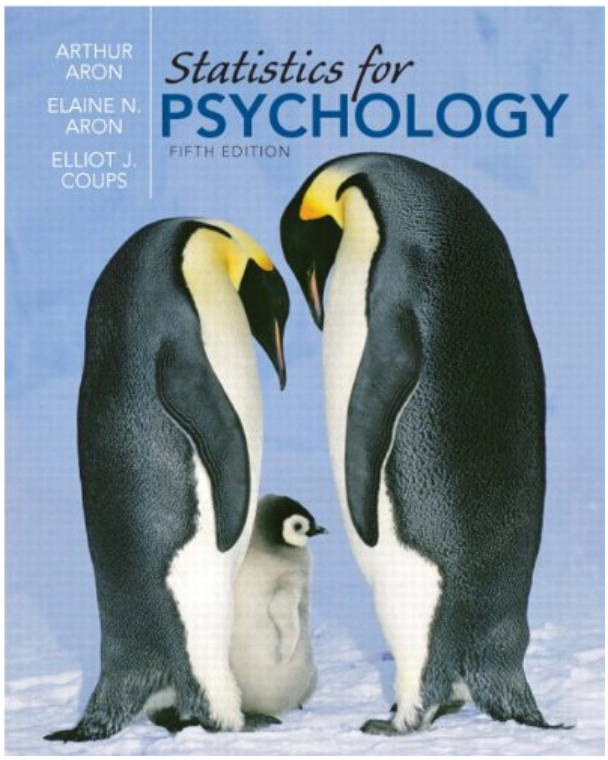
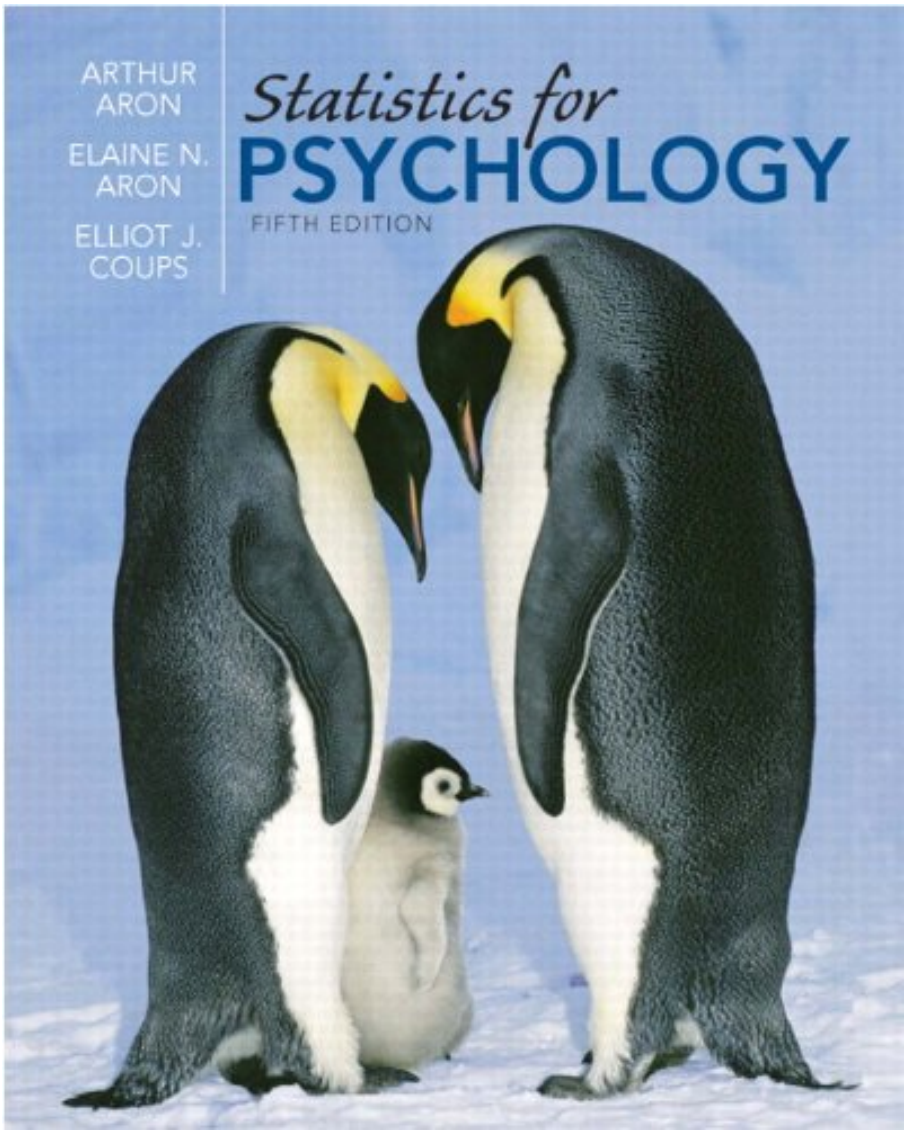
STATISTICS FOR PSYCHOLOGY (5TH EDITION) BY ARTHUR ARON PH.D., ELAINE N. ARON PH.D., ELLIOT COUPS PH.D.





