# Turkish IR Journals through a Bibliometric Lens

Hakan Mehmetcik

Marmara University

Hasan Hakses Selçuk University

## **Abstract**

This article aims at evaluating three International Relations (IR) journals in Turkey, namely, All Azimuth, Insight Turkey, and Uluslararası İlişkiler Dergisi. The scholarly contributions of these three journals to Turkish IR is worthy of exploration since together they constitute 'the mainstream' of Turkish IR journals. To this end, this article applies a bibliometric analysis in surveying all three *journals' publication records in order to provide a general picture of the field in the* last decade. When we consider an evaluation of the Turkish IR community, these three journals are also important and represent different sub-groups and interests among Turkish IR scholars. The field orientations and organization of the IR discipline in a given country may be understood by studying the leading journals of the field in that country. With this assumption in mind, this paper attempts to distinguish certain characteristic differences and similarities among these three journals by surveying their materials and authorships using comparative bibliometric analysis. While there are several articles in the literature that discuss the contents of these publications, no comparative bibliometric analysis has ever been conducted on them.

**Keywords:** International Relations, Turkish IR, Turkish IR Journals

# 1. Introduction

The global higher education landscape has become more and more metric-driven. As a result of this shift, social scientists have grown more interested in journal publishing than they were previously, even while the longer method of authoring books continues to dominate Social Science research practices. However, books and book chapters garner less attention (e.g., citations) than journal articles. Similar to the situation in many other scientific fields, there has been an explosion in the number of specialized journal titles in social sciences aimed at specific readerships as peer-reviewed journal publications have become by far the most prominent form of production. As a result, academic journals have become the principal

Hakan Mehmetçik, Assoc. Prof., Department of International Relations, Marmara University. Email: hakan.mehmetcik@marmara.edu.tr. © 0000-0002-1882-4003.

Hasan Hakses, PhD Lecturer, Department of Foreign Trade, Selcuk University. Email: hasanhakses@selcuk.edu.tr. 0 0000-0002-7018-1340.

<sup>&</sup>lt;sup>1</sup> Mu-hsuan Huang and Yu-wei Chang, "Characteristics of Research Output in Social Sciences and Humanities: From a Research Evaluation Perspective," *Journal of the American Society for Information Science and Technology* 59, no. 11 (2008): 1819–28.



routes through which scientific knowledge is generated and circulated, and hence reflect established patterns in their respective fields. Furthermore, because journals are selecting what will be published and thus what type of study will be socially and academically rewarded, they have an even broader impact on their field of interest.<sup>2</sup> Furthermore, the field orientations and structure of a discipline in a specific country may be understood by reviewing the publications in the top journals. Therefore, analyzing leading journals in a given scientific field offers extremely rich insights and patterns for evaluating the general/central tendencies in that specific subject.

Since they are field-specific journals, All Azimuth (AA), Insight Turkey (IT), and Uluslararasi İlişkiler Dergisi (UI) are three important scientific journals for the study of Turkish IR. These three journals are the only Turkish IR journals indexed by the Web of Science (WoS),<sup>3</sup> which is generally seen as a positive indicator of a journal's quality. Therefore, we may refer to them as 'the mainstream' Turkish IR journals and assume that they have a broad impact on and role in any evaluation of Turkish IR studies. This paper analyzes the publication records of these three WoS-indexed journals by employing a comparative bibliometric study. The scholarship in these publications, as well as the themes, are investigated from a comparative perspective.

Considering the related literature, there are studies in IR in which the concepts and theories, regional studies, and field publications are bibliometrically analyzed. The increasing use of statistical programs is one factor that has led to the current surge in bibliometric studies. There also exist studies which are limited to the scope of databases and conducted in terms of bibliometrics on the basis of a given concept such as Regionalism,<sup>4</sup> Globalization, <sup>5</sup> and Gender.<sup>6</sup>

In the same way, several bibliometric analyses exist on center-periphery relations,<sup>7</sup> European IR,<sup>8</sup> American IR,<sup>9</sup> and Chinese and Russian IR.<sup>10</sup> However, relatively few studies on field journals exist.<sup>11</sup> To the best of our knowledge, several quantitative assessments of

<sup>&</sup>lt;sup>2</sup> Kjell Goldmann, "Im Westen Nichts Neues: Seven International Relations Journals in 1972 and 1992," *European Journal of International Relations* 1, no. 2 (1995): 245–58; Ana Andrés, *Measuring Academic Research: How to Undertake a Bibliometric Study* (Elsevier, 2009); William H. Starbuck, "How Much Better Are the Most-Prestigious Journals? The Statistics of Academic Publication," *Organization Science* 16, no. 2 (2005): 180–200; Gualberto Buela-Casal et al., "Measuring Internationality: Reflections and Perspectives on Academic Journals," *Scientometrics* 67, no. 1 (2006): 45–65.

<sup>&</sup>lt;sup>3</sup> For the list of WoS indexed Turkish journals see: https://www.scimagojr.com/journalrank.php?category=3320&country=TR [accessed:04-01-2022].

<sup>&</sup>lt;sup>4</sup> Hakan Mehmetcik and Hasan Hakses, "Globalizing IR: Can Regionalism Offer a Path for Other Sub-Disciplines?," *All Azimuth-a Journal of Foreign Policy and Peace* 11, no. 1 (2022): 49–65.

<sup>&</sup>lt;sup>5</sup> Xingjian Liu, Song Hong, and Yaolin Liu, "A Bibliometric Analysis of 20 Years of Globalization Research: 1990–2009," (2012), doi: 10.1080/14747731.2012.658256.

<sup>&</sup>lt;sup>6</sup> Gudrun Østby et al., "Gender Gap or Gender Bias in Peace Research? Publication Patterns and Citation Rates for Journal of Peace Research, 1983–2008," *International Studies Perspectives* 14, no. 4 (2013): 493–506, doi: 10.1111/insp.12025; Sara McLaughlin Mitchell, Samantha Lange, and Holly Brus, "Gendered Citation Patterns in International Relations Journals1," *International Studies Perspectives* 14, no. 4 (2013): 485–92, doi: 10.1111/insp.12026.

First Aydinli and Julie Mathews, "Are the Core and Periphery Irreconcilable? The Curious World of Publishing in Contemporary International Relations," *International Studies Perspectives* 1, no. 3 (2000): 289–303, doi: 10.1111/1528-3577.00028.

<sup>&</sup>lt;sup>8</sup> Ole Wæver, "The Sociology of a Not So International Discipline: American and European Developments in International Relations," *International Organization* 52, no. 4 (1998): 687–727, doi:10.1162/002081898550725.

