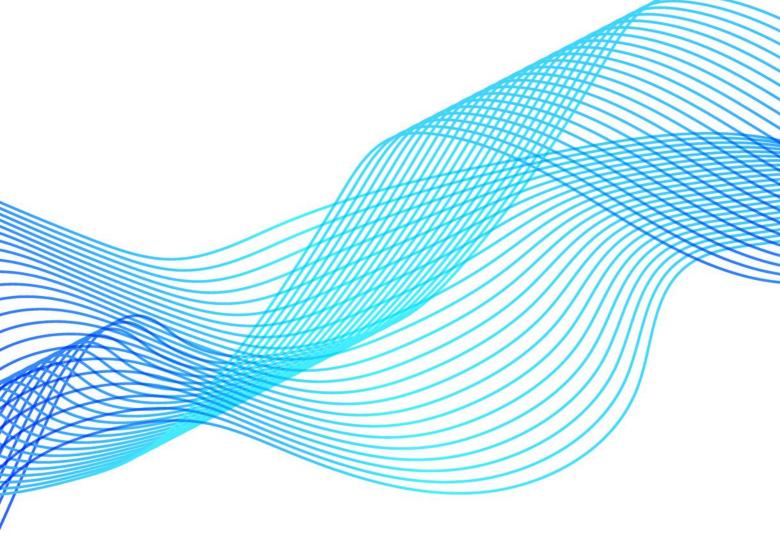
Freedom for Academia Annual Report 2017



7,000 papers gone missing: The short-term effects of the large-scale purges carried out by the AKP government on the research output of Turkey-based academics

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By Freedom for Academia (FfA) collaborators, with input from Prof. Neşe Özgen and Assoc. Prof. Candan Badem*

Summary of report

Following the "15th July 2016 coup attempt", the AKP government sacked tens of thousands of civil servants, including over eight thousand Turkish academics with many influential critics amongst them. The governmental decrees issued by the Turkish government resulted in dozens of universities and academic departments to close — leaving many students without lecturers and many research projects funded by the state to end abruptly.

Consequently, the large-scale dismissal of academics has had direct effects on the research outputs of Turkey-based academics. In this study, we identified a significant reduction (11.5% on average) in the research output of Turkey-based academics in 2017 compared to 2016.

When the average increase of 6.7% per year observed in the research output of Turkey-based academics between 2008 and 2015 is taken into account, this translates to a decrease of over 7,000 papers than the expected figure in 2017.

We also identified substantial decreases in the research outputs of some of Turkey's top universities such as Bilkent (-9%), Hacettepe (-11%) and Gazi (-20%) in 2017 compared to 2016. Both Süleyman Demirel University and Pamukkale University, which lost nearly 200 academics each to governmental decrees issued by the AKP government, showed nearly a 30% decrease in 2017 compared to 2016. The long-term effects of the draconian measures taken by the AKP government on Turkey-based research and academia remains to be seen.

^{*} One of the academics dismissed via a decree issued by the Turkish government

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Back in June 2017, we published an interim report presenting the short-term effects of the large-scale purges carried out by the AKP government on the research output of Turkey-based academics and speculated on the long-term effects. The report attracted a lot of attention from Turkish as well as non-Turkish media and academics. A collection of selected news articles, academic articles and tweets can be accessed from:

http://bit.ly/ffajune

Changes introduced in this report compared to the abovementioned 'interim' report are summarised in the 'Changes from the 6-month interim report' section on page 17.

What happened?

"It would have hurt less if they had killed us" (ref 1) — Ibrahim Kaboğlu, Professor of Constitutional Law, when asked about how it felt to be dismissed by a governmental decree for "being a member of a terrorist organisation"

Just a week after the "15th July 2016 coup attempt", the AKP government released a state of emergency decree (decree no. 667, issued on 23rd July 2016) and dismissed over nine thousand civil servants including teachers, lawyers, and police; and many media outlets and universities were also shutdown with this decree.

All those purged lost their right to work in any public institution and had their and their spouse's passports cancelled – thus could not travel abroad to find work. Most of those purged were either imprisoned and/or detained for at least a certain amount of time*.

Some have even had their assets seized and/or bank accounts frozen. Gross human rights violations were reported, with concrete evidence for physical, psychological, and emotional torture (ref 2). However, as these are outside the scope refer of this article, please websites/reports which extensively these violations for more monitor information. Some relevant news articles can be found in the 'Further reading' section at the end of this report.

The abovementioned decree no. 667 was followed by many other governmental decrees (30 decrees were published within an 18-month period), each time adding substantially to the total of dismissed civil servants (ref 3).

However, academics were largely untouched (with regards to dismissals by a decree) until decree no. 672 (issued on the 1st September 2016), where over two thousand academics were purged in one go. This decree was followed by numerous decrees, where, as of 15th Jan 2018, the total number of purged academics by decrees has reached over eight thousand (ref 3).

Apart from the universities that have been shut down entirely (ref 4), these large-scale purges have led to (i) many academic departments to close, leaving many students without lecturers, (ii) many university hospitals left with a lack of key personnel (personal communication), as many medical academics were also serving part-time, and (iii) many state funded projects funded by the state to come to an abrupt end (ref 5).

