

> Get the most value from your surveys with text analysis

The words people use to answer a question tell you a lot about what they think and feel. That's why you include open-ended questions in your surveys. They provide more varied and detailed information than closed-ended questions do. Traditionally, categorizing or "coding" survey text responses has been time-consuming, tedious, and expensive, often limiting your ability to unlock the full value of these responses.

With PASW Text Analytics for Surveys*, you can quantify text responses for analysis along with other survey data—thoroughly, reliably, and quickly. Best yet, PASW Text Analytics for Surveys is easy to use—even if you haven't performed text analysis before. It automates the process, while still allowing you to intervene manually to refine your results. You never lose control of the categorization process. With PASW Text Analytics for Surveys you can:

- Identify major themes without reading responses word for word
- Distinguish between positive and negative comments easily
- Use pre-built categories for customer, product and employee satisfaction surveys**

* PASW Text Analytics for Surveys, formerly called SPSS Text Analysis for Surveys™, is part of SPSS Inc.'s Predictive Analytics Software portfolio.

** An exclusive feature of the English-language version.

- Create categories or "code frames" more quickly
- Categorize or "code" responses more consistently
- Save money by eliminating or reducing your reliance on outside services
- Save time—and make results more consistent—by reusing categories in ongoing or similar surveys
- Increase satisfaction with survey results

Use PASW Text Analytics for Surveys to categorize text responses whether you conduct surveys to support decision making in business, education, or government, or as part of your academic research. No matter your field, you now have a way to combine your qualitative and quantitative analyses using one advanced but easy-to-use desktop software program.



An efficient way to make text responses count

PASW Text Analytics for Surveys is an ideal tool for categorizing text responses and quantifying customer, employee, or student satisfaction, so you can integrate the new results for analysis with the rest of your data.

To extract and classify key concepts from responses to open-ended questions, PASW Text Analytics for Surveys uses advanced linguistic technologies. These technologies analyze text as a set of phrases and sentences whose grammatical structure creates a context for the meaning of the response. Without having to read responses word for word, you can identify major themes and distinguish between positive and negative statements.

Easy to use and control

PASW Text Analytics for Surveys is simple to use. First, you import your text responses. The new Project Wizard walks you through set up, so you can quickly import your text responses, extract concepts, and obtain initial results.

Extraction results are displayed as lists of terms, types, and patterns.

- Terms are single or compound words
- Types are groups of similar terms—positive or negative comments, for example
- Patterns are a combination of either terms and types or types and types—such as qualifiers and adjectives that reveal opinions about a particular subject

Onscreen, you see the extracted terms, types, or patterns, as well as the text responses. You can create categories in several ways:

- Automatically—Use one of the pre-built sets of categories (for customer, employee, or product satisfaction) by using linguistic algorithms, a semantic network*, or frequency
- Manually—Drag terms, types, patterns, or responses into particular categories
- By using a combination of these methods

It's easy to switch between methods, and it puts you in full control of the categorization process.

Categorizing all responses satisfactorily will probably require manual intervention. You may need to assign and reassign individual responses to categories, as well as create, combine and rename categories. PASW Text Analytics for Surveys enables you to do this quickly and easily—and at any time—using either drag-and-drop or context menus.

The difference between PASW Text Analytics for Surveys and other programs

Let's say a restaurant chain is performing customer surveys to optimize its menu selections. One respondent uses an open-ended field to write the sentence:

"I like pizza and chicken wings but hate salads."

Most automated or statistical tools could identify that the statement carried two opinions, but they couldn't clearly tie it back to pizzas, chicken wings, and salads. As a result, the response would be ranked as neutral (one positive + one negative) and the restaurant chain would not know what this customer likes or dislikes.

PASW Text Analytics for Surveys uses term derivation and term inclusion—powerful linguistic classification methods based on SPSS Inc.'s natural language processing (NLP) technologies. SPSS Text Analysis for Surveys is intelligent enough to automatically assign a positive opinion related to pizza and chicken wings and a negative opinion to salads. It would recognize the following patterns:

- pizza + positive
- chicken wings + positive
- salad + negative

With PASW Text Analytics for Surveys, the restaurant chain gains a clear understanding of what people like (or don't like) and why. With PASW Text Analytics for Surveys, you get better accuracy in text analysis, providing better insights—and ultimately, better predictions.

