Research Publications: Guidelines for Decision-making

Background

Publishing your work means that your findings become available for others – to further knowledge; to be verified as high quality, believable work; to be cited as an indicator of usefulness; and to be implemented into practice. But publishing is not simple. In order to maximise the impact of your work, it must be **findable** (e.g. open access) and in the **most credible format** (peer-reviewed and highest 'quality' journal). There are also proxy publication quality metrics (and they change often) that are used to evaluate your own personal credibility or even the credibility of your centre or institution.

This document outlines the processes you need to consider to ensure that you are publishing for maximum impact – however that ultimately looks for you.

Before you even think about publishing your work, ensure these things:

ORCiD
Are you registered with ORCiD? This ensures all of your work is easily findable and attributed to your own ID. A comprehensive guide for how to register is available from the UniSA library.

Staff home page
Check your home page. Eligible research outputs will display here once processed into the UniSA Research Outputs Repository, and any projects, supervision, teaching etc that are logged in UniSA systems will be automatically populated. Make sure that your background descriptions (e.g., About me) and other categories that are editable are up to date and reflect the profile you need and want.

Register with Clarivate
This will allow you to access the features of InCites listed below. Use your UniSA email here (https://incites.clarivate.com/) to register for free. This links with Publons, Web of Science, Endnote. For more information on accessing and using InCites, see the Library's Metrics and Impact Guide.

## Publication Strategy

WHAT: Ideally you will have designed the project and the data collection in line with best practice – good journals will insist on quality standards like clinical trial registration, locked protocols, data management and analyses plans, conforming with relevant conduct/reporting standards like CONSORT, TIDieR, PRISMA etc. Consider what will be included in the publication to ensure it attracts maximum attention/citation - avoid salami slicing to get more papers – it is quality now not quantity so aim for the strongest paper.

WHO: Also ideally you will have had an authorship agreement (see UniSA Authorship Protocol):
- who is an author (and in what order), in the context of
- each authors' contribution/s (relative to the code and the journal),
- acknowledgements and affiliations (UniSA Author affiliations on research outputs guidelines)

WHERE to publish: This is not necessarily a linear process – you may consider subject first then findability and impact or vice versa or in parallel. The following figure summarises the key factors we recommend you aim for:
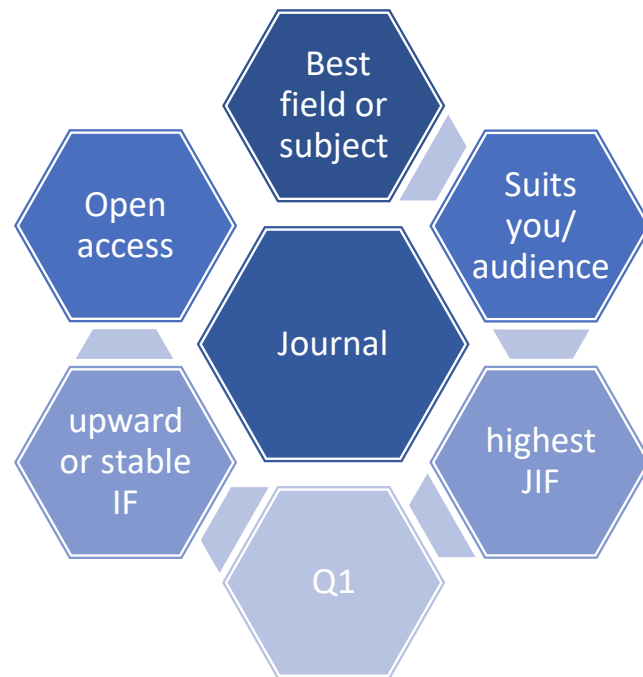
1. Know your potential areas, fields or subjects of research

There are various ways that journals are clumped relative to the field of research or the subject category. Different benchmarks apply for different areas – meaning it can matter where you are publishing. For example, the clinical sciences have much higher levels (and benchmarks) of citations and impact factors than the social sciences (or sports sciences). See here for more information on choosing the relevant Web of Science subject category and see here for more information about indexes which are used to confirm quality e.g. the Science Citation Index Expanded (SCIE).

However ultimately you cannot manipulate the choice of area or category too much – a paper about cancer rehabilitation will not get published in a journal categorised in Environmental Research.