In addition to their negative psychological, emotional, and social effects on the Turkish population, these changes also had an impact on the research output of Turkey-based academics.

"I do not see a future as an academic in Turkey" (ref 6) - Dr. Mehmet Fatih Tıraş, in a cover letter he wrote to apply for a scholarship abroad a few weeks before he committed suicide on the 25th February 2017 after being dismissed by a governmental decree.

To analyse the effect of the large-scale purges carried out by the AKP government on the research output of Turkey-based academics, we queried SCOPUS, the largest abstract and citation database of peer-reviewed literature.

SCOPUS provides comprehensive data on the authors, journals and the articles, making it feasible to filter according to the authors' affiliated country, the academic field of the authors, and the type (e.g. article, review) and date of published articles.

We also chose to study Turkey's top universities (ref 7) such as Middle East Technical University (Orta Doğu Teknik Üniversitesi, ODTÜ), Boğaziçi University, Bilkent University, Gazi University, Istanbul University, Ankara University and Hacettepe University.

We also added Pamukkale University, Süleyman Demirel University, Erciyes University, Akdeniz University, and Yıldız Technical University as they lost the most academics to the decrees issued by the AKP government in the aftermath of the 15th July 2016 events (ref 8). (NB: Methods section has been moved to the end of the article to keep the flow for non-academic readers)



Image source: The Voice Project

Academic Profile 1: Prof. Sedat Laçiner
International Relations and Middle East
Expert with >500 citations and >100 articles
– mostly as first/sole author.
In prison since the 23rd July 2016.

Analysing the effect of the large-scale purges

Filtering on (i) Affiliation country (as Turkey), (ii) Publication year of articles (as 2016 and 2017, separately), and (iii) Document types (as Article, Review, Article in Press and Letters, Books and Book chapters) and (iv) Subject area (as 'Medicine', 'Engineering', 'Physics and Astronomy', 'Social Sciences', 'Computer Science', 'Chemistry', and 'All areas', separately), we identified that there was a 11.5% decrease, on average across all fields, in the number of research outputs of Turkey-based academics in 2017 (Table 1 and Figure 1).

The most affected fields were the Social Sciences, and Medicine, with a total reduction of 14.6% and 22% in the number of published articles by Turkey-based academics, respectively. This sharp decline in the research output in 2017 compared to 2016 becomes more striking when 2008-2015 figures are brought into the equation, as a constant upward trend in the research output of Turkey-based academics was observed in this time - with, on 6.7% more articles average, published compared to the previous year, every year (Table 1).

University-specific results for Gazi University, Istanbul University, Pamukkale University, Süleyman Demirel University, Erciyes University, Middle East Technical University (Orta Doğu Teknik Üniversitesi, ODTÜ), Boğaziçi University, Bilkent University, Akdeniz University, Yıldız Technical University, Ankara University and Hacettepe University can be found in (Table 2 and Figure 2).



Image source: ogetoktem.weebly.com

Academic Profile 2: Prof. Öget Öktem-Tanör

82-year old Prof. Öktem-Tanör is said to have established the first neuropsychology clinic in Turkey (ref 9).

She is known to have helped many poor students and their families in a career spanning over 50 years (personal communication with verified past student).

Figure 1: Research outputs of Turkey-based academics in relation to the previous years (2012-17)

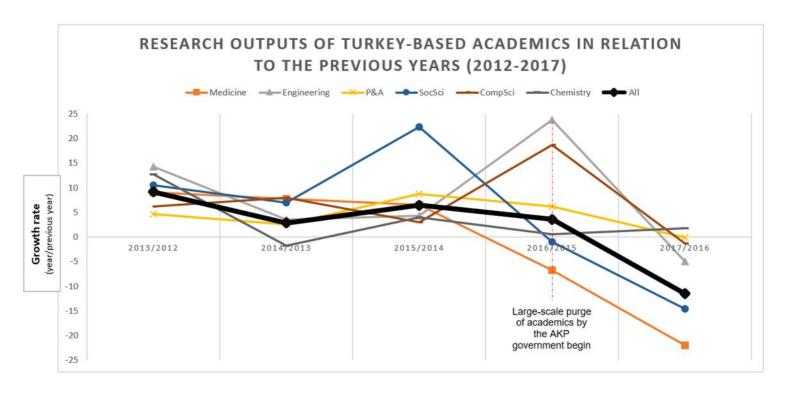


Figure 1 shows the change in research output of Turkey-based academics compared to the previous year (in percentage) on the y-axis; and the two years compared are on the x-axis.

For example, there was a 10% increase in the research output of Turkey-based academics in all areas (thick black line) in 2013 (covering period 1st January 2013 to 31st December 2013) compared to the year 2012; and then on average ~5% increase until 2017, when an approx. 11.5% decrease is observed compared to the 2016 research outputs.

All: All fields; P&A: Physics & Astronomy; SocSci: Social Science; CompSci: Computer Science.