<sup>9</sup> Peter Marcus Kristensen, "Revisiting the 'American Social Science'—Mapping the Geography of International Relations," International Studies Perspectives 16, no. 3 (2015): 246–69, doi: 10.1111/insp.12061.

Maria Mary Papageorgiou and Alena Vieira, "Mapping the Literature on China and Russia in IR and Area Studies: A Bibliometric Analysis (1990–2019)," *Journal of Chinese Political Science* (2021), doi: 10.1007/s11366-021-09768-x.

Marijke Breuning, Joseph Bredehoft, and Eugene Walton, "Promise and Performance: An Evaluation of Journals in International Relations," *International Studies Perspectives* 6, no. 4 (2005): 447–61, doi: 10.1111/j.1528-3577.2005.00220.x.

journal content have been conducted<sup>12</sup> and only one study<sup>13</sup> has tackled publication records for Turkish IR journals. However, there has never been a systematic bibliometric analysis performed by surveying the materials and authors of these Turkish IR journals. Taking this gap in the literature as our starting point, this study aims at analyzing three leading Turkish IR journals using comparative bibliometric analyses. The central aim of the article is to present a general snapshot of the field by surveying records from these three Turkish IR journals. To that end, the data and bibliometric techniques and methodologies used in this research are briefly outlined in the following material and method section. The primary findings are discussed in the next section on results and discussion, and in the conclusion part, there are some ideas on how we may generalize these findings in terms of assessing material and authors.

## 2. Material and Method

## 2.1. Material

This article uses bibliometric data from the WoS database, a platform often used for creating bibliometric data in the Arts, Humanities, and Social Sciences. However, several limitations and shortfalls in judging scientific quality and effect using WoS or equivalent database measures should be noted. Most importantly, using WoS or Scopus to evaluate research may induce biases because English-language journals are overrepresented. Nonetheless, this database provides consistent and accessible data for bibliometric studies.

The WoS Core Collection is made up of multiple indexes that contain material obtained from various journals, books, and other sources. Two of these indexes are connected to research in the social sciences and humanities: 1) Social Sciences Citation Index (SSCI) and 2) Arts and Humanities Citation Index (AHCI). In addition to SSCI and AHCI, WoS also includes the Emerging Sources Citation Index (ESCI), which covers all disciplines. Dependency on data consistency and accuracy is an important feature of bibliometric studies, and with inconsistencies and errors being almost inevitable in databases, it is vital to select one that minimizes these. As a result, the WoS was selected by the authors of this study not only because AHCI, SSCI, or ESCI indexation was an essential factor, but also because the WoS is less prone to error while also being a widely available data source for any bibliometric study.

AA is an ESCI-indexed journal published by the Center for Foreign Policy and Peace Research at Bilkent University.<sup>15</sup> IT is again an ESCI-indexed journal published by the SETA Foundation for Political, Economic, and Social Research.<sup>16</sup> UI is an SSCI-indexed journal published by the International Relations Council of Turkey (IRCT).<sup>17</sup> Even though these three journals are published by Foundations, they are closely affiliated with Sakarya University (IT), Kadir Has University (UI), and Bilkent University (AA). Thus, these journals together

<sup>&</sup>lt;sup>12</sup> Pınar Bilgin, "Uluslararası ilişkiler çalışmalarında 'merkez-çevre': Türkiye nerede?," *Uluslararası İlişkiler / International Relations* 2, no. 6 (2005): 3–14.

<sup>&</sup>lt;sup>13</sup> Elvan Çokişler, "Uluslararası İlişkiler dergisinin bibliyometrik analizi (2004-2017)," *Uluslararası İlişkiler Dergisi* 16, no. 64 (2019): 29–56, doi: 10.33458/uidergisi.652899.

<sup>&</sup>lt;sup>14</sup> Emanuela Reale et al., "A Review of Literature on Evaluating the Scientific, Social and Political Impact of Social Sciences and Humanities Research," *Research Evaluation* 27, no. 4 (2018): 298–308, doi: 10.1093/reseval/rvx025.

<sup>15</sup> See for more info: https://www.allazimuth.com/all-azimuth-a-journal-of-foreign-policy-and-peace/ [accessed:04-01-2022].

<sup>&</sup>lt;sup>16</sup> See for more info: https://www.insightturkey.com/pages/history [accessed: 04-01-2022].

<sup>&</sup>lt;sup>17</sup> See for more info: https://www.uidergisi.com.tr/about-the-journal [accessed: 04-01-2022].



cover a broad range of topics related to Turkish domestic and foreign policy issues, and global affairs in general, and are not only Turkish IR's principal intellectual center, but also a hub for various sub-groups and communities among Turkish IR scholars and the scholars interested in Turkey's international relations.

In brief, a dataset of 1,155 documents were retrieved from the WoS database, all published by these three Turkish IR journals between 2010 and 2021. Several editorial materials were removed from the dataset. When irrelevant or missing contents and duplications were deleted, 969 papers remained, consisting of 596 original research articles, 342 book reviews, and 31 review articles. The data consists of 948 authors, each with 1.02 documents. The three journals combined had an average annual publication number of 80.3, which is a substantial scientific production within the field of Turkish IR.

Even though these journals had publications prior to 2015 or 2010, we only included those that were available via WoS search on December 25th, 2021. It should also be noted that WoS does not instantly index online-first articles. That is, any online-first publications that had not yet been assigned to a volume and issue of the journal at the time of the search were not included in the data. WoS statistics also do not contain pre-indexed articles that were published by journals prior to WoS indexation. We did not set aside any time for certain journals but instead gathered all of the data accessible in the WoS database in order to acquire as much data as possible and to give a general picture of the field in the last decade.

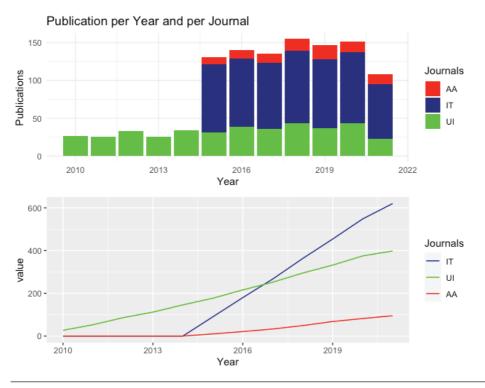


Figure 1: Publications per year and per individual journal

<sup>18</sup> The word document refers to all these different types of publications. If article is specifically stated, this refers to articles only, excluding other documents such as book reviews and reviews.

