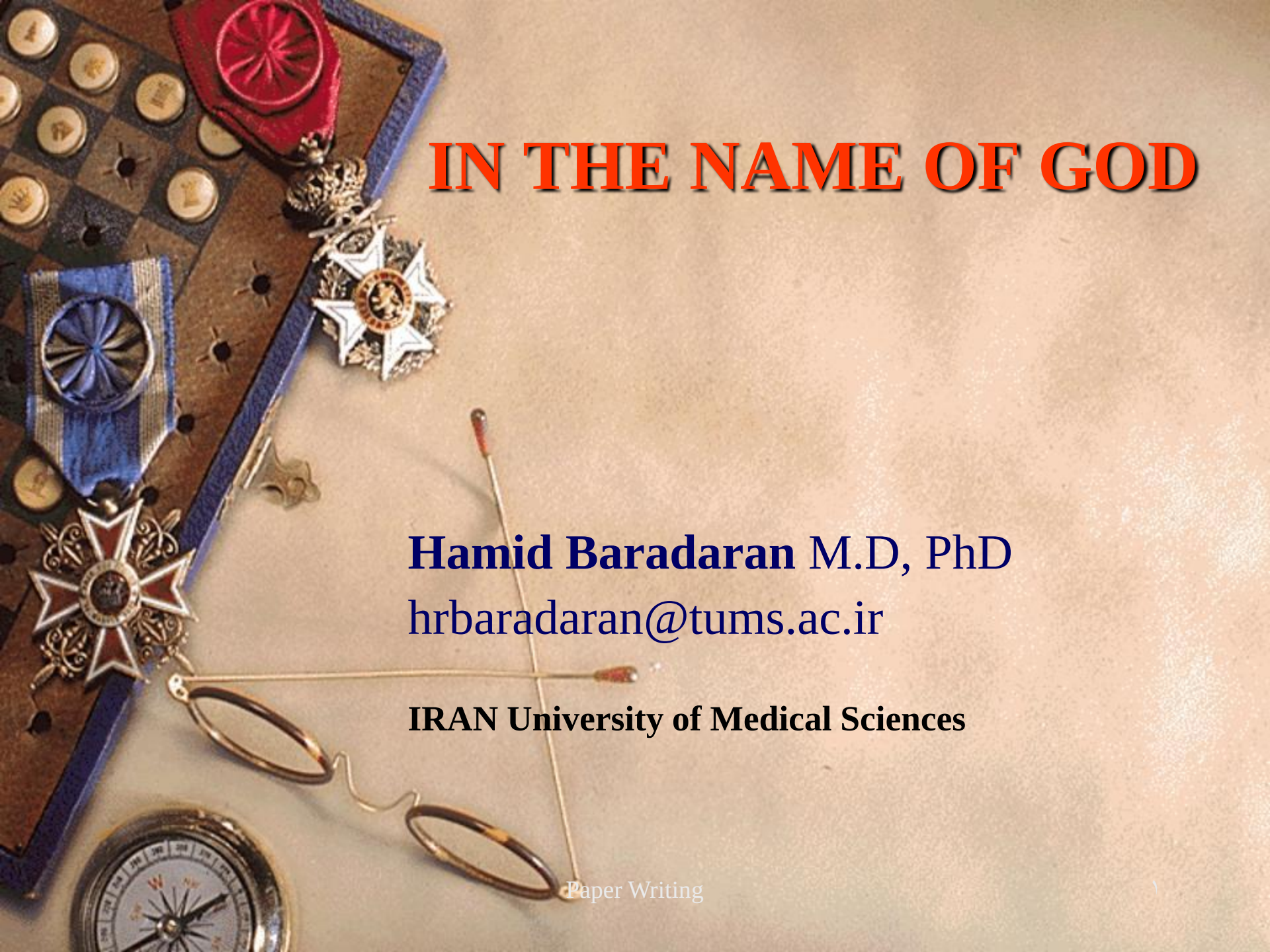

IN THE NAME OF GOD

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How to write a scientific paper

What is a Scientific Paper ?

A scientific paper is a written and published report describing original research results

Writing is learned by writing

- Practice, practice, practice
- Study good examples
- But there are also techniques and rules to learn

What is the purpose of scientific writing?

- Create a concise manuscript that cleanly presents & interprets your research.
- Relay how findings are both unique & important.
- Clearly define scope of work (You are not trying to win the Noble Prize with your undergraduate or graduate thesis paper)
- What is scientific literature?

  - peer reviewed papers, not popular literature, theses, textbooks, internet sites (typically), etc.

Scientific writing

- Structure — **Good order of material**
  Connections (figures, text)
- Style — **Clear sentences**
  (choice of words)

Style

- Be simple and concise. Good scientific writing is clear and easy to read/understand.
- Read widely and learn from papers that are clearly written.
- Don’t try to be “literary” but don’t hesitate to go for a potent image to explain a complex idea.

اصلاً چرا شما مقاله می‌نویسید؟

می‌نویسید برای اینکه خوانده شود و برای این منظور باید منتشر شود.

Gopen and Swan

If the reader is to grasp what the writer means,

the writer must understand what the reader needs

What Does People Read?

- Abstract 87%
- Introduction 43%
- Middle 12%
- Summary and Conclusions 55%

چرا مقاله پژوهشی می نویسیم؟

- -ارتقا
- -به خاطر مدیرمان
- -سخنرانی
- -وظیفه پژوهشگر
- -پیشرفت علم و انجام پژوهشهای بعدی

ابتدا عنوان و بعد چکیده مقاله شما است که خواننده را به سوی خود جلب می کند.

Basic Components of Scientific Papers:

- Title
- Abstract
- Introduction
- Materials and Methods
- Results and Discussion
- Conclusions
- References
- Acknowledgement
- Tables and Figures

Typical format of most peer reviewed journals. However, some do not follow this format!

Parts of a research report

Introduction	What did you do and why
Materials and Methods	How did you do it?
Results	What did you find?
Discussion	Your interpretation of your results?
Summary	Statement of main findings.
Acknowledgements	Who helped?
References	Details of references cited.

IMRAD format

- **Introduction**
- **Methods**
- **Results And**
- **Discussion**

- **What problem was studied? What others and you did?**
- **How do you did it?**
- **What you found out?**
- **What your findings mean?... and future plans**

Remember: writing helps you to think and to learn. Don't misjudge your audience. They can tell you when you are bluffing and when you don't believe what are you saying or doing. Write clear and simple, the science is not an entertainment.