Figure 2: Research outputs of Turkish universities in relation to the previous year (2015-17)

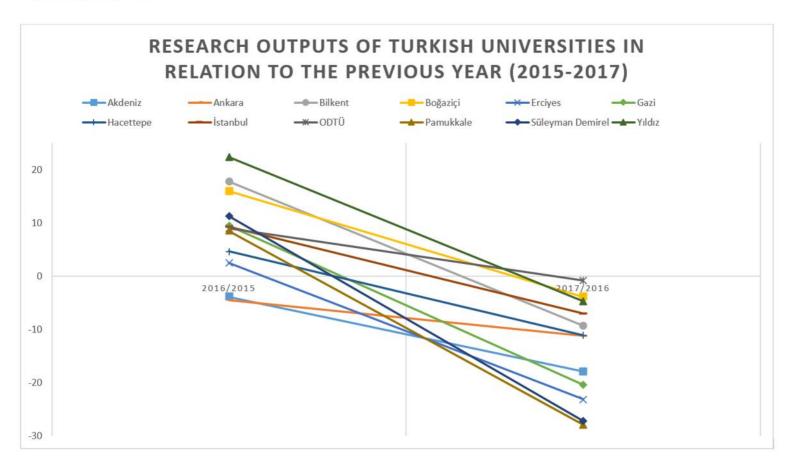


Figure 2 presents the change in research outputs of 12 Turkish universities in relation to the previous year.

All 12 universities showed a decrease in the absolute number of peer-reviewed articles published in journals indexed by SCOPUS in 2017 compared to 2016. For example, Yıldız University academics published 22% more papers (in journals indexed by SCOPUS) in 2016 compared to 2015, then ~5% less in 2017 compared to 2016.

ODTÜ: Middle East Technical University.

Discussion of findings

Before the large-scale purges Turkey had approx. 150,000 academics, including ~22,500 Professors, ~14,000 Associate Professors and ~34,500 Assistant Professors — with the remainder mostly being (part-time or full-time) teaching or research assistants (ref 10). With a series of decrees, the AKP government purged (as of 15th Jan 2018) around 8,500 academics, which is a considerable proportion of the total (~6%).

Considering that the AKP government targeted influential critics including prominent academics such as Öktem-Tanör 82-year-old Prof. Öget (Neuropsychology), Prof. Sedat Laçiner (Political Sciences), Prof. Mehmet Altan Prof. İbrahim (Economics), Kaboğlu (Constitutional Law), Prof. Ömer Geçici (Psychiatry), Prof. İştar Gözaydın (Law and Politics), Prof. Cem Terzi (General Surgery), Prof. A. Özdemir Aktan (General Surgery), Prof. Cem Kaptanoğlu (Psychiatry), Prof. Melek Göregenli (Social Psychology), Prof. Yılgör Gül (Economics Ayşe Administration), Prof. Haluk A. Savaş (Psychiatry), Prof. Mehmet Zencir (Public Health), and Prof. Ayşegül Jale Saraç (Physiotherapy), this figure is likely to be an underestimate within the more senior positions (i.e. above and including Assistant Professors).

In fact, an analysis carried out on the first 5,295 academics dismissed by decrees issued by the Turkish government, over 40% were Professors or Associate Professors (ref 11).

The decrease (11.5% on average) in the research outputs of Turkey-based academics is not totally explained by the proportion of the sacked academics (i.e. 6%).

The discrepancy is likely to be due to a combination of factors:

- (i) the psychological stresses that the remaining academics are facing (e.g. research has become secondary, fear of publishing controversial/critical articles, not being able to concentrate due to instability in the country);
- (ii) sudden cuts in funding to some departments and/or many projects being cancelled:
- (iii) a significant number of academics who had the capacity (e.g. already established or with promising CVs) may have already left the country and found a job abroad prior to 2017 - although they were not sacked by a decree, (iv) the sacked, on average, may have been more productive in publishing articles than the remaining ones, and (v) the statistics published on the number of academics dismissed are an underestimate (e.g. many private universities were closed down and the academics working there, dismissed de not included facto. were in governmental decrees; many academics pressurised into retirement). Further research is required in this regard.

As not enough time has passed since these large-scale purges to carry out comprehensive longitudinal studies, we can only analyse the short-term effects of the large-scale dismissals.

However, it is conceivable that the long-term effects may be more catastrophic for Turkey-based research and science because many academics who have not been sacked still fear for their jobs (and imprisonment, as mentioned above, many who have been sacked are in prison) as many of them are being monitored by overzealous university rectors and deans (from personal communication).

Carrying out research has therefore become secondary to numerous academics, and many who have the capacity (e.g. already established or with promising CVs) are looking for jobs abroad; and this is bound to lead to a 'brain drain', detrimental to the country's higher education and science systems.

A decrease of 11.5% may not sound substantial to some of our readers but considering the fact that there was, on average, an increase of 6.7% every year, any decrease is alarming. If the upward trend had continued in 2017, the number of papers published in journals indexed by SCOPUS should have been around 42,000 (2016 figure x increase= 39,407 x 1.067).

