdy, versatile and reliable	reliable 18
3490 My car is reliable and comfortable	reliability 3
	gas 18

The Responses window (above left) shows responses that have been imported into TextSmart. The Included window (above right) displays the frequency of important terms in the responses. It also shows an example of a stemmed alias. TextSmart’s stemming process automatically combines reliable and reliability into the alias rely.

survey research

Categorize and revise quickly and efficiently

Choose automatic categorization and TextSmart creates meaningful – and manageable – categories by automatically clustering terms that tend to occur together in responses. With a few keystrokes, you can change categorization parameters and rerun the automatic categorizer. And, you can easily refine these automatic categories by adding and deleting terms. Even build custom categories of your own by combining categories using Boolean logic. Simply use AND, OR and NOT to expand or contract categories to your specifications.

TextSmart eliminates the high costs involved in sending responses to outside coding firms. What would take a coding staff days, takes just a few hours with TextSmart – in the process saving you and your organization time, money and effort.

Export coded responses easily

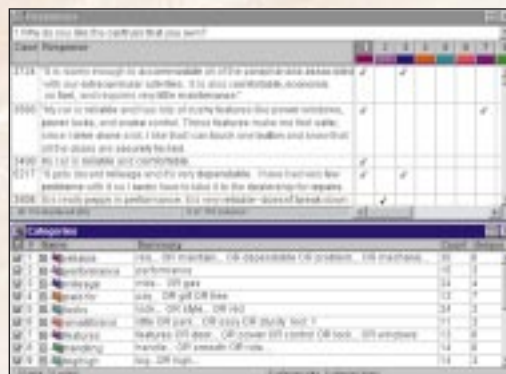
Once you're satisfied with your categories, you can easily select the ones you want to export. Quickly match and merge your TextSmart results with the corresponding SPSS data file or export results in a tab-delimited format. You can even export excluded terms and newly created aliases for use in future TextSmart sessions. In four simple steps, TextSmart enables you to discover more about your respondents than ever before. See the example below and see how well TextSmart turns open-ended survey responses into opportunities.

2 Next, the analyst cleans and refines this list of terms by excluding trivial terms and grouping synonyms into aliases. This process creates a list of terms that are suitable for categorization.



Sorting terms by frequency, the analyst discovers that a car's *comfort* is a priority to many respondents. The TextSmart window shows a custom alias created by the analyst by easily dragging and dropping terms into the alias window.

3 Using TextSmart's automatic categorization feature, the analyst clusters terms that tend to occur together in responses. With TextSmart's powerful tools, she revises the categories to meet her specifications. She even has the flexibility to create custom categories.



TextSmart created several categories automatically. The analyst now easily revises and labels the categories. The checkmarks indicate the responses that apply to each category.

4 Using TextSmart, the analyst codes the open-ended responses. She then exports these categories to a statistical package and merges them with other respondent data. By comparing and contrasting these coded responses, the analyst gets a clear, unbiased representation of her respondents' attitudes and perceptions. With these results, the rental car company is able to create a focused marketing strategy that targets the best prospects for their pre-driven vehicles.

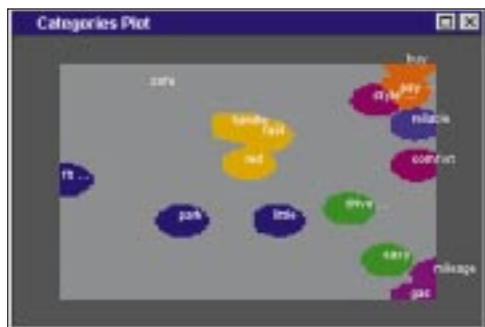
TextSmart is the most efficient and cost-effective method of analyzing open-ended survey responses. Understand your respondents and get an edge on the competition with TextSmart.

Work more productively with powerful, flexible features



Make discoveries with illuminating graphics

TextSmart offers exciting visual features that reveal opportunities. The Auto Categories Plot, created using multidimensional scaling in two dimensions, shows relationships visually among terms. Each colored region represents a category. The distance between pairs of terms indicates how likely the pair is to cluster near one another within responses. Terms farther apart are located within a colored region, the less strong the relationship between the terms.

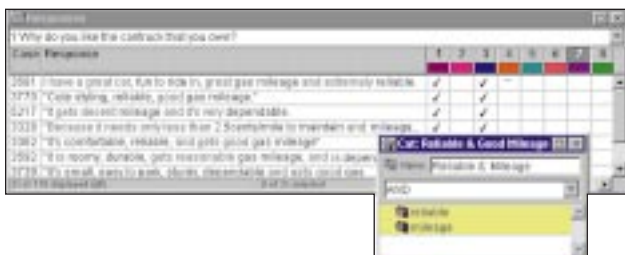


This plot indicates that the terms *handle*, *fast* and *red* tend to occur together. These responses reveal that some respondents like a small car that is easy to park on the street.



Create precise categories with powerful features

Combine text into manual categories or combine categories into compound categories with Boolean operators AND, OR and NOT. Boolean operators enable you to create categories that meet your precise needs for more enlightened survey analysis.

