Research Navigator

Prepared by
Syafiqah Nabilah Binti Jamali
Librarian
Research and Information Services Division

Content

What is Research Navigator?

A **tool, platform,** or **service designed** to guide researchers through the research process.

The purpose of the Research Navigator is **to support and guide researchers throughout the research lifecycle** — from idea development to publication and beyond.

In Short:

> The Research Navigator exists to make the research journey **smoother, more effective, and more credible** — helping researchers produce high-quality, ethical, and impactful work.

How do I use the Research Navigator?

The Research Navigator features **six destinations**, accessible via the "Research Navigator Destinations" tabs. Each destination focuses on a specific stage of the research process, guiding you through every step of your research journey. Generally, this journey involves identifying and sourcing relevant information, analyzing your findings, and articulating your ideas.

The Research Navigator also includes helpful details about you and your supervisor, along with key library resources. Scroll down to begin exploring. Best of luck! And remember, librarians are always available to assist you at every stage of your research journey. See your Research Librarian.

Reference:

- https://uj.ac.za.libguides.com/c.php?g=938500&p=6763508
- https://www.uj.ac.za/library/research-support/research-navigator/

Useful Library Resources

The Sultan Abdul Samad Library offers a diverse range of resources to support your research journey and help you find information.

- Library Services
- Facilities
- Research Support Services
- Digital Resources
- User Education

*Click to access the link

Research Navigator Destinations

Using the concept of a navigator, this tool guides you through six key destination points, each representing a crucial stage in the research cycle. From selecting a research topic to publishing your findings, the Research Navigator offers a clear and structured path to follow.

Destination 1:
Idea Development

Destination 2:
Choosing Research Funding

Destination 3:
Proposal Writing

Destination 4:
Doing Research

Destination 5:
Publishing Your Research

Destination 6:
Visibility and Impact of Your Research

Initial Stage (Exploration)

The Exploration stage is the foundational phase of your research journey. It involves gaining clarity on your area of interest and defining the direction your study will take. Here's a breakdown:

1. Identify Your Interest / General Topic

Start by thinking about what genuinely interests you within your field of study. This could be a broad subject or an area you've encountered in your coursework, readings, or practical experiences.

✅*Why this is important*: Research takes time and effort—choosing a topic that excites you helps sustain motivation and curiosity throughout the process.

What makes a good Research Topic?

2. Identify Existing Research Gaps

Once you have a general topic, start reviewing recent literature (articles, conference papers, theses, etc.) to understand what has already been studied and what hasn't.

- Identify **gaps**, inconsistencies, or underexplored areas within the current body of research.
- Ask questions like:
  - Is there a lack of local context?
  - Are there outdated or conflicting findings?
  - Has a particular population or method been overlooked?

✅ *Why this is important:* A clear research gap helps justify your study and shows how your work can contribute new knowledge or understanding.

3. Define Your Research Question or Objective

Based on your reading and exploration of the gap, narrow your focus into a specific **research question**, **hypothesis**, or **objective**.

Examples:

- *Research Question:* "What are the key factors influencing students' motivation in online learning during the pandemic?"
- *Objective:* "To examine the relationship between self-regulated learning and academic performance among university students."

✅ *Why this is important:* A clear question/ objective provides focus and structure for the rest of your research.

Thinking About Your Research Idea: Key Considerations

When developing your research idea, start by reflecting on a few important factors:

- **Your Passion, Interest, and Practicality:**
  Choose a topic you're genuinely interested in and one that is realistic in terms of time, resources, and scope.
- **Refining Your Topic:**
  Ask yourself fundamental questions, engage in free writing, identify possible research questions, read existing literature, and reflect on what you know (and don't know). These steps will help bring your proposal into sharper focus.
- **Feasibility of Your Research:**
  Consider whether your study is practical and achievable. Are the methods and resources within your reach?
- **Nature and Scope of the Research:**
  Will your work break new ground or contribute incrementally to an existing area? Are you defending an original stance, building upon an existing theory, or challenging prevailing assumptions?

Eventually, your **research proposal** should clearly outline:

- What do you plan to do
- Why it matters
- How do you intend to do it
- Your research question or hypothesis

Important Note:
Any study that generates new data, insights, or knowledge is considered **original**. Conversely, studies that simply compile or interpret already available information without contributing new perspectives are **not** regarded as original research.