However, 34,878 papers were published in 2017 (accessed 1st Feb 2018; all fields), which means that approx. 7,000 less papers have been published than expected.



Image source: twitter.com/drhaluksavas

Academic Profile 3: Prof. Haluk A. Savaş

Professor of Psychiatry with >1750 citations and >150 articles. He was detained on 28th September 2016 and released on the 24th November 2016. He was diagnosed with colon cancer whilst in prison.

He is a prominent figure in social media with over 120,000 followers on Twitter (@drhaluksavas).

Secondly, especially in the life sciences and natural sciences, most studies are not led by Turkey-based academics and their collaborators are the ones who are either first or last (senior) authors on the papers with more than one author – thus one would not expect the numbers to drop considerably with events happening in Turkey.

We did not carry out an in-depth study on this issue as it was outside the scope of this study but to provide an example, the top author when judging only the research outputs of Turkey-based academics is Alessio Bocci (Physics; SCOPUS Author ID: 35226997700) with 1,294 publications (accessed: 1st Feb 2018), who is not a Turkey-based academic but rather is a co-author on virtually all papers published by the CERN collaborators (e.g. The LHCb collaboration, ATLAS collaboration) and many (different) Turkey-based academics are on these publications by default - as Turkey is also one of the Associate Member States (ref 12).

This is also supported by the smaller decrease in the figures of the more established universities in Turkey with a of intensive research history and international collaboration such as Bilkent University (Private), Middle East Technical University (ODTÜ), and Hacettepe University compared to Pamukkale and Süleyman Demirel University University – the latter two being public universities founded within the last 30 years.



Image source: www.vg.no

Academic Profile 4: Prof. İştar Gözaydın

Professor of Law and Politics, and prominent human rights activist.

She is also a New York University School of Law and Georgetown University International Law Institute alumnus.

She was awarded the 2017 University of Oslo's Human Rights Award.

Also, there are Turkey-based journals in SCOPUS which do not show any variation in the number of papers published across the years and virtually all the published articles in these are authored by Turkey-based academics.

It may have been a better decision to exclude them from the analyses as they cause an underestimation of the decrease in the number of papers published by Turkey-based academics.

In addition to the decreases in research outputs, others have stated that the positions left by academics who have been sacked, imprisoned or who have fled are being filled by "cronies" and that this is going to be a problem in Turkey in the longer run as these people will pick other cronies, and there will be no scientific ethic left(refs 5 and 13).

We acknowledge that using the number of publications as a measurement of research output is not a complete one, but that quality, impact and reach are also essential parameters.

However, the purpose of this report was to show that the large-scale dismissals carried out by the Turkish government as well as the hostile environment towards any dissent (ref 14) and/or critical thinking has had significant detrimental effects on Turkey-based academia.

Note to readers and fellow academics

As with our previous report, we look forward to hearing comments, suggestion and criticism – and we will make sure that these will inform future reports.

We are especially interested in social scientists commenting on the findings of this study (e.g. why some areas are affected more than others).

We also kindly request that you retweet our tweets and disseminate the report to as wide an audience as possible.

We also would like to see similar studies carried out in countries where a recent large-scale purge of academics has occurred and/or academic freedom is in danger.

We will happily provide help in terms of data analysis and visualisation of the results.

Please contact us via the below:

Website: freedomforacademia.org Twitter: @FreedomAcademic

Email: info@freedomforacademia.org

What can be done to help academics/scholars at risk?

- Initiatives such as Scholars At Risk (www.scholarsatrisk.org), CARA (www.cara.ngo), and Scholar Rescue Fund (www.scholarrescuefund.org) are offering free help/advice to academics who are eligible (e.g. finding academic posts and/or financial help). Support these initiatives but also encourage and help academics to apply to their funding schemes.
- The dismissed academics often cannot find a job anywhere in Turkey. Many of them need financial and/or psychological support. Raise awareness by contacting your local Amnesty group(s) to ask how they and you can help.
- Many Turkey-based postgraduate students are left without supervisors and/or a university half way through their studies/research. Lecturers outside of Turkey can offer help by supervising and helping them finish their courses/PhDs at their respective universities.
- Many academics are looking for projects/collaborations to take part in. Identify academics working in your field and help them publish papers to enhance their CVs and increase their chances of finding a job abroad assuming they have the means to do so.
- Some Turkish academics who have fled are still trying to publish papers but are without an affiliation as they do not have one anymore. You can help by including them in your research groups. See "Jailed Turkish physicist recounts research struggle in prison" in the 'Further reading' section for an example.

- Many academics who fled do not have the advanced level of English (or the language of the immigrated country) required to secure an academic post. You can help by finding free language courses for them.
- The purged academics have expertise in a variety of fields and they can offer assistance/consultancy. Please identify them and get them involved in your projects. A small fee for their endeavours can also mean that they are not dependant on family and friends to cover their living costs.
- As Freedom for Academia, we have teamed up with experienced academics to offer a free CV reviewing service to academics who are looking for jobs abroad to increase their chances. More information can be found at:

www.freedomforacademia.org/tips-for-pr eparing-your-academic-cv/

Please feel free to contact us if you can offer any help with regard to the above and any additional support/ideas that you may have.

