

> Kent State University

Psychology professor at a top research university studies generalized anxiety disorder (GAD) and collaborates with colleagues across the country—and across computer platforms—using PASW® Statistics Base*

Situation

Generalized anxiety disorder (GAD) currently affects between four and five million people in the United States. People suffering from GAD experience debilitating pathological anxiety, which typically interferes with their ability to function normally. Forty percent of people with GAD are eventually diagnosed with depression, while as many as 25 percent are diagnosed with panic disorders. Often, sufferers attempt to use alcohol and drugs to manage their anxiety.

Challenge

Psychologists have strived to identify the root causes of GAD and its effect on patients, and develop coping strategies. Dr. David Fresco, assistant professor of psychology at Kent State University, in Kent, Ohio, teaches clinical research methods and cognitive behavior therapy. He also conducts clinical research on GAD, as well as factors associated with resiliency and human excellence. To better and more quickly identify meaningful relationships, Dr. Fresco needed a software package to conduct statistical interpretation and analysis. Moreover, as an avid Macintosh® user, he needed Macintosh-based software that was also Windows®-compatible, so that he could easily collaborate with his colleagues.

Solution

Dr. Fresco uses PASW Statistics Base for both of his major areas of study: the study of causes and treatment of GAD; and the identification, distillation, and dissemination of factors associated with human resilience and excellence. In his GAD research, Dr. Fresco can now quickly analyze data he has gathered in clinical populations and determine which characteristics correlate. While researching human resilience, Dr. Fresco and his colleagues can determine how variables relate to or predict an outcome, which in turn helps the team develop interventions designed to promote “resiliency”—the ability of patients to spring back from and successfully adapt to adversity.

At a glance

Country: United States

Industry: Higher education

Date founded: 1910

Company type: Public

Students: More than 35,000

Application

Clinical research

Solutions used

PASW Statistics Base

* PASW Statistics Base, formerly called SPSS Statistics Base, is part of SPSS Inc.'s Predictive Analytics Software portfolio.

Results

- Reduced time needed to analyze data, allowing Dr. Fresco to focus his attention on research questions and developing new treatments
- Facilitated collaboration with colleagues to jointly develop solutions for GAD

Dr. David Fresco has studied psychology for more than a decade. His interest in GAD resulted from his work both before and during graduate school. As an assistant professor of psychology at Kent State University, Dr. Fresco seeks to identify shared characteristics between patients with GAD and those with bulimia nervosa. He believes both disorders share a fundamental deficit in the way that these patients experience and choose to express their emotions. By understanding why people attempt to escape their emotional experiences with worry, Dr. Fresco hopes to treat GAD, with the goal of possibly preventing GAD before it develops into the disorder and, subsequently, into other conditions such as depression.

Dr. Fresco typically begins his research by conducting clinical interviews, and using both written and computer-based tests. He interviews participants and control groups, examining such factors as their responses to stressful events, their attitudes/emotions, their marital status, their income level, and their past emotional problems. After gathering the data, Dr. Fresco performs more than 90 percent of his statistical research using PASW Statistics Base.

“The flexibility of PASW Statistics in handling multiple data formats, regardless of whether they’re text, Excel®, Access®, etc., is extremely beneficial. Since the datasets are so compact, I can share results with colleagues via the Internet and collaborate in realtime. What’s really great is that I don’t miss a beat working on a Mac and collaborating with Windows colleagues. Sharing PASW Statistics datasets and syntax files is completely seamless. With PASW Statistics Base, I can share output files, too!”

– Dr. David Fresco
Assistant Professor of Psychology
Kent State University



Dr. Fresco identifies symptoms of GAD, such as restlessness, difficulty concentrating, irritability, muscle tension, etc., to determine which characteristics individuals afflicted with the disorder do not share with the control group. With these factors in mind, he then develops proactive intervention methods to better combat the disorder.

Reduced time needed to analyze data, allowing Dr. Fresco to focus his attention on research questions and developing new treatments

For a majority of his career, Dr. Fresco has been using PASW Statistics Base as a way to quickly determine how variables relate to one another. He also performs regression analysis to determine how a combined number of factors affect a person. By identifying patterns and relationships, Dr. Fresco can rephrase his questions or adjust his analysis to assist in identifying the cause of the disorder and developing treatments.

“The inherent ease of use of PASW Statistics Base has allowed me to focus less on crunching the data and devote more time to posing harder questions,” said Fresco. “By focusing more mental energy on the project, I’ve become a more sophisticated statistician.”

Facilitated collaboration with colleagues to jointly develop solutions for GAD

Previously, Windows and Macintosh data files were incompatible. However, with software and operating system upgrades, Dr. Fresco now collaborates with his Macintosh- and Windows-based colleagues across the country at locations such as Temple University, Yale University, and Stanford University.

“The flexibility of PASW Statistics in handling multiple data formats, regardless of whether they’re text, Excel, Access, etc., is extremely beneficial. Since the datasets are so compact, I can share results with colleagues via the Internet and collaborate in real-time. What’s really great is that I don’t miss a beat working on a Mac and collaborating with Windows colleagues. Sharing PASW Statistics datasets and syntax files is completely seamless. With PASW Statistics Base, I can now share output files, too!”

Although Dr. Fresco has made strides in understanding GAD and its root causes, more research is needed. With PASW Statistics playing an integral role in his analysis, Dr. Fresco will continue to develop and refine treatments in an effort to ensure the highest rate of improvement—and foster peoples’ ability to overcome adversity.

□ “The inherent ease of use of PASW Statistics Base for Macintosh has allowed me to focus less on crunching the data and devote more time to posing harder questions. By focusing more mental energy on the project, I’ve become a more sophisticated statistician.”

– Dr. David Fresco
Assistant Professor of Psychology
Kent State University

For more customer stories, visit www.spss.com/success.

SPSS is a registered trademark and the other SPSS Inc. products named are trademarks of SPSS Inc. All other names are trademarks of their respective owners. © Copyright 2003 SPSS Inc. KSCS-0109