If your organization has pre-existing categories, you can recreate their rules with precision and automate their creation. You can do so by creating conditional rules, using extraction results and Boolean operators. This enables you to categorize responses based on more complex information or filter erroneous responses.

Use the product's visualization capabilities to help manually refine categories. For example, use a bar chart, Web graph, or Web table to quickly reveal which categories contain co-occurring responses. Then you can decide whether to combine certain categories or create new ones that better account for shared responses.

You can train PASW Text Analytics for Surveys by categorizing a subset of your text responses, and then importing the entire dataset and re-running the extraction and categorization. For ongoing surveys, you create categories once and then import the newer version of the data into the software for fast, reliable, and consistent categorization.

When you have finished categorizing your responses, your unstructured survey data has been transformed into quantitative data. You can export this data as dichotomies or categories and analyze it with other quantitative data in programs such as PASW® Statistics*, PASW® Data Collection***, or Microsoft® Excel.

PASW Text Analytics for Surveys makes it easy to work with others. You can share project files—which include extracted results, categories, and linguistic resources—across your organization. Additionally, you can share categories by importing and exporting them as an XML file. These features allow others to easily reuse category work in new projects.

Linguistic technologies make the difference

PASW Text Analytics for Surveys extracts concepts and categorizes text responses without any customization. You can, however, customize some of the product's dictionaries to refine extraction results. This makes the categorization process operate more smoothly, given your survey's specific subject matter. For example:

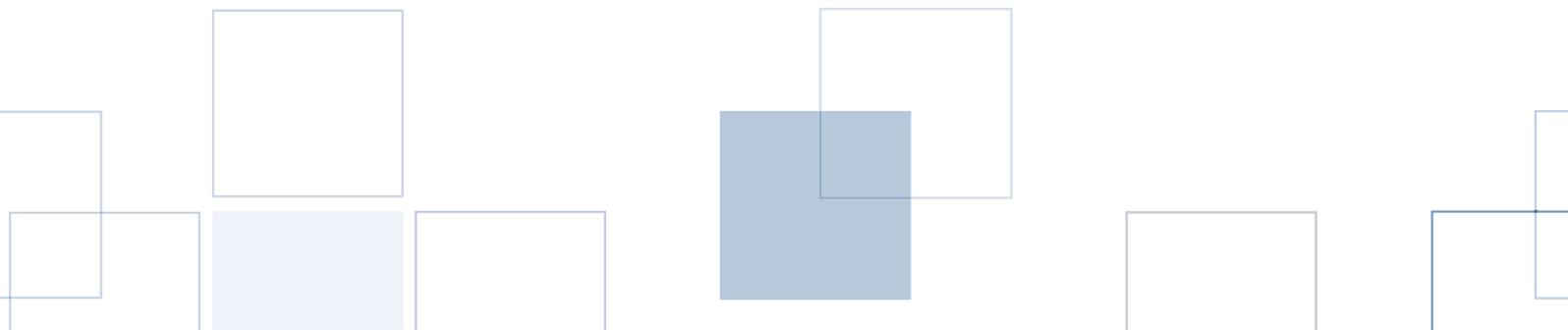
- To indicate that certain product names belong in the same product line, modify the Type Dictionary
- To extract and group industry- and domain-specific terms, add these terms to the Type Dictionary
- To indicate that variant forms of the name of a chemical, gene, or medicine, for example, refer to the same thing, modify the Substitution Dictionary
- To prevent a “noise” term, such as your organization's name, from cluttering extraction and category results, modify the Exclude Dictionary

PASW Text Analytics for Surveys uses a semantic network based on Princeton University's WordNet®**. The software uses these methods in combination to optimize the quality of results. For instance, the semantic network will automatically understand that “apples” and “oranges” are types of fruit.

PASW Text Analytics for Surveys is a stand-alone program that works well with PASW Statistics and other SPSS Inc. products that you might already use, including PASW® Custom Tables*** and software from the Data Collection family. You can also use it with Excel. Currently, separate versions of PASW Text Analytics for Surveys are available for analyzing text in English, Dutch, French, German, Spanish, and Japanese.