Research and Publishing Process
Research Project
Manuscript Preparation
Submission to Journal
Peer Review Process
Production Process
Published Article
• Study concept, design, approval and execution
• Data analysis and interpretation
• Results and Conclusions
• Most suitable article type
• Appropriate structure and format: Intro, Methods, Results, Discussion, etc.
• Concise and clear
• For which journal's audience is the study most relevant?
• Editor's initial assessment
• Sent to relevant experts within the field for critique and comment
• Authors asked to make corrections and improvements
• Manuscript set to journal style
• Copyediting performed, figure and table checks
• Authors sent proof for approval / correction
• Article publishes online
• Issue-assignment likely to follow a few months later
• Metadata sent to indexing services
35
SPRINGER NATURE

Destination 2: Choosing Research Funding

What is Research Funding?

Research funding refers to the financial support provided to individuals or institutions to carry out academic, scientific, or applied research. It enables researchers to explore ideas, conduct experiments, collect data, and disseminate findings. It often leads to new knowledge, innovations, or solutions to real-world problems.

Why is Research Funding Important?

01

Covers project costs

Materials, equipment, software, fieldwork, travel

02

Supports research staff

Salaries for research assistants, postdocs, technicians

03

Enables access to resources

Subscriptions, databases, lab facilities

04

Supports publication and dissemination

Conference fees, open-access fees, printing

05

Reputation and innovation

Enhances institutional reputation and encourages innovation

Destination 2: Choosing Research Funding

Who Provides Research Funding?

Universiti Putra Malaysia (UPM), through its Research Management Centre (RMC), administers a variety of research funding schemes, including national grants (FRGS, PRGS, TRGS, and MRUN) and UPM's own internal "Geran Putra." Each grant caters to different research stages—ranging from fundamental research and postgraduate support to innovation and commercialization.

Putra Grant is a university research funding initiative established to support UPM's research programs.

Here are the types of grants available under the scheme:

1. Geran Inisiatif Putra Berkumpulan (GP-IPB)
2. Geran Inisiatif Putra Muda (GP-IPM)
3. Geran Inisiatif Putra Siswazah (GP-IPS)
4. Geran Putra Berimpak (GPB)
5. Geran Inisiatif Putra (GP)
6. Geran Padanan IN-Putra (IN-Putra)
7. Geran Penyelidikan Pembangunan Inovasi (GPPI)

Destination 2: Choosing Research Funding

Application Grant under RMC UPM

- PRIVATE AND INTERNATIONAL GRANTS 2025
- TAKWIM PERMOHONAN GERAN PUTRA 2025
- PUTRA GRANT 2025

Guidelines

- PUTRA GRANT GUIDELINES
- GARIS PANDUAN SKIM GERAN PEGAWAI PENYELIDIK MRUN (MROGS) 2023-2025
- SKIM GERAN PENYELIDIKAN FUNDAMENTAL (FRGS)
- SKIM GERAN PENYELIDIKAN PEMBANGUNAN PROTOTAIP (PRGS)
- SKIM GERAN PENYELIDIKAN TRANS DISIPLINARI (TRGS)
- SKIM GERAN PENYELIDIKAN JANGKA PANJANG (LRGS)

Publication Initiatives by RMC UPM

- DANA PENERBITAN JURNAL (DPJ) FACULTY & RCOE
- JOURNAL PUBLICATION FUND FORM (DPJ)- FACULTY (UDRP)
- JOURNAL PUBLICATION FUND FORM (DPJ) INSTITUTE
- DANA SUNTINGAN ARTIKEL JURNAL (DSAJ)

