

การเขียน บทความวิจัย ภาษาอังกฤษ อย่างมืออาชีพ

บุษบา กนกศิลปกรรม
คณะวิทยาการจัดการ
มหาวิทยาลัยศิลปากร

สถาบันวิจัยและพัฒนา
มหาวิทยาลัยสุโขทัยธรรมมาธิราช
26 สิงหาคม 2564



Part I: Overview

1.1. Why is writing a research article important?



- Long and painful process
- To showcase your success
- To advance scientific knowledge
- To share your results
- To participate in academia
- To continue your academic life
- To increase salaries
- To achieve academic promotions
- Publish or perish?

1.2. Challenges when writing a research article



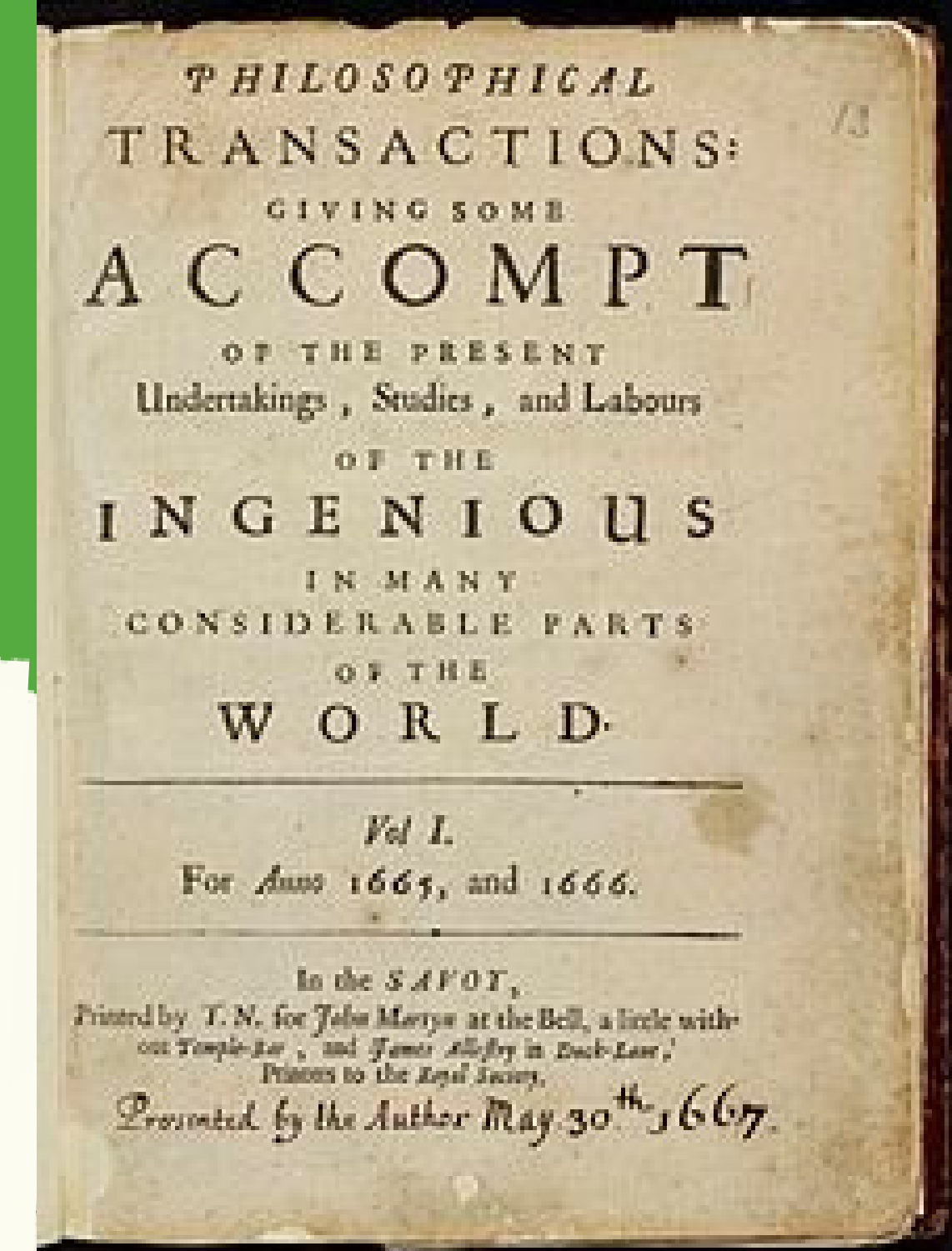
1.3. Academic language & characteristics

- **Language**
- **Academic language:**
อยาก เอน้ำใส่แก้ว แยะ เจ๋ง
สุดๆ ฟิน อะไม่เอา
- **เขียนบทความวิจัยอย่างไร**
ให้ฟิน ให้ปิ๊วะ ให้ปัง หรือ
ให้ปัง!
- **Contractions (isn't,
aren't)**



Part II: Writing Research Articles

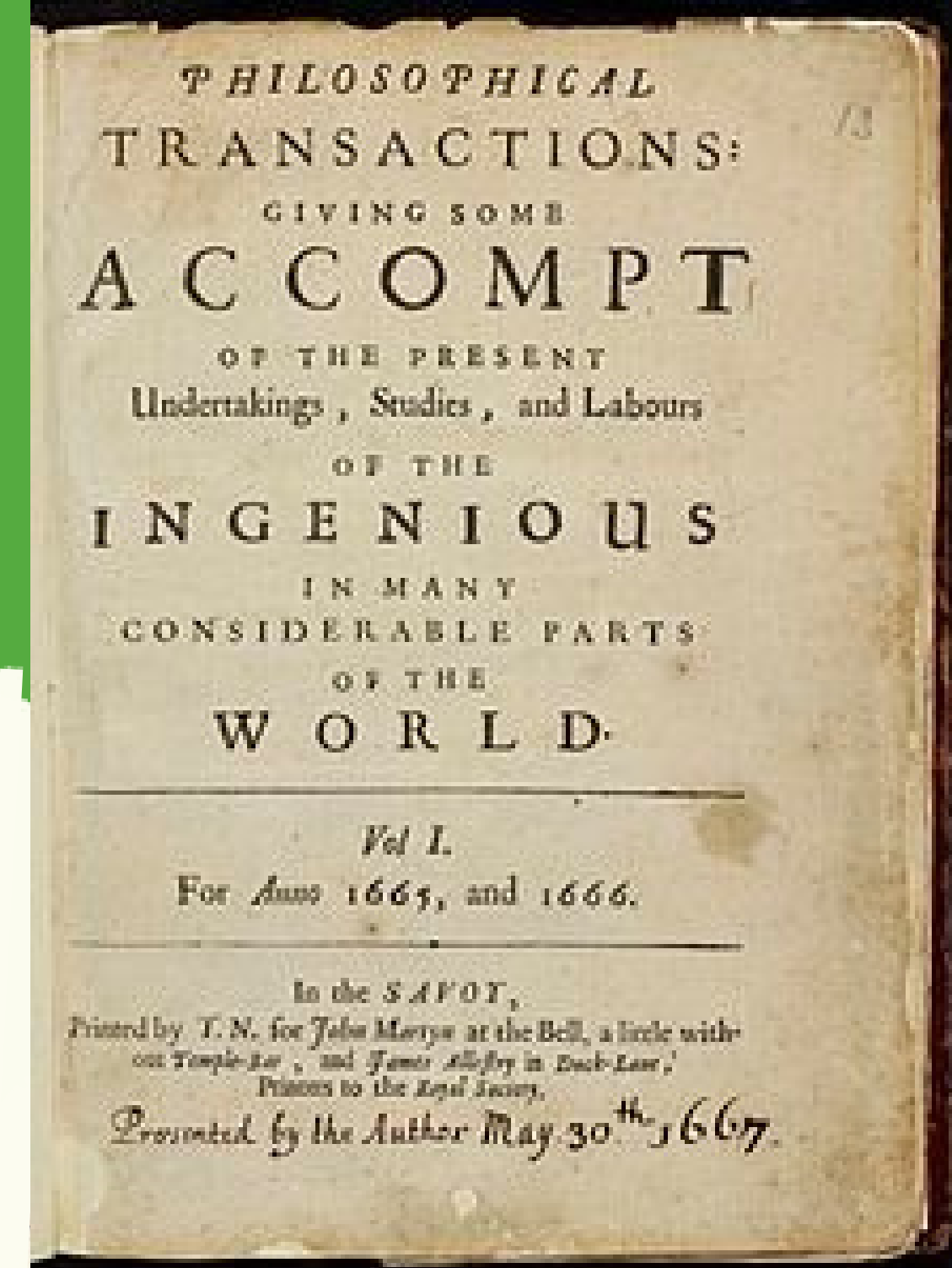
- A major type of academic communication
- Origin in sciences
- The first journal in 1665
- Evolution or development (different from 356 years ago)



Part II: Writing Research Articles (2)

Traditionally known as IMRD

- Title
- Abstract & key words
- Introduction*
- Literature review*
- Methods*
- Results*
- Discussion*
- Conclusion*
- Acknowledgement
- References



**In
this
talk**

#1

Experimental

#2

**Each major section and
its structure**

#3

**Each section and its
language characteristics**

#4

**Assumption: Have the
content in hand and
ready for writing!**

Titles - the ultimate abstract

Answer
some wh
questions

Usually not
in a
sentence

Something
that “wows!”