STATISTICS FOR PSYCHOLOGY (5TH EDITION) BY ARTHUR ARON PH.D., ELAINE N. ARON PH.D., ELLIOT COUPS PH.D. PDF

So, when you need quick that book **Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D.**, it doesn't should get ready for some days to get guide Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. You could directly get guide to conserve in your gadget. Even you enjoy reading this Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. almost everywhere you have time, you can enjoy it to review Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. It is undoubtedly helpful for you which intend to obtain the much more precious time for reading. Why don't you invest five minutes and also invest little cash to get guide Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. here? Never ever let the extra thing quits you.

From the Publisher
Class-tested and developed over two decades, the material for this innovative text reflects recent changes in both research practice and in the teaching of statistics for psychology: 1) Statistics are done by computer, not by hand, so the text stresses deep understanding, not brief explanation followed by the usual plugging numbers into formulas. 2) The majority of psychology majors are human-and word-oriented, not math-oriented, so this text employs their way of learning--for example, requiring them to put what they learn into words lay persons can understand.

From the Back Cover
Pearson’s MySearchLab is the easiest way for students to master a writing or research project. In a recent student survey, the overwhelming majority of students are assigned writing and research projects, for which they would use research and citation tools if they were available to them. MySearchLab is a website available at no additional charge in a package with a Pearson textbook and is also available as a standalone product.

The heart of this book was written over a summer in a small apartment near the Place Saint Ferdinand, having been outlined in nearby cafés and on walks in the Bois de Boulogne. It is based on our 35 years of experience teaching, researching, and writing. We believe that the book we wrote is as different from the conventional lot of statistics texts as Paris is from Calcutta, yet still comfortable and stimulating to the long-suffering community of statistics instructors.

Our approach was developed over three decades of successful teaching—successful not only in the sense that students have consistently rated the course (a statistics course, remember) as a highlight of their major, but

also in the sense that students come back to us later saying, "I was light-years ahead of my fellow graduate students because of your course," or "Even though I don't do research, your course has really helped me read the journals in my field."

The response to the first and second edition has been overwhelming. We have received hundreds of thank-you e-mails and letters from instructors (and from students themselves!) from all over the English-speaking world. Of course, we were also delighted by the enthusiastic review in Contemporary Psychology (Bourgeois, 1997).

In this third edition we have tried to maintain those things that have been especially appreciated, while reworking the book to take into account the feedback we have received, our own experiences, and advances and changes in the field. We have also added new pedagogical features to make the book even more accessible for students. However, before turning to the third edition, we want to reiterate what we said in the first edition about how this book from the beginning has been quite different from other statistics texts.

A BRIEF HISTORY OF THE STATISTICS TEXT GENRE

In the 1950s and 1960s statistics texts were dry, daunting, mathematical tomes that quickly left most students behind. In the 1970s, there was a revolution—in swept the intuitive approach, with much less emphasis on derivations, proofs, and mathematical foundations. The approach worked. Students became less afraid of statistics courses and found the material more accessible, even if not quite clear.

The intuitive trend continued in the 1980s, adding in the 1990s some nicely straightforward writing. A few texts have now also begun to encourage students to use the computer to do statistical analyses. However, discussions of intuitive understandings are becoming briefer and briefer. The standard is a cursory overview of the key idea and sometimes the associated definitional formula for each technique. Then come the procedures and examples for actually doing the computation, using another "computational" formula.

