# Submitting your work to Archive of Orofacial Data Science

A step by step guide to prepare and upload a scientific manuscript.

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# Part 1 - Title page

#### Enter your title:

Growth and Maxillofacial Surgery - A Plea for a more Physiological Approach to Surgery

#### Enter your name(s):

Jean Delaire<sup>1</sup>, Ulrich Joos<sup>2</sup>

#### Enter your affiliation:

<sup>1</sup>Private Dental Practice Nantes, France, <sup>2</sup>University Duisburg-Essen, Germany

#### Enter the abstract (400 words maximum):

**AIM:** This work provides orthodontic practitioners with an updated literature review and meta-analysis on the practicality of reusing debonded metal orthodontic brackets.

METHODS: An electronic search from January 1989 to June 2017 on MEDLINE-PubMed and EBSCOhost Research Databases yielded 63 studies after removing duplicates. Following initial screening, 47 potentially relevant articles were identified. Detailed scrutiny led to the exclusion of 19 studies. The remaining 19 studies were divided into two groups: Group I (same bracket brand and bonding agent) and Group II (different bracket brand and bonding agents).

**RESULTS:** The mean shear bond strength (SBS) for debonding a new bracket was 10.16 MPa. Five chairside recycling methods were compared: erbium laser, aluminum oxide sandblasting, high-speed grinding, slow-speed grinding, and direct flaming. Average reductions in SBS were 0.65 MPa, 0.89 MPa, 2.82 MPa, 3.49 MPa, and 3.93 MPa, respectively.

**CONCLUSION:** Erbium laser recycling is highly efficient, though cost-prohibitive. Chairside aluminum oxide sandblasting with a microetcher offers a cost-effective alternative with comparable SBS.

#### This is what the title page looks like:

Growth and Maxillofacial Surgery - A Plea for a more Physiological Approach to Surgery

Jean Delaire<sup>1</sup>, Ulrich Joos<sup>2</sup>

<sup>1</sup>Private Dental Practice Nantes, France, <sup>2</sup>University Duisburg-Essen, Germany

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# Part 2 - Introduction

No word limit for the introduction. Use in-text citations in APA 7th style (see examples in bold).

Bonding of orthodontic attachment to etched enamel with dental resins was made possiblethrough Buonocore's study in 1951 (Buonocore, 1955). Buonocore showed that a simplemethod to increase the mechanical bond between acrylic filling and enamel surfaces wasthrough etching the enamel surfaces with 85% phosphoric acid for 30 seconds. His discoverygreatly widens the scope of orthodontics as orthodontic practitioners are able to simply bonddirectly to the enamel surfaces.

However, failure of the bonded brackets is not uncommon. Studies had reported be-tween 4.7 to 23% of clinical bracket bond failure (O'Brien and Roberts, 1989; Lovius etal., 1987). In addition, orthodontic practitioners may also wish to reposition the bracketsthroughout the course of orthodontic treatment. Regardless of the reason, replacing thedebonded brackets with new brackets every time is very costly. For both economical and en-vironmental reason, orthodontic practitioners have resorted to recycle the brackets, in-officeor commercial methods.

Older studies (Mascia and Chen, 1982; Wright and Powers, 1985; Hixson et al., 1982; McClea and Wallbridge, 1986) casted a doubt on recycling brackets, claiming that reconditioned brackets showed a decrease in bond strength to an extent that might interfere withorthodontic treatment. Other studies showed that reconditioned brackets not only . . .

# The introduction ends with a paragraph explaining the aim.

The aim of this study is to investigate . . .

# Part 3 - Methods

Explain what you did in full sentences. Do not make lists.