Destination 2: Choosing Research Funding

Grant Applications

Putra Grant Secretariat

1. Pn. Nur'afifah Maamor

03-9769 1253 / nurafifahmaamor@upm.edu.my/ rmcgeran@upm.edu.my

2. Cik Nor Atiqah Dayini Norazalin

03-9769 1287 / atiqah.norazalin@upm.edu.my / rmcgeran@upm.edu.my

UPM PPRN & Government Grant Secretariat

1. Pn. Nur'afifah Maamor

03-9769 1253 / nurafifahmaamor@upm.edu.my/ rmcgeran@upm.edu.my

KPT UPM Grant Secretariat

1. Pn. Norbani Mohamad Yusof

03-9769 1628 / norbani@upm.edu.my / rmcgeran@upm.edu.my

2. Pn. Noor Adzilah Mohd Fua'ad.

03-9769 1179 / nooradzfuad@upm.edu.my / rmcgeran@upm.edu.my

Grant Secretariat of UPM MyPAIR , UPM SATREPS & UPM Private / International

1. Cik Nor Atiqah Dayini Norazalin

03-9769 1287 / atiqah.norazalin@upm.edu.my / rmcgeran@upm.edu.my

Destination 3: Proposal Writing

Preparing a Research Proposal

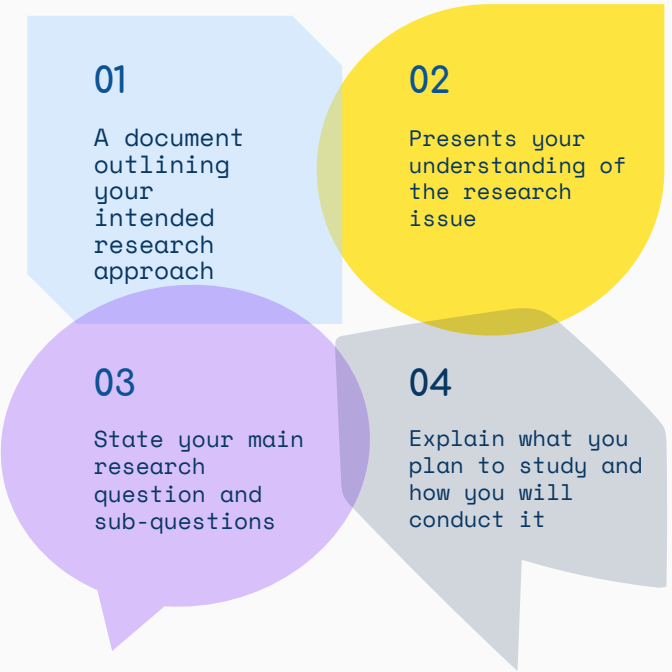
Before starting a research project, it's crucial to create a clear and structured plan. This includes selecting a meaningful and feasible topic and developing a strong research proposal.

During this stage, you should consider the theoretical framework, relevant literature, and appropriate methodology. A well-crafted proposal acts as a roadmap, giving you direction and confidence as you begin your research.

Other Useful Information:

- FRGS Proposal Writing Tips
- HOW TO MAKE A GOOD RESEARCH PROPOSAL

What is a Research Proposal?



Elements of a Research Proposal

Please note that these are the basic elements of a research proposal. Kindly consult your supervisor or faculty for a proposal template used within your discipline.

Title

- Specific in nature, reflecting fundamental issues to be resolved and the novelty of the proposal.
- Brief and reflects the content of the proposal

Introduction

- Problem statement
- Background or setting of the problem
- Research area/topic
- Motivation
- General statement of the purpose of the research

Executive Summary (if applicable)

- Problem statement
- Objectives
- Methodology
- Expected output/outcome/ implication
- Significance of output

Destination 3: Proposal Writing

Research Background

- Elaboration of the title
- Clarity of problem statement and research question/hypothesis/theoretical framework (if applicable). The issue or gap your research aims to address
- Literature review. Summary of existing research and how your work fits in. Cited most recent (last 5 years) related references
- In line with government policy, national agenda, and global aspiration (can help alleviate problems at the local, national, or world level).

Objectives

- Specific, Measurable, Achievable, Realistic, and within Time-frame (SMART)
- Relate to problem statement/research question

Methodology

- Clear and detailed description of methodology (may consist of field work, sampling techniques, interview session, analysis, lab work of different phases, experimental protocol, statistical analysis)
- Able to achieve research objectives
- Include research design, flow chart, Gantt chart, activities, and milestones (if applicable)

Destination 3: Proposal Writing

Expected Results	Track record and composition of the Team (if applicable)	Quality of Proposal
• New theory or new findings/knowledge • Publication in indexed journals (top tier)/Intellectual property • Human capital - Masters or PhD (if applicable) • Impact on society, economy, and nation	• Evidence of previous successful research projects • Qualification and rank of researchers • Well-balanced team	• Meticulous • Proper use of language (grammar, spelling, sentence construction) • Good formatting and presentation

Tips:
Elements of the FRGS proposal criteria include novelty, cutting-edge innovation, and high impact

Library Resources for your Literature Review

A literature review examines and analyzes academic books, journal articles, and other relevant sources connected to a specific topic or theory. It summarizes, evaluates, and synthesizes these works to highlight their relevance to the research issue being studied.