Even with all this streamlining, or perhaps because of it, at the end of the course most students cannot give a clear explanation of the logic behind the techniques they have learned. A few months later they can rarely carry out the procedures either. Most important, the three main purposes of the introductory statistics course ark, not accomplished: Students are not able to make sense of the results of psychology research articles, they are poorly prepared for further courses in statistics (where instructors must inevitably spend half the semester reteaching the introductory course), and the exposure to deep thinking that is supposed to justify the course's meeting general education requirements in the quantitative area has not occurred.

WHAT WE HAVE DONE DIFFERENTLY

We continue to do what the best of the newer books are already doing well: emphasizing the intuitive, de-emphasizing the mathematical, and explaining everything in direct, simple language. But what we have done differs from these other books in 11 key respects.

1. The definitional formulas are brought to center stage because they provide a concise symbolic summary of the logic of each particular procedure. All our explanations, examples, practice problems, and test bank items are based on these definitional formulas. (The amount of data to be processed in practice problems and test bank items are reduced appropriately to keep computations manageable.)

Why this approach? To date, statistics texts have failed to adjust to technological reality. What is important is not that the students learn to calculate a t test with a large data set—computers can do that for them. What is important is that students work problems in a way that they remain constantly aware of the underlying logic of what they are doing. Consider the population variance—the average of the squared deviations from the

mean. This concept is directly displayed in the definitional formula (once the student is used to the symbols): Variance = Σ(I – M)2/N. Repeatedly working problems using this formula engrains the meaning in the student's mind. In contrast, the usual computational version of this formula only obscures this meaning: Variance = ΣX2 – (ΣX)2/N/N. Repeatedly working problems using this formula does nothing but teach the student the difference between ΣX2 and (ΣX)2!

Teaching the old computational formulas today is an anachronism. Researchers do their statistics on computers now. At the same time, the use of statistical software makes the understanding of the basic principles, as they are symbolically expressed in the definitional formulas, more important than ever. Students still need to work lots of problems by hand to learn the material. But they need to work them using the definitional formulas that reinforce the concepts, not using the computational formulas that obscure them. Those formulas once made some sense as timesavers for researchers who had to work with large data sets by hand, but they were always poor teaching tools. (Because some instructors may feel naked without them, we still provide the computational formulas, usually in a brief footnote, at the point in the chapter where they would traditionally have been introduced.)

2. Each procedure is taught both verbally and numerically—and usually visually as well. In fact, when we introduce every formula, it has attached to it a concise statement of the formula in words. Typically, each example lays out the procedures in worked-out formulas, in words (often with a list of steps), and illustrated with an easy-to-grasp figure. Practice problems and test bank items, in turn, require the student to calculate results, write a short explanation in layperson's language of what they have done, and make a sketch (for example of the distributions involved in a t test). The chapter material completely prepares the student for these kinds of practice problems and test questions.

It is our repeated experience that these different ways of expressing an idea are crucial for permanently establishing a concept in a student's mind. Many psychology students are more at ease with words than with numbers. In fact, some have a positive fear of all mathematics. Writing the formula in words and providing the lay-language explanation gives them an opportunity to do what they do best.

3. A main goal of any introductory statistics course in psychology is to prepare students to read research articles. The way a procedure such as a t test or an analysis of variance is described in a research article is often quite different from what the student expects from the standard textbook discussions. Therefore, as this book teaches a statistical method, it also gives examples of how that method is reported in the journals (excerpts from current articles). And we don't just leave it there. The practice problems and test bank items also include excerpts from articles for the student to explain.

4. The book is unusually up to date. For some reason, most introductory statistics textbooks read as if they were written in the 1950s. The basics are still the basics, but statisticians and researchers think far more subtly about those basics now. Today, the basics are undergirded by a new appreciation of effect size, power, the accumulation of results through meta-analysis, the critical role of models, the underlying unity of difference and association statistics, the growing prominence of regression and associated methods, and a whole host of new orientations arising from the central role of the computer. We are much engaged in the latest developments in statistical theory and application, and this book reflects that engagement. For example, we devote an entire early chapter to effect size and power and then return to these topics as we teach each technique.