Further reading

- Özkırımlı U. How to Liquidate a People? Academic Freedom in Turkey and Beyond. Globalizations. p851-856. Published online: 22 May 2017. URL: http://www.tandfonline.com/doi/full/10.1080/14747731.2017.1325171
- Amnesty Report (EUR 44/6272/2017) on Turkey. No End In Sight: Purged Public Sector Workers Denied A Future In Turkey. URL: https://www.amnesty.org/en/documents/eur44/6272/2017/en/
- SAIH. Continuous Threats Against Academics In Turkey. URL: https://saih.no/artikkel/2018/2/continuous-threats-against-academics-in-turkey
- The Rights and Justice Platform (Hak ve Adalet Platformu) report: Social Burdens of "The State of Emergency" in Turkey 2016-17: http://hakveadalet.org/reports
- BBC News. Turkey brain drain: Crackdown pushes intellectuals out. URL: http://www.bbc.co.uk/news/world-europe-42433668
- The Guardian. In Turkey, academics asking for peace are accused of terrorism. URL: https://www.theguardian.com/commentisfree/2017/dec/11/erdogan-turkey-academics-terrorism-violence-kurdish-people
- New York Times. Turkey Sees Foes at Work in Gold Mines, Cafes and 'Smurf Village'. URL: https://www.nytimes.com/2017/07/22/business/turkey-akin-ipek-fethullah-gulen-recep-tayy ip-erdogan.html

The above is an interview by New York Post with Akın Ipek. Ipek University (Private), founded by him, was completely shut down via a governmental decree.

- Time Higher Education. Jailed Turkish physicist recounts research struggle in prison.
 URL:
- https://www.timeshighereducation.com/news/jailed-turkish-physicist-recounts-research-struggle-prison
- The National. Post-coup crackdown sees Turkish universities slide in global ratings. URL: https://www.thenational.ae/world/mena/post-coup-crackdown-sees-turkish-universities-slide-in-global-ratings-1.705613
- Human Rights Watch 2017 report on Turkey. URL: https://www.hrw.org/world-report/2017/country-chapters/turkey
- Turkey Purge: Turkey's post-coup crackdown. URL: https://turkeypurge.com/

References

1- The Turkish version of Prof. Ibrahim Kaboglu's interview can be found here (accessed 14th Jan 2018):

http://www.cumhuriyet.com.tr/haber/siyaset/674173/KHK_ile_ihrac_edilen_Kaboglu__Kursu nlayip_oldurseler_daha_az_etkilerdi.html

2- Amnesty Report on Turkey 2016/2017 (accessed 18th May 2017):

https://www.amnesty.org/en/countries/europe-and-central-asia/turkey/report-turkey/

3- Scholars At Risk: Two years since Peace Petition, attacks on higher education sector continue (accessed 17th Jan 2018):

https://www.scholarsatrisk.org/2018/01/sar-turkey-letter-january-2018/

4- Scholars At Risk: 15 Universities shut down in connection with state of emergency (accessed 24th May 2017):

https://www.scholarsatrisk.org/2016/07/15-universities-shut-connection-state-emergency/

5- Turkish crackdown takes toll on academic output (accessed 14th Jan 2018):

https://www.chemistryworld.com/news/turkish-crackdown-takes-toll-on-academic-output/3 oo7804.article

6- Dr. Mehmet Fatih Tıraş' full letter can be found here (accessed 14th Jan 2018):

https://m.bianet.org/bianet/toplum/184063-mehmet-fatih-tras-akademik-gelecek-ongoremiyorum-demisti

7- QS World University Rankings 2018 - EECA region (accessed 5th Feb 2018):

https://www.topuniversities.com/university-rankings/eeca-rankings/2018

8- 5 KHK, 112 Üniversite, 4811 Akademisyene İhraç (accessed 14th Jan 2018):

http://m.bianet.org/bianet/toplum/183431-5-khk-112-universite-4811-akademisyene-ihrac

9- Prof. Dr. Öget Öktem Tanör'le Nöropsikoloji Üzerine. URL:

http://www.tpocg.org/blog/prof-dr-oget-oktem-tanorle-noropsikoloji-uzerine

10- YÖK (Turkish Council of Higher Education) 2017 statistics (accessed 17th Jan 2018):

https://istatistik.yok.gov.tr/yuksekogretimIstatistikleri/2017/2017_T10.pdf

11- Üniversite çölleşti (accessed 6th Feb 2018):

http://www.cumhuriyet.com.tr/haber/egitim/731218/Universite_collesti.html

12-CERN Member States' Contributions (accessed 17th Jan 2018):

https://fap-dep.web.cern.ch/rpc/member-states-contributions

13-KHK ile boşalan asistanlığa AKP'li vekilin oğlu geçti (accessed 5th Feb 2018):

http://ilerihaber.org/icerik/khk-ile-bosalan-asistanliga-akpli-vekilin-oglu-gecti-81433.html