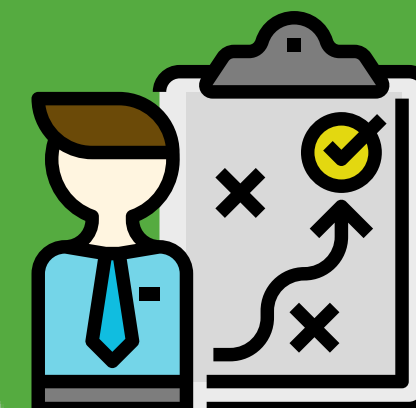
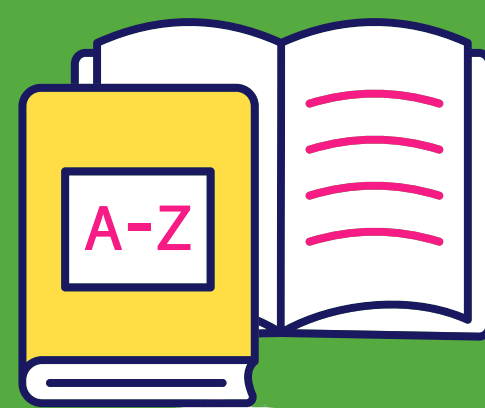
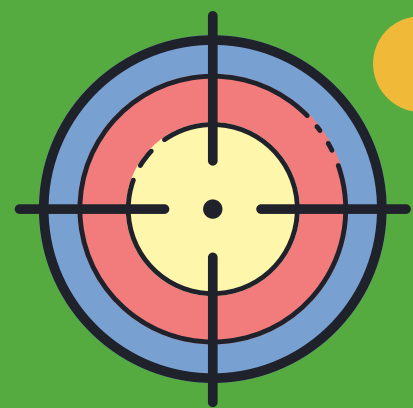
Titles - the ultimate abstract (2)

Accurate,
concise,
clear,
attracting

Informative,
specific,
transparent

Jargon &
slang terms

Aim &
approach of
the study



**Title
examples:**

#1

COVID-19 and death

#2

*Online teaching in the
new normal era*

#3

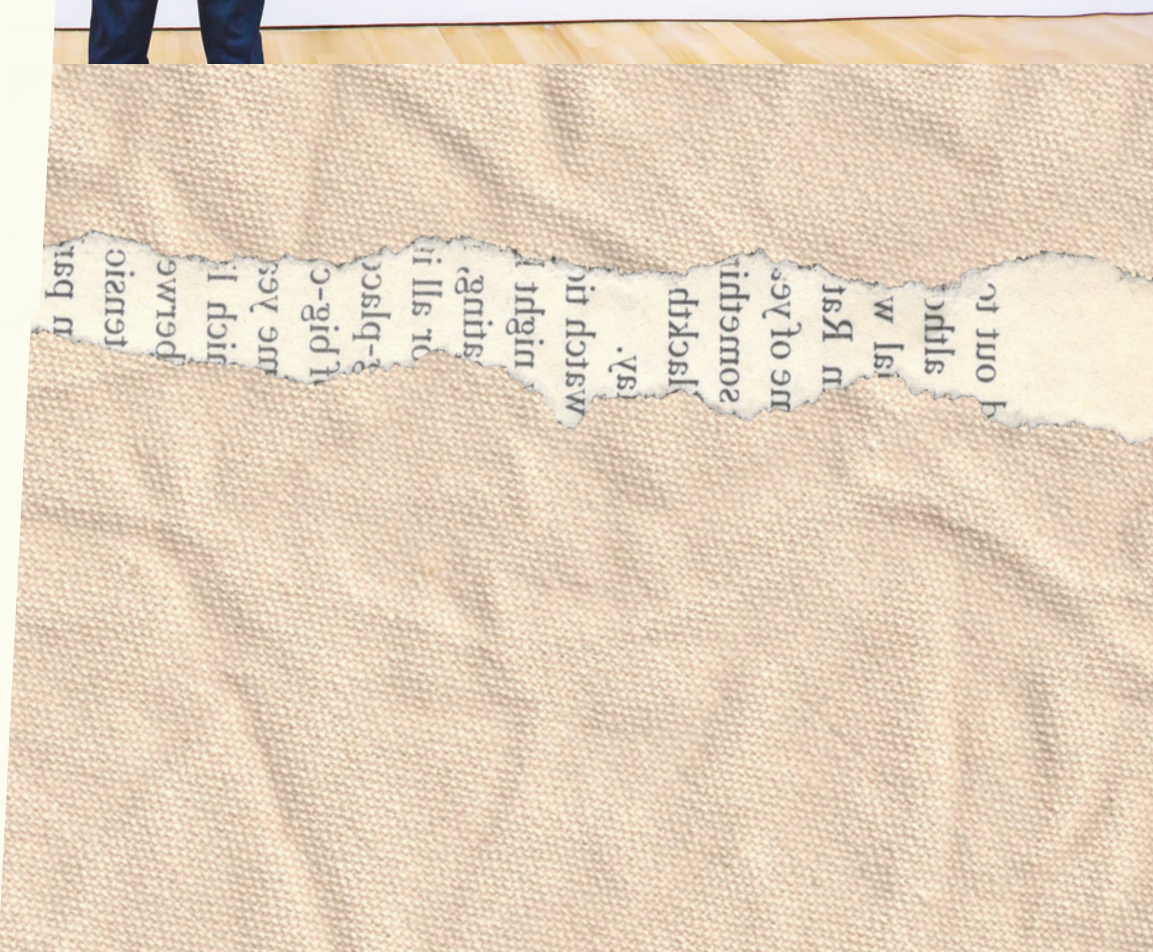
*A study of impacts of
COVID-19 on the health of
Thai people*

#4

*Using English language
tasks to enhance English
language skills of Thai
students who are studying
English in high schools*

In management science

- Original: Students studying in the third year at a university majoring in tourism management
- Improved:
- Strategy:



In tourism

- Original: The perceptions of cruise travel during the pandemic of COVID-19 and strategies for market recovery for cruise businesses in the area of north America
- Improved:
- Strategy:



**More
examples
of
successful
titles**

#1

*Effects of Booking.com's
new scoring system*

#2

*Exponential growth
impacts of the COVID-19
pandemic, preventive
measures, and drug
preferences*

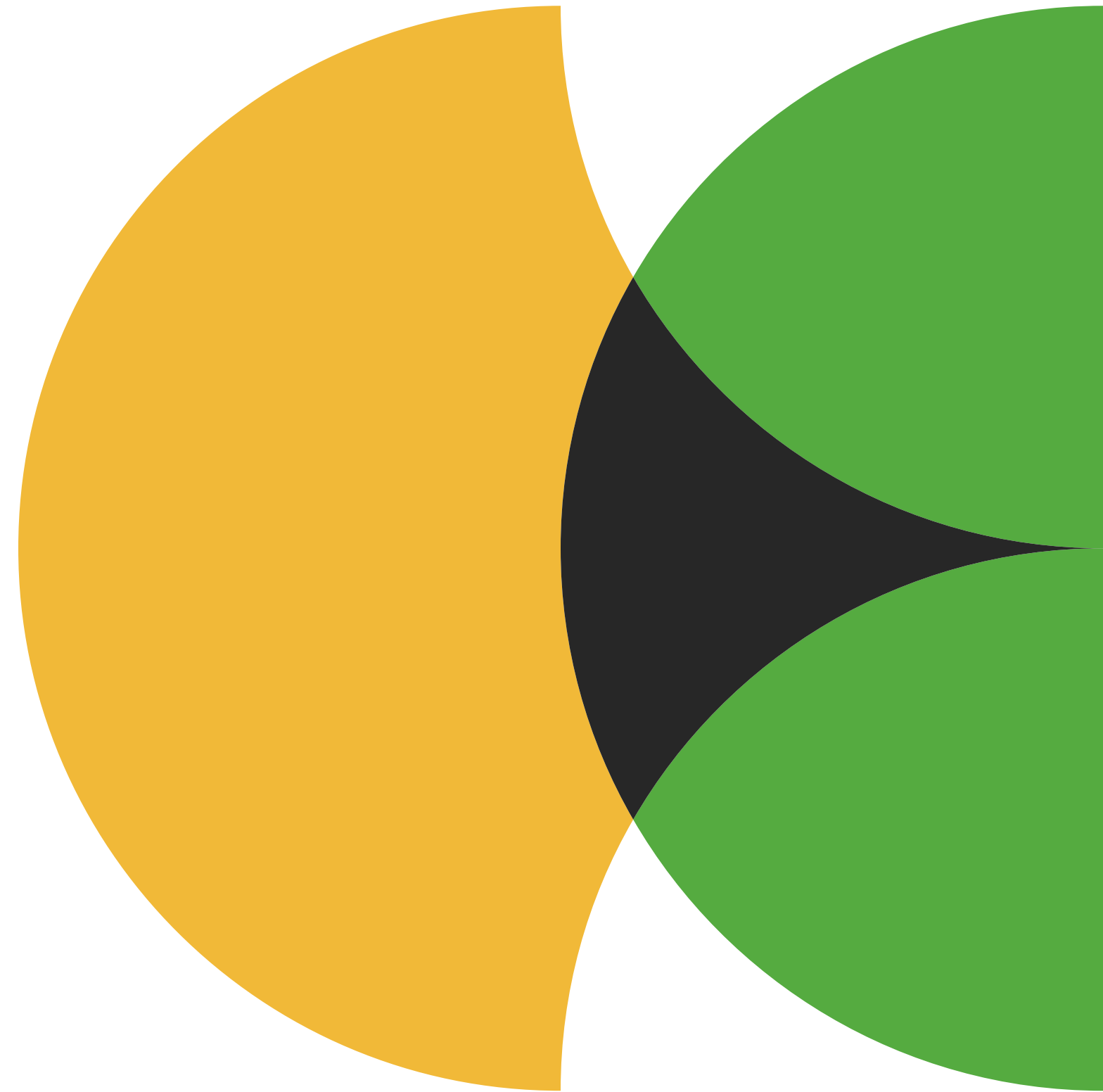
#3

*Resource management in
big data initiatives:
Processes and dynamic
capabilities*