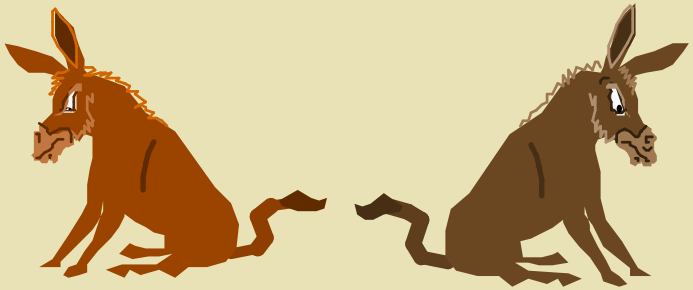
Three key stages

- Plan
- Execute
- Polish

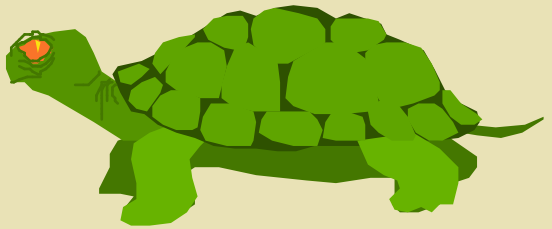
Try not to do two or more of these at the same time.

We can split the writing process into stages

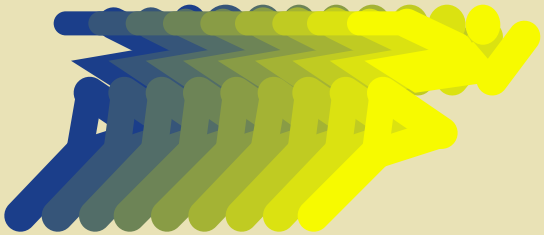
Getting in the Mood



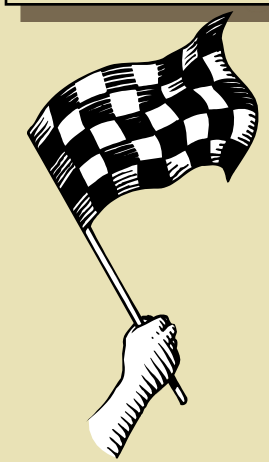
Writing the First Draft



Revising, Revising, Revising



Finishing



چگونه نوشتن را آغاز می‌نمایید؟

- برای خوب نوشتن لازم است طرحی از آن داشت.
- باید در نوشتن مقاله روش قانونمند داشت و آن را مرحله به مرحله نوشت.
- طرح مقاله را مجزا کنید و هر بار فقط یک بخش آن را بنویسید.
- در مورد انچه باید توضیح دهید یادداشتهایی راتهیه کنید.
- یادداشتها را دسته بندی کنید.ایاچیزی تکراری نیست؟ ایا چیزی را از قلم نیانداخته اید؟

چگونه نوشتن را آغاز می‌نمایید؟

- حالا انچه که باید انجام دهید نوشتن یادداشتها در جملات مناسب است.
- بهتر است در مورد هر کدام از سوالات بخشهای مقاله فکر کرده و از جوابها یادداشت بردارید و چهارچوب مقاله را کامل کنید.
- نباید احساس کنید که باید تمام مقاله را در یک جلسه طراحی نمایید.

چگونه نوشتن را آغاز می‌نمایید؟

- پیش نویس اولیه را تهیه کنید.مهم نیست هر چقدر می خواهد نامرتب باشد.
- اگر مقاله برای یک مجله انگلیسی است ابتدا به زبان خود بنویسید و بعد ترجمه کنید یا می توانید مخلوط بنویسید.
- برگه‌ها یا کارت‌های یادداشتی را به همراه خود داشته باشید و هرگاه فکری به مغزتان خطور کرد می توانید سریعاً آن را یادداشت نمایید. این امر به خصوص برای قسمت «بحث» که همیشه به ابراز عقاید نیاز دارد، مفید است.

چگونه نوشتن را آغاز می‌نمایید؟

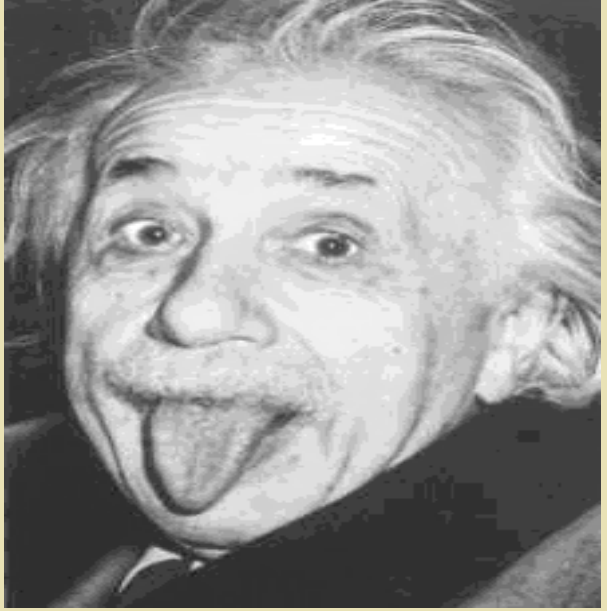
- بعد از پایان پیش نویس اولیه بازنگری را شروع کنید.
- ابتدا نگران محتوای علمی باشد نه شیوه نگارش و دستور زبان.
- مقاله را برای چند روز کنار بگذارید و دوباره مرور کنید.
- یک نسخه را برای مرور به افراد دیگر بدهید.
- حالا عملا پیش نویس دوم در اختیار شما است.
- همچنان به محتوای علمی دقت کنید و نگران موارد نگارشی نباشید.

چگونه نوشتن را آغاز می‌نمایید؟

- در پیش نویس سوم شما باید از محتوا ساختار و جنبه های علمی مقاله اطمینان داشته باشید.
- شیوه نگارش را اصلاح کنید .
- منابع وماخذ را بررسی کنید.تصاویر و جداول را با متن هماهنگ کنید.
- نسخه نهایی را باخواسته های مجله ای که قصد چاپ دارید تنظیم کنید.
- تا قبل از پایان به عقب برنگردید.

The final draft

- **Front Matter**
  - Title (fewest possible words that describe the contents)
  - Author's (co-authors) name and address
  - Abstract (miniversion of the paper, no citations)
  - Keywords
- **Article Body**
  - Introduction
  - Theoretical and experimental sections
  - Results
  - Discussion/Conclusion
- **End Matter**
  - Acknowledgment (technical help and financial assistance)
  - References (at 52 journals were found 33 different styles for listing)
  - Appendixes



Thank you

Any questions ?

Types of Scientific Articles

- There are number of different types of publications available to researchers. The type of publication you need may depend on where you are with your research or what the requirements of your particular assignment are. The following list highlights some of the characteristics of each type.

Types of Scientific Articles

- Original Article
- Editorial
- Review Article
- Brief Report or Short Communication
- Case Report
- Letter to Editor

Original Article

- This is the most important type of paper. It provides new information based on original research. This category of paper is usually prospective and is supported by in-depth statistical analysis. The conclusions should be supported by the data provided in the results.

