


# Bibliometric Analysis on the Word Procrastination

Zikri Bagas Munandar  
Universitas Pembangunan Jaya

Article Info	ABSTRACT
<p><b>Article history:</b></p> <p>Received September, 2025 Revised September, 2025 Accepted September, 2025</p>	<p>This study aims to understand how research trends on procrastination have evolved over time. Using bibliometric methods, the authors analyzed 1,000 documents from Google Scholar that discussed this topic from 1973 to 2024. The results of the analysis show that the number of studies on procrastination has increased significantly in recent years, especially after 2010. Topics that often appear are related to stress, self-control, academic achievement, and other psychological and social factors. Data visualization with the help of VOSviewer software shows that procrastination is a complex topic and involves many fields of science. This study is expected to help academics and practitioners to better understand the direction of research developments on procrastination and develop more effective treatment strategies.</p>
<p><b>Keywords:</b></p> <p>Procrastination Bibliometrics research trends stress academic achievement</p>	<p><i>This is an open access article under the <a href="#">CC BY-SA</a> license.</i></p>
<p><b>Corresponding Author:</b></p> <p>Name: Zikri Bagas Munandar Institution: Universitas Pembangunan Jaya e-mail: <a href="mailto:zikribagasm@gmail.com">zikribagasm@gmail.com</a></p>	

## 1. INTRODUCTION

Procrastination is an activity that deliberately delays even though it knows the delay has a negative impact (Svartdal et al., 2020). Procrastination appears as a problem that is often faced by some people because of their inability to manage time. In (Kurniawan, 2024) stated that procrastination does not mean avoiding or not wanting to know the task at hand, but only delaying doing it which makes the time it takes to complete longer.

In recent years research on procrastination has begun to expand into various aspects of life. Not only in the academic field, but also in everyday work life. Current research on procrastination has begun to focus on several factors, namely psychological and social, that can allow this procrastination to occur (Chen et al., 2024). In academia, bibliometric methods are used to

identify research trends, publication patterns, and relationships between concepts in a field of study. Bibliometrics itself is a type of quantitative study of scientific publications that can help reveal research patterns and understand how a topic can develop or decline over time and changes in society (Wijaya Pramodha Wardhana et al., n.d.).

Therefore, this study aims to conduct a bibliometric analysis of studies that address procrastination. Through this approach, researchers can identify publication trends, the most studied topics, as well as research gaps that remain unfilled. By understanding how research on procrastination develops, academics and practitioners can design more effective strategies to address its impact on various aspects.

The purpose of this study is to analyze the development of procrastination research using bibliometrics. The results of this analysis are expected to provide insights for academics and practitioners in developing strategies to overcome procrastination.

## 2. LITERATURE REVIEW

This study utilizes bibliometric analysis to comprehensively evaluate and understand the research landscape in "procrastination". Bibliometric analysis is a quantitative method that involves statistical examination of scholarly publications, extracting valuable insights into publication trends, thematic focus, and collaborative networks within a given domain.

### 2.1 Data Collection

The Google Scholar database was chosen as the primary source for obtaining relevant scientific publications as it has a wide coverage of literature. The search was conducted using the keyword "Procrastination" to identify documents related to the subject. The publications found ranged from 1973 to 2024 which were used to analyze the historical research in the field.

### 2.2 Bibliometric indicators

This study was conducted through bibliometric analysis by analyzing publication

trends over the number of publications per year was analyzed to identify patterns, gaps, as well as significant changes in research focus. The study also identified different types of publications such as journal articles, book chapters and reviews which were categorized to understand the diversity of research.

To visualize the relationships between research themes, VOSviewer was used as a bibliometric analysis tool. Interrelated themes were identified to see interdisciplinary patterns in the research.