14-In Turkey, academics asking for peace are accused of terrorism (accessed 6th Feb 2018):

https://www.theguardian.com/commentisfree/2017/dec/11/erdogan-turkey-academics-terror ism-violence-kurdish-people

15-Akademisyen Noémi Levy-Aksu: Karara Tepki Göstereceğiz (accessed 16th Feb 2018):

https://m.bianet.org/bianet/ifade-ozgurlugu/184325-akademisyen-noemi-levy-aksu-karara-tepki-gosterecegiz

Materials and methods used to conduct the research

We have taken the decree no. 672 as a reference point and added three months to it as it is reasonable to assume that most of the previously submitted papers (i.e. prior to 1st September 2016) will have been published by then. Thus, we have compared the research outputs of Turkey-based academics from 1st January 2016 to 31st December 2016 with the research outputs of Turkey-based academics from 1st January 2017 to 31st December 2017. To bring some background context into the trends, we also carried out the same analysis for articles published from 2008 to 2015.

For reproducibility, we publish the command(s) we used in SCOPUS (URL: https://www.scopus.com/home.uri; using the 'Advanced search' feature) to filter the 2008 to 2017 results accordingly (example below, using 'Medicine' as subject area):

AFFILCOUNTRY (turkey) AND (LIMIT-TO (AFFILCOUNTRY, "Turkey")) AND (LIMIT-TO (DOCTYPE, "ar") OR LIMIT-TO (DOCTYPE, "le") OR LIMIT-TO (DOCTYPE, "re") OR LIMIT-TO (DOCTYPE, "ip")) AND (LIMIT-TO (DOCTYPE, "ip")) AND (LIMIT-TO (PUBYEAR, 2017) OR LIMIT-TO (PUBYEAR, 2016) OR LIMIT-TO (PUBYEAR, 2015) OR LIMIT-TO (PUBYEAR, 2014) OR LIMIT-TO (PUBYEAR, 2013) OR LIMIT-TO (PUBYEAR, 2012) OR LIMIT-TO (PUBYEAR, 2011) OR LIMIT-TO (PUBYEAR, 2010) OR LIMIT-TO (PUBYEAR, 2009) OR LIMIT-TO (PUBYEAR, 2008)) AND (LIMIT-TO (SUBJAREA, "MEDI"))

To filter the university-specific results (using "Süleyman Demirel Üniversitesi" as an example), we added "AFFILORG (suleyman demirel) AND" to the front of the above code. The codes for other fields are PHYS, ENGI, SOCI, CHEM, and COMP for Physics, Engineering, Sociology, Chemistry, and Computer Science, respectively. In the above example, "MEDI" would have to be replaced by the code of interest.

Potential limitations of the study

We realise that the conducted study has some potential limitations and/or biases, which we summarise below. We have taken on board the suggestions made by academics and readers on the interim report to improve our current study:

- i) There can be a lag between the publication date at the publisher's website and the day the articles appear in SCOPUS. We allowed a month for this and carried out the analysis on the 1st February 2018 to alleviate this potential source of bias.
- ii) We realise that not all of the subject areas used in this study are fully independent, thus the decrease in one field may have affected the results in a related area (these have been indicated in Table 1). However, the absolute value of articles published within each academic field are not the main interests of this study (but rather the relative values), therefore any confounding effects in the absolute value of certain academic fields should not take anything from the validity of conclusions. A large decrease in the research output of Turkey-based academics was observed in all fields.
- iii) We mostly relied on SCOPUS to define the subject area of an article as we do not have the capacity to examine each article to place them into the most fitting categories. However, after validating a number of the articles, we believe that SCOPUS has done a good job in this regard.

iv) We did not take into account the quality of the research published, as we assumed that the overall impacts of the studies published by Turkey-based academics in 2016, and in 2017 should not be too different.

A significant difference is not expected in time periods that are this close (e.g. this assumption may have been violated if we were comparing 1970's research outputs with today when quantity has become as important as quality).

We also did not take into account the significance of the Turkey affiliated academic in the papers published (e.g. first/equal-first/senior authorship should be weighted higher than a middle-authorship; and there is a lot of variability between mid-authors, which is very hard to quantify). However, we do not think the overall contribution of Turkey-based co-authors would change significantly between 2016 and 2017.

v) The publication date of an article may not consistently correspond to the acceptance date of a manuscript as certain journals take longer to process an 'accepted' manuscript and publish. Again, this may affect the absolute values but should not affect the relative values significantly between time-periods that are this close, supported by the stable numbers in the 'All articles' category in **Figure 1**.

vi) SCOPUS does not index all existing journals (although, virtually all respectable international journals are indexed); thus, the absolute values of the research-output of Turkey-based researchers will be underestimated.

However, this should not considerably affect the relative values as this underestimation should be consistent across the time-periods studied. Follow-up studies can make use of several databases (e.g. Web of Science, CrossRef, Google Scholar) to garner evidence from a variety of sources.

vii) We assumed that the number of research-productive academics did not change significantly between 2016 and 2017. This may have biased the 2017 figures up or down (e.g. sizeable number of prominent academics may have immigrated/emigrated prior to 2017, significantly more academics may have been appointed), thus further study is required in this regard.