The figure above summarizes key details of the raw publication records for each journal. Even though the top and bottom parts of the figure visualize the same data in different forms, the difference is important. The line graph at the bottom better reveals the time span, showing that UI has had the longest time span in the WoS database. Both AA and IT only extend back to 2015 in the WoS database. However, the top graph better represents total publication counts, showing that IT, despite entering the WoS database at a later date, has had more publications than the earlier-indexed UI cumulatively. This quantifies the numbers of articles; it only makes sense when the emphasis is put on the publication numbers. UI has published 382 articles over a ten-year period, while AA and IT published 90 and 492 respectively over a five-year period. These numbers constitute average publication counts of 15, 82, and 34.7 for AA, IT, and UI respectively. This great difference in average publications seems interesting, but it must be noted that UI and IT are quarterly journals—apart from some special issues—while AA is a biannual journal.

As for the language of the publications, most are in English. The primary Turkish language publication was UI, but it, too, has made English its primary language. From the data, we can see that all of AA's and IT's publications—90 and 492 respectively—are in English, while 156 of UI's publications (41% of the total papers) are in English. English, then, is the primary language for Turkish IR publications, which is not surprising given the predominance of English as a global *lingua franca* in the field of IR.

## 2.2. Method

Statistical classifications and analyses of publication content in a field are known as bibliometric studies. E. Wyndham Hulme coined the phrase 'Statistical Bibliography' in 1923,<sup>19</sup> while Pritchard and Gross coined the term 'bibliometrics' to make it more understandable.<sup>20</sup> Bibliometric techniques are now widely used and considered an important part of research-evaluation methodology. Bibliometric methods are increasingly being used in the study of various aspects of science, in the way institutions and universities are assessed internationally, and in journal and author rankings.<sup>21</sup>

Bibliometrics is, in essence, the measurement of scientific indices such as citation, publication, authorship, and so on. The bibliometric analysis method allows for a thorough examination of journal articles, concepts, study topics, and databases. Thus, it allows for the disclosure of which subjects studies focus on regularly, who the most productive authors are, and whose studies are cited most in a given field. Bibliometric studies use a set of indexes to quantitatively evaluate the literature as well. The evolution of the literature can be examined using factors such as the most commonly used keywords in articles, the most cited publications, and co-author network analysis.<sup>22</sup> As such, bibliometric analysis goes beyond identifying the corpus of literature within a certain subject area.<sup>23</sup> One of the primary goals of journal bibliometrics is actually to give information to editorial boards and authors to help them make better decisions during the publication process. However, evaluating specific

Edward Wyndham Hulme, "Statistical Bibliography in Relation to the Growth of Modern Civilization," 1923.

Ole V. Groos and Alan Pritchard, "Documentation Notes," Journal of Documentation 25, no. 4 (1969): 344-49.

<sup>21</sup> Ole Ellegaard and Johan A. Wallin, "The Bibliometric Analysis of Scholarly Production: How Great Is the Impact?," Scientometrics 105, no. 3 (2015): 1809–31.

<sup>22</sup> Stephen Majebi Lawani, "Bibliometrics: Its Theoretical Foundations, Methods and Applications," Libri 31, no. Jahresband (1981): 294–315.

<sup>23</sup> Élaine Gauthier, "Bibliometric Analysis of Scientific and Technological Research: A User's Guide to the Methodology" (Citeseer, 1998).



publications—Turkish IR journals in our situation—serves to further investigate the field's development and evaluation, and to present an overview of the field.

Bibliometrics can also be used to evaluate the significance of a certain article for a specific topic, taking into consideration the citations referenced in any of a sequence of papers.<sup>24</sup> The majority of the quantitative field entries in this method are based on existing papers in scientific databases that have been indexed. It is possible to evaluate the evolution of any scientific literature by restricting it to a set period of time and by depending on a number of characteristics such as the most frequently used keywords, the most cited articles, author relationships, author nation, and author institution.<sup>25</sup>

In brief, bibliometric analysis is known as the statistical classification and assessment of contents of bibliometric data. Bibliometric studies allow for a quantitative assessment of literature using a variety of indexes, which may be used to determine if studies in certain fields present common features.<sup>26</sup> Although bibliometrics is most commonly associated with counting scientific output and assessing its quality and influence, it may also be used to visualize and analyze intellectual, conceptual, and social structures, as well as their development and discipline-specific characteristics.<sup>27</sup> In this sense, bibliometrics tries to characterize the structure and evolution of certain disciplines, scientific areas, or research topics. A bibliometric study can be used to determine general productivity in a specific field, but it can also be used to assess the productivity of individual researchers, journals, nations, or any other level of performance. The goal of our research is to look at the productivity of three Turkish IR journals and the unique bibliometric features of their articles. To put it another way, the goal of this research is to map out these Turkish IR journals using various bibliometric methodologies.

Most of the techniques employed here are among common practices of bibliometric studies. On the technical level, this study used the R statistical computing environment<sup>28</sup> and R-bibliometrix package for the analysis.<sup>29</sup> This research also used a multi-pronged strategy in making code and data accessible, making the complete analysis public, archiving the computational environment, and making the code usable for a broad audience. To this end, all the coding, data, and results are provided in the GitHub Repository in order to encourage transparent and reproducible social science practices.<sup>30</sup> Reproducible scientific procedures and best practices are the only things that will increase research efficiency and the robustness of scientific discoveries.<sup>31</sup>

<sup>&</sup>lt;sup>24</sup> Francisco Mas-Verdu et al., "A Systematic Mapping Review of European Political Science," *European Political Science* 20, no. 1 (2021): 85–104, doi:10.1057/s41304-021-00320-2.

<sup>&</sup>lt;sup>25</sup> Mehmetcik and Hakses, "Globalizing IR: Can Regionalism Offer a Path for Other Sub-Disciplines?".

<sup>&</sup>lt;sup>26</sup> Andrés, Measuring Academic Research.

<sup>&</sup>lt;sup>27</sup> Ozge Kilicoglu and Hakan Mehmetcik, "Science Mapping for Radiation Shielding Research," Radiation Physics and Chemistry 189 (2021), doi: 10.1016/j.radphyschem.2021.109721.

<sup>&</sup>lt;sup>28</sup> For more info see: https://www.r-project.org [accessed: 29-01-2022].

<sup>&</sup>lt;sup>29</sup> Bibliometrix is an open-source program that simplifies the data-analysis and data-visualization processes. Bibliometrix provides a descriptive analysis and other research-structure analyses after converting and uploading bibliographic data in R. See Massimo Aria and Corrado Cuccurullo, "Bibliometrix: An R-Tool for Comprehensive Science Mapping Analysis," *Journal of Informetrics* 11, no. 4 (2017): 959–75.