Editorial

- Invitation
- Very short review by an expert
- Hot topic
- No abstract

Editorial

- **This may take *several* forms, most often: a short review or critique of original articles accepted for publication in the same issue of the journal, brief description of a subject that does not warrant a full review, or to draw attention to very recent innovations or subjects of general interest to readers. The number and types of editorials varies according to the editor's personality. Editorials are invited by the editor or written by the editor.**

Review Articles

- Provide an overview of a field or subject
- Synthesize previous research
- Useful when you need background information and additional references
- Review Articles are usually taken by invitation. However, an invitation to submit does not guarantee publication. Like Original Articles, Review Articles are subject to peer review.

Review Articles

- **This is a detailed analysis of recent developments on a specific topic. It serves to highlight important points that have been previously reported in the literature. This type of paper does not introduce new information and does not include the author's opinion or personal experience. A large number of relevant references are expected. Reviews should consist of the following headings: unstructured abstract, introduction and subheadings. Reviews are usually invited by the editor.**

Case Report

- This is a description of a single case with unique features. These unique features may consist of previously – unreported observation of a recognised disease, the unique use of imaging or diagnostic test to reveal a disease, previously unreported clinical condition, previously – unreported treatment in a recognised disease, or previously – unreported complication of a procedure. Case Reports are usually short and focused. There is often a prescribed limit to the number of figures and references, and sometimes, also the authorship. Case Reports should consist of the following headings: short unstructured (or no) abstract, brief introduction, case report and discussion.

Letter to the editor

- For many reasons:
- Provide supporting information
- Clarification
- Criticism
- Correction
- An alternative explanation to the results

Letter to the editor

- **This is a short letter on any subject of interest to the journal reader, including comments on previously- published articles. These comments should be objective and constructive. Authors of the article commented on are usually invited to reply. This section may be used for floating new hypotheses, and for drawing readers' attention to important hazards and points of interest of relevance to clinical practice.**

Letter to Editor

- Please always be polite and constructive rather than arrogant and critical.

Systematic Review

- Systematic methods used to control bias and imprecision
- Uses rigorous scientific methodology to search literature
- Can be replicated

Summary

- Being familiar with the various types of scientific papers is essential for construction of the manuscript in the correct format. Authors submitting their work in the most appropriate format not only maximise their material but also enhance the chances of acceptance.

Title

The title is the only part of your paper most people will read - make it clear, self-contained, descriptive

Title

- A title should be the fewest possible words that accurately describe the content of the paper.
- Omit all waste words such as

"A study of ...",

"Investigations of ...",

"Observations on ...",

Title

یک عنوان کامل به خواننده می‌گوید که مقاله در چه زمینه‌ای است

- **مختصر، دقیق و گویا**
- **بدون کلمات اضافی و اختصاری**
- **مهم‌ترین عبارت‌ها در ابتدا**
- **جذاب و اطلاع‌دهنده**

Title

- Max info in least words
- <12 words
- <100 characters
- The title is a label
- Should almost never contain abbreviations
- Question: easier to understand, more impact

Title

- **Descriptive, informative & short (10-12 words).**
- **Make objective of study clear & include key words**
- **Provide key works for indexing**
- **Should NOT confuse reader with knowledge in your field .**

Characteristics of Effective Titles

- **Identify the main issue of your paper**
- **Begin with the subject of your paper**
- **Are accurate,unambiguous,specific & complete**
- **Do not contain abbreviations**
- **Attract readers**

- **Get the attention of your readers immediately.**
  - Bad: *The effects of stress*
  - Good: *Is stress killing you?*
  - Or: *Stress: Is it killing you?*

Title Page

- عنوان کامل در وسط صفحه
- اسامی نویسندگان وآدرس آنها
- نویسنده مسئول مکاتبات ومشخصات تماس

Thank you

Any questions ?

چکیده

- چکیده باید یافته‌های مهم مقاله را به صورت واضح خلاصه کند.
- باید کوتاه باشد ولی حقایق مهمی را در بر داشته باشد.
- چکیده باید مستقل باشد و نیازی برای درک آن به مراجعه به متن نباشد.
- چکیده باید به زمان گذشته نوشته شود.
- چکیده نباید حاوی منابع, کلمات اختصاری,جدول و نمودار باشد.

Abstract

- The abstract is vitally important without doubt the most important

  150 - 250 words in the paper

- Avoid references and acronyms

Abstract

- **Provide enough information to enable reader to determine:**
  - **What you did (objectives)**
  - **How you did it (design, setting, participants)**
  - **Your major results (main outcome measure)**
  - **The significance of results (pvalue, CI)**
  - **Conclusions**
- **Difficult to write & should be written after the rest of the paper.**

چهار جزء اصلی چکیده شامل موارد زیر است

۱- هدف شما یا آنچه که قصد انجام آن را دارید.

۲- توضیح کوتاهی از روش کار

۳- یافته‌های اصلی‌تان با معیارهای واقعی نه صفت‌های مبهم

۴- تفسیر یافته‌ها به زبان اهمیت و مفهوم احتمالی آن‌ها

Abstract

- Intro: 1-2 sentences
- Objective: 1 sentence
- M&M: 3-4 sentences
  - Where-when
  - How set-up
  - What data was taken
- Results: 3-4 sentences
- Conclusion: 1 sentence

Introduction

- مقدمه باید به این پرسش پاسخ دهد که «چرا این کار را انجام دادید و انتظار دارید چه چیزی را بیابید؟» برای این کار، مقدمه باید **سه** قسمت داشته باشد:

۱. زمینه‌ی قبلی کار، تا به خواننده فرصت ارزیابی کار حاضر را بدهد.

۲. مرور مختصر سابقه‌ی پژوهش‌های مرتبط و پیشرفت منطقی که باعث شده شما این کار ار انجام دهید.

۳. بیان مختصر اهداف کاری که آنرا شرح خواهید داد.

Introduction

2-3 paragraphs, <450 words, No more than 2 pages

- **First paragraph**
  - **What we know**
- **Second paragraph**
  - **Explicit rationale**
- **Last paragraph (the most part)**

  Why we did this study(my objectives)

Introduction

- Provides a context for your research
- Explain the importance of your research
- Motivate the reader & review the relevant literature
- State objectives of your work
- End Introduction with clearly defined hypothesis being tested & focused objectives of study

Introduction

- You should never be tempted to put "text book"
- Quote the science & not the scientist.
- Nuance: at least, not too much
- You should never end the introduction section with a quick summary of your own results.
- Review of the literature not completely
- Move from general to specific:

problem in real world/research literature ⟶ your experiment.

Thank you

Any questions ?

Method Section

The methods section is the most important aspect of a research paper because it provides the information by which the validity of a study is ultimately judged.

Method Section (2)

The author must provide a clear and precise description of how an experiment was done, and the rationale for the specific experimental procedures chosen. It must be written with enough information so that: (1) the experiment could be repeated by others to evaluate whether the results are reproducible, and (2) the audience can judge whether the results and conclusions are valid.