The purpose is to showcase your understanding of the existing body of knowledge and to position your research within the broader academic context.

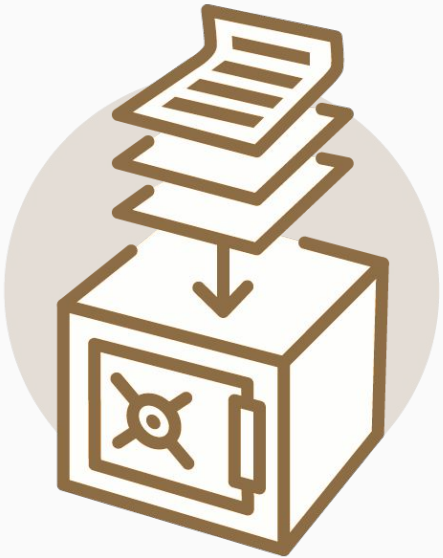
Doing Research

The core of any research project lies in the actual process of data collection, which provides the evidence needed to answer your research questions and address identified gaps. In **Destination 1 (Idea Development)**, you reviewed existing studies to establish a foundation. In **Destination 3 (Proposal Writing)**, you mapped out a clear research strategy and timeline. With this groundwork laid, you're now ready to move forward confidently, equipped with both a strong understanding of the past and a clear direction for the research ahead.

Before starting any research project, it is essential to first develop a Research Data Management (RDM) plan. This ensures that all research data is handled systematically and responsibly throughout the research process. A proper RDM plan outlines how data will be collected, organized, stored, shared, and preserved. By planning ahead, you can prevent data loss, ensure ethical compliance, ensure easy access, and make your research more transparent and reusable. RDM is not just good practice—it's a foundational step in conducting high-quality and credible research.

When conducting research, managing your data properly is **essential** to:

- Ensure accuracy and integrity
- Support reproducibility and validation of results
- Meet institutional, ethical, and funding requirements
- Enable future reuse and sharing of data



RDM starts with a clear **Data Management Plan (DMP)**, which outlines how data will be handled before, during, and after your project. This is particularly important for projects involving large datasets, sensitive information, or public sharing.

Related link:

➢ RESEARCH DATA MANAGEMENT (RDM)

Research methods

Research methods refer to the specific strategies, tools, or procedures used to gather data or evidence for analysis. These approaches help you discover new insights or deepen your understanding of a particular subject.

Qualitative research

Focuses on collecting in-depth data about people's lived experiences, emotions, behaviors, and the meanings they assign to them. It helps researchers gain deeper insights into complex issues, social interactions, and cultural contexts. This approach is especially valuable when exploring the "how" and "why" behind certain phenomena, as it allows for the interpretation of events, actions, and human perspectives in a rich, descriptive manner.