<sup>&</sup>lt;sup>30</sup> Hakan Mehmetcik and Hasan Hakses, "Globalizing IR: Can Regionalism Offer a Path for Other Sub-Disciplines?" *All Azimuth-A Journal of Foreign Policy and Peace* 11, no. 1 (2022): 49–65.

<sup>&</sup>lt;sup>31</sup> Marcus R. Munafò et al., "A Manifesto for Reproducible Science," *Nature Human Behaviour* 1, no. 1 (2017): 1–9, doi: 10.1038/s41562-016-0021.

## 3. Result and Discussion

#### 3.1. Authors

The data shows that 946 authors published 964 articles, from which we can easily infer that most of the articles are single-authored productions. Indeed, 791 of the 964 articles are single-authored, and co-authors per document are 1.22 while the collaboration index is 1.68. The formula derived from Total Authors of Multi-Authored Articles/Total Multi-Authored Articles is used to compute the Collaboration Index (CI).<sup>32</sup> For the individual journals, single-authored documents are 71,436, and 284 units for AA, TI, and UI respectively.

Table 1- Authorship Frequency and Authors' Collaborations

N.AUTHORS	N.ARTICLES	FREQ		
1	873	0.81665108		
2	140	0.13096352		
3	34	0.03180543		
4	13	0.0121609		
5	4	0.00374181		
6	3	0.00280636		
7	1	0.00093545		
9	1	0.00093545		

AUTHORS COLLABORATION	AA	IT	UI
Single-authored documents	76	551	298
Co-Authors per Documents	1.39	1.14	1.31

Documents per Author for individual journals are 0.865, 1.04, and 0.895, yielding a collaboration index of 1.89, 1.89, and 1.78 for AA, TI, and UI, respectively. With such a small collaboration index, it would be fair to say that single authorship is by far the most common form of authorship for these three journals. The humanities and social sciences, and particularly IR, have seen a major surge in co-authorship (Sigelman 2009) as the rising frequency of collaborative research and multi-authored publications has become a standard practice in several disciplines including social sciences. Collaborative research has even become a functional prerequisite for current scientific exploration, to varied degrees.<sup>33</sup> We see that this trend is not reflected in Turkish IR journals. The table below summarizes the data in terms of authorship and frequency of different numbers of authorship in the articles published by these three journals. Table 1 above is an authorship frequency table in which we can see how many papers are authored by how many authors, along with a cumulative frequency. These kinds of contingency tables are more informative than the raw numbers since it is much easier to see that works with 3 or more authors are indeed rare for these journals. Table 1 above also provides a collaboration index of the level of collaborative practices across these journals. As stated above, it is clear that most of the published articles here are single-author

<sup>&</sup>lt;sup>32</sup> For an explanation of collaboration index see Jonathan Stallings et al., "Determining Scientific Impact Using a Collaboration Index," *Proceedings of the National Academy of Sciences* 110, no. 24 (2013): 9680–85, doi: 10.1073/pnas.1220184110; B. Elango and P. Rajendran, "Authorship Trends and Collaboration Pattern in the Marine Sciences Literature: A Scientometric Study," *International Journal of Information Dissemination and Technology* 2, no. 3 (2012): 166. Yet, for the R-based-calculations see Aria and Cuccurullo, "Bibliometrix." and https://www.bibliometrix.org/vignettes/Introduction\_to\_bibliometrix.html [accesed: 29/05/2022]

<sup>&</sup>lt;sup>33</sup> Gary King, "Restructuring the Social Sciences: Reflections from Harvard's Institute for Quantitative Social Science," *PS: Political Science & Politics* 47, no. 1 (2014): 165–72; Gary King, "Ensuring the Data-Rich Future of the Social Sciences," *Science* 331, no. 6018 (2011): 719–21.



documents yielding small collaboration scores.

We may also calculate an author dominance ranking index,<sup>34</sup> or in other words, metrics on the frequency of first authorships if a document has more than one author. We have listed the first eight authors with a dominance factor of 1, indicating that she/he is the first author in all of their multi-authored publications. Merging this information, it would be fair to claim that social science investigation as a collaborative effort has not been greatly adopted by Turkish IR scholars, who would appear to favor the lone-wolf research approach. Furthermore, collaborative works are generally driven by dominant authorship practices and collaboration patterns. Both collaborative and 'lone wolf' approaches create advantages and disadvantages for scholars, yet this issue is mostly perceived as a common drawback in the creation of a community of Turkish IR scholars.<sup>35</sup>

Table 2- Author Dominance Factor

Author	Dominance Factor	TotAl- Articles	5 1		First- Authored
BALCI A	1	7	5	2	2
DEMIR CK	1	4	3	1	1
KEKILLI E	1	4	4 3 1		1
KIBAROGLU M	1	4	3	1	1
KOSE T	1	4	3	1	1
TELCI IN	1	4	1	3	3
ABILOV S	1	3	1	2	2
AYDINLI E	1	3	1	2	2

In terms of productivity, the fifteen most productive authors are listed in Figure 2, which, in conjunction with Table 2 on dominance ranking, shows that dominant authors correspond to a great extent with most productive authors.

<sup>&</sup>lt;sup>34</sup> The dominance function computes the author's dominance ranking as proposed by Sudhir Kumar and Surendra Kumar, "Collaboration in Research Productivity in Oil Seed Research Institutes of India," in *Proceedings of Fourth International Conference on Webometrics, Informetrics and Scientometrics*, vol. 28 (Humboldt-Universitat zu Berlin, Institute for Library and Information ..., 2008). See also https://www.bibliometrix.org/vignettes/Introduction\_to\_bibliometrix.html [accessed: 29/05/20202]

Deniz Kuru, "Homegrown Theorizing: Knowledge, Scholars, Theory," *All Azimuth: A Journal of Foreign Policy and Peace* 7, no. 1 (June 16, 2017): 69–86, doi: 10.20991/allazimuth.321993; Pinar Bilgin and Oktay F Tanrisever, "A Telling Story of IR in the Periphery: Telling Turkey about the World, Telling the World about Turkey," *Journal of International Relations and Development* 12, no. 2 (2009): 174–79, doi: 10.1057/jird.2009.5.