Method Section (3)

Content and Writing Style of the Methods Section Historically, the methods section was referred to as the "materials and methods" to emphasize the 2 distinct areas that must be addressed.

Method Section (4)

"Materials" referred to what was examined (eg, humans, animals, tissue preparations) and also to the various treatments(eg,drugs,gases)and instruments(eg,ventilators) used in the study.

Method Section (5)

"Methods" referred to how subjects or objects were manipulated to answer the experimental question, how measurements and calculations were made, and how the data were analyzed.

Method Section (6)

The complexity of scientific inquiry necessitates that the writing of the methods be clear and orderly to avoid confusion and ambiguity.

First, it is usually helpful to structure the methods section by:

Method Section (7)

1. Describing the materials used in the study
2. Explaining how the materials were prepared
3. Describing the research protocol
4. Explaining how measurements were made and what calculations were performed
5. Stating which statistical tests were done to analyze the data

Method Section (8)

Second, the writing should be direct and precise and in the past tense. Compound sentence structures should be avoided, as well as descriptions of unimportant details.

For clarity, when a large amount of detail must be presented, information should be presented in subsections according to topic. Within each section and subsection, material should always be organized by topic from most to least important.

Method Section (9)

Subjects

Judging the external validity of a study involving human subjects (ie, to whom the study results may be applied) requires that descriptive data be provided regarding the basic demographic profile of the sample population, including age, gender, and possibly the racial composition of the sample. When animals are the subjects of a study, it is important to list species, weight, strain, sex, and age.

The selection criteria and rationale for enrolling patients into the study must be stated explicitly.

Method Section (10)

Ethical Considerations

Preparations

Animal models or mechanical model

Measurements and Calculations

Data Analysis

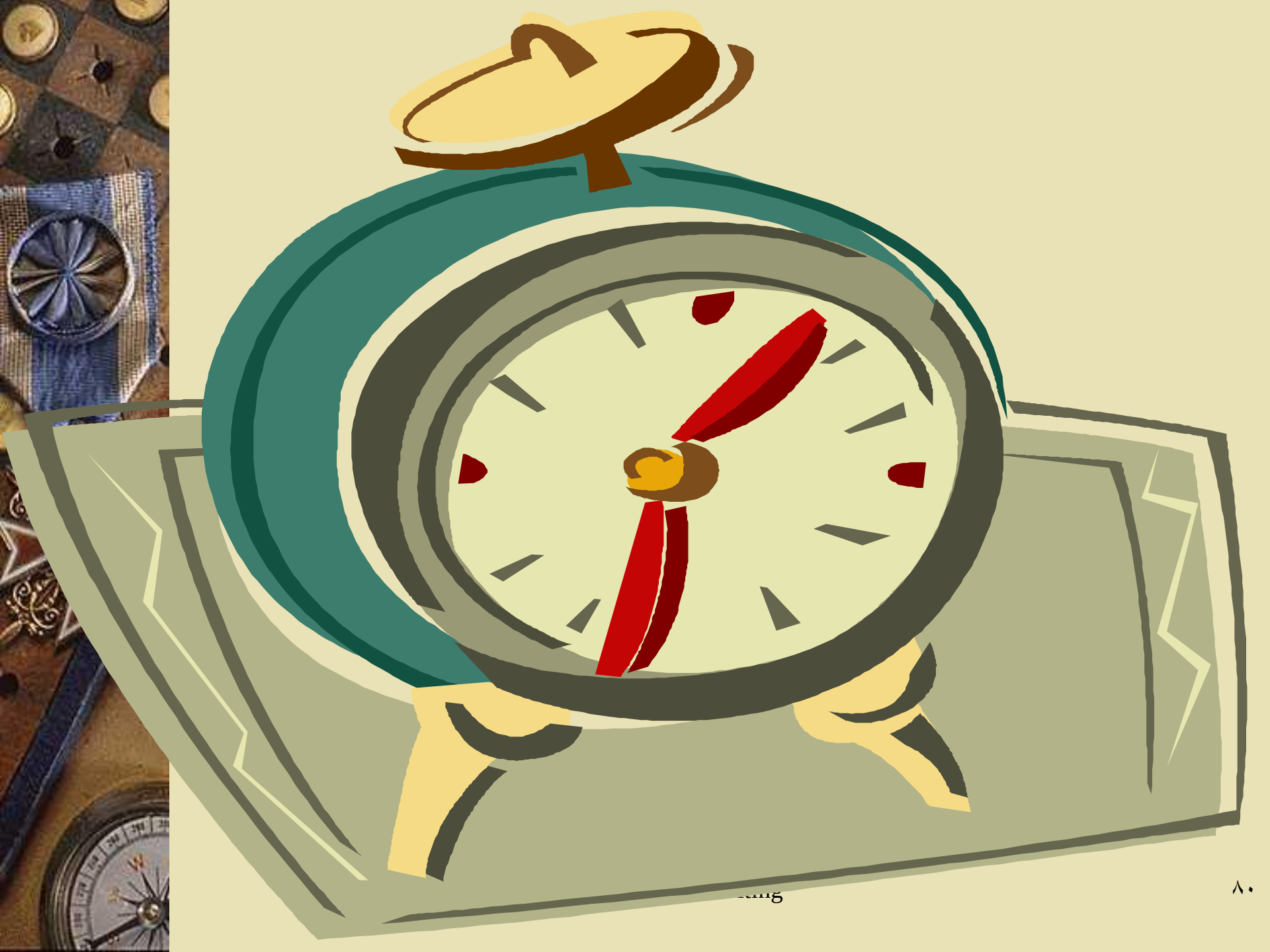
Checklist for Materials and Methods

- Use the third person and past tense.
- Describe what you did.
- Give enough information to tell the reader how you did the experiment but not so much as if you were writing a cookbook or lab manual.
- In field studies it is important include the locations and times that data were collected.
- Avoid the use of slang or jargon.

Materials & Methods:

- Should make research reproducible
  - Detail experimental design
  - Describe equipment used
  - Define formulas and symbols
  - Identify statistical approach

- Do not simply *list* your protocol, *write* it out if possible



Results

The function of this section is to summarize general trends in the data without comments, bias, or interpretation.

Results

Data may be presented in figures and tables, but this may not substitute for a verbal summary of the findings.

Results

The text should be understandable by someone who has not seen your figures and tables.