** An exclusive feature in the English-language version

*** PASW Statistics, PASW Data Collection, and PASW Custom Tables, formerly called SPSS Statistics, Dimensions™, and SPSS Custom Tables, are part of SPSS Inc.'s Predictive Analytics Software portfolio.



New features in PASW Text Analytics for Surveys 3.0

enable you to:

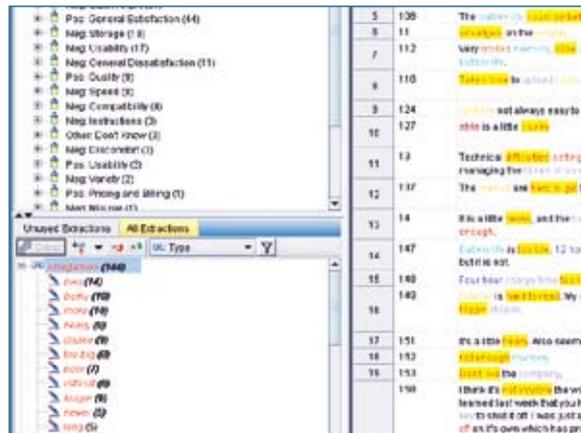
- Get better out-of-the-box results with pre-built Text Analysis Packages (TAPs) for Customer/Product/Employee satisfaction surveys**
- Easily re-code text responses without being an expert—the new Project Wizard walks you through set-up quickly and easily
- Import heritage code frames—protect your investment by using your own code frames inside PASW Text Analytics for Surveys
- Reduce manual work to the minimum by using new category building/classification techniques
- Get more accurate results faster with the extended category editor
- Quickly view the type of responses that best match a given category with the new relevance ranking algorithm
- Work on surveys easily in more than a dozen languages by using new Language Weaver automated translation capabilities***

** An exclusive feature in the English-language version.

*** An exclusive feature in the English-language version; requires Language Weaver software license.



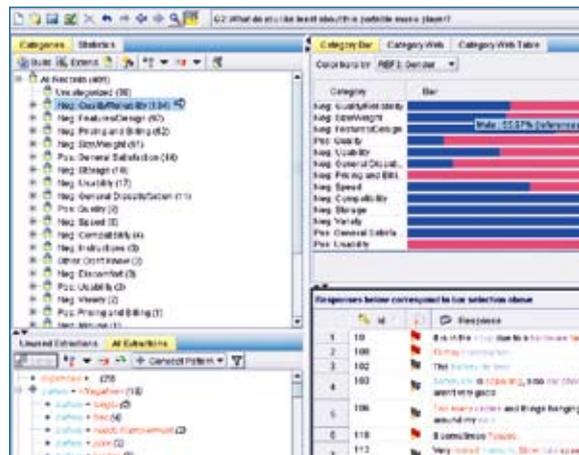
Creating a project just got easier with the new Project Wizard. The wizard steps you through the process of selecting a data source, variables, and new Text Analysis Packages (TAPs) containing pre-built categories and linguistic resources for satisfaction surveys. (Note : TAPs are available only in the English-language version)



PASW Text Analytics for Surveys makes the process easy to understand by displaying the text responses in the right-hand pane and extracted concepts in the pane at lower left. Automatic color-coding shows which terms have been extracted and identifies their type. Positive terms are light green and negative ones are red.

“With the introduction and inspired development of PASW Text Analytics for Surveys, SPSS Inc. has succeeded where other software vendors have failed. Finally, there is a powerful, intuitive tool that reduces the time needed to analyze large amounts of qualitative data and opens the door to new methods of targeted analysis.”

– Karl Buchholz
Executive Vice President, Business Development
Data Specialists Inc.