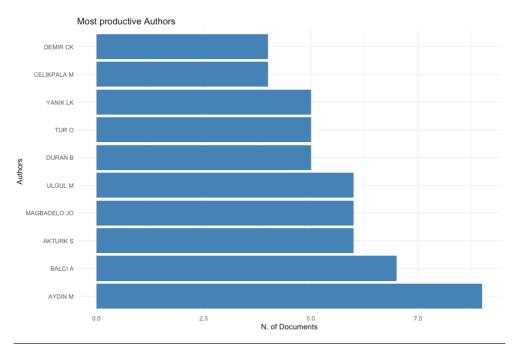


Figure 2: Most Productive Authors

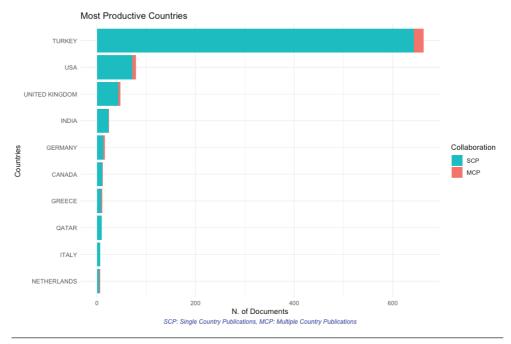


Figure 3: Most Productive Countries

From Figure 3 above, showing the 'Most Productive Countries,' we see that the great majority of authors publishing in these three Turkish IR journals are from Turkey, and a



more detailed inquiry would reveal that those authors in other countries are also originally from Turkey. One of the most important insights on authors and their collaboration may be gained by looking at their affiliations and overall publication patterns. It is unsurprising that the authors publishing in these three IR journals are from Turkey. We know that the country of publication has a high propensity to influence authorship, which is hardly an odd situation given that British publications are predominantly produced by British scholars, and that American journals include more American authors than they do authors from any other nation.<sup>36</sup>

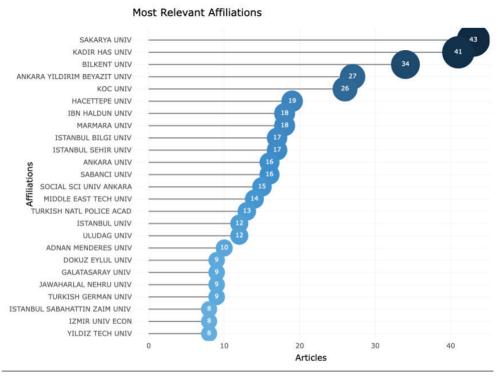


Figure 4: Most Relevant Affiliations

However, when we look at our authors' respective affiliations from Figure 4 above, we see that the most frequent affiliations are as follows: Sakarya University, Kadirhas University, and Bilkent University. This finding might be problematic because it may indicate journalistic clientelism and/or favoritism, by which some authors and affiliations enjoy more expedited peer reviews. However, a deeper examination of the publishing formats and editorial materials reveals that the ratio of founding university affiliation on balance cannot be attributed to favoritism.

<sup>&</sup>lt;sup>36</sup> Goldmann, "Im Westen Nichts Neues".

#	AA (Bilkent Uni.)	IT (Sakarya Uni.)	UI (Kadirhas Uni.)
TOTAL NUMBER OF PUBLICATIONS*	73	322	147
NUMBER OF SELF- AFFILIATIONS**	6 (8.2%)	15 (4.6%)	12 (8.1%)
NUMBERS OF UNI- OUE AFF.	51 (69.8%)	169 (52.4%)	88 (59.8%)

Table 3- Affiliation Percentage

Table 3 above displays the publication history of the three journals for the past three years, along with the corresponding affiliations. According to the data, scholars affiliated with Bilkent, Sakarya, and Kadirhas Universities account for 8, 4, and 8% of total publications in AA, IT, and UI, respectively (what we called self-affiliation). Because of their high unique affiliation numbers (69, 52, and 59 for AA, IT, and UI, respectively) and low self-affiliations, we can easily rule out favoritism concerns in their editorial processes.

# 3.2. Papers

The statistics show that these three Turkish IR journals grew by approximately 13.34% every year, and it is worth noting that in doing so, they have helped to broaden the SSCI coverage of Turkish IR.

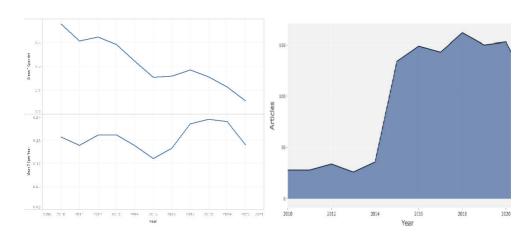


Figure 5: Mean Total Citation per Article and Mean Total Citation per Year; Annual Scientific Production

Figure 5 shows that two metrics useful for estimating the yearly impact of the journals are the average number of citations each year—the sum of all citations divided by the number of years—and the average number of citations per article—the sum of citations per article divided by the number of years, along with Annual Scientific Production. An intriguing finding here is that while yearly scientific production for all journals is rising, the average citation number per year is not doing the same. Furthermore, the average total citations per

<sup>\*</sup>including editorial materials, reviews, and articles

<sup>\*\*</sup>self-affiliation Bilkent University for AA, Sakarya University for IT, and Kadirhas University for UI.

article have diminished considerably. That is, these publications are producing ever more scientific papers, yet their individual impacts are declining, and the overall scientific impacts of the journals are stagnating.

These findings (in Figure 5 above) are important in determining Journal Impact Factors,<sup>37</sup> a metric often used to draw comparisons among academic journals, the results of which in turn often serve as a proxy for journal quality. According to Table 4 below, AA and IT have Journal Citation Indicator (JCI), which is a normalized citation impact of 0.52 and 0.15, respectively. UI has a 0.33 impact factor and 0.15 JCI. Given that the 1.94 median impact factor for International Relations has increased almost half a percentage point in 2020 from 1.261 in 2019, the diminishing average total citations and overall impact of the three journals is contrary to the general trends in Political Science and International Relations journals.

Table 4- 2020	Clarivate Journal	Citation Reports

Metrics	AA	IT	UI
Eigenfactor Score	0.00017	0.00044	0.00016
Article Influence Score	0.301	0.269	0.103
Journal Citation Indicator (JCI)	0.52	0.15	0.15
JCI Quartile	Q3	Q4	Q4

<sup>\*</sup> The Journal Citation Indicator (JCI) is the average Category Normalized Citation Impact (CNCI) of citable items (articles & reviews) published by a journal over a recent three-year period.