5. We capitalize on the students' motivations. We do this in two ways. First, our examples emphasize topics or populations that students seem to find most interesting. The very first example is from a real study in which 151 students in their first week of an introductory statistics class rate how much stress they feel they are under. Other examples emphasize clinical, organizational, social, and educational psychology while

being sure to include sufficient interesting examples from cognitive, developmental, behavioral and cognitive neuroscience, and other areas to inspire students with the value of those specialties. (Also, our examples continually emphasize the usefulness of statistical methods and ideas as tools in the research process, never allowing students to feel that what they are learning is theory for the sake of theory.)

Second, we have worked to make the book extremely straightforward and systematic in its explanation of basic concepts so that students can have frequent "aha" experiences. Such experiences bolster self-confidence and motivate further learning. It is quite inspiring to us to see even fairly modest students glow from ha...

STATISTICS FOR PSYCHOLOGY (5TH EDITION) BY ARTHUR ARON PH.D., ELAINE N. ARON PH.D., ELLIOT COUPS PH.D. PDF

This is it guide **Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D.** to be best seller lately. We give you the best offer by getting the spectacular book Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. in this website. This Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. will not just be the kind of book that is difficult to discover. In this internet site, all types of books are given. You can browse title by title, author by writer, as well as publisher by publisher to learn the most effective book Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. that you can check out now.

Why should be this book *Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D.* to review? You will certainly never get the knowledge as well as experience without managing yourself there or trying on your own to do it. Hence, reading this book Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. is needed. You can be great and appropriate enough to obtain exactly how vital is reviewing this Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. Also you always review by obligation, you can assist on your own to have reading e-book practice. It will certainly be so useful and enjoyable after that.

However, exactly how is the means to get this publication Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. Still puzzled? It matters not. You can take pleasure in reviewing this publication Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. by on-line or soft data. Merely download and install guide Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. in the web link provided to go to. You will get this Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. by online. After downloading and install, you could conserve the soft data in your computer system or gizmo. So, it will certainly alleviate you to review this publication Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. in certain time or location. It may be not exactly sure to take pleasure in reading this e-book Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D., since you have great deals of job. But, with this soft file, you could take pleasure in reading in the downtime also in the voids of your jobs in office.

STATISTICS FOR PSYCHOLOGY (5TH EDITION) BY ARTHUR ARON PH.D., ELAINE N. ARON PH.D., ELLIOT COUPS PH.D. PDF

This author team is committed to making statistics a highlight for psychology students! Now, in a 5th edition, Statistics for Psychology, continues to be an accessible, current, and interesting approach to statistics. With each revision, the authors have maintain those things about the book that have been especially appreciated, while reworking the text to take into account the feedback, their our own experiences, and advances and changes in the field.

The fifth edition of this popular text uses definitional formulas to emphasize concepts of statistics, rather than rote memorization. This approach constantly reminds students of the logic behind what they are learning, and each procedure is taught both verbally and numerically, which helps to emphasize the concepts. Thoroughly revised, with new content and many new practice examples, this text takes the reader from basic procedures through analysis of variance (ANOVA). While learning statistics, students also learn how to read and interpret current research.

- Sales Rank: #337146 in Books
- Published on: 2008-03-19
- Original language: English
- Number of items: 1
- Dimensions: 10.35" h x 1.26" w x 8.20" l, 3.20 pounds
- Binding: Hardcover
- 744 pages

From the Publisher
Class-tested and developed over two decades, the material for this innovative text reflects recent changes in both research practice and in the teaching of statistics for psychology: 1) Statistics are done by computer, not by hand, so the text stresses deep understanding, not brief explanation followed by the usual plugging numbers into formulas. 2) The majority of psychology majors are human-and word-oriented, not math-oriented, so this text employs their way of learning--for example, requiring them to put what they learn into words lay persons can understand.

From the Back Cover
Pearson’s MySearchLab is the easiest way for students to master a writing or research project. In a recent student survey, the overwhelming majority of students are assigned writing and research projects, for which they would use research and citation tools if they were available to them. MySearchLab is a website available at no additional charge in a package with a Pearson textbook and is also available as a standalone product.

The heart of this book was written over a summer in a small apartment near the Place Saint Ferdinand, having been outlined in nearby cafés and on walks in the Bois de Boulogne. It is based on our 35 years of experience teaching, researching, and writing. We believe that the book we wrote is as different from the conventional lot of statistics texts as Paris is from Calcutta, yet still comfortable and stimulating to the long-suffering community of statistics instructors.

