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**Master’s in Data Science and Advanced Analytics**

Patterns in Retracted Research: Insights and Trends

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**Supervisor:** Professor/Prof. Bruno Damásio

**Context:**

[Paragraph #1: containing the context and importance of the topic; line spacing 1.15 points; font type; Times New Roman in font size [10 up to 12] for the body text.]

As the number papers being retracted each year increases, it is increasingly more important to delve into the reasons for it. Retractions not only have immediate implications for the credibility of published research, but also risk the dissemination of misinformation and distrust of the public. By exploring the characteristics that render a publication more susceptible to retraction, it may warrant increased scrutiny from peer reviewers and lead to a decrease in retractions. Furthermore, quantifying the repercussions of these affected publications can be crucial in understanding their significance.

**Research gap and objectives:**

[Paragraph #2: Containing a scientifically supported research gap, the research question(s), and the research objectives]

While existing literature often focuses on the impact of retracted papers within specific subject areas or relies on small case samples for individual analysis, it often lacks a broader perspective that can be gained by studying inter-subject patterns or employing larger sample sizes. Our research aims to provide a comprehensive view of the retraction landscape, with the goal of identifying potential risk factors and assessing the impact of retracted publications, both in terms of their immediate consequences on the affected publications and their influence on subsequent citations.

**Methodological approach:**

[Paragraph #3: Containing the scientifically supported methodological approach, namely the method(s), and instruments]

In this study, the primary data source will be the Retraction Watch Database, which houses detailed information about retracted papers, including reasons for retraction, author affiliations and publisher. To complement this dataset, data from Web of Science from Clarivate Analytics will be used, which provides comprehensive bibliographic data. *The analysis will mainly involve the creation of visualizations and basic statistical analysis, which will help uncover trends and patterns in retraction data.*

**Expected results and contributions:**

[Paragraph #4: Containing the expected results and expected contributions]

**Bibliographical references:**

[APA Style references, using a reference management system, e.g., Zotero, Mendeley, or Endnote]

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**Notes**: Students should use one page, excluding references. References are mandatory.