Journals are often grouped in a distinct and well-known hierarchy, and while this is an insufficient proxy for output quality, it remains the most important predictor of a journal's relative status in the given discipline. In this sense, citation scores are another important metric when it comes to comparing journals to each other. The impact factor (IF) and JCI as a normalized IF score are directly related to citation scores and are often referred to as important indicators of a journal's quality in the given field. This comparison exercise can be extended by including several metrics from the 2020 Web of Science Journal Citation Report (JCR).38 Table 4 is presented for this purpose. 2020 was chosen because in that year, all three of the journals examined here are included in the report. Several citation indexes along with the Web of Science Journal Impact Factor are all included in the JCR. Some of these indicators are shown in Figure 9 above. The Eigenfactor Score computes a network score based on a 5-year citation network density, with highly cited sources having a bigger impact on the network than sources with fewer citations. The normalized Eigenfactor multiplied by the total size of the cited journal over the last 5 years yields the Article Influence Score. A score greater than 1.00 indicates that the citation effect is higher than the average. Another normalized score produced from citable materials and their average citations is the Journal Citation Indicator (JCI). These measures combine to form the Journal Citation Indicator, which is the primary indicator used to rank journals. We can observe that AA is performing better than the other two Turkish IR journals, attaining a higher quartile ranking based on its

<sup>&</sup>lt;sup>37</sup> See more on this: https://incites.help.clarivate.com/Content/Indicators-Handbook/ih-journal-impact-factor.htm [accessed: 04-01-2022]

<sup>&</sup>lt;sup>38</sup> See https://clarivate.com/webofsciencegroup/web-of-science-journal-citation-reports-2021-infographic/ [accessed: 29-01-2022].

impact factor (IF) and citations.

Similarly, we can compare three journals on these metrics. The following figures are presented for this purpose. Figures 6 and 7 illustrate that increasing annual publication has not translated into an increasing rate of average citation score for any of the journals.

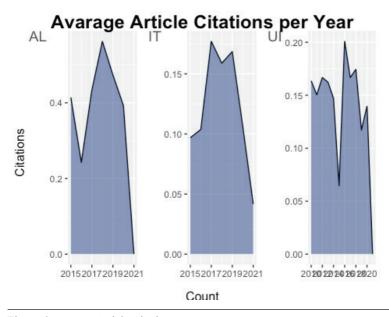


Figure 6: Average Article Citation per year

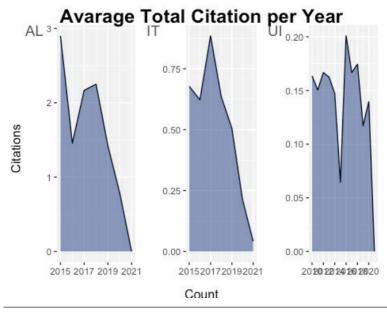


Figure 7: Average Total Citation per year



Author-level metrics are citation metrics that evaluate an individual author's bibliometric influence. The H-index is the most frequently-used measure at the author level, and H-Index ratings are also assigned to journals. The number of a journal's published papers that have received more than a specific number of citations is referred to as the 'journal h-index.' For example, a journal with an h-index of 8 has published 8 papers, each of which has garnered at least 8 citations. The G-index gives highly cited articles more weight, while the M-Index is the H-index divided by the number of years. Publishing in a journal with high H-G-M indexes increases the chances of being cited by other authors. Table 5 below shows the H-G-M indexes for these three Turkish IR journals and reveals that all are relatively similar in terms of these indexes. In a similar way, in terms of total citation number, every publication in AA, IT, and UI produced 2.45, 2.13, and 2.3 citations, respectively.

Table 5- Journal Impact and H-G-M Indexes

#	h_index	g_index	m_index	TC	NP	PY_start
ALL AZIMUTH-A JOURNAL OF FOREIGN POLICY AND PEACE	5	5	0.62	145	59	2015
INSIGHT TURKEY	7	8	0.87	324	152	2015
ULUSLARARASI ILISKILER- INTERNATIONAL RELATIONS	7	8	0.53	375	163	2010

TC: Total citations

NP: Number of Publications PY Start: Publication Year Start

We have calculated local citations, which measure how many times an author (or a document) included in a collection has been cited by other documents in the collection. This is an interesting piece of information because it shows whether or not cross-referencing exists among different issues of these publications. The result shows that very few articles are actually read and cited by authors newly contributing to these journals. In the figure below, local citation counts (LCC) are given at the top of the bar under the global citation counts (GCC). For example, KHOSRAVINIK M, 2017, the top paper in terms of global citation with a score of 16, received 0 local citations. This data reveals that if Turkish IR journals are cited, it is not by Turkish IR scholars publishing in these journals, but by others elsewhere.

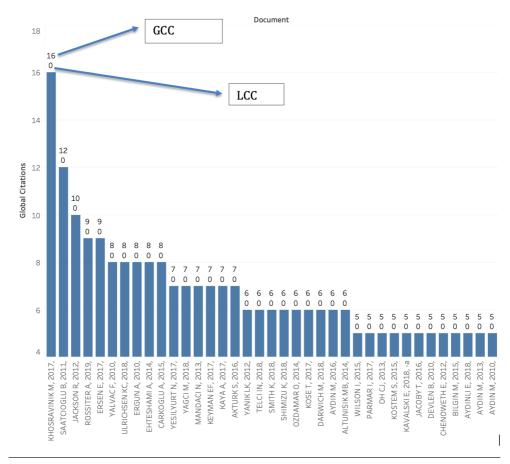


Figure 8: Global Citation Counts (GCC) vs Local Citation Counts (LCC)

## 3.3. Networks

Manuscripts' attributes are connected to each other through the manuscript itself with several linkages via author(s) journal, keywords, publication date, etc. These connections of different attributes generate bipartite networks. The scientific collaboration network, university collaboration network, networks of scientific papers (i.e., citation network, bibliographic coupling network, co-citation network), and keywords network are constructed to reveal relationships between/among authors, affiliations, papers and keywords, respectively.<sup>39</sup> By using these linkages, network analysis reveals important insights on how academics cite and are cited, as well as patterns of collaboration between authors, institutions, and nations.

First among networks that can be extracted from a bibliometric analysis is the co-citation network among authors and articles. Reference Co-citations Networks, one type of citation network that can be drawn from bibliometric data, aims to show a network of references that have been co-cited by the selected publications. Co-citation analysis is a useful method

<sup>&</sup>lt;sup>39</sup> Bo Yang and Jinhai Li, "Complex Network Analysis of Three-Way Decision Researches," *International Journal of Machine Learning and Cybernetics* 11, no. 5 (2020): 973–87, doi: 10.1007/s13042-020-01082-x.



for mapping scientific research subject-matter or topic clustering since changes in research topics would return comparable reference citations. That is, even if not all references for a certain area are identical, there will be meaningful overlaps and similarities among the cited references.