Results

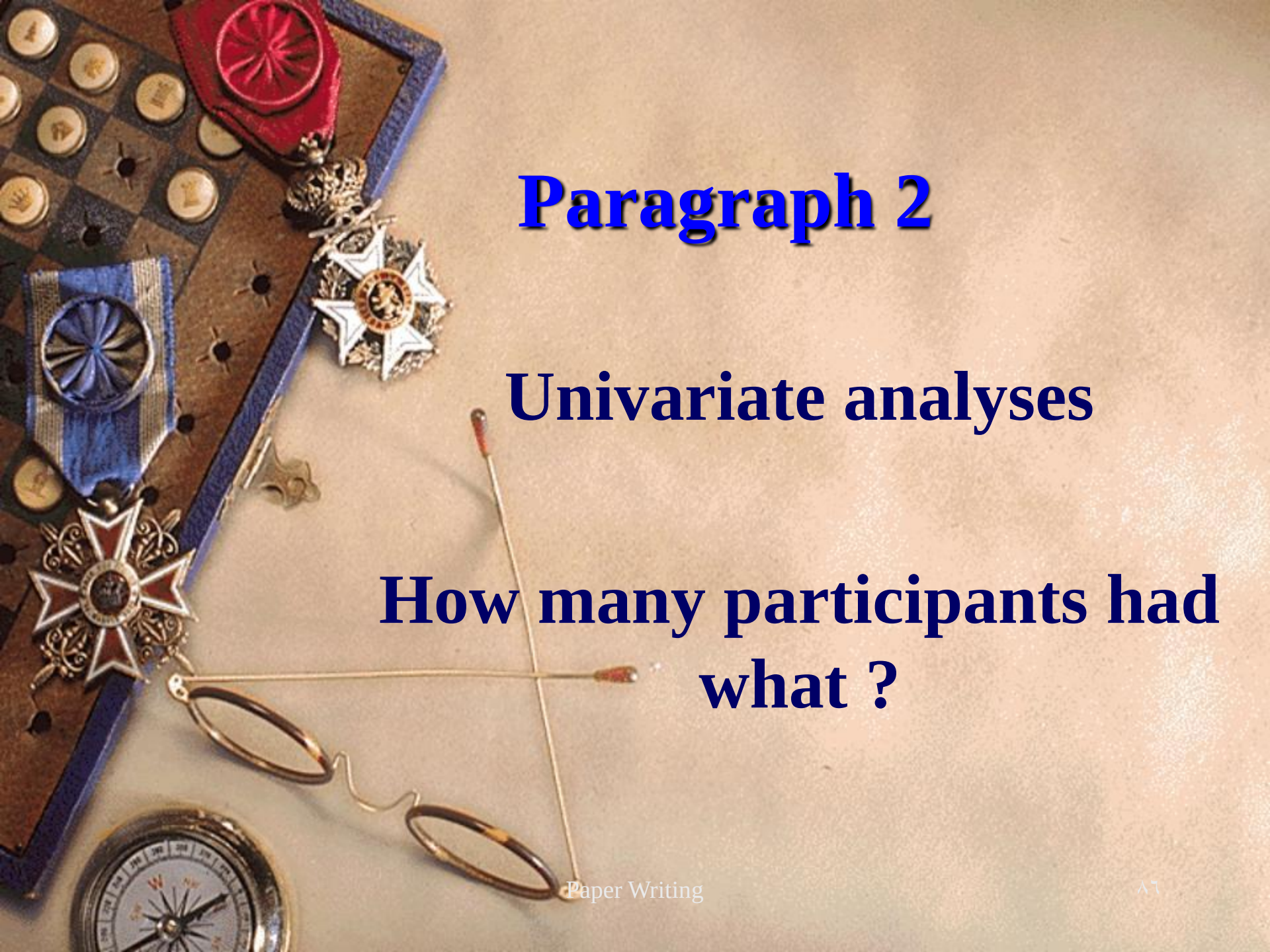
The results are given in Figure1.

Temperature was directly proportional to metabolic rate (Fig. 1).

Paragraph 1

Describe study sample

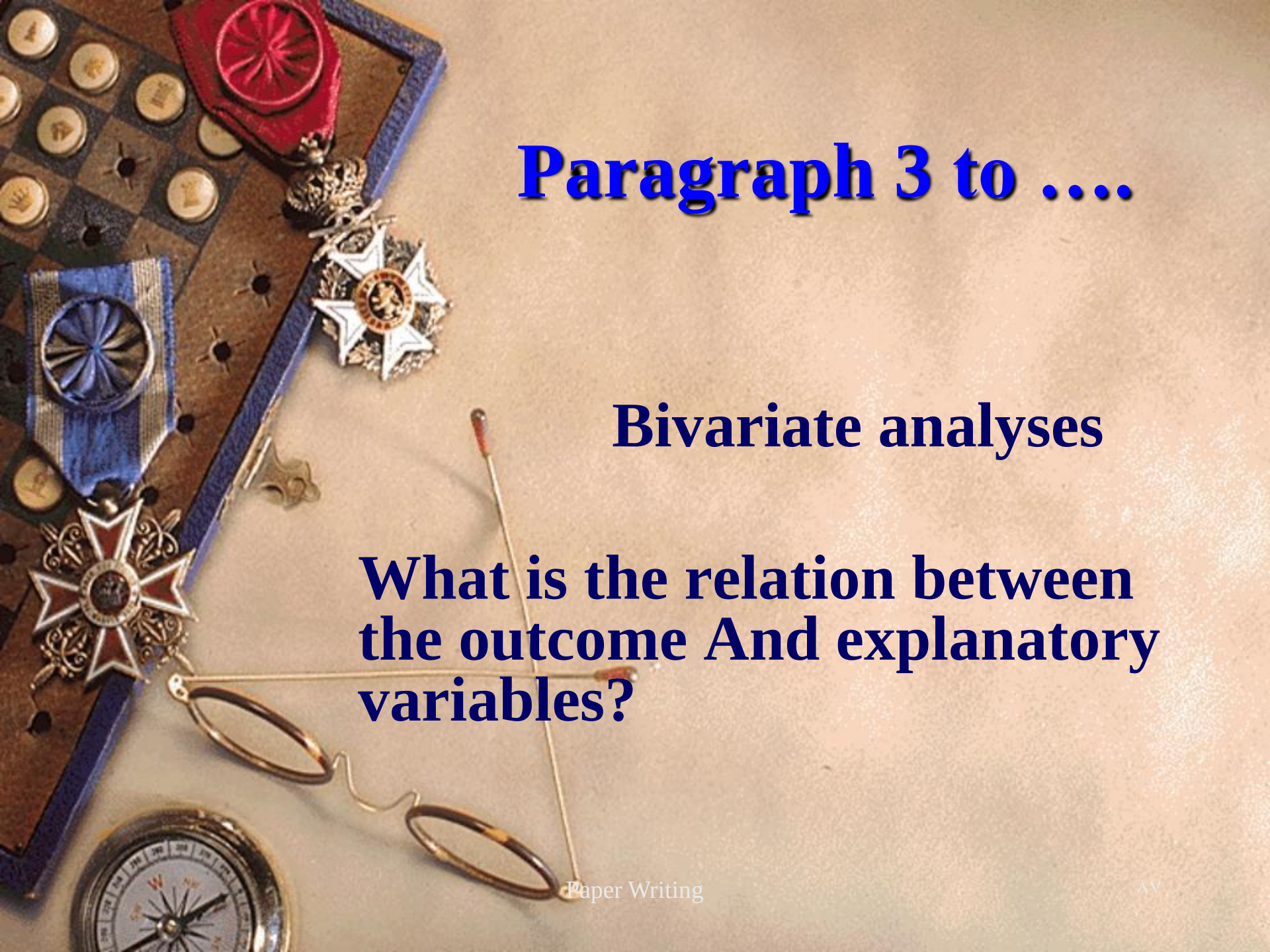
Who did you study?