You can look at Web of Science **Research Areas** in Clarivate (https://incites.clarivate.com/) – you can change the filter to Australia FoR Level 1 or Level 2 (for the ANZSTRC lists used by ARC, NHMRC etc). You can look up various indicators like the top 1% or 10% cited papers in your research area/s to get an idea of where they have been published (UniSA REI1). Whichever indicator you choose then click on the green number and the 'Publication Source' which will give you the journals listed in order of their ranking for this Research Area.

Alternatively you can ask JANE (Journal/Author Name Estimator https://jane.biosemantics.org/) using your title or abstract or keywords, to generate a list of potential journals with an indication of their 'Article Influence' based on their citation rate. This is pretty crude compared to the Web of Science above.

2. Maximising findability/impact – choosing journals in your area

2.1 Journal Impact Factor (JIF)

Provides a functional approximation of the average citation rate per citable item. The higher the better – to find out the JIF for particular journals look on their website; to find out the journals with the highest impact factor in your particular Research Area choose this Impact Indicator on the InCites site (as above). If they don't have an impact factor reported do not use the journal (unless the impact factor is pending as it is a new journal). For a full description of JIFs see Appendix 2.

2.2 Know your Quartiles and rankings (UniSA Research Enterprise Indicator REI1)

The JIF is used to rank a journal within its subject category – Q1 is the top 25% through to Q4 (bottom 25%). If a journal doesn't have an impact factor it is not in the rankings. It is important to recognise that a journal can have different rankings (and therefore be in different quartiles) in different subject areas – so know your subject area. To find the quartile for your journal or to find journals in Q1 in your Research Area select **JIF quartile** from the IMPACT Indicators on the InCites site (as above). To get the ranking based on JIF select the Impact Indicator **JIF Ranking**. For a full description of quartiles see *Appendix 1*. For reasons why you should publish in a Q1 Journal see *Appendix 3*.

See the Library's [Finding Journal Impact Factors and journal rank in category Research Quick Guide](#) for instructions. There's also an additional Library Research Quick Guide on how to do this using Scopus data and SJR: '[Finding journal rank using SCImago Journal & Country Rank](#)'

2.3 Know your Category Normalised Citation Index (UniSA REI2)

Understanding your publication successes in terms of citations can help you consider where to build your work. You can look up your current NCI using your Clarivate account and accessing InCites. Anything above 1 is above world standards. Consider the type of article that is cited the most in your publication list, in which subject area and which journal. For a full description of CNCI see Appendix 4. For the evidence of the relationship between CNCI and Q1 look at Appendix 3.

Depending on the Research area, highly cited papers are often systematic reviews, guidelines, consensus statements etc or involve big data sets of international significance.

2.4 Critically evaluate the performance of your chosen journal/s as well as the style and content.

If you want to have a closer look at the performance of a particular journal you can look at [Journal Citation Reports – Browse Journals](#) For example look at the **Journal Impact Factor Trend** and ideally choose one that is trending upward not downward! Similarly there will be a trajectory over the last 5 years for the **Rank by Journal Impact Factor**. See Appendix 5 for an example of evaluating a journal.

The **Citable Items** will give you an idea of the scope of the journal as well as the type of articles most likely to be cited; you can also download individual items to use as a writing guide if they are similar to your project. Visit the prospective journal website and review the aims and scope (e.g. target audience, priorities etc), acceptance rate, fees etc.

3. Publish in OPEN access – Green or Gold

Gold open access journals are the majority of journals we encounter who charge authors article processing charges, and the reader or consumer pays nothing. Budgets are the main limiting factor here. Currently authors use their PD or other financial sources (if the journal is of sufficient quality) and we are looking to budget for some unit-level funding for those who do not have sufficient PD.

Green open access is essentially self-archiving where the author can (independently of the publisher) post the work on another website (e.g. personal, institutional or related to the funder) as an open repository. This is allowable if you deposit a near-final version (e.g. post-print/author-accepted manuscript) which means it has undergone peer-review and been accepted for publication but has not been formatted by the publisher. Publisher embargo rules may apply for a period. UniSA has mandated all publications be placed in our Research Open Repository (ROR) – it is your interests to ensure this happens as it maximises your 'findability".

Citation advantages are maximum in green open access or hybrid (where the article is closed access unless the author pays a discretionary open access publication fee).