Our approach was developed over three decades of successful teaching—successful not only in the sense that students have consistently rated the course (a statistics course, remember) as a highlight of their major, but also in the sense that students come back to us later saying, "I was light-years ahead of my fellow graduate students because of your course," or "Even though I don't do research, your course has really helped me read the journals in my field."

The response to the first and second edition has been overwhelming. We have received hundreds of thank-you e-mails and letters from instructors (and from students themselves!) from all over the English-speaking world. Of course, we were also delighted by the enthusiastic review in Contemporary Psychology (Bourgeois, 1997).

In this third edition we have tried to maintain those things that have been especially appreciated, while reworking the book to take into account the feedback we have received, our own experiences, and advances and changes in the field. We have also added new pedagogical features to make the book even more accessible for students. However, before turning to the third edition, we want to reiterate what we said in the first edition about how this book from the beginning has been quite different from other statistics texts.

A BRIEF HISTORY OF THE STATISTICS TEXT GENRE

In the 1950s and 1960s statistics texts were dry, daunting, mathematical tomes that quickly left most students behind. In the 1970s, there was a revolution—in swept the intuitive approach, with much less emphasis on derivations, proofs, and mathematical foundations. The approach worked. Students became less afraid of statistics courses and found the material more accessible, even if not quite clear.

The intuitive trend continued in the 1980s, adding in the 1990s some nicely straightforward writing. A few texts have now also begun to encourage students to use the computer to do statistical analyses. However, discussions of intuitive understandings are becoming briefer and briefer. The standard is a cursory overview of the key idea and sometimes the associated definitional formula for each technique. Then come the procedures and examples for actually doing the computation, using another "computational" formula.

Even with all this streamlining, or perhaps because of it, at the end of the course most students cannot give a clear explanation of the logic behind the techniques they have learned. A few months later they can rarely carry out the procedures either. Most important, the three main purposes of the introductory statistics course ark, not accomplished: Students are not able to make sense of the results of psychology research articles, they are poorly prepared for further courses in statistics (where instructors must inevitably spend half the semester reteaching the introductory course), and the exposure to deep thinking that is supposed to justify the course's meeting general education requirements in the quantitative area has not occurred.

WHAT WE HAVE DONE DIFFERENTLY

We continue to do what the best of the newer books are already doing well: emphasizing the intuitive, de-emphasizing the mathematical, and explaining everything in direct, simple language. But what we have done differs from these other books in 11 key respects.

1. The definitional formulas are brought to center stage because they provide a concise symbolic summary of

the logic of each particular procedure. All our explanations, examples, practice problems, and test bank items are based on these definitional formulas. (The amount of data to be processed in practice problems and test bank items are reduced appropriately to keep computations manageable.)

Why this approach? To date, statistics texts have failed to adjust to technological reality. What is important is not that the students learn to calculate a t test with a large data set—computers can do that for them. What is important is that students work problems in a way that they remain constantly aware of the underlying logic of what they are doing. Consider the population variance—the average of the squared deviations from the mean. This concept is directly displayed in the definitional formula (once the student is used to the symbols): Variance = $\Sigma(I - M)2/N$. Repeatedly working problems using this formula engrains the meaning in the student's mind. In contrast, the usual computational version of this formula only obscures this meaning: Variance = $\Sigma X2 - (\Sigma X)2/N/N$. Repeatedly working problems using this formula does nothing but teach the student the difference between $\Sigma X2$ and $(\Sigma X)2$!

Teaching the old computational formulas today is an anachronism. Researchers do their statistics on computers now. At the same time, the use of statistical software makes the understanding of the basic principles, as they are symbolically expressed in the definitional formulas, more important than ever. Students still need to work lots of problems by hand to learn the material. But they need to work them using the definitional formulas that reinforce the concepts, not using the computational formulas that obscure them. Those formulas once made some sense as timesavers for researchers who had to work with large data sets by hand, but they were always poor teaching tools. (Because some instructors may feel naked without them, we still provide the computational formulas, usually in a brief footnote, at the point in the chapter where they would traditionally have been introduced.)