Paragraph 2

Univariate analyses

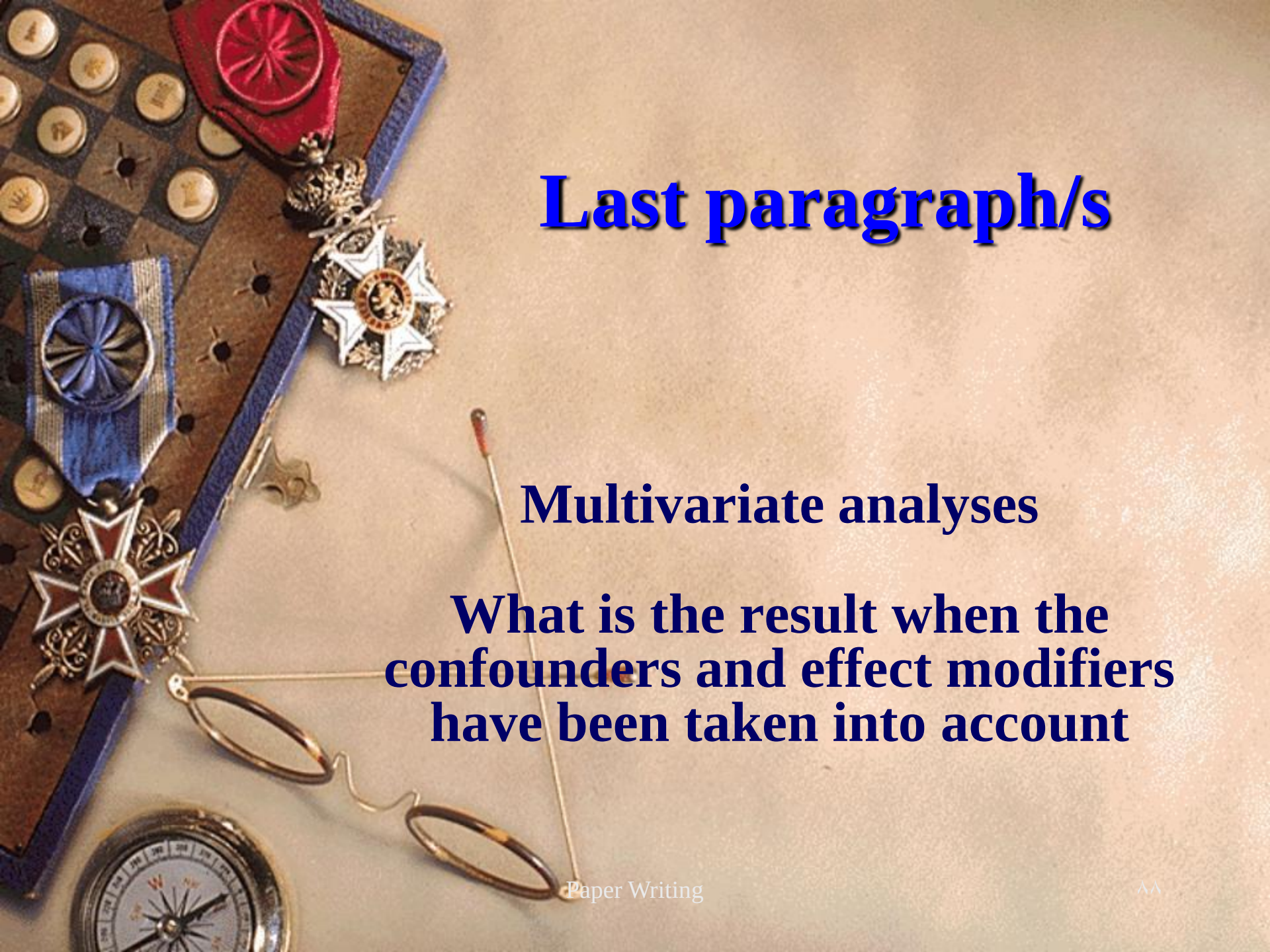
How many participants had what ?



Paragraph 3 to ….

Bivariate analyses

What is the relation between the outcome And explanatory variables?



Last paragraph/s

Multivariate analyses

What is the result when the confounders and effect modifiers have been taken into account

یافته ها:

- اساساً این قسمت یک بخش توصیفی ساده است درباره آنچه در آزمایشهای شما اتفاق افتاده است. راههای مختلفی برای نوشتن بخش یافته‌ها وجود دارد. یکی از آنها ارائه یافته‌های خود بدون هیچگونه اظهار نظر در مورد آنهاست. شما تفاسیر خود را بعدا در قسمت «بحث» بیان خواهید نمود. روش دیگر آن است که یافته ها را تا جایی تفسیر کنید که بین مطالب مختلف ارتباطاتی ایجاد نمایید؛ اما توضیحات بیشتر را رد بخش مجزای «بحث» بیاورید.

Results:

- Use figures and tables with self-contained legends to convey your most important results “at a glance”
- Let your readers see as much as possible of the data for themselves, without losing narrative coherence
  - use descriptive statistics/graphics as well as hypothesis tests
  - organais presentation so that logically or substantively related results are juxtaposed

Results:

- Introduce the principle findings.
- Present tables and figures in this section.
- Include descriptions of important numbers, as well as the results of any statistical tests.
  - Example: “There was a significant difference in the volume of the mascot animals ($t = 2.21$, $p = 0.001$). West Coast mascots were twice as large as East coast mascots (Fig. 1).”
- Do ***NOT*** mix Results & Discussion