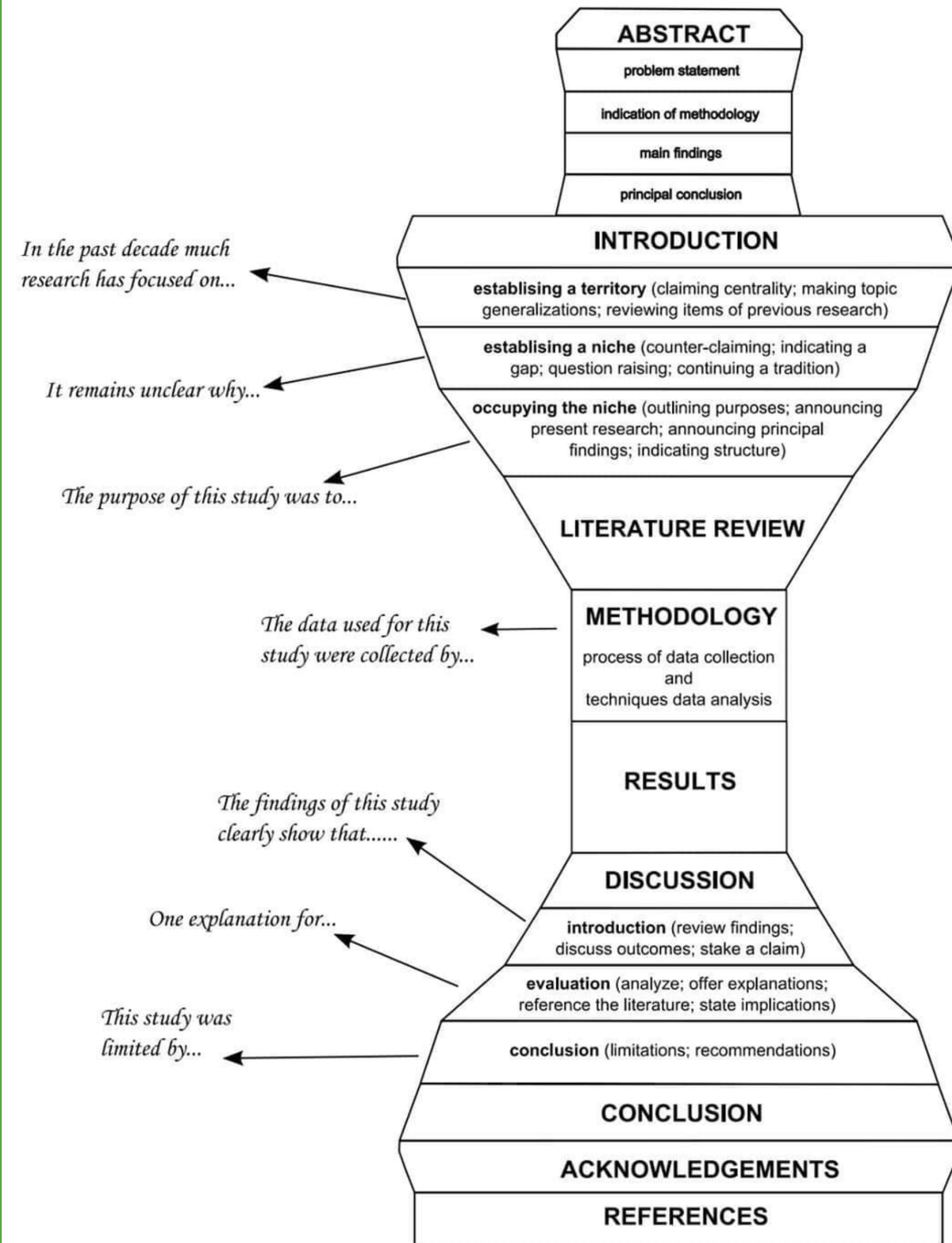
#4

*Motivating frontline
employees: Role of job
characteristics in work and
life satisfaction*

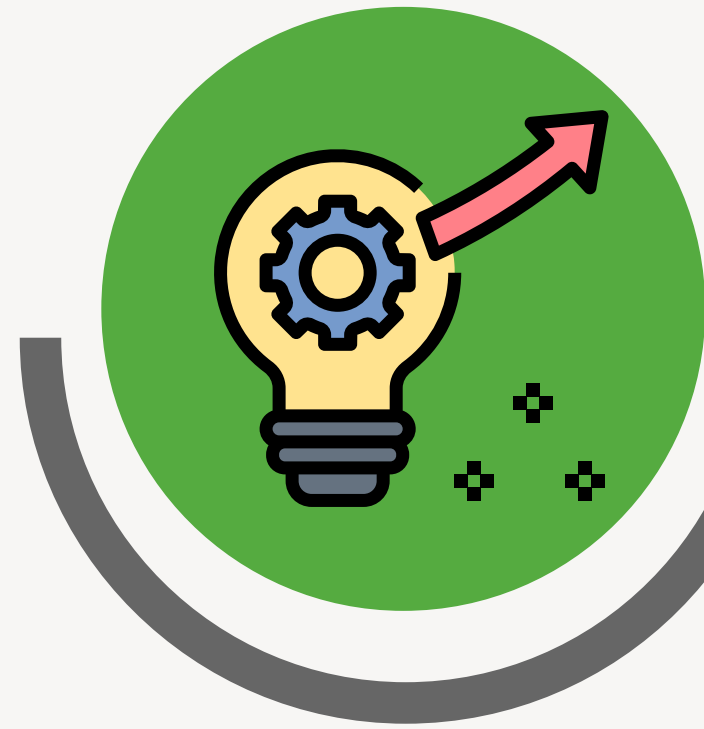
**How about
your titles?**



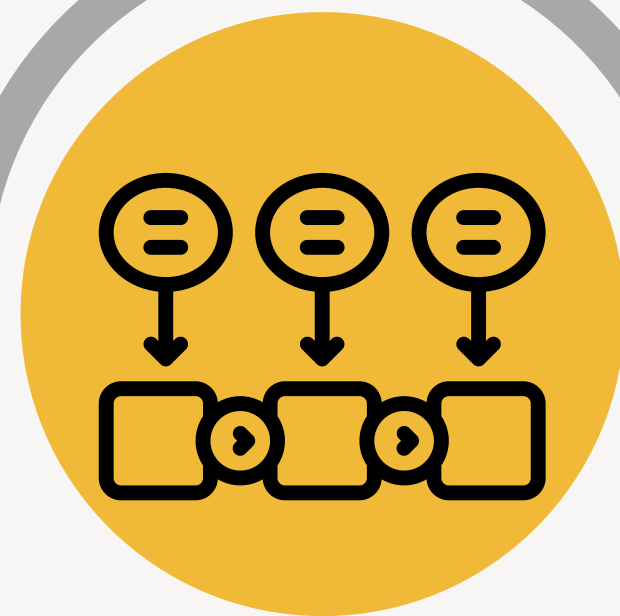
2.2. Abstract



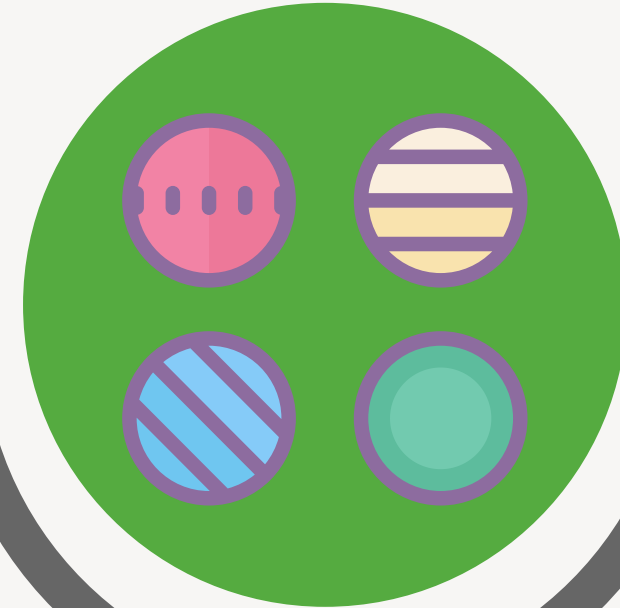
2.1.1. Abstract & unique characteristics



RAs evolve



So do
individual
sections



Abstracts
and the
other
sections with
variations



Disciplinary
preference

2.1.1. Abstract unique characteristics (2)



Each section or part has a structure and preferred language use



Significance: acceptance and rejection



Word limit



Brief and precise

2.1.1. Abstract unique characteristics (3)



The simpler, the better

ADJ

Thoroughness

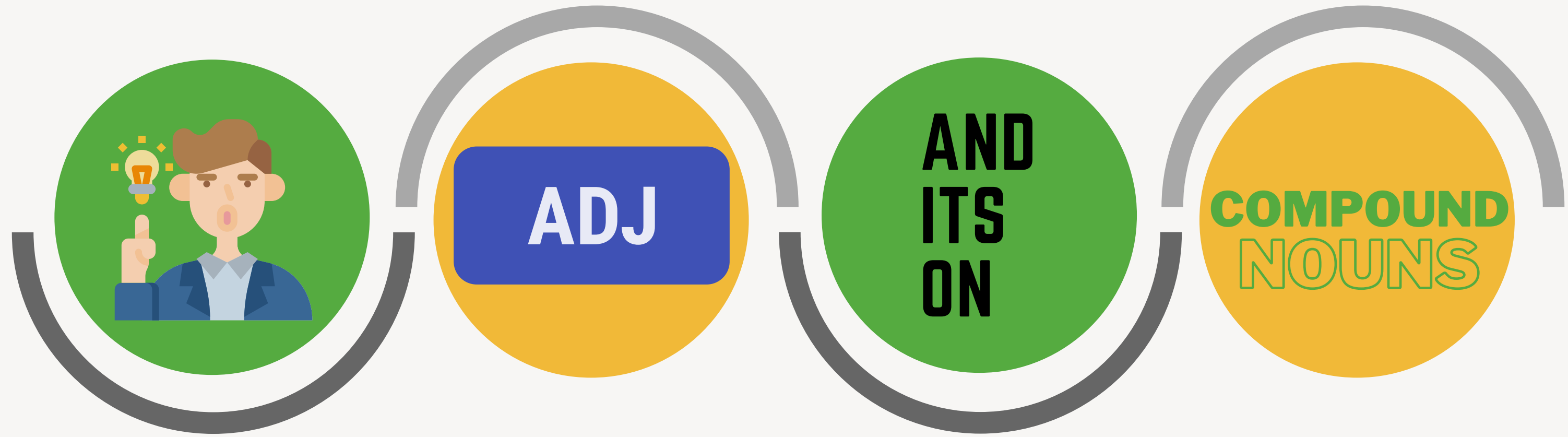


Self-contained



Not too sexy or slangy

2.1.1. Abstract unique characteristics (4)



Acronyms or
jargon

Absence of
references
(if possible)

Empty words
→ minimal:
and, its, on

Compound
nouns (when
possible)

2.1.1. Abstract unique characteristics (5)



Organization
/structure



Written last



One
paragraph?