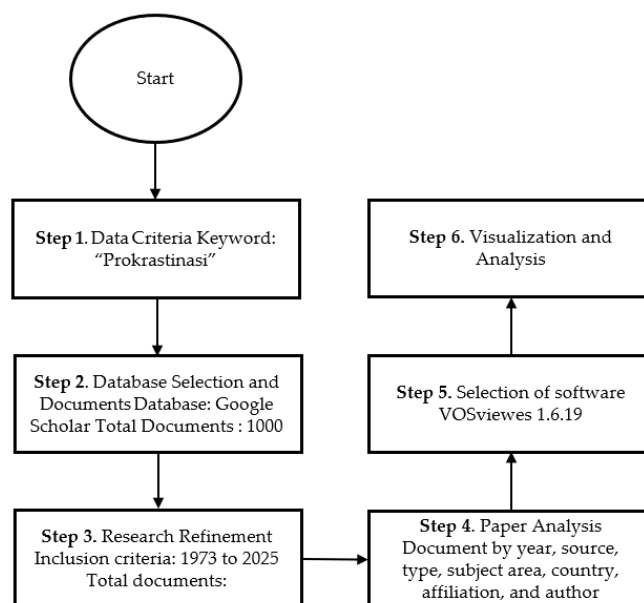
### 2.3 Data visualization

The database used through google scholar as the main source to retrieve relevant publication sources and has a wide coverage of academic literature. The search was conducted using the keyword "procrastination" taken from 1973 to 2025.

### 2.4 Interpretation and Implications

A publication trend analysis was conducted to identify periods of high interest, uncover research gaps, and look at changes in the focus of studies. Mapping publications and institutions provided insights into global contributions to the research. Thematic analysis facilitated an understanding of the interconnectedness of the research themes and opportunities for future research development.

*2.5 stages of bibliometric analysis the steps involved in the bibliometric analysis paper are illustrated in figure.*



3. RESULTS AND DISCUSSION

3.1 Data Collection

A document search on “Procrastination” in the Google Scholar database produced 1000 documents covering

the publication period from 1973 to 2025 documents in table 1, regarding the research location, research objectives, research methodology, and findings presented in previous studies.

No	Author (s)	Research Objectives	Location	Methodology	Findings
1	(Kuftyak, 2022)	To analyze the relationship between academic procrastination, stress level, response to stressors, and academic achievement in university students.	Rusia	The method used is a quantitative approach using a sample of students aged 17-25 years Procrastination Assessment Scale for Students (PASS) and student life stress inventory.	Students with low academic achievement are more likely to experience procrastination, intrusiveness, and high stress. Factors such as laziness and failure avoidance are associated with high stress and negative emotional responses. In contrast, high-achieving students are more organized and have high self-control. procrastination was shown to contribute to decreased academic achievement.
2	(Chandra & Kadek Pande Ary Susilawati, 2024)	Identify the factors that cause academic procrastination among secondary school students in Indonesia.	indonesia	Literature review using 11 journals selected from 747 articles using inclusion criteria (focus on the causes of procrastination in junior / senior high school students).	The causes of academic procrastination are divided into: internal factors (time management, poor physical condition, low self-efficacy), and external factors (unsupportive parenting and student environment). These two factors influence each other and cause students to delay academic tasks.

3	(Sirois, 2023)	Conceptually review the relationship between procrastination and stress, and explain how context (such as the COVID-19 pandemic) affects vulnerability to procrastination..	united kingdom	Conceptual and theoretical review based on literature over the past two decades; developed the "Stress Context Vulnerability" model.	Procrastination serves as a strategy to avoid pressure in high-stress situations, due to decreased ability to manage emotions and fatigue in the face of pressure. This model suggests that stress from certain contexts, such as the COVID-19 pandemic, increases the tendency to procrastinate due to the increased burden of negative emotions and decreased ability to tolerate stress. Therefore, this model emphasizes the importance of a more empathic approach in understanding procrastination behavior.
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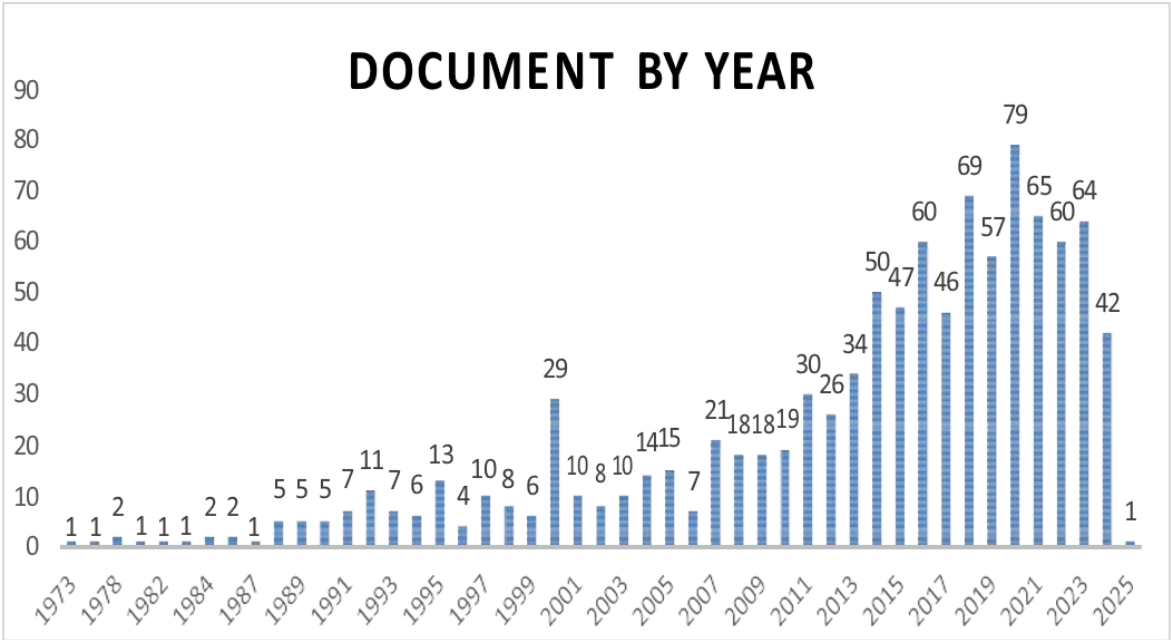