Read & Publish Agreements

A new publishing model, known as Read & Publish Agreements, has been launched with UniSA being a participant in several agreements with major publishers, including Cambridge University Press, Oxford University Press, Springer Nature, and Wiley.

These agreements allow researchers to publish direct to Open Access with no transactional Article Processing Charges (APCs), providing more equitable access and enhancing potential research impact.

Some key points to note:
- **Not all journals are eligible under these agreements** - see the **Alphabetical title list** on the CAUL website
- Journal articles will be deemed eligible for **corresponding authors**, using their **UniSA email address**, and made available under a Creative Commons CC-BY Licence (or a variant thereof)
- Each agreement may have different conditions. For example, some publishers will allow unlimited submissions, whereas other publishers may set a limit that will apply across all participating universities in Australia
- Most agreements start in January 2022
- See the Read & Publish Agreements negotiated by CAUL webpages for further details.
- Not all publishers offer Read and Publish Agreements.
- For more and current information refer to the Library's **Read & Publish Agreements** page

Appendix 1 Journal Impact Factors, Quartiles and Rankings

2020 Journal Impact Factors (JIF) have been calculated as follows, using the Journal of Physiotherapy as an example:

$$\frac{\text{Citations in 2020 to items published in 2018 (n=184) + 2019 (n=159)}}{\text{Number of citable items published in 2018 (n=25) + 2019 (n=24)}} = \frac{343}{49} = 7.000$$

Though not a strict mathematical average, JIF provides a functional approximation of the average citation rate per citable item. A JIF of 1.0 means that, on average, papers published one or two years ago have been cited one time. A JIF of 2.5 means that, on average, papers published one or two years ago have been cited two and a half times.

JIFs are used to rank journals in a given subject category and distribute them into quartiles using the formula $Z=(X/Y)$, where X is the journal rank in a category and Y is the count of journals in a category.

Q1	$0.0 < Z \leq 0.25$	Highest ranked journals in category
Q2	$0.25 < Z \leq 0.5$	
Q3	$0.5 < Z \leq 0.75$	
Q4	$0.75 < Z$	Lowest ranked journals in category

- If a journal is ranked 78 out of 314 in a category: $Z=(78/314)=0.248$ - Q1 journal
- If a journal is ranked 102 out of 204 in a category, $Z=(102/204)=0.5$ - Q2 journal

It is important to know that journals can be assigned to more than one subject category, and that quartile rankings can differ in the same year for the same journal across these different categories. The same is true for journals that are assigned to the same subject category in more than one index (see here for more information about indexes). The examples below highlight what to look out for to ensure you are correctly identifying Q1 journal options in the right index and subject category for your research.

- The Journal of Physiotherapy is indexed in the Science Citation Index Expanded (SCIE) in the categories of Orthopedics and Rehabilitation. For 2020, it was ranked first out of 82 journals in Orthopedics, and first out of 68 journals in Rehabilitation, placing it at the top of Q1 in both categories. This journal is therefore a Q1 option for physiotherapy research with scope in one or both categories
- The journal Supportive Care in Cancer is indexed in the SCIE in the categories of Rehabilitation, Health Care Sciences & Services, and Oncology. In 2020 this journal was ranked 9/68 in Rehabilitation, placing it in Q1 for this category. It was ranked 34/107 in Health Care Sciences & Services, placing it in Q2 for this category; and 142/242 in Oncology, placing it in Q3. This means that Supportive Care in Cancer is a Q1 option for articles focusing on rehabilitation in cancer care; and that alternatives should be sought for cancer care articles that align with the other two categories

- The [International Journal of Environmental Research and Public Health](#) is indexed in the SCIE for Environmental Research (118/274; Q2 JIF) and Public, Environmental & Occupational Health (68/203; Q2 JIF). It is also indexed on the Social Sciences Citation Index (SSCI) in Public, Environmental & Occupational Health where it has a Q1 JIF (ranked 42/176). This journal is therefore a Q1 option for social science research in Public, Environmental & Occupational Health. Alternatives should be sought for research that aligns with one or both SCIE categories