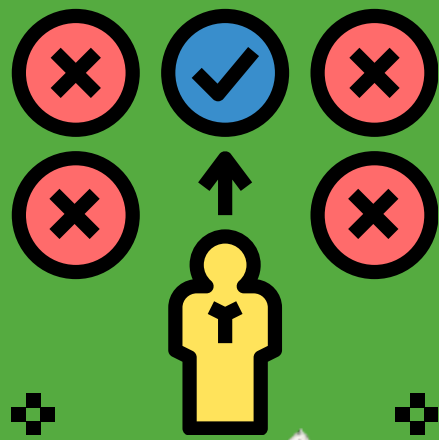
Keyword
Selection

Keyword Selection

Carefully selected

Saves time to find an article
→ retrieval purposes

Widely read from search engines

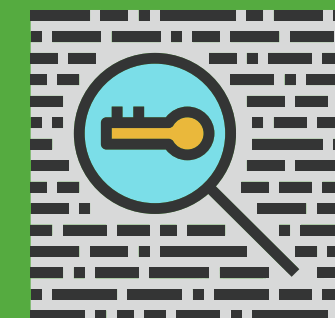


Keyword Selection

To enhance
visibility

Included in the
title and the
abstract
(a few times)

Repeated keywords –
synonyms:
teaching- instruction;
students-learners,
exercises/activities, etc.





2.1.2. Abstract types

Abstract A → Structured abstract

Introduction: The first reported UK case of COVID-19 occurred on 30 January 2020. A lockdown from 24 March was partially relaxed on 10 May. One model to forecast disease spread depends on clinical parameters and transmission rates. Output includes the basic reproduction number R_0 and the log growth rate r in the exponential phase.

Methods: Office for National Statistics data on deaths in England and Wales is used to estimate r . A likelihood for the transmission parameters is defined from a gaussian density for r using the mean and standard error of the estimate. Parameter samples from the Metropolis-Hastings algorithm lead to an estimate and credible interval for R_0 and forecasts for cases and deaths.

Results: The UK initial log growth rate is $r = 0.254$ with s.e. 0.004. $R_0 = 6.94$ with 95% CI (6.52, 7.39). In a 12 week lockdown from 24 March with transmission parameters reduced throughout to 5% of their previous values, peaks of around 90,000 severely and 25,000 critically ill patients, and 44,000 cumulative deaths are expected by 16 June. With transmission rising from 5% in mid-April to reach 30%, 50,000 deaths and 475,000 active cases are expected in mid-June. Had such a lockdown begun on 17 March, around 30,000 (28,000, 32,000) fewer cumulative deaths would be expected by 9 June.

Discussion: The R_0 estimate is compatible with some international estimates but over twice the value quoted by the UK government. An earlier lockdown could have saved many thousands of lives.

Abstract B → Non-structured abstracts

Abstract

Despite considerable social scientific attention to the impacts of the COVID-19 pandemic on urbanized areas, very little research has examined its impact on rural populations. Yet rural communities—which make up tens of millions of people from diverse backgrounds in the United States—are among the nation's most vulnerable populations and may be less resilient to the effects of such a large-scale exogenous shock. We address this critical knowledge gap with data from a new survey designed to assess the impacts of the pandemic on health-related and economic dimensions of rural well-being in the North American West. Notably, we find that the effects of the COVID-19 pandemic on rural populations have been severe, with significant negative impacts on unemployment, overall life satisfaction, mental health, and economic outlook. Further, we find that these impacts have been generally consistent across age, ethnicity, education, and sex. We discuss how these findings constitute the beginning of a much larger interdisciplinary COVID-19 research effort that integrates rural areas and pushes beyond the predominant focus on cities and nation-states.

Source: Warwick McKibbin, Roshen Fernando; The Global Macroeconomic Impacts of COVID-19: Seven Scenarios.

Asian Economic Papers 2021; doi: https://doi.org/10.1162/asep_a_00796

Abstract C → Non-structured abstracts

Abstract

COVID-19 has disrupted the Chinese economy and is spreading globally. The evolution of the disease and its economic impacts are highly uncertain, making formulation of appropriate macroeconomic policy responses challenging. This paper explores seven plausible scenarios of COVID-19 and the macroeconomic outcomes using a global hybrid DSGE/CGE general equilibrium model. The results demonstrate that even a contained outbreak could significantly impact the global economy in the short run. Economic costs could be significantly avoided with greater investment in public health systems in all economies, particularly in economies where health care systems are less developed and population density is high.

How
about
your
abstract?

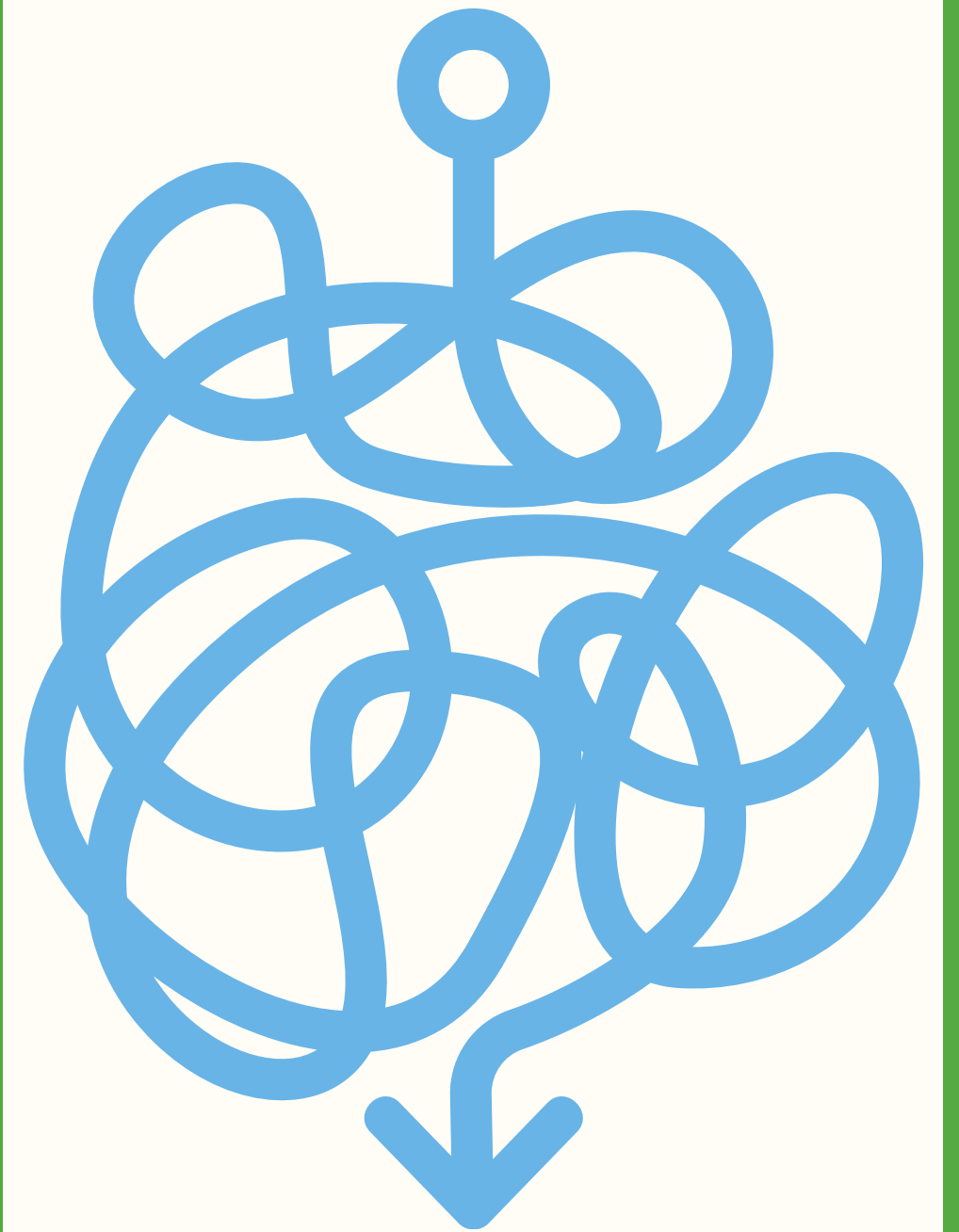
A = Structured



A

Z

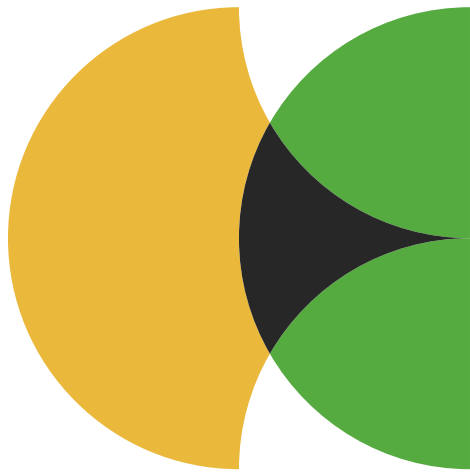
B = Non-structured



What do we learn from the above abstracts?