Results

Bad Figure

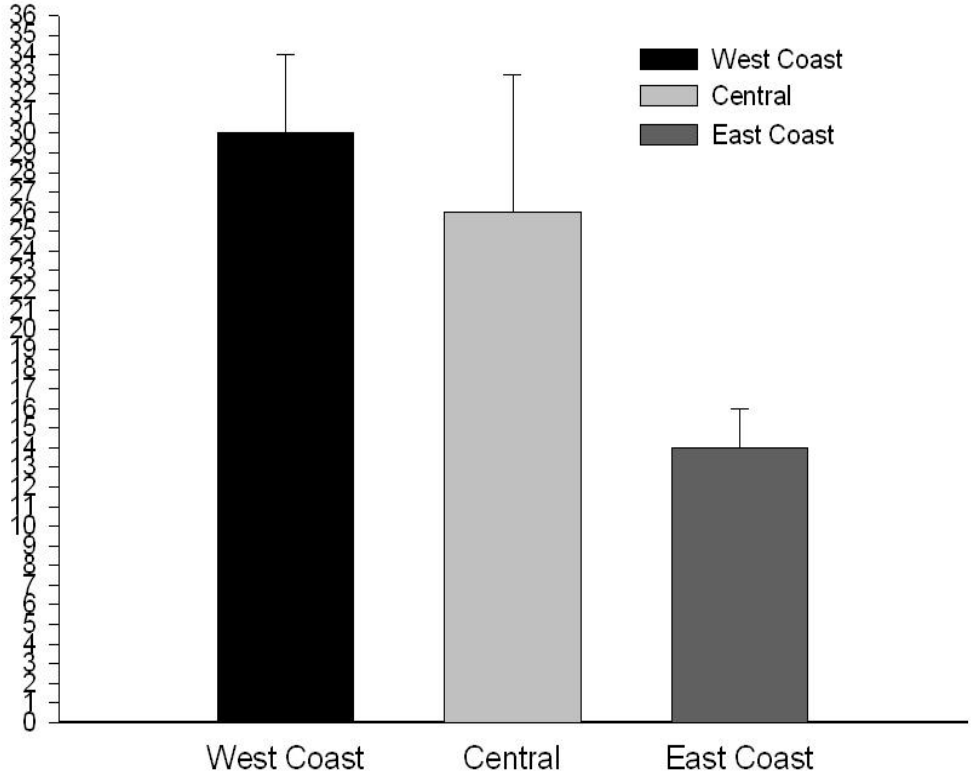


Figure 1. Mascot costume volumes

Results

Good Figure

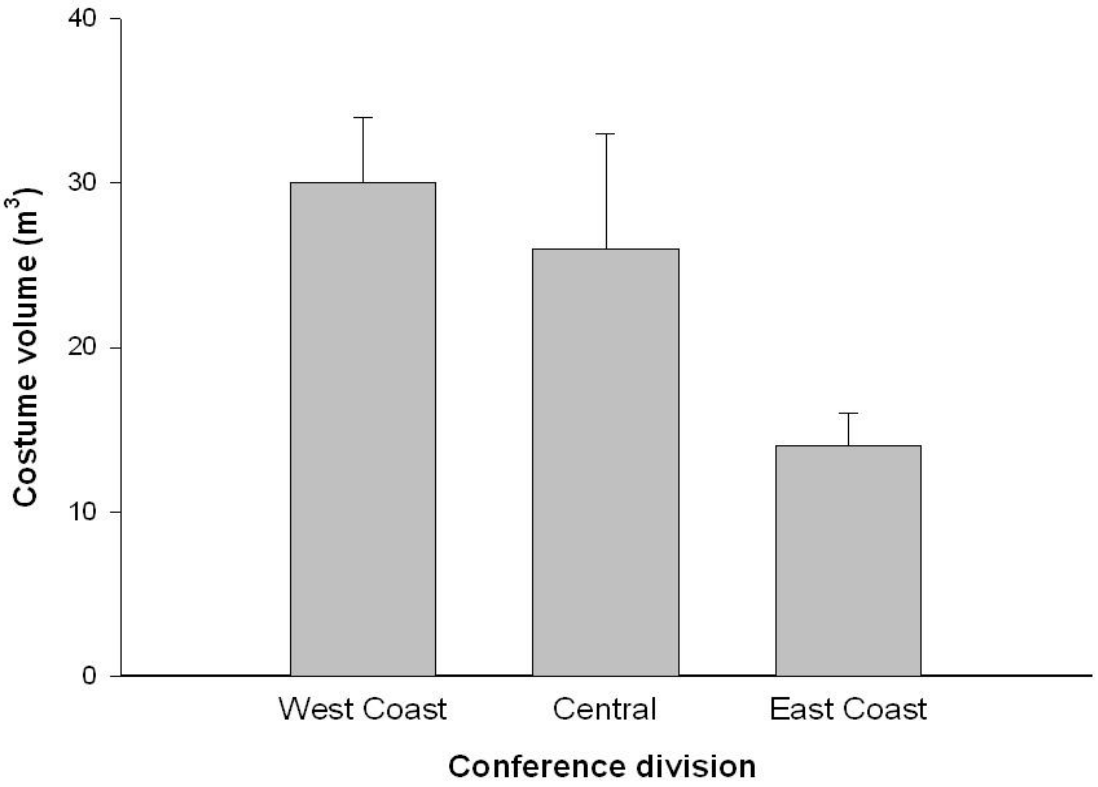


Figure 1. Volume of mascot costumes of all minor league baseball teams (n = 42) in the United States in 1999.

تصاویر و جداول:

- تصاویر و جداول دو قسمت از مهم ترین اجزای مقاله در دادن اطلاعات هستندو باید روی انها خیلی فکر شود.
- مقاله را در ارتباط با جداول و تصاویری که ساخته‌اید بنویسید اما طوری بر آنها تکیه نکنید که آن‌ها مقاله را برایتان تکمیل نمایند.
- نگویید: «یافته‌های آزمایش الف در جدول شماره یک آورده شده است.» در عوض بگویید که «نتیجه‌ی درمان در آزمایش الف، پنجاه درصد بیشتر از گروه شاهد بود.
-

ارائه یافته‌ها در قالب جداول یا تصاویر

روشی که با آن یافته‌ها را رائه می‌دهید می‌تواند اثر زیادی بر خواننده داشته باشد. با آوردن نمودارها، بیان اطلاعاتی را که در جداول یا متن موجود است، تکرار نکنید. «منحنی‌های درجه‌بندی مستقیم‌الخط را در مقاله نیاورید». در عوض اطلاعات مربوط را به اختصار در متن بیان بیاورید.

امار:

- بعضی از مجلات نوع دقیق روشهای آماری را که در مورد یافته‌ها اعمال می‌شوند، مشخص می‌کنند. اگر از آمار استفاده می‌کنید آزمون آماری باید به اختصار توضیح داده شود و در صورت لزوم مأخذ آن اعلام شود. در صورت مناسبت، تعدادنمونه‌ها، مقدار میانگین و یک واحد برای اندازه‌گیری متغیر باید بیان شود.

Thank you

Any questions ?

Discussion

- **Paragraph 1 :**

What did the study show?

Address the aims stated in the introduction

- **Paragraph 2 :**

Strengths & weaknesses of methods

- **Paragraph 3 to n-1:**

Discuss how the result support the current literature or refute current knowledge

- **Final Paragraph :**

Future directions

Discussion

- (1) An analysis of whether the hypothesis was supported by the results of your experiments. Your key findings should be emphasized first.