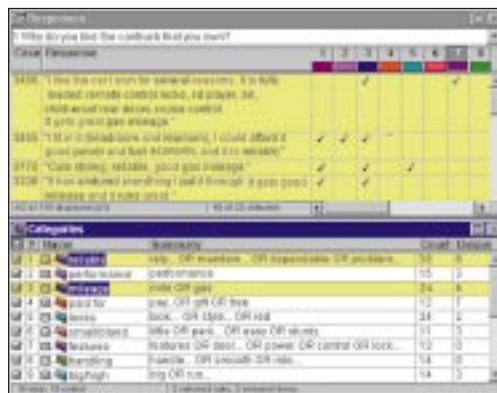


Combining two categories with the Boolean operator AND is simple. Here, the categories *reliable* and *mileage* are selected to create a compound category that includes only those responses that are part of both categories. The response viewer shows a few of the responses that are part of this new category.



Enhance analysis with revealing tools

Brushing is a powerful feature that enables you to view correlations between words, responses and categories. There's also a filtering procedure that enables you to concentrate on a subset of responses to help sharpen your survey's focus. For example, brush on a category and then see only the responses in that category. You can also filter responses that fall into more than one category, or filter only those responses yet to be categorized.



Choosing the *reliability* and *mileage* categories brushes the related responses. Now, you concentrate on the responses that interest you most. The highlighted responses are a few of the 62 responses that fall into either category.



Work more efficiently with revealing charts

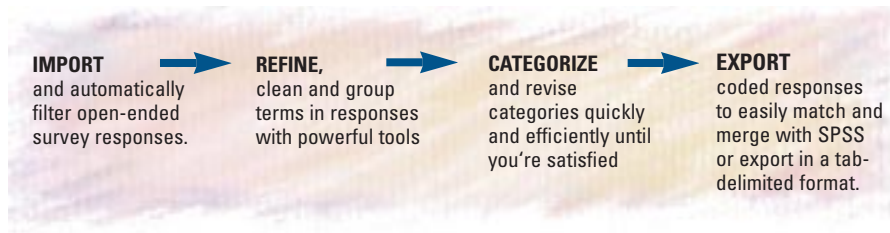
Get a visual snapshot of your progress with the Category Frequencies Chart. At a glance, it displays your categories, how many responses are included in each category and how many responses must still be categorized.



For at a glance comparison, the Category Frequencies chart shows you how many responses are included in each category. It also displays which responses are not yet assigned to a category. With this information, you can use the filter feature to view only uncategorized responses.

TextSmart specifications

How TextSmart works



Response filtering

- Integrated spell-checking (American and British spellings)
- Stemming: automatically combs through responses to combine words with a common root (run = runs, running, ran)
- Excluded Words List: default list automatically excludes pronouns, conjunctions, helping verbs and other words of little semantic value
- Alias List: default list automatically groups list of related words (smart = intelligent, wise)
- Modify the default Excluded Words List and Alias List
- Create and save your own Excluded Word Lists and Alias Lists

Categorization algorithms

- Uses matrix of similarities
- Uses hierarchical clustering with maximum distance amalgamation
- Uses multidimensional scaling in two dimensions to scale and chart the matrix of similarities

Automatic categorization options

- Clustering and term frequency, clustering only, term frequency only
- Choose number of categories
- Choose number of terms
- Keep modified categories or completely re-categorize
- Option to display Automatic Categories Plot

Editing tools

- Create aliases button
- Drag and drop words into and out of aliases
- Drag and drop to move items between categories and term lists
- Pop-up window to edit the text of a response
- Boolean operators AND, OR, NOT

Graphics

- Automatic Categories Plot displays information about how the terms in your automatically created categories relate to each other
- Bar Chart of Term Frequencies
- Bar Chart of Category Frequencies

File management

- Import Wizard
- Import in standard tab-delimited (ASCII) file format
- Outputs directly into SPSS or as a tab-delimited file

Windows

- Parent window with menus and toolbar
- Responses window: displays the question, responses and categories into which responses have been placed
- Included terms window: displays all words, stemmed aliases and aliases included in the analysis and count of occurrences of each
- Excluded terms window: displays words from exclusion list and count of occurrences of each
- Categories window: displays results of categorization

Help

- Online help system
- Import Wizard

Manual categorization

- Combine terms into categories
- Combine categories into compound categories
- Automatic re-categorization of a category when an item is added
- Add a response to a category or remove a response by a simple click of a cell in responses window

Viewing

- Brushing tool: shows selected item in response viewer, categories table and term lists
- Filter the view to show only brushed, uncategorized or multiple categorized responses
- View SPSS data values while categorizing your results

Sorting

- Included and Excluded Word Lists by count or alphabetically
- Categories by count of responses
- Responses by categories, response identification number, alphabetically by first word in response

System requirements

- 486 or better IBM-compatible PC (Pentium recommended)
- 16MB RAM; 32MB RAM strongly recommended
- Windows 95 and NT 4.0
- 12MB hard drive space
- SVGA monitor

SPSS for Windows family

SPSS® Base for Windows™	AnswerTree™
SPSS Professional Statistics™	Amos™
SPSS Advanced Statistics™	MapInfo®
SPSS Tables™	SPSS Exact Tests™
SPSS Trends™	Neural Connection™
SPSS Categories®	allCLEAR™
SPSS Conjoint™	SPSS Diamond™
Teleform®	SPSS Data Entry™
Remark Office OMR®	