- **One paragraph?**
- **Length varies**
- **Target journal submission guidelines**
- **Structured vs. non-structured abstracts**
- **Superficially, seem to be so different BUT**

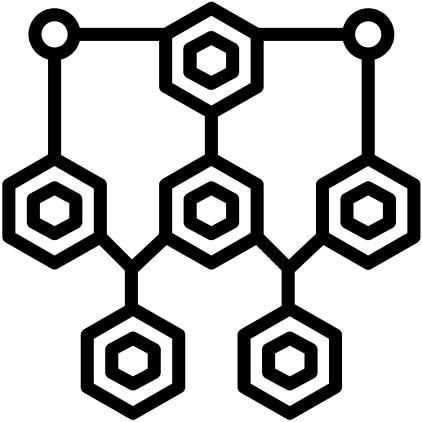




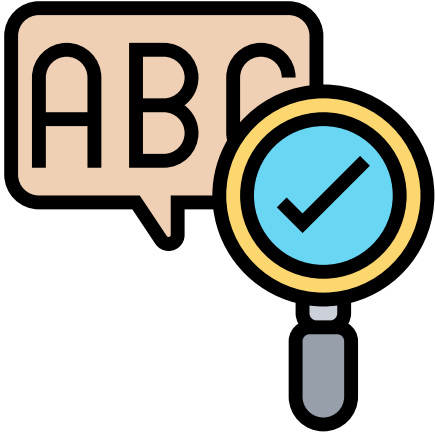
2.1.3. Abstract structure



Two central issues:
Content and language



Content
↓
structured



Language
↓
pattern

Consider the five sentences below (A to E) and answer the following questions.

1. Where can you find these sentences?

A = Newspaper, B = Academic journal

2. What is the communicative function each sentence?

1 = methods

2 = results

3 = purpose

4 = background

5 = discussion



Consider the five sentences below (A to E) and answer the following questions.

- A. This study bears a number of industrial implications in the business of herbal drinks in Thailand*
- B. The impacts of COVID-19 were investigated.*
- C. The objective of this study is/was*
- D. The results demonstrate that*
- E. (It is known that) most people infected with the COVID-19 virus experience mild to moderate respiratory illness.*



Answers and how do you know?

- *What would be a logical sequence of these sentences in an abstract?*
D/M/P/R/B
- Content Sequence:+.....+.....+.....+.....
- Remark: In reality, the sentences can be more complex and longer in length.



Identify the function of each sentence and the logical sequence. There might be more than 4 functions in the abstracts.

Practice (Education abstract)

#1

Although this study focused on only one context, it recommends that language teaching practices in other contexts be studied extensively.

#2

This study aims at examining teaching practices in a writing classroom at a state university in Minnesota.

#3

Findings revealed that the participant's instructional practices were consistently aligned with principles of process-writing approaches.

#4

Data were derived from four sources including video-taped classroom interactions, and informal interviews with the participant.

Abstract B

Abstract

Despite considerable social scientific attention to the impacts of the COVID-19 pandemic on urbanized areas, very little research has examined its impact on rural populations. Yet rural communities—which make up tens of millions of people from diverse backgrounds in the United States—are among the nation's most vulnerable populations and may be less resilient to the effects of such a large-scale exogenous shock. We address this critical knowledge gap with data from a new survey designed to assess the impacts of the pandemic on health-related and economic dimensions of rural well-being in the North American West. Notably, we find that the effects of the COVID-19 pandemic on rural populations have been severe, with significant negative impacts on unemployment, overall life satisfaction, mental health, and economic outlook. Further, we find that these impacts have been generally consistent across age, ethnicity, education, and sex. We discuss how these findings constitute the beginning of a much larger interdisciplinary COVID-19 research effort that integrates rural areas and pushes beyond the predominant focus on cities and nation-states.

Abstract C

Abstract

COVID-19 has disrupted the Chinese economy and is spreading globally. The evolution of the disease and its economic impacts are highly uncertain, making formulation of appropriate macroeconomic policy responses challenging. This paper explores seven plausible scenarios of COVID-19 and the macroeconomic outcomes using a global hybrid DSGE/CGE general equilibrium model. The results demonstrate that even a contained outbreak could significantly impact the global economy in the short run. Economic costs could be significantly avoided with greater investment in public health systems in all economies, particularly in economies where health care systems are less developed and population density is high.

Abstract D

This study aims at uncovering teacher talk and teaching practices in a writing classroom at a state university in Minnesota. Data were derived from four sources including video-taped classroom interactions, audio-taped interactions during peer conferences, periodical informal interviews with the participant, and field-notes. Findings revealed that the participant's teacher talk and instructional practices were consistently aligned with principles of process-writing approaches. Although this study focused on only one bounded case, it recommends that language classroom discourse in other contexts be studied extensively.

Conclusion: + + +

Abstract E

Virtual schools are rising in popularity and presence. Unfortunately, there is a relative dearth of research related to teaching and learning in virtual schools. Although there are numerous handbooks addressing teaching online, there is little research on successful online teaching in the K-12 arena. Much of the existing research focused on teaching online is rooted in face-to-face content, not focused on content areas, built upon a post-secondary audience, or fails to use data from the teachers themselves to triangulate findings. This article focused on 16 virtual school teachers from the Michigan Virtual School (MVS). It reports on best-practices from the interviews conducted with MVS teachers; and also provides research triangulation for those practices. The paper concludes with implications for policy, research, and practice.

DiPietro, M. et al. (2008). Best practices in teaching K-12 online: Lessons learned from Michigan Virtual School teachers. *Journal of Interactive Online Learning*, 7, 1.

Remarks – Back to your abstract

1. Not necessary or always with 5 elements
2. Some are obligatory; the others optional
3. Some elements are substantial in size; the others are minimal.
4. A template that is quite flexible
5. Word limit
6. Studies being reported
7. Authors' intention to highlight



What can we take it from abstract phenomena?

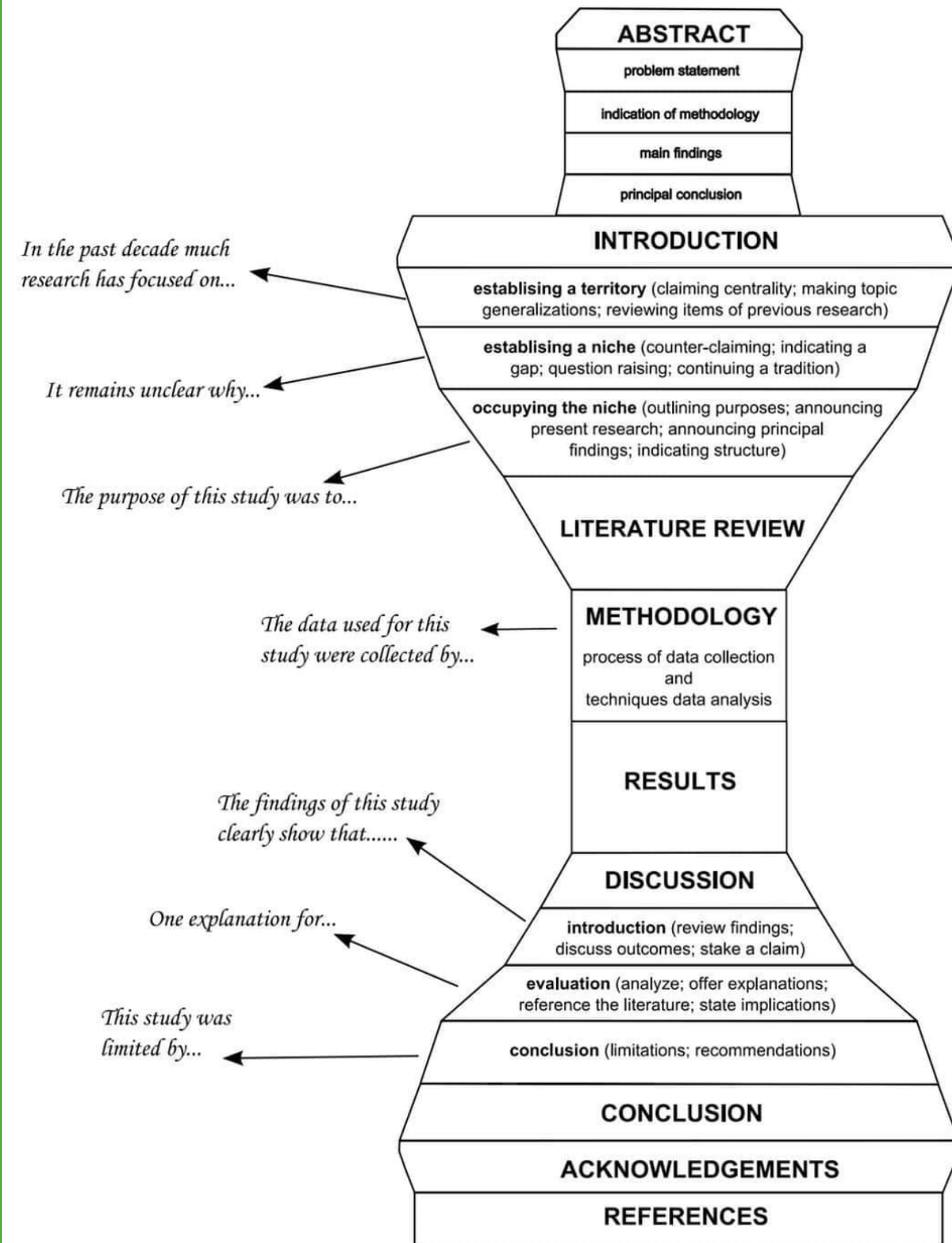
1. Every section (IMRD) of a research article is structured
2. Variations highly possible (unique features of individual studies)
3. Interesting and exciting