2. Each procedure is taught both verbally and numerically—and usually visually as well. In fact, when we introduce every formula, it has attached to it a concise statement of the formula in words. Typically, each example lays out the procedures in worked-out formulas, in words (often with a list of steps), and illustrated with an easy-to-grasp figure. Practice problems and test bank items, in turn, require the student to calculate results, write a short explanation in layperson's language of what they have done, and make a sketch (for example of the distributions involved in a t test). The chapter material completely prepares the student for these kinds of practice problems and test questions.

It is our repeated experience that these different ways of expressing an idea are crucial for permanently establishing a concept in a student's mind. Many psychology students are more at ease with words than with numbers. In fact, some have a positive fear of all mathematics. Writing the formula in words and providing the lay-language explanation gives them an opportunity to do what they do best.

3. A main goal of any introductory statistics course in psychology is to prepare students to read research articles. The way a procedure such as a t test or an analysis of variance is described in a research article is often quite different from what the student expects from the standard textbook discussions. Therefore, as this book teaches a statistical method, it also gives examples of how that method is reported in the journals (excerpts from current articles). And we don't just leave it there. The practice problems and test bank items also include excerpts from articles for the student to explain.

4. The book is unusually up to date. For some reason, most introductory statistics textbooks read as if they were written in the 1950s. The basics are still the basics, but statisticians and researchers think far more subtly about those basics now. Today, the basics are undergirded by a new appreciation of effect size, power, the accumulation of results through meta-analysis, the critical role of models, the underlying unity of difference and association statistics, the growing prominence of regression and associated methods, and a whole host of new orientations arising from the central role of the computer. We are much engaged in the

latest developments in statistical theory and application, and this book reflects that engagement. For example, we devote an entire early chapter to effect size and power and then return to these topics as we teach each technique.

5. We capitalize on the students' motivations. We do this in two ways. First, our examples emphasize topics or populations that students seem to find most interesting. The very first example is from a real study in which 151 students in their first week of an introductory statistics class rate how much stress they feel they are under. Other examples emphasize clinical, organizational, social, and educational psychology while being sure to include sufficient interesting examples from cognitive, developmental, behavioral and cognitive neuroscience, and other areas to inspire students with the value of those specialties. (Also, our examples continually emphasize the usefulness of statistical methods and ideas as tools in the research process, never allowing students to feel that what they are learning is theory for the sake of theory.)

Second, we have worked to make the book extremely straightforward and systematic in its explanation of basic concepts so that students can have frequent "aha" experiences. Such experiences bolster self-confidence and motivate further learning. It is quite inspiring to us to see even fairly modest students glow from ha...

Most helpful customer reviews

0 of 0 people found the following review helpful.
Five Stars
By Saqib Nisar
Good book.

20 of 23 people found the following review helpful.
A great book for the non-statistically minded
By A Customer
I found this book greatly supportive to a non-statistically minded person such as myself. The authors realise that not everyone feels comfortable with doing statistics and, indeed, actually dread it. Since I need to do a Statistics for Psychology course to continue in Psychology it has been a relief that the main text used has been written to aid the statistically impaired. It is fulled with many mind-easing comments etc. and, with the combination of this book and my lecturer at the University of Canterbury, I am actually learning to enjoy something I never thought I would enjoy. A big thank you to Arthur and Elaine Aron. You have helped me continue my studies in the field I wish to remain in - Psychology.

9 of 10 people found the following review helpful.
Vastly improved over previous editions!
By The deadbeat Lebowski--
I used Edition 2 of this book during my undergraduate education and, at the time, it seemed fine. I am in a graduate program and we are using the 6th edition and it is SO MUCH BETTER! I have compared them side-by-side and the improvement has been remarkable. Not that I have no complaints, mind you, but it's a solid book for psychology statistics.

See all 76 customer reviews...

STATISTICS FOR PSYCHOLOGY (5TH EDITION) BY ARTHUR ARON PH.D., ELAINE N. ARON PH.D., ELLIOT COUPS PH.D. PDF

Once a lot more, checking out behavior will certainly always give valuable benefits for you. You might not should spend sometimes to read the book Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. Simply established apart several times in our extra or totally free times while having dish or in your workplace to check out. This Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. will reveal you brand-new thing that you can do now. It will assist you to improve the high quality of your life. Occasion it is merely a fun publication **Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D.**, you could be happier and also much more enjoyable to appreciate reading.

