

Book Review: PDQ (Pretty Darned Quick) Statistics (3rd Edition)

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BOOK: [PDQ \(Pretty Darned Quick\) Statistics \(3rd Edition\)](#)

PRODUCT DESCRIPTION:

PDQ Statistics, Third Edition, offers an expert overview of all major statistical methods, giving the reader a thorough understanding of statistics and how they are used in research articles. The book covers the major categories variable and descriptive statistics, parametric statistics, non-parametric statistics, and multivariate statistics. The explanations are clear, succinct, and loaded with practical examples. This third edition includes new chapters on hierarchical and logistic regression, path analysis, and structural equation modeling. PDQ Statistics, Third Edition also helps the reader identify those statistical analyses with basic flaws in design or research. The book's attractive design and humorous writing style make the subject matter accessible and engaging.

FROM THE CPNP MEMBER:

If you are looking for a basic introduction to statistics that focuses on helping you to understand the results section of a study, "PDQ Statistics" is a great book. This book will Alcohol dependence affects a small proportion of the population but contributes disproportionately to crime and other societal burdens.¹ Results from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) suggest that approximately 2% of alcohol users transition to dependence after their first year of use. This number increases to approximately 11% after a decade of use.¹ There remains, however, a paucity of evidence regarding alcohol use and dependence in

not teach you how to actually "do" statistics, but will help you understand what the investigators were trying to do, and also identify what they may have done wrong. Like many statistics primers, it is divided into four sections: (1) Variables and descriptive statistics, (2) Parametric Statistics, (3) Nonparametric Statistics, and (4) Multivariate Statistics. Unlike most statistics texts, it presents these concepts in an understandable manner, while minimizing detailed discussions about the equations needed to calculate the numbers.

Another difference from most statistics books, is that it is written in understandable language, and isn't afraid to use humor to make a point. One example is the introduction to Multivariate Statistics, where the authors state, "...we have been inundated with highly complex analyses of completely inappropriate data." While explaining variables in multiple regression and factor analysis, the authors give this example, "Head injuries may not be a direct result of bumping into low doorways (the Gerald Ford hypothesis), rather, the three H's (height, hirsuteness, and humour) lead to promotion to dean, which results in physical abuse by the rest of the faculty (the Streiner hypothesis)."

Another outstanding feature is almost every chapter includes C.R.A.P* Detectors (which stands for *Convoluted Reasoning or Antiintellectual Pomposity) which highlights areas where researchers frequently misuse or misinterpret statistical tests. This book will not attempt to make you a statistician, but if you just want to learn how to use and interpret the most frequently used statistical tests, this just might be the book for you.

healthcare students, particularly those entrusted with oversight of the medication use system. One important goal of the present study is to estimate the probability of student pharmacists transitioning from alcohol use to dependence.

This study was approved by the University of Georgia Institutional Review Board. The Student Pharmacist Chemical Health Scale (SPCHS) is an instrument developed to assess addiction risk in student pharmacists.

The survey, described further in an accompanying article,² was administered to a sample of pharmacy students (n = 395) in the opening days of fall semester 2012. Figure 1 displays results from a cohort of student pharmacists who developed alcohol dependence as determined by application of DSM-IV-TR criteria to SPCHS responses.³ A total of 127 respondents indicated alcohol use (32%), and of these, 20 respondents (5% of total, 16% of alcohol users) were classified as alcohol dependent. After respondents' first use of alcohol, data suggest that the probability of transitioning to dependence remains relatively constant at 1% for two years after first use. By the third year, the probability of transitioning to dependence peaks at approximately 6% but subsequently decreases to 2% years four through seven. A small but noticeable rise in probability occurs eight to ten years after first use, increasing to approximately 3%.

Data suggests that the probability of student pharmacists transitioning from alcohol use to dependence is greatest three years after first use of alcohol (Figure 1), a finding similar to those in recent analyses.^{1, 4} Lopez-Quintero et al.¹ show a similar cumulative probability three years after first use (approximately 5%). Data from Wagner et al.⁴ suggest that the highest risk for transitioning to alcohol dependence occurs around age 20 to 21, with new cases of dependence occurring later in life. The mean age of first use (approximately 17 years) in our sample of student pharmacists suggests that by age 20 (three years after first use), it can be expected that a small but significant percentage of students entering the profession as first year students are in active transition from alcohol use to dependence, with new cases occurring eight years after first use (Figure 1).

Results from this analysis highlight the importance of early identification of students at risk for substance use disorders. It is expected that substance use education, detection, and prevention strategies will gain importance in the coming years as more pharmacists enter the workforce. The SPCHS, a tool designed to aid in the identification of student pharmacists at risk for substance use disorders, will hopefully fill a vital gap in this process.

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