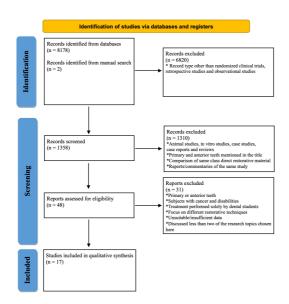
The search of relevant data was done on two main online platforms, namely MEDLINE-PubMed (National library of Medicine) and EBSCOhost Research Databases. The keywordsused in the search includes "Orthodontic Brackets", "Reuse", "Recycle", "Rebond". BooleanOperators (AND, OR, NOT) were used to connect the keywords to narrow the relevant search results . . .

Explain inclusion and exclusion criteria.

Explain data extraction and / or data assessment.

Use flowcharts, e.g.

https://estech.shinyapps.io/prisma\_flowdiagram/



### Part 4 - Results

Describe the baseline. Describe what you found. Do not make lists.

Use subsections sparingly.

Example text: There were many different in-office recycling methods described in the literature. The three most common methods described and frequently tested were grinding, flaming and sand-

blasting. Using laser to recondition the orthodontic brackets has gathered more interests in the last decade. As there are sufficient data for the aforementioned four methods, we will do a comparison by extracting the data from each articles.

Do not insert illustrations or tables into the text. Only insert the image or table caption at the point where the illustration/table should appear. Submit images or tables separately.

Figure 1. Forest plot for sandblasting method versus control in group I with same bracket brand (Gemini 3M) and same bonding agent (Transbond XT).

Example text: Apart from the recyling methods mentioned above, the literature also mentioned the following less common methods: ultrasonic cleaning, silicoating method, acid bath method, Esmadent method and Buchman method. The resulting mean SBS based on the data from 582 brackets was -0.89 MPa (95% CI, -1.96, 0.17) indicating similar result. The difference between group I (same bracket and bonding material) and group II (assorted brackets and bonding material) after sensitivity test was 1.07 MPa.

**Table 1.** Combining all the results of the mean SBS (MPa) reduction of different recycling methods for group I and group II after sensitivity test.

# **Part 5: Figures**

- In AODS, any visual representation, excluding tables, is classified as a figure. Examples of figures encompass a variety of visual formats such as line graphs, bar graphs, charts (including flowcharts and pie charts), drawings, maps, plots like scatterplots, photographs, infographics, and various other types of illustrations.
  - If possible, create images in landscape format rather than portrait format.
  - If the landscape format is not possible, combine 2 or 3 portrait formats thematically next to each other:







Fig. 2. X-ray of the palate after SARP



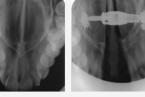


Fig. 1. X-ray of the palate before (left) and after (right) SARPE

Submit images separately under the names Figure 1, Figure 2, etc.

As a rule of thumb, if the image in the published PDF should have an acceptable quality when printed, the image on your PC monitor should have an approximate width of 1500 pixels, but not less than 1000 pixels.

## **Part 6: Tables**

• The primary objective of incorporating tables or figures is to facilitate readers' understanding of your research. Ideally, well-crafted tables and figures should not only be visually appealing but also easily accessible to a diverse audience.

#### Example of a table in the main text:

| Bold text — | STUDY              | FOLLOW-UP | SURVIVAL/SUCCESS RATES (%) |                | P VALUE | 1.5 pt lines    |
|-------------|--------------------|-----------|----------------------------|----------------|---------|-----------------|
|             |                    |           | COMP-RES                   | GLASS-ION-C    |         |                 |
|             | BALKAYA, 2020      | 2 y       | 100                        | 54,3           | < 0.05  | 0.75 !:         |
|             | GURGAN, 2020       | 10 y      | 100 (throughout)           | 10 y: 100      | n.s.    | ←               |
|             |                    |           |                            | 4 y: 96        |         |                 |
|             | ROZNIATOWSKI, 2020 | 2 y       | CE: 100                    | CE: 95.83      | n.s.    |                 |
|             |                    |           | RE: 100                    | RE: 93.75      | n.s.    |                 |
|             |                    |           | Overall: 100               | Overall: 91.67 | < 0.05  | _               |
|             | HATIRLI, 2021      | 2 y       | 100                        | 96             | n.s.    |                 |
|             | UZEL, 2022         | 2 y       | 1 y: 100                   | 1 y: 100       | n.s.    | _               |
|             |                    |           | 2 y: 100                   | 2 y: 97.1      |         |                 |
|             | BAYAZIT, 2023      | 4 y       | 96,9                       | 90,6           | n.s.    | _ ← 1.5 pt line |