However, analysing the 2009 to 2015 figures suggest a stable upward trend was observed in all areas (prior to 2017), thus making it more apparent that 2017 was not a successful year for Turkey-based academics overall – at least in terms of research output.

Changes from the 6-month interim report

Following the publication of our interim report on the 1st June 2017, the report received a lot of praise as well as some criticism and suggestions. We have tried to take those suggestions on board in our current annual report. Compared to the last report we have made the following changes:

- 1- In our interim report, we obtained the figures on the 1st June 2016 and then doubled these figures to calculate the 2017 figure. However, we should have carried out the analysis on the 1st July 2016 to obtain a figure for the first 6 months of 2017 as we claimed. This will have caused an overestimation of the decrease of research-outputs.
- 2- In our interim report, we did not allow for a time-lag between the date a paper is published by its publisher and the date it appears in SCOPUS. This will have caused a slight overestimation of the decrease of research-outputs.
- **3-** We have now included the last 10 years' stats on the research-output of Turkey-based academics.
- 4- We excluded vaguely defined fields such as 'Pharmacology, Toxicology and Pharmaceutics', 'Biochemistry, Genetics and Molecular Biology', 'Materials Science', from the current study. These fields were also highly correlated with other fields in this study, thus making analysis of these almost redundant.
- **5-** Books and Book chapters written by Turkey-based academics were included in the figures in the current study.
- 6- University-specific results were added for Gazi University, Istanbul University, Pamukkale University, Süleyman Demirel University, Erciyes University, Middle East Technical University (Orta Doğu Teknik Üniversitesi), Boğaziçi University, Bilkent University, Akdeniz University, Yıldız Technical University, Ankara University and Hacettepe University.
- **7-** Labels were added to the Y-axis of **Figures 1** and **2** for clarity.

Freedom for Academia (FfA) Mission Statement

We, as Freedom for Academia, believe that all academics deserve an environment where they are free to think, write and speak critically without fearing for their job and freedom, let alone their lives.

Unfortunately, many academics who resist their government's attempts to silence thought and speech are facing adversity in many countries. Recently, Turkey has been under the spotlight with the sacking of over eight thousand academics for vague and unsubstantiated allegations.

We are a group of British and Turkish academics/researchers who are willing to lend a helping hand to our colleagues and bring the struggles that they face to the attention of the public and academic circles. We also aim to liaise and cooperate with other groups believing in similar principles and help them help other persecuted academics.

For more information about us, please visit our website:

www.freedomforacademia.org

Twitter: @FreedomAcademic

Email: info@freedomforacademia.org



Raporun Türkçe özeti

AKP hükümeti "15 Temmuz 2016 darbe girişimi"nden sonra Kanun Hükmünde Kararname (KHK)'lerle sekiz bini aşkın akademisyen işsiz kaldı.

Bu akademisyenlerin arasında Prof. Dr. Öget Öktem-Tanör (Nöropsikoloji), Prof. Dr. Sedat Laciner (Siyaset Bilimi), Prof. Dr. Mehmet Altan (Ekonomi), Prof. Dr. İbrahim Kaboğlu (Anayasa Hukuku), Prof. Ömer Geçici (Psikiyatri), Prof. İştar Gözaydın (Sosyoloji), Prof. Cem Terzi (Genel Cerrahi), Prof. Dr. A. Özdemir Aktan (Genel Cerrahi), Prof. Dr. Melek Göregenli (Sosyal Psikoloji), Prof. Dr. Ayşe Gül Yılgör (İktisadi ve İdari bilimler), Prof. Dr. Haluk A. Savaş (Psikiyatri) ve Prof. Dr. Ayşegül Jale Saraç (Fizik tedavi ve Rehabilitasyon) gibi kendi bilim dallarında saygınlık kazanmış bilim insanları da yer alıyor. İşten çıkarılan akademik personel toplam sayısı, akademisyenlerin %6'sı gibi önemli bir orana tekabül ediyor.

Freedom for Academia (FfA) olarak yayınladığımız bu kısa raporda, Türkiye'nin akademik ve bilimsel araştırmalarına bu %6'lık oranın açıklayabileceğinden çok daha ciddi bir darbe vurulduğunu tespit ettik. Akademisyenler KHK'lar ile işten atılmaya başlandıktan sonra Turkiye'deki bilim adamları tarafından 2017'de yayınlanan makalelerde 2016'ya nazaran %12'ye yakın bir düşüş olduğu görülüyor. Bu rakam ise 2017'de SCOPUS tarafından taranan indekslenen dergilerde beklenenden ~7.000 makale daha az. AKP hükümetinin yayınladığı KHK'ların uzun vadede Türkiye bilimine etkisi ise daha ileri tarihlerde yapılacak araştırmalar ile daha net bir şekilde ortaya çıkartılacaktır.