Figure 2 Tren Publication by Year

Figure 2 illustrates that “procrastination” is categorized over a period of time. The first discussion on this topic was in 1973, which was then re-published in 1974

with one publication. The next publications occurred in 1978-1979 which had two publications published in 1978 and one publication published in 1979. There was no

publication in 1980-1981, but in 1982-1983 there was one publication published each year. Then in 1984-1986 each year had two publications published. In 1987- 1999, the publication consistently increased every year for several years. Entering 2000-2010 it was noted that the increase still occurred every year, but the publication published in 2007 decreased compared to other publication years. Furthermore, in 2011-2020 the publication of this topic has increased from the previous year.

Then in 2021-2024 the publications published experienced a drastic increase

Because the pattern shows a changing shift in publications published, in 1973- 1986 publications were not consistently published.

Publications have increased significantly in 2010-2024 because it indicates the importance of 'procrastination' and therefore this topic needs new attention due to the increasing number of publications in these years. The consistent number of publications in the last few years 2010-2024 indicates that this topic can be sustained for further discussion.

## PUBLISHER

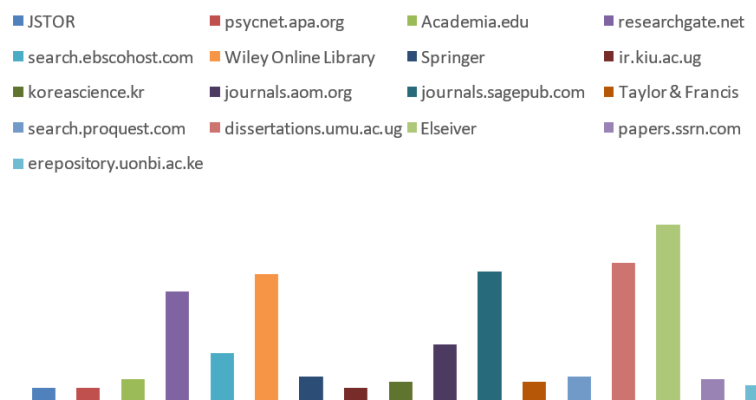


Figure 3. Publisher Publications

Figure 3 The most publisher publications in this document come from the publisher Elsevier (Elsevier.com) which reaches 62 publications which is one of the research databases that is often used to find scientific journals and academic books in various fields of study. Then the second largest publisher was followed by

dissertations.umu.ac.ug with a total of 49 publishers which is one of the publishers from Uganda martyrs university. Then publisher journals.sagepub.com with a total of 46 publishers. Wiley online library and researchgate.net with 45 publishers and 39 publishers respectively.

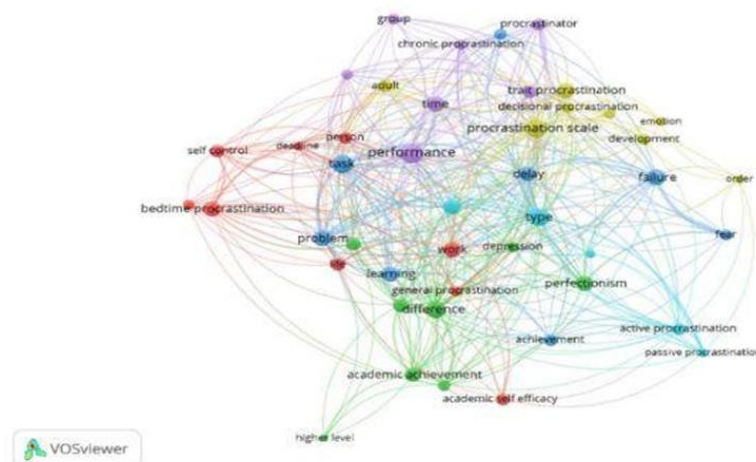


Figure 4

Figure 4 created using VOSviewer visually represents the keyword network of research on the theme of “procrastination”. This visualization shows the interconnectedness of terms collected from various international literatures, demonstrating that research on procrastination is complex and multidisciplinary. The word “task” is the main center that connects themes such as

performance, delay, self- control, academic achievement, and perfectionism.