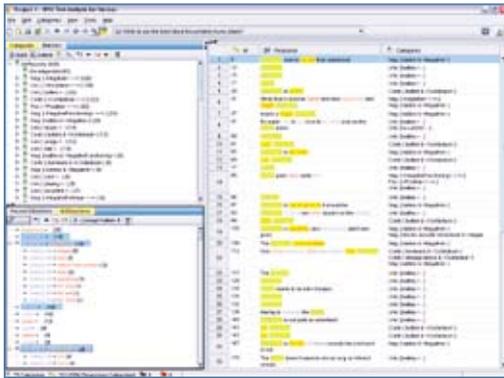


PASW Text Analytics for Surveys’ visualization features enable you to overlay reference variables, such as gender, onto a bar chart to profile categories. When you click on the blue or “Male” portion of the bar in this example, all responses from males in the category are displayed in the Data pane.

Get reliable results faster with automated features

1 Extract key concepts and opinions

Extract key concepts automatically from responses to an open-ended question. The software creates a list of terms, types, and patterns.



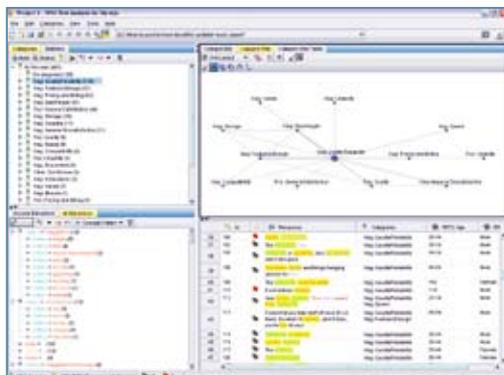
Automatic color coding identifies which terms have been extracted and identifies their type. Positive items are light green; negative ones are red. The Data pane shows the full text of all responses to the question.

2 Create categories and categorize text responses

Automatically create categories and categorize responses using term derivation, term inclusion, a semantic network, or frequency. Also, categorize responses manually by dragging terms, types, and responses within the interface.

3 Refine categories

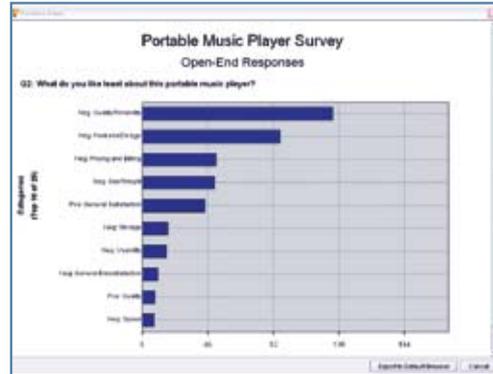
Visualization capabilities enable you to quickly see which categories share responses. This can help you to refine categories manually.



A Web graph showing which categories share responses enables the user to decide whether to combine certain categories or to create new ones that better account for shared responses.

4 Summarize your findings

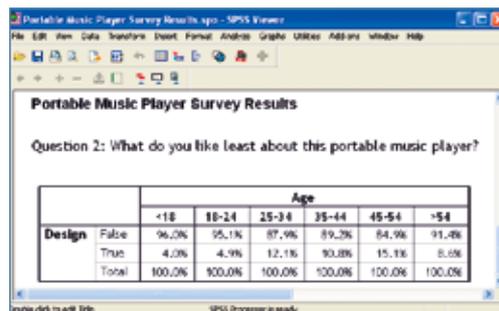
You can quickly and easily create and export a summary bar chart at any point during your project. Use it to communicate to others your top categories.



Results can be exported to clipboard or html pages to create graphs in your presentations that communicate survey findings.

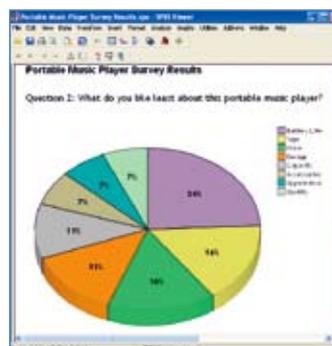
5 Export results for analysis and graphing

When you are satisfied with your categories, you can export results either as dichotomies or as categories. These can be used to create tables and graphs, either separately or in combination with other survey data.



		Age					
		<18	18-24	25-34	35-44	45-54	>54
Design	False	96.0%	95.1%	87.9%	89.3%	84.9%	91.4%
	True	4.0%	4.9%	12.1%	10.8%	15.1%	8.6%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Export results to PASW Statistics Base to create crosstabs or whatever your analysis requires.