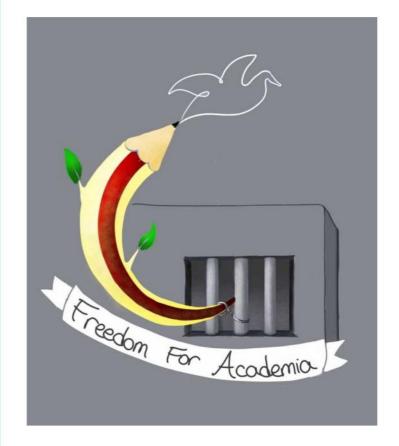


Table 1: Research output of Turkey-based academics in SCOPUS indexed journals

Subject area	No of articles published from 2008 (left) to 2013 (right) in journals indexed by SCOPUS	No of articles published in 2014 (left) and 2015 in journals indexed by SCOPUS	No of articles published in 2016 in journals indexed by SCOPUS	No of articles published in 2017 in journals indexed by SCOPUS	2017 figures in relation to 2016 figures	Notes
Medicine	10,313; 11,250; 12,353; 12,691; 14,211; 15,504	16,698; 17,785	16,592	12,937	-22.0%	-
Engineering	2,607; 3,260; 3,551; 3,866; 3,613; 4,129	4,275; 4,459	5,519	5,243	-5.0%	22% and 18% overlap with P&A and CompSci articles, respectively
Physics and Astronomy (P&A)	1,890; 2,226; 2,530; 2,796; 2,808; 2,937	3,012; 3,275	3,478	3,475	-0.1%	32% and 22% overlap with Engineering and Chemistry articles, respectively
Social Sciences (SocSci)	1,151; 1,934; 1,830; 2,113; 2,306; 2,547	2,725; 3,334	3,300	2,819	-14.6%	-
Chemistry	1,938; 2,355; 2,376; 2,449; 2,458; 2,771	2,721; 2,829	2,846	2,895	1.7%	24% and 11% overlap with P&A and Engineering articles, respectively
Computer Science (CompSci)	859; 1,184; 1,303; 1,377; 1,330; 1,413	1,525; 1,570	1,864	1,840	-1.3%	50% overlap with Engineering articles
All fields	23,173; 26,837; 28,093; 30,118; 31,833; 34,748	35,738; 38,050	39,407	34,878	-11.5%	-

Table 1 shows the absolute number of peer-reviewed articles published in journals indexed by SCOPUS (i) between 1st January 2016 and 31st December 2016 and (ii) between 1st January 2017 and 31st December 2017.

Research output in the Social Sciences and Medicine in 2017 appear to have been affected the most with a decrease of 14.6% and 22%, respectively, in relation to 2016. 2008 to 2015 figures are included for background information.

Many of the academic fields listed here are not independent of each other and this has been noted in the Notes column.

Table 2: Research output of 12 Turkish universities in SCOPUS indexed journals

University	No of articles published in 2015 and 2016 in journals indexed by SCOPUS	No of articles published in 2017 in journals indexed by SCOPUS	2016 figures in relation to 2015 figures	2017 figures in relation to 2016 figures	*No of academics dismissed via emergency decrees (i.e. KHKs)
Akdeniz	778; 748	614	-3.9	-17.9	97 academics as of 8 th Feb 2017 ⁸
Ankara	2684; 2563	2276	-4.5	-11.2	117 academics as of 8 th Feb 2017 ⁸
Bilkent	522; 615	558	17.8	-9.3	Private university
Boğaziçi	624; 724	696	16.0	-3.9	No academics as of 8 th Feb 2017 ⁸
Erciyes	963; 987	759	2.5	-23.1	124 academics as of 8 th Feb 2017 ⁸
Gazi	1605; 1758	1400	9.5	-20.4	169 academics as of 8 th Feb 2017 ⁸
Hacettepe	1992; 2085	1853	4.7	-11.1	65 academics as of 8 th Feb 2017 ⁸
İstanbul	4531; 4953	4605	9.3	-7.0	192 academics as of 8 th Feb 2017 ⁸
ODTÜ	1079; 1176	1167	9.0	-0.8	5 academics as of 8 th Feb 2017 ⁸
Pamukkale	538; 584	421	8.6	-27.9	164 academics as of 8 th Feb 2017 ⁸
Süleyman Demirel	644; 717	522	11.3	-27.1	193 academics as of 8 th Feb 2017 ⁸
Yıldız	677; 829	790	22.5	-4.7	75 academics as of 8 th Feb 2017 ⁸
			1		

Table 2 shows the university-specific statistics of the absolute number of peer-reviewed articles published in journals indexed by SCOPUS between 2015 and 2017.

Ten out of the 12 universities showed improvements in their number of research outputs in 2016 compared to 2015 figures, however all 12 showed a decrease when comparing 2017 figures to 2016 figures.

ODTÜ: Orta Doğu Teknik Üniversitesi (Middle East Technical University).

*These figures do not include the academics whose contract was terminated by their universities or the Higher Education Council of Turkey (Yükseköğretim Kurulu; YÖK) – for example (ref 15), Assis. Prof. Noemi Levy-Aksu's contract with Boğaziçi University was terminated by YÖK on the 22nd February 2017.