Appendix 2 Why you should aim to publish in a Q1 journal

The relationship between CNCI and Quartiles for papers published in Q1-Q4 journals between 2015 and 2020 by current ALH academics (n=1491 papers) is shown in the left panel of Figure 1. The right panel shows the relationship between Average Percentile and Quartile ranking for the same set of documents. Average percentile is normalised for document type, age and category, with those in the 99th percentile representing the top 1% most cited papers and those in the 90th percentile representing the top 10% most cited papers. The proportions of top 1% and top 10% papers are also tracked for the UniSA REIs.
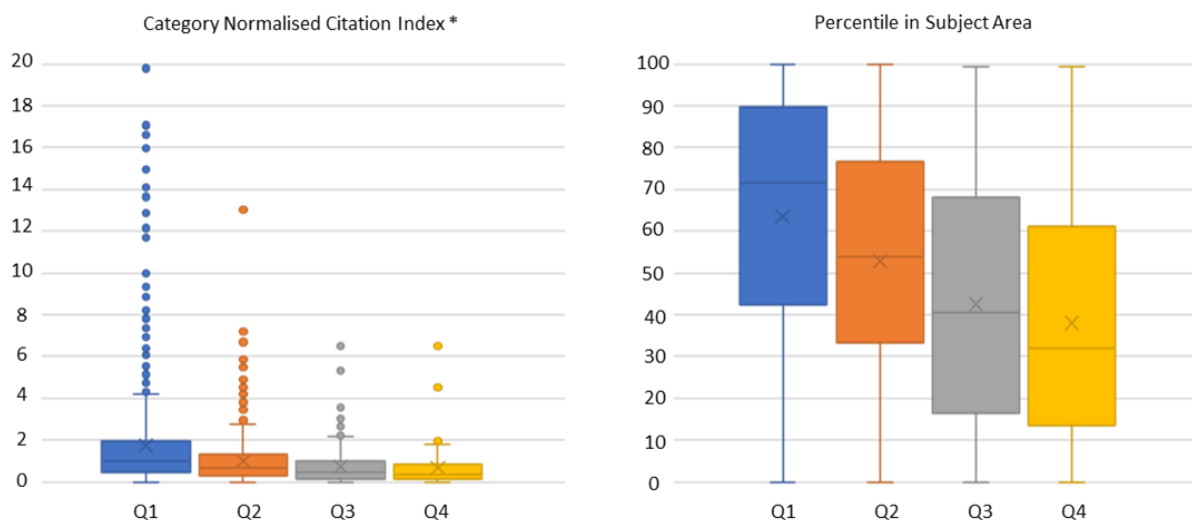

Figure 1. Average CNCI and average percentile ranking in subject category for papers published in Q1-Q4 from 2015-2020 by current ALH academics

* Outliers with a CNCI > 25 were not included in the LHS plot. This represents 14 outputs in Q1 (CNCIs of 26, 34, 37, 42, 46, 51, 55, 73, 93, 146, 189, 236 and 314) and 1 output in Q2 (CNCI of 33). The RHS plot includes all papers (n=1491)

Figure 1 highlights that for both metrics, the average performance of papers is highest in Q1 and lowest in Q4. Additionally, for this document set at the time of analysis, a total of 247 papers had a top 10% classification, with 178 (72%) published in Q1 journals. It is worth noting though that low and high-performing outliers are evident in each quartile for these metrics, further demonstrating that quartile ranking (and by extension, JIF) should not be used as a proxy for the quality of an individual paper.

Taken together, the evidence does support the rationale for publishing in Q1 journals as a means of placing your papers in a strong position to be read and cited by others. Citations can bring a host of benefits for your career, such as opportunities to collaborate and invitations to present at conferences. Furthermore, the selection criteria for many competitive grant funding schemes include a component that assesses publication track record in terms of quality and impact. These considerations provide a frame through which you can critically evaluate your publication strategy. Rather than focusing on the old mantra of "publish or perish" which prioritises quantity over quality, you should think about how to improve each output before you start writing. It might make sense to combine two or more bits of research into one paper that will pack more of a punch. If you have a lot of information to include, you could target a journal that allows for the inclusion of supplementary materials. By using this section in a considered way, the main body of the manuscript can be dedicated to presenting a cohesive and impactful narrative. Sometimes it's necessary to

determine if writing up your findings is warranted, by considering whether it will make a scholarly contribution to your field through being of interest to others. It is OK to decide not to publish if it means you can prioritise spending time on strategic tasks that will be more beneficial for your future success.