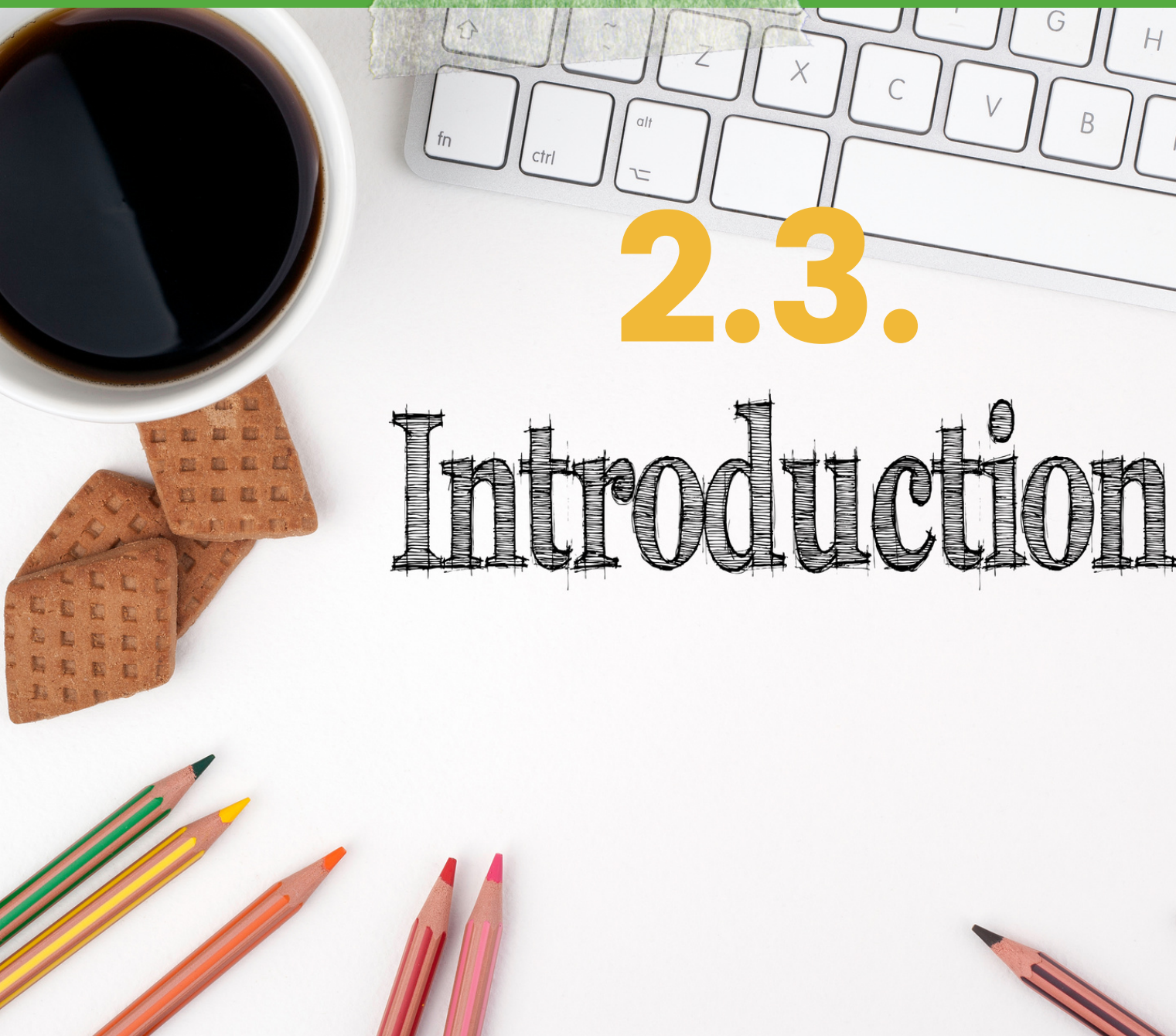


Abstract



Revised





2.3.

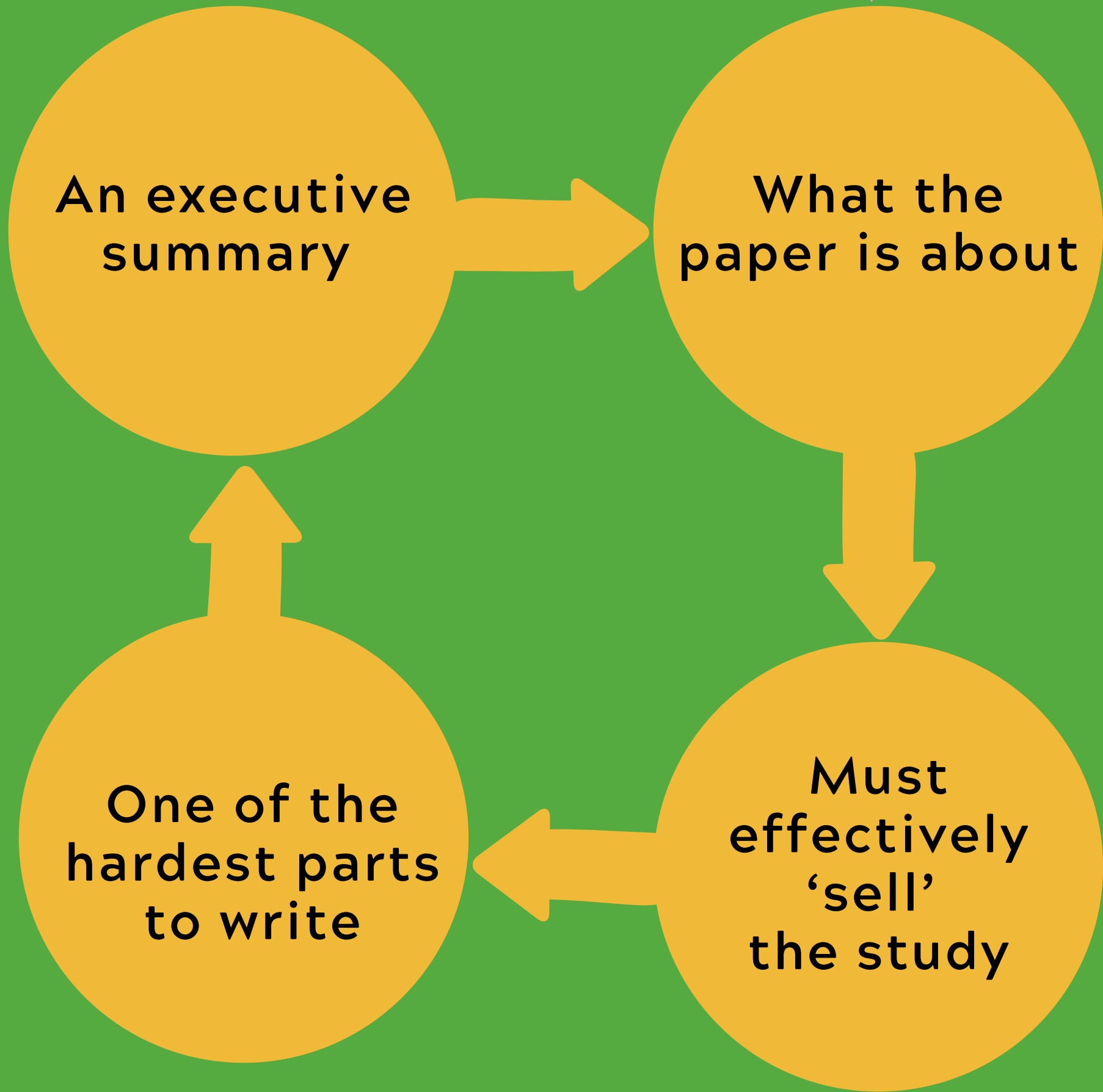
Introduction

An executive summary

What the paper is about

One of the hardest parts to write

Must effectively 'sell' the study



2.3.1. Structure

Teaching and learning in K-12 virtual schools has grown in popularity since their inception in 1996. In the United States, there are currently 24 state-led virtual schools and 12 states in the process of forming these institutions (Watson & Kalmon, 2006). This rapid increase in schooling has led some to suggest that online learning is one of the most important new approaches for K-12 schools (Blomeyer, 2002).

Unfortunately, while virtual schooling at the K-12 level has grown in popularity, research-based investigations into the teaching and learning process in this medium and at this level are still lacking (Cavanaugh, Gillan, Kromrey, Hess, & Blomeyer, 2004). Very little is known about best practices specifically related to teaching in K-12 online settings. Lacking a body of research that focuses on the K-12 online arena,

In this paper, we present evidence from a study aimed at understanding best practice in K-12 virtual schools. The study was based on data collected from a series of interviews conducted with 16 highly-qualified virtual school instructors. Data evidence underlying the instructional practices identified by this study is presented and triangulated with existing research. In addition to reporting the results of the study, the positioning of the findings in relation to existing research exploring instructional practice in face to face and post-secondary online settings will identify virtual school instructional practices as an area in need of further research. We conclude with implications for research, policy and practice.