From the Publisher
Class-tested and developed over two decades, the material for this innovative text reflects recent changes in both research practice and in the teaching of statistics for psychology: 1) Statistics are done by computer, not by hand, so the text stresses deep understanding, not brief explanation followed by the usual plugging numbers into formulas. 2) The majority of psychology majors are human-and word-oriented, not math-oriented, so this text employs their way of learning--for example, requiring them to put what they learn into words lay persons can understand.

From the Back Cover
Pearson’s MySearchLab is the easiest way for students to master a writing or research project. In a recent student survey, the overwhelming majority of students are assigned writing and research projects, for which they would use research and citation tools if they were available to them. MySearchLab is a website available at no additional charge in a package with a Pearson textbook and is also available as a standalone product.

The heart of this book was written over a summer in a small apartment near the Place Saint Ferdinand, having been outlined in nearby cafés and on walks in the Bois de Boulogne. It is based on our 35 years of experience teaching, researching, and writing. We believe that the book we wrote is as different from the conventional lot of statistics texts as Paris is from Calcutta, yet still comfortable and stimulating to the long-suffering community of statistics instructors.

Our approach was developed over three decades of successful teaching—successful not only in the sense that students have consistently rated the course (a statistics course, remember) as a highlight of their major, but also in the sense that students come back to us later saying, "I was light-years ahead of my fellow graduate students because of your course," or "Even though I don't do research, your course has really helped me read the journals in my field."

The response to the first and second edition has been overwhelming. We have received hundreds of thank-you e-mails and letters from instructors (and from students themselves!) from all over the English-speaking world. Of course, we were also delighted by the enthusiastic review in Contemporary Psychology

(Bourgeois, 1997).

In this third edition we have tried to maintain those things that have been especially appreciated, while reworking the book to take into account the feedback we have received, our own experiences, and advances and changes in the field. We have also added new pedagogical features to make the book even more accessible for students. However, before turning to the third edition, we want to reiterate what we said in the first edition about how this book from the beginning has been quite different from other statistics texts.

A BRIEF HISTORY OF THE STATISTICS TEXT GENRE

In the 1950s and 1960s statistics texts were dry, daunting, mathematical tomes that quickly left most students behind. In the 1970s, there was a revolution—in swept the intuitive approach, with much less emphasis on derivations, proofs, and mathematical foundations. The approach worked. Students became less afraid of statistics courses and found the material more accessible, even if not quite clear.

The intuitive trend continued in the 1980s, adding in the 1990s some nicely straightforward writing. A few texts have now also begun to encourage students to use the computer to do statistical analyses. However, discussions of intuitive understandings are becoming briefer and briefer. The standard is a cursory overview of the key idea and sometimes the associated definitional formula for each technique. Then come the procedures and examples for actually doing the computation, using another "computational" formula.

Even with all this streamlining, or perhaps because of it, at the end of the course most students cannot give a clear explanation of the logic behind the techniques they have learned. A few months later they can rarely carry out the procedures either. Most important, the three main purposes of the introductory statistics course ark, not accomplished: Students are not able to make sense of the results of psychology research articles, they are poorly prepared for further courses in statistics (where instructors must inevitably spend half the semester reteaching the introductory course), and the exposure to deep thinking that is supposed to justify the course's meeting general education requirements in the quantitative area has not occurred.

WHAT WE HAVE DONE DIFFERENTLY

We continue to do what the best of the newer books are already doing well: emphasizing the intuitive, de-emphasizing the mathematical, and explaining everything in direct, simple language. But what we have done differs from these other books in 11 key respects.

1. The definitional formulas are brought to center stage because they provide a concise symbolic summary of the logic of each particular procedure. All our explanations, examples, practice problems, and test bank items are based on these definitional formulas. (The amount of data to be processed in practice problems and test bank items are reduced appropriately to keep computations manageable.)