How to obtain a list of Q1 Journals in your subject category or categories

- Go to [Journal Citation Reports – Browse Journals](#)
- Click on the "Filter" icon on the LHS
- Select "Categories" to display the list of 254 Web of Science categories, then click the checkboxes to select one or more categories that are relevant to your research. For this example, select "Orthopedics"
- Select "Citation Indexes" to specify which one(s) to use. This is important because some journals are listed on multiple indexes and the quartile rankings may differ. By default, all indexes are selected. Many academics will only need the Science Citation Expanded Index (SCIE) and can unselect all other options.
- Depending on the nature of the research, some academics may need the Social Science Citation Index (SSCI) or the Arts & Humanities Citation Index (AHCI).
- Journals listed on the Emerging Sources Citation Index (ESCI) do not have a Journal Impact Factor. Q1 journals listed on SCIE, SSCI and/or AHCI should therefore be prioritised
- Select "JIF Quartile" then click the checkbox for "Quartile 1"
- Select apply - the displayed list is automatically sorted from highest to lowest 2020 JIF. The Journal of Physiotherapy is the highest ranked journal in Orthopedics - SCIE
- Clicking on the journal name displays detailed information about that journal
- There is also the new Journal Citation Indicator (released 2021) and this is available across all the indexes (noting AHCI and ESCI do not have a JIF).

Appendix 3 Normalised Citation Index (NCI)

In addition to monitoring the proportion of papers that are being published in Q1 journals, the UniSA REIs make use of a metric called the Category Normalised Citation Index (CNCI) as another way of tracking and measuring performance. CNCI is one of several metrics that Clarivate makes available via InCites. You can access InCites by registering for a free Clarivate account with your UniSA email address.
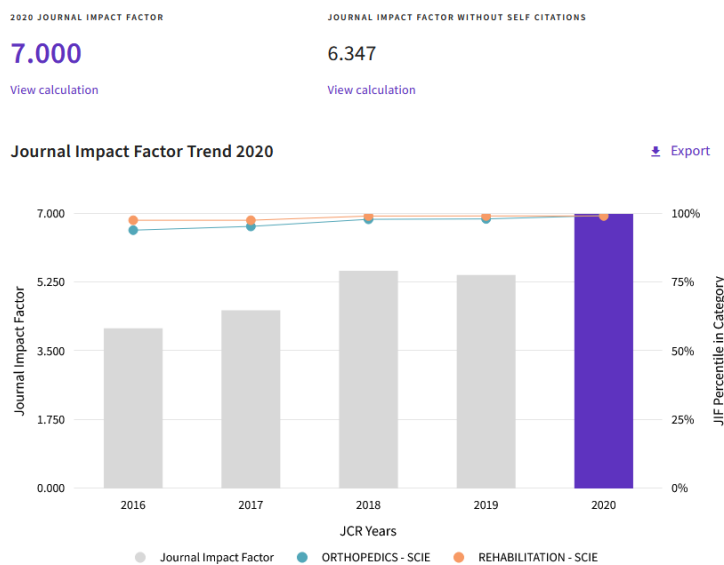
For each paper, InCites determines the CNCI by dividing the actual count of citing items by the expected citation rate for documents of the same document type (article or review), year of publication, and subject area (assigned at the journal level). When a document is published in a journal assigned to more than one subject area, InCites computes multiple CNCIs and returns the average value. According to Clarivate, the CNCI is a valuable and unbiased indicator of impact irrespective of document type, age and category. A CNCI value of one represents performance at par with world average, values above one are considered to be above average and values below one are considered below average. A CNCI value of two is considered twice world average.

The UniSA REI that utilises the CNCI metric is determined at the academic unit level. It represents the average CNCI of all papers with at least one author from that unit, published in the last 6 full calendar years. The overarching organisational objective is to foster increases in the average CNCI for each academic unit year on year as we move forwards. Further information on CNCI is available from InCites and the UniSA library.