Structure

Importance of the topic
(with citations)

Research gap
(possibly with citations)

The study being
presented

English is an international language and thus the ability to communicate in English is crucial in all aspects of our lives. Successful English communication consists of a number of language skills including vocabulary, grammar, and pronunciation. Kanoksilapatham (2018) maintains that clear and accurate pronunciation contributes to effective communication. However, as opposed to other language skills, English pronunciation has received relatively minimal attention in English curricula (xxxxxx, 2020). Thus, this study aims to examine Thai learners' English pronunciation



2.3.2. Language

Move 1: Topic Centrality **สำคัญ**

- *Recently, there has been (growing/increasing/paramount interest/development) in*
- *In recent years, applied researchers have become increasingly interested in*
- *The possibility has (generated/triggered/stimulated) interest in*
- *Recently, there has been wide interest in*
- *The explication of the relationship between ... is a (classic/fundamental) problem of...*

2.3.2. Language

Move 1: Topic Centrality สำคัญ (2)



- *The (well-known/famous/renowned/reputed) (phenomena/scenarios).... have been favorite topics for analysis both in*
- *Knowledge of.... has a great (importance/significance) for....*
- *The study of has become an (important/crucial/vital/essential) aspect/area/realm of*
- *The theory that.... has led to the hope that....*
- *The of has been studied/investigated/examined/explored/scrutinized/analyzed/focused) (extensively/repeatedly/incessantly) in recent years.*

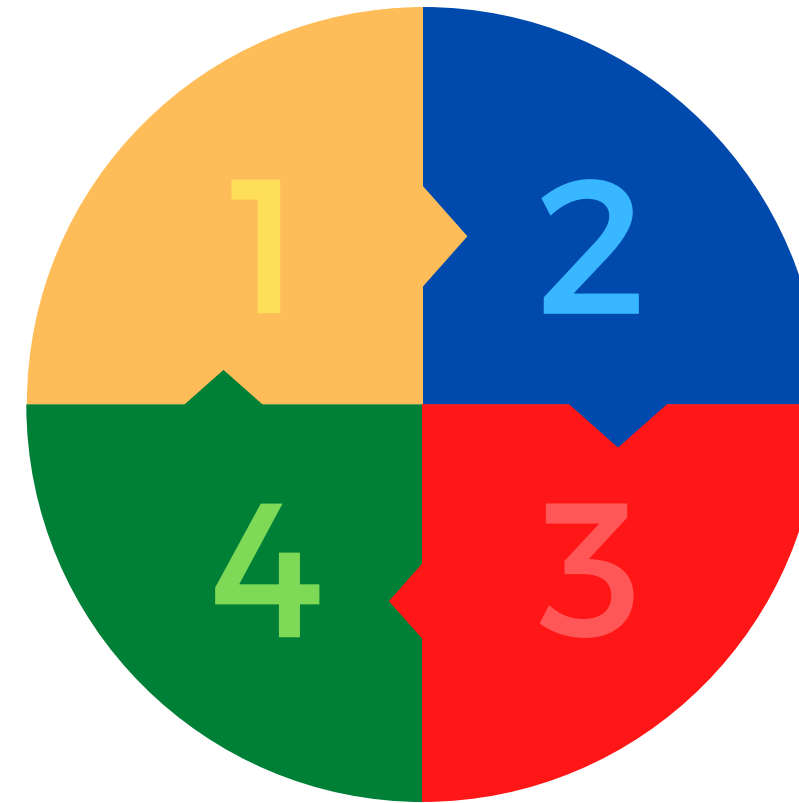
Move 2:
Research gap
- **ύακη**
Transition to
the present
study

1 Counter-claim

However, the use of results in such a degree of spherical aberration that radical design changes have become necessary.

2 Gap

However, the mechanism of processing the nature, 184nt 6S RNA from its precursors has not been characterized.



4 Continuing

The remaining issue is to find a way of better controlling spherical aberrations.

3 Question

However, it is not clear whether the use of.... can be modified to reduce spherical aberration to acceptable levels

Move 3:
The
current
study
ค้นคว้า

#1

listing the research
questions or hypotheses

#2

providing a synopsis of
the research method(s)

#3

findings in brief

#4

explaining
the significance/value/
implication of the study

Source: Swales (2004):
Introduction model

Move 1. *Establishing a territory* (citations required)

Via

Topic generalizations of increasing specificity

Move 2. *Establishing a niche* (citations possible)

Via

Step 1A Indicating a gap, or

Step 1B Adding to what is known

Step 2 (optional) Presenting positive justification

Move 3. *Presenting the present work* (citations possible)

Step 1 (obligatory) Announcing present research descriptively and/or purposively

Step 2* (optional) Presenting research questions or hypotheses

Step 3 (optional) Definitional clarifications

Step 4 (optional) Summarizing methods

Step 5 (PISF**) Announcing principal outcomes

Step 6 (PISF) Stating the value of the present research

Step 7 (PISF) Outlining the structure of the paper.

*Steps 2–4 are not only optional but less fixed in their order of occurrence than the others

**PISF: Probable in some fields, but unlikely in others

2.4. Lit(erature) review

(can be embedded in the introduction section)

Context of the
work



Credibility with
readers



Acknowledge
and give credit
to sources



2.4.1. Structure

1. *Identify the context of your research or project*
2. *Synthesizing sources*
3. *Summarizing the review and commenting (by highlighting a problem, inadequacies, a knowledge gap in the field of study: research design, methods, analysis, etc.)*
4. *Addressing the above points in your study (by stating the purposes of research, research questions, hypotheses)*

**Recycling or cyclical pattern*

2.4.2. Language

1. Citations
2. Quotations
3. In- text citations:

Smith (2021) asserted that
According to Smith (2021),
xxxxxxxxxxxxxxxxxxxxx (Smith, 2021).



2.4.2. Language (2)

4. Stating verbs:

argue, claim, described, explain, find, mention, point out, report, state, announce, assert, maintain, etc.

5. Tenses vary: present or past

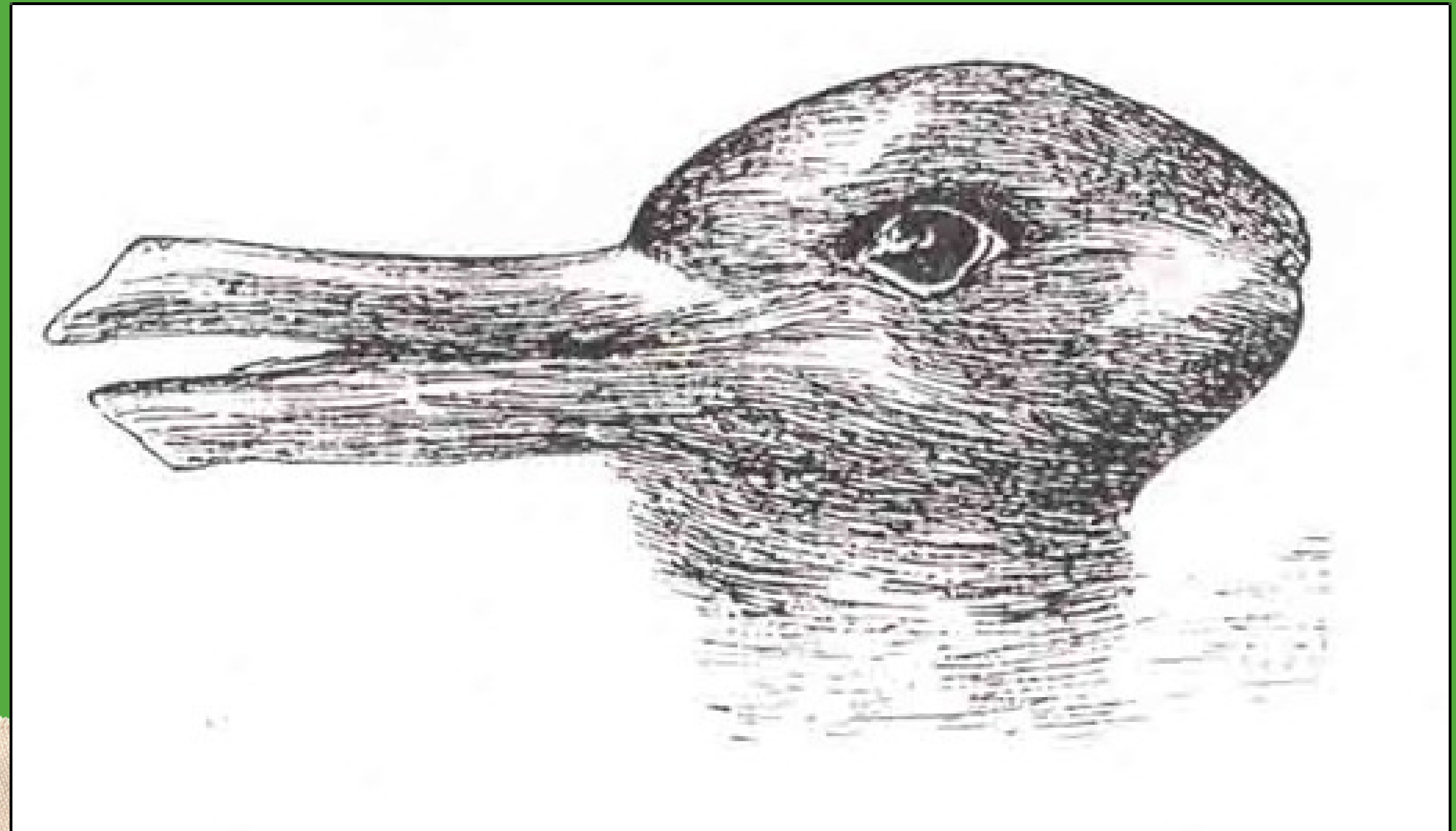


Examples



- *A large number of studies were conducted to investigate the impacts of COVID-19 on education (citation list).*
- *Primary education, as revealed by xxxxx (2021) seems to suffer a great deal from the lack of computer skills, whereas university students*
- *Based on the previous studies described above, more studies need to be conducted to ascertain the impacts of COVID-19 on the teaching and learning of language skills.*
- *To address this lack of knowledge, this study aims to xxxxx.*
- *Therefore, an experimental study was conducted*