The dense connections around the word “task” show that procrastination is widely researched in the context of academic and work responsibilities. In addition, themes related to bedtime procrastination, passive procrastination, and trait procrastination illustrate the various types and causes of procrastination in terms of behavior, psychology, and environment.

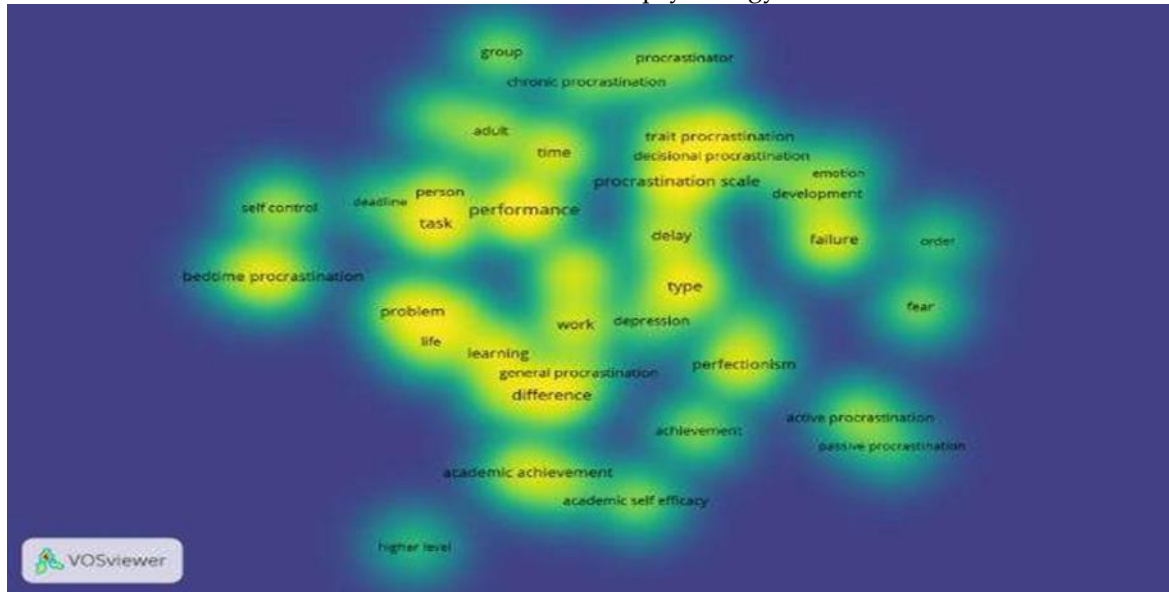


Figure 5

Figure 5 visualization shows the density of concentration in the global research on procrastination. The lightest color indicates areas of high research intensity and dominance. Terms such as task, performance, delay, academic achievement indicate that the main focus of research is the relationship

between procrastination and task. academic, individual achievement and psychological factors. This visualization thus shows that procrastination is not only limited to the effects on achievement but also to the psychosocial characteristics that underlie it.