Appendix45 Example of a critical evaluation of a chosen journal

What to look for in Journal Citation Reports – using Journal of Physiotherapy as an example. Go to Journal Citation Reports – Browse Journals

- Examine the Journal Impact Factor Trend and Rank by Journal Impact Factor – check to ensure you are viewing information for the correct index (usually SCIE) and category
- Critically evaluate the trajectory of the journal over the last three years. This may allow you to predict which JIF quartile a journal will achieve next. Where possible, avoid submitting to journals showing a sharp downwards trend and/or a 2020 JIF percentile close to the 75% Q1 cutoff. Otherwise you run the risk of publishing in a journal that will be relegated to Q2 in the next JIF year

2020 JOURNAL IMPACT FACTOR

7.000

View calculation

JOURNAL IMPACT FACTOR WITHOUT SELF CITATIONS

6.347

View calculation

Journal Impact Factor Trend 2020

⬇ Export

⚪ Journal Impact Factor   🔵 ORTHOPEDICS - SCIE   🟠 REHABILITATION - SCIE

Rank by Journal Impact Factor

Journals within a category are sorted in descending order by Journal Impact Factor (JIF) resulting in the Category Ranking below. A separate rank is shown for each category in which the journal is listed in JCR. Data for the most recent year is presented at the top of the list, with other years shown in reverse chronological order. Learn more

EDITION
Science Citation Index Expanded (SCIE)

CATEGORY
ORTHOPEDICS
1/82

JCR YEAR	JIF RANK	JIF QUARTILE	JIF PERCENTILE	
2020	1/82	Q1	99.39	
2019	2/82	Q1	98.17	
2018	2/76	Q1	98.03	
2017	4/77	Q1	95.45	
2016	5/76	Q1	94.08	

EDITION
Science Citation Index Expanded (SCIE)

CATEGORY
REHABILITATION
1/68

JCR YEAR	JIF RANK	JIF QUARTILE	JIF PERCENTILE	
2020	1/68	Q1	99.26	
2019	1/68	Q1	99.26	
2018	1/65	Q1	99.23	
2017	2/65	Q1	97.69	
2016	2/65	Q1	97.69	

- The "Citable Items" in the Journal Impact factor contributing items section is the list of outputs from the previous two years (2018-2019) that were used to determine the most recent JIF (2020). Reviewing output titles will provide an indication of the scope of the journal. The number of citations per output is also displayed and the list of titles is ranked from highest to lowest citation count. In some cases, it is possible to identify which output types attract the most

citations – for this journal, six of the top seven outputs (10 or more citations) are denoted as systematic reviews in the title

- Each citable item can be viewed in Web of Science. It is a good idea to download copies of any articles that are broadly similar to what you want to publish, as they can be useful to guide your writing process
- If you can't identify any similarities between your manuscript and the list of citable items, then the journal is probably not a good fit. Go back to the list of Q1 journals in your category and repeat the process

Journal Impact Factor contributing items   ⬇ Export

Citable items (49)	Citing Sources (194)

TITLE	CITATION COUNT
Physical exercise improves strength, balance, mobility, and endurance in people with cognitive impairment and dementia: a systematic review	24
People with low back pain want clear, consistent and personalised information on prognosis, treatment options and self-management strategies: a systematic review	18
Attitudes, barriers and enablers to physical activity in pregnant women: a systematic review	18
Recurrence of low back pain is common: a prospective inception cohort study	14
Combined training is the most effective training modality to improve aerobic capacity and blood pressure control in people requiring haemodialysis for end-stage renal disease:	10
Progressive resistance training increases strength after stroke but this may not carry over to activity: a systematic review	10
Aquatic exercise improves motor impairments in people with Parkinson's disease, with similar or greater benefits than land-based exercise: a systematic review	10

In late 2021 Clarivate introduced a new journal metric, providing a measure for all journals in the Core Collection including those without a JIF. This includes coverage of the Emerging Sources Citation Index (ESCI), a collection introduced from 2015 to address concerns about limited coverage (especially compared to rival Scopus) and introduce greater regional/specialty coverage. ESCI now numbers over 7,000 journals. This provides a comparative measure for researchers who for a variety of reasons (e.g. target audience) might be interested in targeting a journal not covered by SCIE or SSCI.

Scopus is also a reputable source of metrics supporting choice of journals, with greater coverage than Journal Citation Reports (approximately 23,452 journals). The equivalent Scopus metric to the JIF is CiteScore, but there are several metrics available via Scopus Sources including the well-known SCImago Journal Rank (SJR). Our subscription to Scopus includes access to CiteScore rank & trend. Based on CiteScore 2020 there are 63 titles in Q1 for the Category Physical Therapy, Sports Therapy and Rehabilitation, more expansive than the numbers in JCR SCIE.