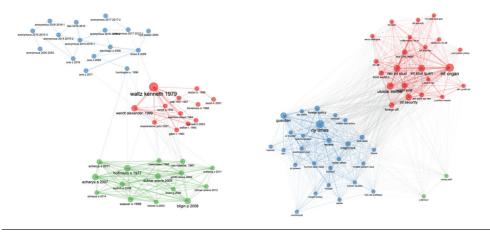


Figure 9: Most Cited Paper and Sources Network

The figure above depicts paper co-citation networks on the left and source co-citation networks on the right. The term 'most cited papers' refers to papers referenced in articles published by these three Turkish IR journals, whilst 'sources' refers to the most cited sources. When we speak of an author network, as shown in Figure 9 above, we are referring to scholars whose papers are cited in the publications published in these Turkish IR journals. All the citation network figures reveal three intriguing sub-areas emerging from the networks of publications by these three journals. We can elaborate even more on the topics covered by the publication taking these individual papers, sources, and authors. However, there are other, better tools to make such inferences, among which are co-occurrences networks, widely used tools in order to evaluate topics in bibliometric data.

To further evaluate the content of the articles published by these three journals, we look at the bibliographic co-occurrences' networks for keywords, abstracts, and titles. A co-occurrence network is a metric that establishes co-occurrence links between documents. If two papers used the same keywords, or themes in their title or abstract, or one or more documents in common, they are bibliographically connected. Among these, keywords co-occurrences are particularly noteworthy.

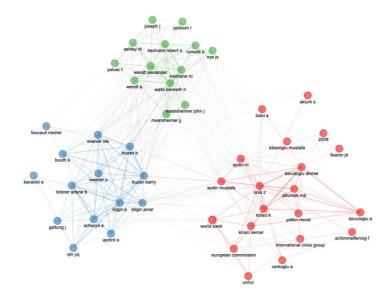


Figure 10: Most cited Authors' Network

We have performed abstract and keywords co-occurrences network analysis and plotted theme detection results on a bi-dimensional map. The premise is that the more terms that are used in the abstracts and keywords by different articles, the more similar they are in terms of topic.

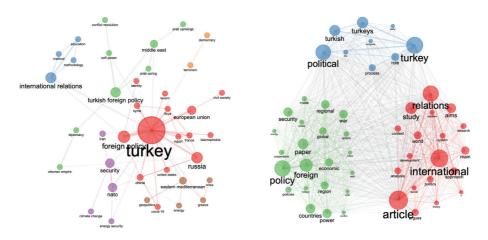


Figure 11: Co-occurrences network for Keywords and Abstracts

On the left of Figure 11, we see co-occurrences in keywords, and on the right, co-occurrences in abstracts. The data shows three general themes that appeared in the publications corresponding to the co-citation network plots. Among them, as the authors' keywords and abstract co-occurrences reveal, are Turkey, Turkish Foreign Policy, and related issues in



terms of their common theme. When we read bibliographic co-citation networks with co-occurrence networks, along with degree centralities, we may argue that many of the articles published in these three journals are not closely connected in terms of citations.

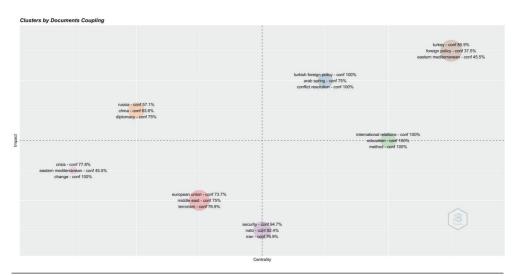


Figure 12: Clusters by Documents Coupling

We have also created a conceptual structure map of a scientific field, performing Coupled Clusters Analysis (CC) of a bipartite network of terms extracted from keywords, which provides further analysis of the common theme(s) in the publications of these three journals. Both the topic dendrograms and factorial analysis (highest contributing and mostcited documents) show a very similar pattern: 3-4 topic clusters. The calculated clusters are depicted in Figure 12 above. Here, cluster coupling is measured by keywords, impact is measured by global citation scores, and cluster labeling is also done with keywords. We have 7 clusters, with Turkey-Foreign Policy and Eastern Mediterranean having the greatest degree of centrality and global citation impacts. That is, the articles in these clusters are the most impactful articles published by these three Turkish IR journals. The Security-NATO-Iran cluster has the lowest degree of centrality and impact, and leads the least impactful articles in these clusters. Hence, one practical outcome might be that if one is publishing an article in these journals, it would be better to do so on a topic that can be clustered in Turkey-Foreign Policy and Eastern Mediterranean. However, having seven closely-related clusters is a very suggestive finding as it shows that these journals have delved into only a few broader themes/ clusters. This is also verified by the topic dendrograms, which is a clustering and mapping scheme for bibliometric analysis. The topic dendrogram in Figure 13 shows that there are two broad topics and several sub-topics emerging in the papers published in these three IR journals.

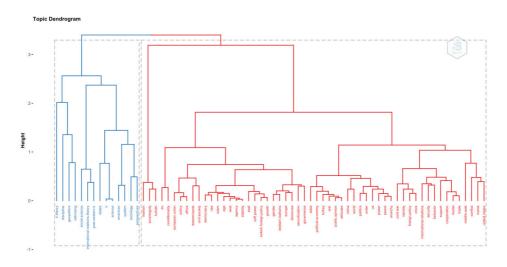


Figure 13: Topic Dendrogram

The figure below provides yearly trend topics based on field tags. Here we see that the dominating themes in the articles published by these three journals change over time. The trend topics also correspond to the finding we presented in the clusters by coupling.

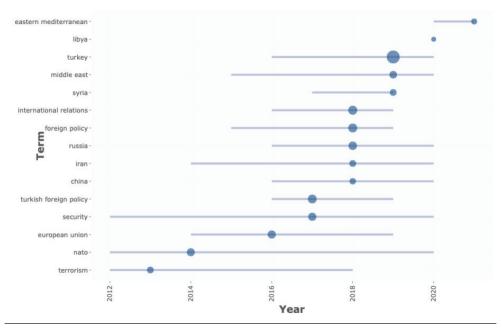


Figure 14: Trends in Topics per Year

The same experiment may be done with article titles, the results of which are shown in the following figure, in which we see the most frequently used bigrams in the titles of the papers published by our three journals.



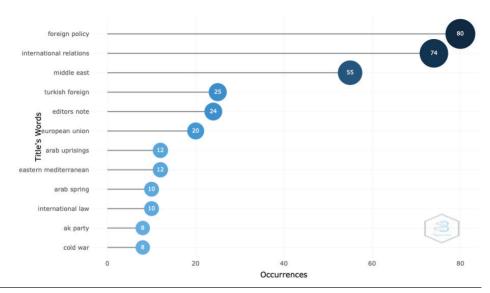


Figure 15: Most Relevant Words in Titles

Another way to investigate these shifts in theme is to sketch out the changes in keywords used. The first ten keywords and their growth over the years is provided in the figure below. We see that Turkey and Turkish Foreign Policy are among the top authors' keywords.