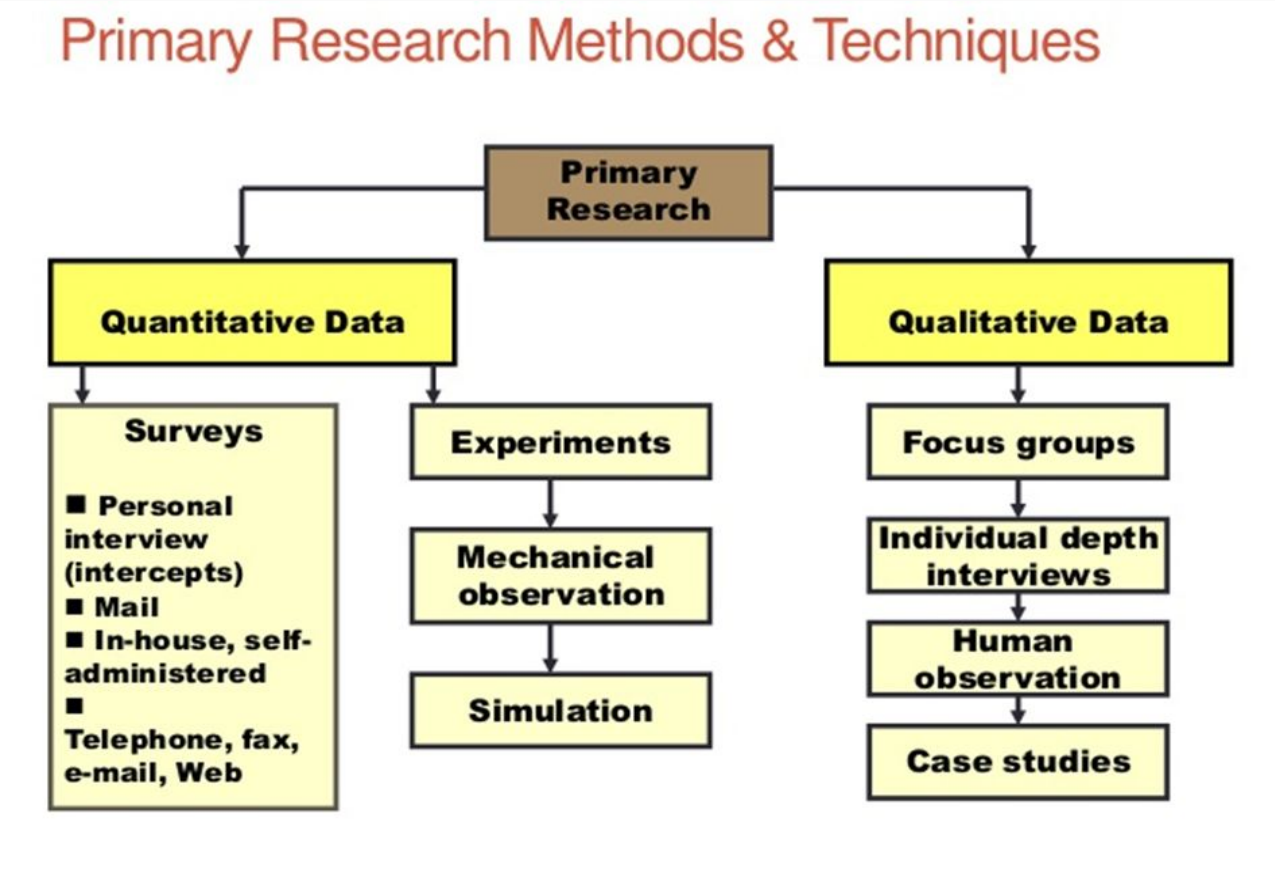
Quantitative research

Involves collecting and analyzing numerical data that can be measured, ranked, or categorized using statistical methods. It helps identify patterns, test hypotheses, and determine relationships between variables. This method is ideal for answering questions such as "how many," "how much," "how often," or "to what extent," and is commonly used for making generalizations based on large datasets.

Mixed Methods Research

combines both qualitative and quantitative approaches to provide a more comprehensive understanding of a research problem. By integrating numerical data with in-depth contextual insights, it captures both the breadth and depth of a topic. This approach also allows for triangulation, which enhances the validity of the findings by cross-verifying data from multiple sources or methods.

Reference: https://libguides.newcastle.edu.au/researchmethods



Source: https://uj.ac.za.libguides.com/c.php?g=938500&p=6778327

Data Analysis

Data analysis is the process of systematically examining, organizing, and interpreting collected data to uncover patterns, relationships, or trends. It involves using statistical, logical, or computational techniques to draw meaningful insights that answer research questions or support decision-making.

In research, data analysis helps determine whether the hypothesis is supported and identifies significant findings. It can be quantitative (numerical, statistical analysis) or qualitative (thematic, content analysis), depending on the research design and data type.

Turning your research into an article

Publishing your research in a scholarly article is a vital step in contributing to your academic field and gaining recognition for your work. After completing a research project, the next challenge is transforming your findings into a structured, compelling, and publishable manuscript. This process not only helps disseminate knowledge but also enhances your academic profile. Understanding the steps involved—from selecting a suitable journal to crafting a clear narrative—will improve your chances of acceptance and impact within the research community.

Academic Search Tools/Databases

Academic search tools and databases are essential platforms that help you find reliable scholarly resources such as journal articles, theses, books, conference papers, and others. These tools provide structured access to academic content, making it easier to discover relevant literature, track research trends, and support evidence-based writing. Whether open-access or subscription-based, they are crucial for conducting efficient and credible research.