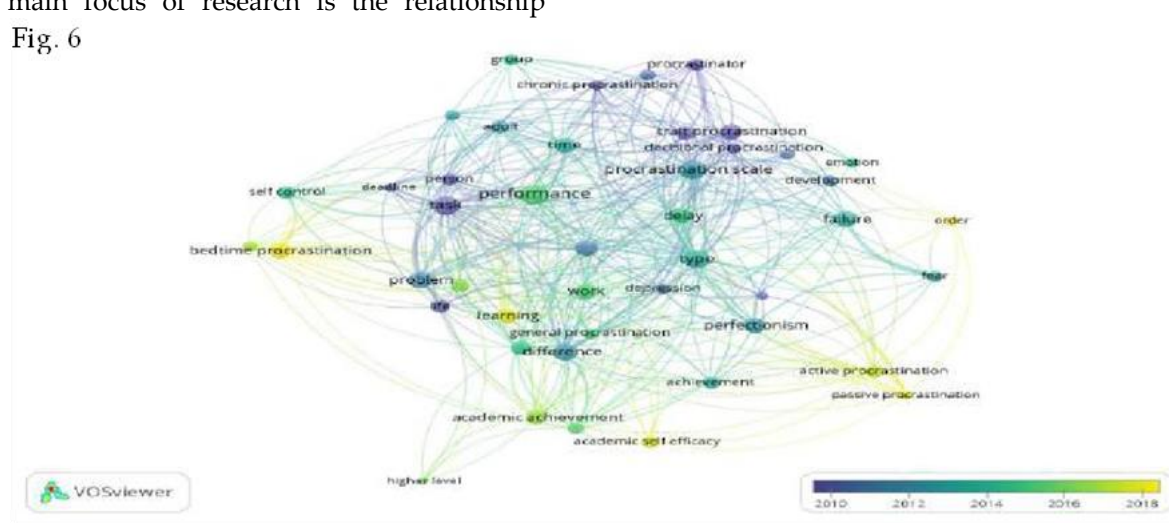


Figure 6

Figure 6 The color of each term reflects the average year of appearance in the literature from dark purple (2010) to light yellow (2018) lighter colors indicate that the topic is more recent and trending in academic studies. The words task, performance and procrastination scale appear early shown in purple indicating that early research on procrastination focused mostly on basic aspects such as task and performance measurement.

In contrast, bedtime procrastination, academic self- efficacy, and passive procrastination are shown in yellow, indicating a shift in scientific interest towards a more specific understanding of procrastination both in terms of form and context. The appearance of the words fear, emotion and depression in green and yellow indicates that studies are beginning to link procrastination with psychological and emotional factors in more depth.

No	Cluster	Fill Cluster
1	Blue	showed that procrastination research themes related to themes such as fear, active procrastination and problems emerged as part of the cluster that addressed this issue. This cluster illustrates the differentiation of procrastination types, as well as its relationship with psychological issues such as fear and failure. The research focus of this cluster identifies the emotions that drive procrastination, as well as how this can impact performance.
2	Green	shows that the theme of procrastination research is related to themes such as academic achievement, academic self-efficacy and learning as part of a cluster that addresses this issue. This theme indicates that procrastination is widely studied in the field of education, specifically on procrastination that has an impact on academic achievement, the learning process and learner confidence. emphasizes that procrastination is not only a passive behavior but also affects student learning outcomes and processes.
3	Red	shows procrastination research themes related to themes such as, self-control, bedtime procrastination, and life as part of a cluster that addresses this issue. The themes in this cluster address an individual's internal factors such as self-control, bedtime procrastination tendencies, as well as how these relate to daily life. reflects procrastination is not only related to a student's work or academics, but also to a person's behavior and personal traits.
4	Purple	shows procrastination research themes related to themes such as, chronic procrastination, trait procrastination and procrastinators as part of a cluster that addresses this issue. There is a scientific tendency to consider procrastination as a complex and recurrent psychological phenomenon.
5	Yellow	shows procrastination research themes related to themes such as, emotion, order, and development as part of a cluster related to personal development and self- regulation. This cluster focuses on the relationship between emotions and the ability to organize time and tasks, as well as how procrastination can be overcome through individual developmental strategies. The focus is on self-development as a solution to procrastination.

4. CONCLUSION

This research shows that the topic of procrastination is increasingly becoming a concern in the academic and professional world. Through bibliometric analysis of 1000 documents from Google Scholar covering the period 1973 to 2025, it was found that research

on procrastination experienced a significant spike, especially since 2010, with the peak number of publications occurring in 2023. This indicates a growing awareness of the negative impact of procrastination, both in academic and everyday contexts.



The findings also highlight the importance of a multidisciplinary approach in understanding procrastination, as its causal factors do not only stem from individual behavior, but are also closely related to psychological, social, and environmental aspects. Visualization of the VOSviewer revealed that terms such as task, performance, self-control, and academic achievement took center stage in this research network. This suggests that procrastination not only impacts achievement, but is also influenced by emotional dynamics and self-regulation abilities.

This research provides direction for future studies. There are still gaps that need to be explored, such as the relationship between local culture and certain forms of procrastination, technology-based prevention approaches, and effective interventions in educational and work environments. Thus, this study is expected to contribute to designing more appropriate managerial strategies, educational policies, and psychological approaches in overcoming procrastination in a comprehensive and sustainable manner.

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