# Word Growth

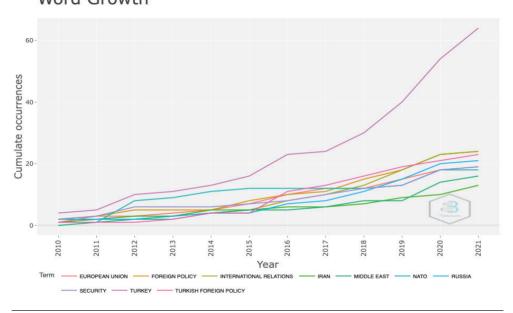


Figure 16: Word growth in Authors' Keywords

Another way to evaluate theme is to provide a contrasting cluster map, which is presented below. In this figure, we have used Key Words Plus, which is based on a specific algorithm exclusive to Clarivate Analytics databases. The words or phrases in Key Words Plus are words or phrases that regularly appear in the titles of an article's references, but not in the article's title itself.<sup>40</sup> The figure shows a thematic evaluation between 2010–2015 and 2016–2021 (five-year periods).

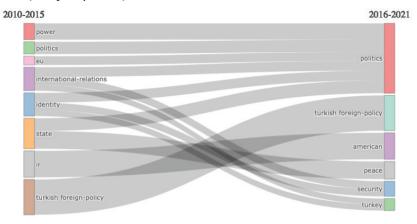


Figure 17: Thematic Evaluation in Key Words Plus

One of the best ways to look at the changes in the thematic evaluation in bibliometric data is to look at three-block plots. We have created such a three-block plot for fields, sources, authors, keywords, and how they are related through a Sankey diagram.

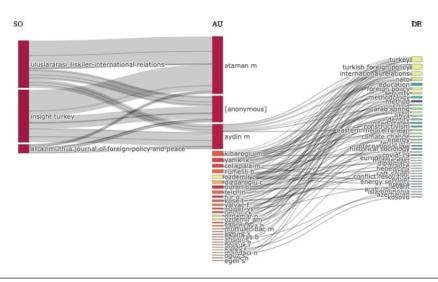


Figure 18: Sources (SO), Authors (AU), and Keywords (DE)

 $<sup>^{40}</sup>$  See for more info https://support.clarivate.com/ScientificandAcademicResearch/s/article/KeyWords-Plus-generation-creation-and-changes?language=en\_US [accessed 29-01-2022].



#### 4. Conclusion

By finding trends in modern Turkish IR research, in terms of both material and authors, this study set out to provide systematic documentation of the breadth of scholarship as well as the diversity of authorship of articles published in the field's leading Turkish IR publications. To this end, we conducted a bibliographic analysis on data retrieved from the WoS database. The data comprises three journals, All Azimuth, Insight Turkey, and Uluslararasi İlişkiler Dergisi, and ranges between 2010 and 2021. The materials included in our analysis are representative of the topic of interest because they are all top-tier Turkish IR journals. All the bibliometric indicators were carefully selected based on the study's objective.

The outcomes of bibliometric studies are quantitative and qualitative. They may also provide assessments of relationships between researchers and study topics through statistical analysis of co-publications and citations. Our findings concerning the three selected journals indicate the following:

The dominant form of authorship is single-authored papers. This may be seen as concerning, indicating as it does that collaboration practices have as yet failed to take root in the Turkish IR community. As the humanities and social sciences worldwide, and particularly IR, are witnessing a major surge in co-authorship, such a lone-wolf attitude among Turkish IR scholars is not a healthy development for the Turkish IR community. We believe this could be addressed through various socialization practices. Another important takeaway from the data is that authorship patterns call for more transparency by these three Turkish IR journals in their peer-review processes. However, we can readily rule out favoritism concerns in their editorial processes due to their high unique affiliation numbers (69, 52, and 59 for AA, IT, and UI, respectively) and low self-affiliations as a percentage of the overall publication counts.

In terms of publication counts, there is a general upward trend, implying that these three publications have been contributing to a broadening of AHCI, SSCI, and ESCI coverage of Turkish IR. However, even as yearly scientific productivity for all journals is increasing, the average citation per year is not. That is, while these publications are producing an increasing number of scientific works, their individual impacts are decreasing, and their aggregate scientific impact remains unchanged. Diminishing average total citations and overall impact contrasts starkly with the general trends in Political Science and International Relations journals. Furthermore, there is very little (almost none) cross-referencing among various issues of these publications, implying that relatively few papers are actually read and cited by the new authors contributing to these journals. According to the statistics, when Turkish IR publications are cited, they are cited abroad rather than by Turkish IR scholars who produce scientific papers in these journals. That is an interesting finding suggesting that Turkish IR scholars follow the research outcomes of others in other countries but not their fellow countrymen. However, it should be noted that new publications provide a challenge for established bibliometric methodologies since citations build over time, even over years in some subjects. IR is such a subject for which citations take time. Given the fact that these journals are relatively young, they are expected to be better cited in the future. Yet, the gap between local and global citations, which is producing almost none in terms of local citations, should be addressed. Overall, we can suggest that Turkish IR researchers publish works in English for Turkish IR researchers, but they are not cited (or may not be read) by Turkish IR researchers.

According to the findings of co-citation and co-occurrence networks, Turkey, Turkish Foreign Policy, and Turkish politics appear most frequently in the publication of the three selected journals. Even though we may argue that many of the articles published in these three journals are not particularly linked in terms of citations, the topic dendrograms and factorial analysis show three or four topic clusters. Having closely connected clusters is a highly noteworthy finding since it illustrates that these journals collectively represent common themes/clusters in their field of interest. The topic clustering and thematic evaluations from keywords, abstracts, or titles reveal similar patterns. From this finding, it could be argued that the existing academic interests and contributions from Turkish IR have not constituted a new space for non-Western inferences. While American and European academics are in charge of generating concepts and theories in this system, others are responsible for creating case studies and testing theories in non-Western contexts, and Turkish IR in its current format is not an exception. The topical coverages and clusters, citation patterns, cited sources, and used keywords derived from the bibliographic data we used in this article clearly illustrate this notion. An analysis of books and book chapters written by Turkish IR scholars may serve as supplementary study in this area and could either confirm or dispute the conclusions we have presented here, but it would be worth looking into.

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