Destination 5: Publishing Your Research

Here are some platforms that are very helpful for your literature review:

Platform	Main Category	Function
Elicit	AI Research Assistant / Literature Review Tool	Helps search and organize past studies based on research questions (AI-driven).
BASE	Academic Search Engine	A search engine for scholarly sources from various open repositories.
Zendy	Digital Library / Academic Content Aggregator	Provides access to academic articles, journals, and eBooks (free & paid).
Paperity	Open Access Journal Aggregator	A platform to discover and access open-access journal articles.

It is recommended to use **three to five online databases** when conducting your literature review. This approach helps ensure a more comprehensive understanding of the existing research on your topic.

Destination 5: Publishing Your Research

Search Methods in Research refer to the strategies and techniques used to locate relevant information or literature for your study. Here are some common methods:

Keyword Searching	Use specific terms related to your topic across multiple databases.
Citation Chaining	Follow references in useful articles (backward) or find newer articles citing them (forward).
Boolean Operators	Apply operators like AND, OR, and NOT to refine search results.
Advanced Search Filters	Limit by year, publication type, language, or peer-review status.
Subject Headings	Use controlled vocabulary or descriptors used by databases (e.g., MeSH in PubMed).
Search String	A combination of keywords and Boolean operators used to retrieve relevant literature from databases. You can use a prompt driven by AI to create a string.

"Please develop a SCOPUS query string that includes the keywords 'Keyword 1', 'keyword 2', and 'keyword 3', along with their synonyms, related terms and variations. The query should incorporate basic search functions such as field codes (TITLE-ABS-KEY), boolean operators (OR/AND), phrase searching, wildcard (*) and truncation (*)."

Structure Your Manuscript

Here's a basic structure commonly used for organizing a research manuscript, especially in academic journals:

Title

- Concise and informative.
- Includes keywords relevant to the study.

Abstract

- Structured or unstructured (depending on the journal).
- Summarizes key elements: background, methods, results, conclusion

Keywords

- 4–6 keywords that represent the core content of the manuscript.

Destination 5: Publishing Your Research

Introduction

- Background information.
- Research gap or problem statement.
- Objectives or research questions.
- Hypothesis (if applicable).

Literature Review (Alternatively: Background or Conceptual Framework)

- Summarizes relevant past studies.
- Identifies gaps your study addresses.

Methods (Alternatively: Methodology)

- Study design.
- Data collection methods.
- Instruments used.
- Sampling and participants.
- Data analysis procedures.
- Ethical considerations.

Results (Alternatively: Findings)

- Present findings clearly, using tables and figures if needed.
- Avoid interpreting the results here.

Discussion

- Interpret and explain the results.
- Compare with past research.
- Discuss implications, limitations, and possible future directions.

Conclusion

- Summarize main findings.
- Highlight contributions.
- Optional: recommendations or next steps.

Destination 5: Publishing Your Research

References

- Follow the required citation style (e.g., APA, MLA, Vancouver).
- Ensure all cited works are listed.

Appendices (if needed)

- Supplementary materials like surveys, detailed data tables, etc.

Acknowledgements (if required)

- Recognize funders, contributors, or institutions.

Related link:

- MODULE STUDENT
- TIPS FOR WRITING A MANUSCRIPT @ PJSSH

Know Your Target Journal

When developing your publishing strategy, it's essential to consider several key factors. Consider the following:

Indexing

For publication in UPM, you have to check if the journal is indexed in Journal Citation Reports (JCR), Scopus, Excellence in Research for Australia (ERA), or MyCite. For Open Access journals, refer to the Directory of Open Access Journals (DOAJ).

➢ Citation Indexed Journal (CIJ) & Guidelines in UPM

Scope and Relevance

Ensure your article aligns with the journal's subject area and scope.

Peer-Review Process

Familiarize yourself with the journal's peer-review procedure (e.g., single-blind, double-blind, or open review).

Editorial Board

Review the credentials and expertise of the journal's editorial team.

Target Audience

Identify who the journal is intended for — researchers, practitioners, policymakers, etc.

Journal Ranking

Assess the journal's rank or reputation. You can find more information on high-impact journals at:

- HIGH-IMPACT JOURNAL PUBLICATIONS
- GUIDELINES FOR CHECKING JOURNALS ON THE JOURNAL CITATION REPORTS (JCR) WEBSITE

Type of Publications

Consider the kinds of articles the journal typically publishes (e.g., original research, reviews, case studies).