Results can also be exported to PASW Statistics Base to create graphs that communicate survey findings.

Features

User interface

- New Project Wizard to guide business users through the coding process
- View data, create categories, and categorize responses in the Text Analysis window:
 - View all open-ended questions and responses in the Project view
 - View responses to a single question in the Question view
- View all responses and reference variables in the Data pane
- View extraction results by term, type, or pattern in the Extracted Results pane
- View categories and their contents in the Category pane
- Create conditional rules by using extraction results and Boolean operators in the Conditional Rule pane
- New category rules editor to create new Boolean rules (using wildcards and other syntactical enhancements)
- Profile categories and view response co-occurrence by using a category bar chart, web graph, or web table in the Visualization pane
- Use flags in the Data pane to mark which responses are complete and which ones require follow-up
- View and customize linguistic resources in the Directory Editor window

Import data from:

- SPSS Statistics (SAV)
- Dimensions™ (MDD)
- Excel® (XLS)
- Excel (XLSX) for Office 2007
- ODBC-compliant databases

Translate non-English languages

- Translate non-English languages into English with Language Weaver (requires a Language Weaver license).

Extract key concepts and opinions

- Extracts terms, types, and opinion patterns automatically using linguistic resources
- Supports manual review and refinement
- Allows extraction results to be saved

Create categories

- Use pre-built categories and resources (Text Analysis Packages) for customer/employee/product satisfaction surveys*
- Re-use categories created in other programs
- Import pre-existing customer code frames (specific Excel format is required)
- Use linguistic algorithms and a semantic network to automatically create categories and categorize responses
- New category building/classification enhancements to create categories from scratch or to better define existing ones
- Supports manual review and refinement
- Shows response co-occurrence in categories using visualizations
- Sort your categorized responses by relevance
- “Force-in” an unextracted word or phrase into a category definition and automatically assign responses containing it to that category
- Print category lists and some visualizations
- Re-use categories in future surveys

Export results as dichotomies or categories (in the following file formats):

- SPSS (SAV)
- Excel (XLS)
- Excel (XLSX) for Office 2007

Share resources and results

- Share project files that contain extracted results, categories, and linguistic resources
- Share categories and category definition for use in new projects
- Create and export summary bar graphs of your categories
- Share custom libraries as part of a project file, or as a separate file

Dictionaries

- More advanced resources such as non-linguistic entities (phone numbers, dates, amounts of money) are now editable for advanced users
- Type Dictionary: Supports the grouping of similar terms (customizable)
- Substitution Dictionary: Contains synonyms to group similar terms under a single target name (customizable)
- Exclude Dictionary: Contains “noise” terms to be ignored during extraction (customizable)

Libraries

- Survey Library: Contains resources related to pattern rules and types, as well as a predefined list of synonyms and excluded terms (proprietary)
- Project Library: Stores dictionary changes for a particular project
- Core Library: Contains reserved Type Dictionaries for:
 - Person/Location/Product/Organization
- Budget Library: Contains one built-in type for words or phrases that represent qualifiers and adjectives for “price” or “quality”
- Opinions Library: Contains seven built-in types that group terms for qualifiers and adjectives (such as “positive” and “negative”)
- English Variation Library: Contains cases in which certain English-language variations require synonym definitions to group them properly

System requirements

- Operating system: Microsoft Windows® Vista® Business or Home Basic (32- and 64-bit) or Windows XP Professional, Service Pack 2 (32-bit)
Hardware:
 - Processor: Intel® Pentium®-class; 3.0 GHz recommended
 - Monitor: 1024 x 768 (SVGA) resolution
 - Memory: 512MB or more recommended; 1GB or more for large datasets
 - Minimum free space: 300MB; more recommended for larger datasets
 - A CD-ROM drive is required for installation
 - Internet Explorer 7 or later is required for online help

** An exclusive feature in the English-language version

Features subject to change based on final product release.

□ Symbol indicates a new feature.

To learn more, please visit www.spss.com. For SPSS office locations and telephone numbers, go to www.spss.com/worldwide.

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