Why this approach? To date, statistics texts have failed to adjust to technological reality. What is important is not that the students learn to calculate a t test with a large data set—computers can do that for them. What is important is that students work problems in a way that they remain constantly aware of the underlying logic of what they are doing. Consider the population variance—the average of the squared deviations from the mean. This concept is directly displayed in the definitional formula (once the student is used to the symbols): Variance = $\Sigma(I - M)2/N$. Repeatedly working problems using this formula engrains the meaning in the student's mind. In contrast, the usual computational version of this formula only obscures this meaning: Variance = $\Sigma X2 - (\Sigma X)2/N/N$. Repeatedly working problems using this formula does nothing but teach the student the difference between $\Sigma X2$ and $(\Sigma X)2$!

Teaching the old computational formulas today is an anachronism. Researchers do their statistics on

computers now. At the same time, the use of statistical software makes the understanding of the basic principles, as they are symbolically expressed in the definitional formulas, more important than ever. Students still need to work lots of problems by hand to learn the material. But they need to work them using the definitional formulas that reinforce the concepts, not using the computational formulas that obscure them. Those formulas once made some sense as timesavers for researchers who had to work with large data sets by hand, but they were always poor teaching tools. (Because some instructors may feel naked without them, we still provide the computational formulas, usually in a brief footnote, at the point in the chapter where they would traditionally have been introduced.)

2. Each procedure is taught both verbally and numerically—and usually visually as well. In fact, when we introduce every formula, it has attached to it a concise statement of the formula in words. Typically, each example lays out the procedures in worked-out formulas, in words (often with a list of steps), and illustrated with an easy-to-grasp figure. Practice problems and test bank items, in turn, require the student to calculate results, write a short explanation in layperson's language of what they have done, and make a sketch (for example of the distributions involved in a t test). The chapter material completely prepares the student for these kinds of practice problems and test questions.

It is our repeated experience that these different ways of expressing an idea are crucial for permanently establishing a concept in a student's mind. Many psychology students are more at ease with words than with numbers. In fact, some have a positive fear of all mathematics. Writing the formula in words and providing the lay-language explanation gives them an opportunity to do what they do best.

3. A main goal of any introductory statistics course in psychology is to prepare students to read research articles. The way a procedure such as a t test or an analysis of variance is described in a research article is often quite different from what the student expects from the standard textbook discussions. Therefore, as this book teaches a statistical method, it also gives examples of how that method is reported in the journals (excerpts from current articles). And we don't just leave it there. The practice problems and test bank items also include excerpts from articles for the student to explain.

4. The book is unusually up to date. For some reason, most introductory statistics textbooks read as if they were written in the 1950s. The basics are still the basics, but statisticians and researchers think far more subtly about those basics now. Today, the basics are undergirded by a new appreciation of effect size, power, the accumulation of results through meta-analysis, the critical role of models, the underlying unity of difference and association statistics, the growing prominence of regression and associated methods, and a whole host of new orientations arising from the central role of the computer. We are much engaged in the latest developments in statistical theory and application, and this book reflects that engagement. For example, we devote an entire early chapter to effect size and power and then return to these topics as we teach each technique.

5. We capitalize on the students' motivations. We do this in two ways. First, our examples emphasize topics or populations that students seem to find most interesting. The very first example is from a real study in which 151 students in their first week of an introductory statistics class rate how much stress they feel they are under. Other examples emphasize clinical, organizational, social, and educational psychology while being sure to include sufficient interesting examples from cognitive, developmental, behavioral and cognitive neuroscience, and other areas to inspire students with the value of those specialties. (Also, our examples continually emphasize the usefulness of statistical methods and ideas as tools in the research process, never allowing students to feel that what they are learning is theory for the sake of theory.)

Second, we have worked to make the book extremely straightforward and systematic in its explanation of basic concepts so that students can have frequent "aha" experiences. Such experiences bolster self-

confidence and motivate further learning. It is quite inspiring to us to see even fairly modest students glow from ha...

So, when you need quick that book **Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D.**, it doesn't should get ready for some days to get guide Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. You could directly get guide to conserve in your gadget. Even you enjoy reading this Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. almost everywhere you have time, you can enjoy it to review Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. It is undoubtedly helpful for you which intend to obtain the much more precious time for reading. Why don't you invest five minutes and also invest little cash to get guide Statistics For Psychology (5th Edition) By Arthur Aron Ph.D., Elaine N. Aron Ph.D., Elliot Coups Ph.D. here? Never ever let the extra thing quits you.