Citation Trends

Look at how articles published in the journal are cited within the academic community.

Publication Model

Check the available publication options, such as Open Access, and learn more about what Open Access entails.

Acceptance Rate

Understand the journal's acceptance or rejection rate to gauge competitiveness.

Most of this information is typically available on the journal's official website.

Caution: Predatory Journals

Leading scholars and publishers from ten countries have agreed on a definition of predatory publishing that can protect scholarship “Predatory journals and publishers are entities that prioritize self-interest at the expense of scholarship and are characterized by false or misleading information, deviation from best editorial and publication practices, a lack of transparency, and/or the use of aggressive and indiscriminate solicitation practices.” (Agnes Grudniewics, et. al, 2018)

Predatory publishers often appear to be legitimate Open Access publishers, but they engage in unethical practices such as:

- Conducting minimal or poorly executed peer review
- Prioritizing the collection of article processing charges over academic quality
- Concealing the identities of editorial staff and obscuring the true costs of publication.

Related link:

➢ PSAS Research Information Hub: Predatory Journal

Increase Visibility and Track the Impact of Your Research

To maximize the reach and influence of your scholarly work, it's essential to make your research visible to the right audiences and monitor how it's being used, cited, and discussed.

Here are some key strategies to help you do that:

🔍 1. Choose the Right Platforms for Sharing

- Upload your publications to institutional repositories, subject-specific databases, and academic networking sites (e.g., ResearchGate, Academia.edu).
- Share preprints or postprints where allowed by your publisher.

Consider Open Access publishing to make your work freely available.

🧭 2. Create and Maintain Researcher Profiles

- Set up and regularly update profiles on:
  - Google Scholar
  - ORCID
  - Scopus Author ID
  - Publons/Web of Science

These profiles increase discoverability and help consolidate your publication record.

Destination 6: Visibility and Impact of Your Research

📣 3. Promote Your Research

- Use social media (Twitter/X, LinkedIn, Threads) to highlight key findings.
- Collaborate with your institution's communications or library team to feature your research in newsletters or press releases.

Present your work at conferences and webinars.

📊 4. Monitor Your Impact

- Track citations through platforms like Google Scholar, Scopus, and Web of Science.
- Use Altmetric tools (e.g., Altmetric.com, PlumX) to measure attention from social media, policy documents, and news outlets.

Analyze download counts, reads, and mentions to understand your audience.

🧩 5. Collaborate and Network

Engage with researchers in your field to increase collaboration opportunities.
Participate in academic discussions, peer reviews, and research communities to expand your professional visibility.

Destination 6: Visibility and Impact of Your Research

Improving the visibility and tracking the impact of your research is not just about personal recognition — it's a vital part of contributing to the global research community. By embracing practices such as Open Access publishing, data sharing, and transparent communication, you support the principles of **Open Science**: making scientific knowledge freely available, accessible, and reusable.

Open Science empowers collaboration, accelerates innovation, and ensures that research benefits society as a whole. By making your work visible and measurable, you help bridge the gap between science and the public — advancing not only your field, but also the collective progress of knowledge. You can deposit your research data for visibility in PutraRDRepo, a research data repository built by The InfoComm Development Centre (iDEC), Universiti Putra Malaysia.

Related link:

- About Open Science
- How to Deposit Data in PutraRDRepo

Research Navigator Services

In today’s information-rich environment, navigating the vast array of research sources can be overwhelming. Our Research Navigator Services are designed to support you throughout your research journey by providing essential guidance and resources.

Whether you're just beginning or deep into your project, the Research Navigator is an ideal starting point and companion, helping you make informed decisions and access relevant tools every step of the way.

Offered Research Consultation Services

1

Research Data Management (RDM) Support

1. Research Data Management
2. Data Management Plan

2

Research Literacy Guidance

1. Journal Verification
2. Predatory Journals

3

Support for Systematic Review & Literature Review

1. Systematic Literature Review

4

Publishing & Open Access Advisory

1. Open Science
2. Putra Repository

5

First quarter development campaign

1. Officer Publication Verification
2. Intellectual Property Verification
3. UPM Data Bank Portal
4. Verification of Officers' Journals in PRIMS
5. Research Support Service

Thank you!

Contact
Syafiqah Nabilah Jamali
Librarian
Tel : +603-9769 1245
email : syafiqah.jamali@upm.edu.my