- (2) A **comparison** of your results and your interpretation to the results and interpretations previously obtained by others. **Integrate** your data with what has been written previously in the appropriate literature. How have your experiments added to our knowledge of this phenomenon/organism/system?

Discussion

- (3) If your hypothesis was refuted, you must provide an explanation. You should also provide explanations of any unexpected results and describe any problems encountered during the experiment.

Discussion

- (4) If you had problems during the experiment or if you are not satisfied with your results, tell how the methods could be altered to provide more definitive results
- (5) End with a short summary/conclusion regarding the significance of your work
- (6) Describe future experiments suggested by your results.
- (7) Do not over-generalize

Thank you

Any questions ?

Thank you

Any questions ?

Style

- Be simple and concise. Good scientific writing is clear and easy to read/understand.
- Read widely and learn from papers that are clearly written.
- Don’t try to be “literary” but don’t hesitate to go for a potent image to explain a complex idea.

Tips for Better Writing

- Passive versus active voice:
  - Given a choice, active is more direct & interesting.
  - Currently preferred in most scientific fields, even when it necessitates the use of “I” or “we.”
- Passive voice:
  - A two-tailed t-test was performed.
- Active voice:
  - The investigators performed a two-tailed t-test.
  - We performed a two-tailed t-test

Guidelines for Using Active Voice

- **Review journal articles or check with the editor to see if active voice is allowed.**
- **Sentence subject should be the emphasis.**
- **Avoid starting sentences with “I” or “we” as this pulls the focus away from the scientific topic.**
- **Avoid using “I” or “we” when making a conjecture, whether substantiated or not. Statements should follow from logic rather than personal bias or subjectivity.**
- **Never use emotive words in conjunction with “I” or “we” (e.g., “I believe,” “we feel,” etc.).**

Tips on Words

- Simple terms are better than long/complicated ones.

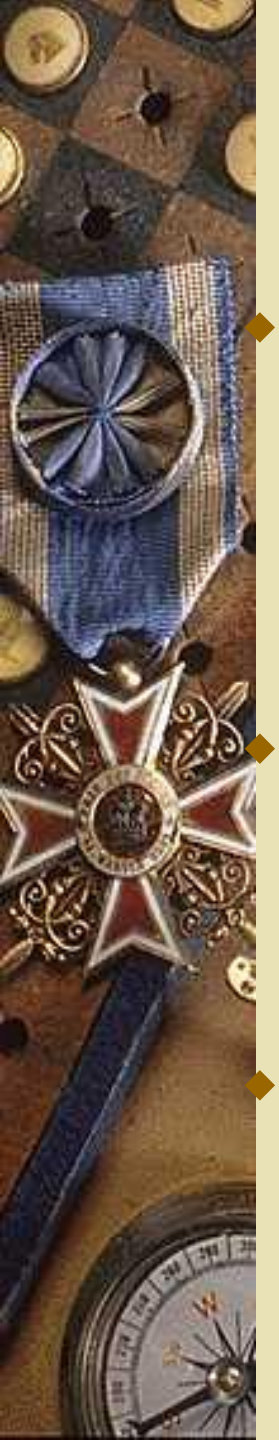
Complex	Simple
efficacious	effective
utilize	use
elucidate	explain
proximal	close
terminate	end

Use Concise Terms

Instead of:	**Write:**
prior to	before
due to the fact that	because
in a considerable number of cases	often
the vast majority of	most
during the time that	when
in close proximity to	near
it has long been know that	I'm too lazy to look up the reference.

Avoid Wordiness and Jargon

- Instead of:
  - The choice of exogenous variables in relation to multi-collinearity is contingent upon the derivations of certain multiple correlation coefficients.
- Replace with:
  - Supply determines demand.



Tense

- **Past** tense (demonstrated):
  - Introduction/Literature review – when discussing other researchers' work.
  - Methods section
  - Results section
- **Present perfect** tense (have demonstrated):
  - For a past action that did not occur at a specific time
  - To describe an action beginning in the past and continuing into the present.
- **Present** tense (demonstrates):
  - Discussing the results (Discussion section)
  - Presenting conclusions

Avoid Mixing Tenses in a Paragraph

"The authors **found** that allopurinol **was** efficacious in controlling future attacks of gout. In fact, only 100 mg per day effectively **controlled** attacks in 78% of patients. Combined allopurinol and benzbromaraon therapy **helps** patients even more dramatically."

Common Grammar Errors

- Subject/verb agreement:
  - The student body **were** interested in the debate.
  - The student body **was** interested in the debate.
- Number agreement:
  - The patients saw their doctor three times a month.
  - The patient**s** saw their doctor**s** three times a month.

Vagueness and Ambiguity

- Strategies to avoid ambiguous, imprecise writing:
  - Choose words and phrases for precision.
  - Avoid figurative language.
  - Use quantitative rather than qualitative descriptions.

Choose Words and Phrases for Precision

- Avoid substituting a less precise term when a more precise term is available.
  - Choice 1: Population density is positively *correlated with* the SARS transmission rate.
  - Choice 2: Population density is positively *related to* the SARS transmission rate.
- In scientific writing, “correlated” conveys a precise statistical relationship between two variables.

Avoid Figurative Language

- Figurative language is by definition imprecise.
- Similes and metaphors should be excluded from scientific writing.
  - Choice 1: Experimental subjects were assaulted with a wall of sound.
  - Choice 2: Experimental subjects were presented with 20 second pulses of nonspecific mating calls.

Use Quantitative Rather than Qualitative Descriptions

- *Which of the following statements is more precise?*
  - Development rate was fastest in the higher temperature treatment.
  - Development rate in the 30 C temperature treatment was 10% faster than development rate in the 20 C temperature treatment.

Faulty Parallelism

- Watch out for FP when using conjunctions (*a*, *and*, or *or).*
- Joined phrases should have similar grammatical structures.
- ***INCORRECT:***
  - **He liked to play basketball and riding horses.**
- ***CORRECT:***
  - **He liked playing basketball and riding horses.**
  - **He liked to play basketball and to ride horses**
  - **He liked to play basketball and ride horses.**

Other Writing Tips

- Cite a reference when you make a statement of fact!
  - It is well known that… (Well known by whom?)
- Refer to all tables and figures in the text.
- Define an acronym the first time you use it.
- Format headings consistently.
  - Font type and size
  - Capitalization
  - Bold, italics, underline

Thank you

Any questions ?

Steps in the Publication Process

- Submission
- Peer review
- Editor's decision
  - Accept for publication as is
  - Accept pending revisions
  - Reject but invite resubmission after revision
  - Reject outright

Steps after a paper is accepted

- “In Press” – time between acceptance and publication
- Receive copy-edited version; correct and return
- Receive page proofs and copyright forms; correct proofs, sign forms, and return
- Typical time from acceptance to appearing in print: 6 to 12 months

Thank you

Any questions ?