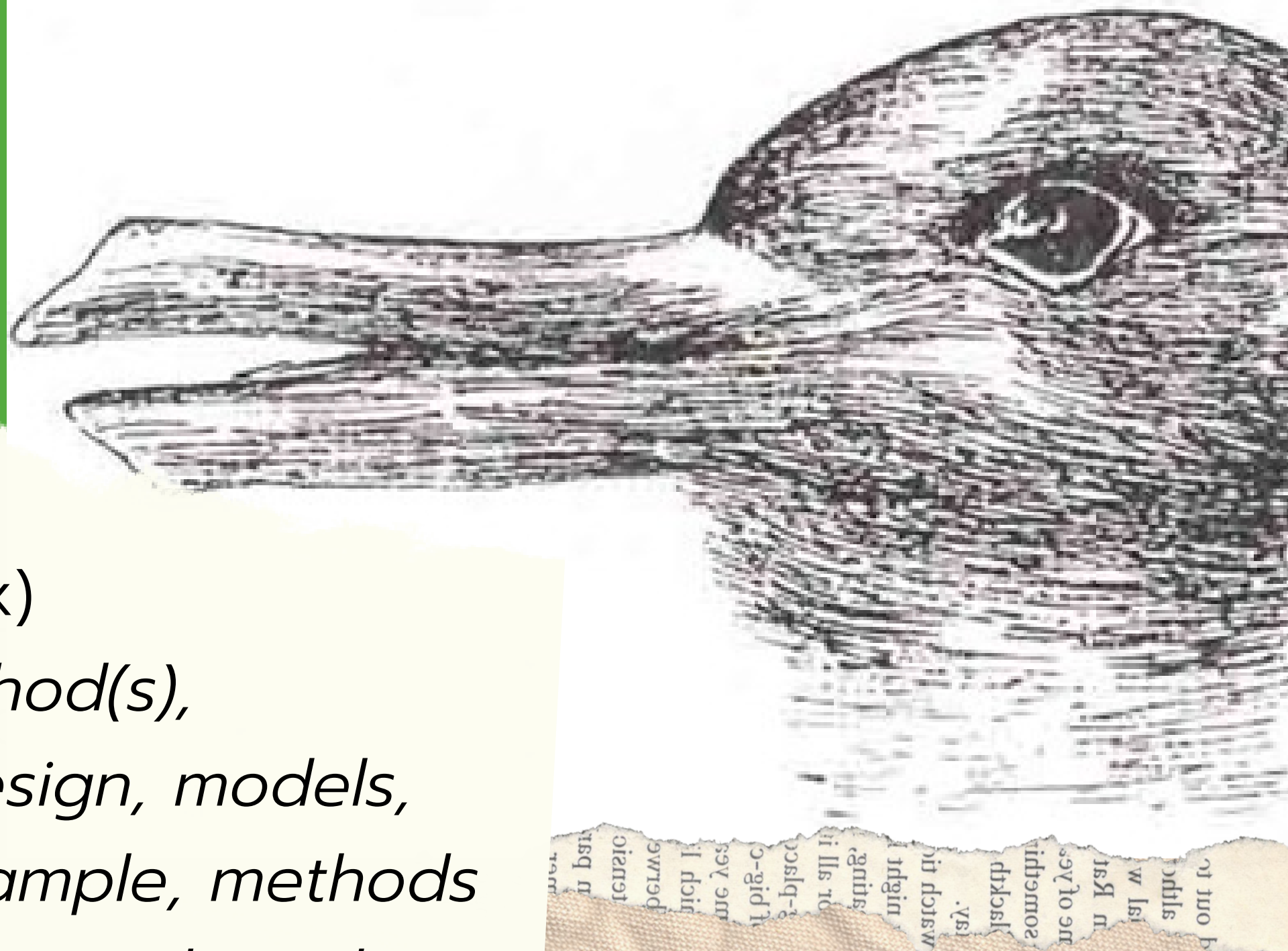
Which animal is it?
(Wittgenstein, Philosophical investigations, 1953)
– Chat box



2.5. Methods

Other terms for the section

- In your research article (chat box)
- Research design: *approach, method(s), methodology, methodologies, design, models, and study, data, sources, and sample, methods and approach, and research approach and design*
- Enough details for replication purposes
- Procedures in chronological order



Other terms for the section (2)

- Precise in every procedure
- If the method is novel, need a detailed description.
- For standard methods, naming the methods should be sufficient (mRNA).



2.5.1. Structure (many subsections: chat box – how many subsections?)

1. Context
2. Purpose(s)
3. Indicating a specific method (participants/sample/subjects; instruments)
4. Justifications (giving reasons why a particular method was adopted)
5. Data collection or describing procedures in detail
6. Data analysis

(typical verbs in the passive form) with subsections
(context, participants/sample, instruments, data collection, data analysis)



Examples

- *This study is a qualitative/quantitative/mixed study in nature.*
- *The context or the research site is a medium sized university*
- *The sample consists of xxxx students*
- *The participants were selected based on.....*
- *The instruments were developed, consisting of*



2.5.2. Language of the methods section (check with your research article)



1. Describing the purpose: infinitive of purpose or other phrases
2. Indicating a specific method: past and passive
3. Giving reasons why a particular method was adopted (because, due to)
4. Describing the process: typical verbs in the passive form (interview, collect, test)
5. Describing the process: sequence words and phrases (first, subsequently)
6. Describing the process: adverbs of manner (carefully, regularly, immediately)

2.5.2. Language of the methods section (check with your research article)

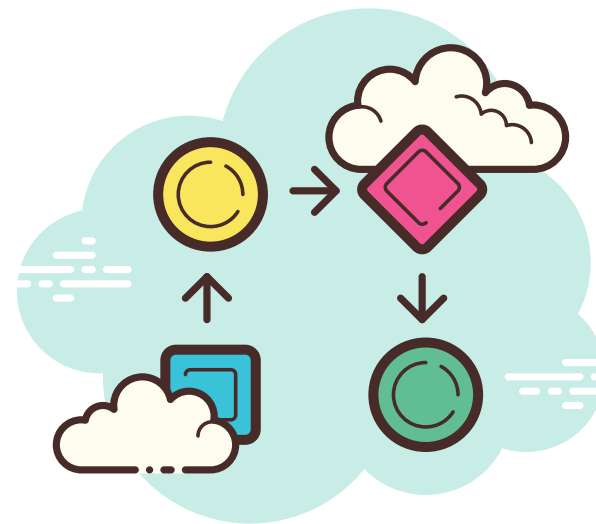


7. Describing the process: using + instrument (passive, past tense)
8. Describing the process: giving detailed information (for 5 minutes, phone interview)
9. Describing the characteristics of the sample/participants (Grade 4 students, 3 years abroad)

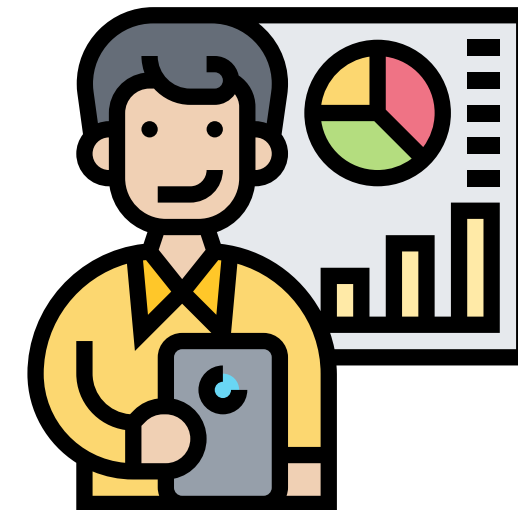
2.6. Results (only)



Stating findings, results, outcomes, outputs, etc.



Systematic and detailed



Tables and graphs and descriptions with details

2.6.1. Structure



1. Reference to aims or objectives
2. Highlighting significant, interesting, surprising data in a table or chart
3. Text before or after tables, diagrams, figures? (Figure 2, Table 6)
4. Statement of results
5. Commentary
6. Summary and transition

Reporting verbs: show, reveal, display, demonstrate, depicts, demonstrate, illustrate



2.7. Discussion (combined section of Results and Discussion, or Discussion and Conclusion)

DISCUSSION

- Not only discuss
- Potential impact of your proposed research
- Overview of the study. Why?
- Contextualize the discussion of major findings
- Connect with previous studies
- Results are summarized and strengthened by different strategies
- Reporting verbs: *show, reveal, display, demonstrate, depict, illustrate, present, etc,*
- Discussion strategies

2.7.1. Structure



1. Overview of the study: Reference to aim or method
2. Highlighting selected results (usually with reference to results section)
3. Discussion strategies

*Recycling or cyclical pattern

2.7.2. Language



- Interpretation: *suggest, indicate, imply, illustrate*
- Comparison/contrast: *comparison, contrast, agreement, compatible*
- Explanation: *explain, be attributed to, due to, leading to, caused by, result from*
- Exemplification: *for instance, for example*
- Implication (be it pedagogical or industrial)
- Summary: *in summary, in short, to sum up, in conclusion*

Hedging devices



- *This result tends to be likely due to...*
- *The results seem to be caused by ...*
- *This finding can be possibly explained by ...*
- *It can be summarized that*
- *The comparison might not be valid.....*
- *Potentially, the students might be too young...*

Intensifiers



- *Interestingly, the data demonstrate*
- *Generally, it is agreed that speaking is one of the*
- *The young age of learners can significantly contribute to*

2.8. Conclusion (if a separate section)



- Study overview
- Implications (be it pedagogical or industrial)
- Limitation: *constraints, weakness, limitations, shortcomings, downsides*
- Future research