- Tables must be centered and should not exceed the text width.
- A table, including table legend and notes, must fit on one page of the manuscript.
- Table cells should not colored or shaded.
- · All numbers shown must have the same number of decimal places.
- Mixed units in columns are not allowed. Convert them uniformly.
- Additional information about specific data points could be indicated with symbols and explained in the table notes.
- Abbreviations are explained in the table notes or table caption.

Tables that do not fit into the main text will only be published as a supplement.

Submit each table in a separate spreadsheet. Excel or CSV data is recommended.

## Part 7: Discussion and Conclusion

No word limit for the discussion. Use in-text citations in APA 7th style.

Use subsections sparingly. A continuous text with explanatory paragraphs ensures better readability.

Example text: This study focused on tooth impaction in the aesthetic zone of the maxillary arch. The maxillary canine and maxillary central incisor are commonly observed as the impacted teeth following wisdom teeth, which was the rationale for their inclusion in our study. Furthermore, the selection of surgical methods for impacted maxillary teeth is crucial for achieving aesthetic results.

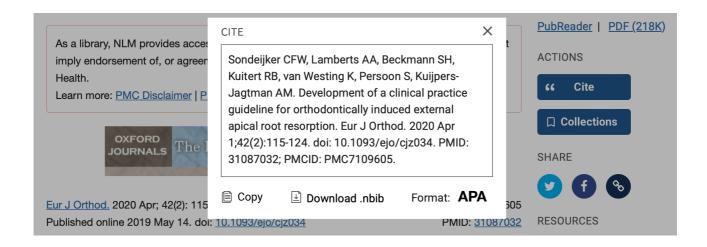
According to a study by Vilarinho and Lira (2010), the closed-eruption technique plays an important role in the aesthetic zone. Conversely, Robert et al. (2010) reported that the closed-eruption approach (CEA) could mitigate scarring in the aesthetic zone, particularly in cases of buccal impaction. Therefore, the closed-eruption approach was primarily addressed in this study.

The conclusion is not a repetition of your results. Write a few sentences summarising what you conclude from your results.

Example text: Treating impacted teeth in the aesthetic zone of the maxillary region requires thorough comprehension of surgical procedures. Our findings suggest that the closed-eruption approach (CEA) is a reliable technique yielding favorable outcomes for gingival tissues, PPD, RL, and CL upon completion of treatment.

## **Part 8: References**

Use the APA 7th format style for your references. In Pubmed you can copy the citation directly from each entry. In Pubmed click on the title of an article, then "Cite" under ACTIONS. Choose the format APA and click "Copy".



# Do not number the references. Sort them alphabetically.

Caldara, R. (2010). Beyond smiles: The impact of culture and race in embodying and decoding facial expressions. Behavioral and Brain Sciences, 33(6), 438-439.

Sondeijker, C. F. W., Lamberts, A. A., Beckmann, S. H., Kuitert, R. B., van Westing, K., Persoon, S., & Kuijpers-Jagtman, A. M. (2020). Development of a clinical practice guideline for orthodontically induced external apical root resorption. European Journal of Orthodontics, 42(2), 115-124.

# Part 9: How to submit

Once you have prepared your manuscript according to the above guidelines, you will have

- a text file (TXT or MS Word recommended),
- JPG files for images, and
- CSV or Excel files for tables.

#### Go to:

https://www.uni-muenster.de/Ejournals/index.php/aods/index

Click on MAKE A SUBMISSION and follow the instructions.