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The Aftereffects of Mass Dismissals and Detentions of Academics at Turkish Universities

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Abstract

The number of scientific publications serves as a crucial indicator of a country's scientific standing. Subsequent to 2016, the academic productivity of Turkey exhibited a gradual decline in the rankings, despite substantial investments in higher education. In the period between 2016 and 2018, over eight thousand academics were dismissed from state universities. In total, this equates to 5.7% (n=3,542) of the 60,385 professors. The present study sought to evaluate the impact of these mass dismissals on the scientific publication performance of the affected institutions. The scientific publication performance of all 108 state universities was evaluated between the years 2012 and 2019. The universities were classified according to the proportion of academics dismissed relative to the total number of professors in 2016. The categories were as follows: <5.0% (n=47, Group 1), 5.0-10.0% (n=41, Group 2), and >10.0% (n=20, Group 3). The number of annual scientific publications that were carried out and those that were expected to be carried out were compared following the mass dismissal. The number of publications increased by approximately 13.2% per year between 2012 and 2016 (from 34,130 to 52,168) and by 3.1% from 2016 to 2019 (from 52,168 to 57,013). The anticipated total number of publications was projected to be 55,643 in 2017, 60,225 in 2018, and 64,806 in 2019. The observed-expected differences were 13.8%, 13.4%, and 12.0%, respectively. The mean number of publications exhibited a decline in 2017 across all three groups. Group 2 and Group 3 were more significantly affected than Group 1. There were notable differences between Group 1 and Group 3 (p-values for 2017, 2018, and 2019 were 0.027, 0.009, and 0.017, respectively). The academic purge at Turkish universities had a substantial impact on overall academic productivity, extending beyond the number of academics dismissed.

Keywords: academic performance, emergency decree, mass dismissals, publications

1. Introduction

The number of international scientific publications serves as a pivotal objective indicator, elucidating the scientific activities of countries. A considerable number of countries provide encouragement and financial assistance to academic institutions with the objective of facilitating the production of a greater quantity of publications of a superior quality. Higher education

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institutions seek to enhance their reputation, which is often gauged by the number of scientific publications and citations they receive (Stelmach 2011). However, improvements in academic achievement are related to several factors, and it is not straightforward to identify the practical components of the changes in these productions. Moreover, the evolving criteria employed in these assessments render them challenging to evaluate. Notwithstanding the aforementioned challenges, the number of articles in journals indexed by international organizations may serve as a reliable indicator (Feist 1997, McGrail 2006, Schmoch 2008).

Over the course of several decades, Turkey has made considerable investments in the development of its university system and other academic institutions, while also providing substantial support for international scientific publications through the implementation of a range of instruments (Gunay 2011, Tekneci 2016). This situation persists, but following an enigmatic coup attempt on July 15, 2016, the country experienced a significant increase in arrests and detentions, affecting hundreds of thousands of individuals from diverse occupational backgrounds, including academics (Reuters 2020; SCF 2018). A significant number of individuals occupying public positions were suspended, while mass detentions and arrests continued. In the subsequent period, over 150,000 individuals employed in the public sector were dismissed through the issuance of Emergency Decrees based on the State of Emergency Law (Reuters 2020). It is notable that public and foundational universities have consistently been at the center of the detention, arrest, and dismissal processes. Over the course of the two-year State of Emergency, which commenced in July 2016 and concluded in July 2018, emergency decrees were enacted, resulting in the dismissal of over six thousand academics from public universities. Additionally, 15 foundational universities were closed, and their academics were rendered unemployed (Resmi Gazete 2016; O'Malley 2016a; SCF 2018; Tekin 2019; Aktürk and Tufan 2020).

The systematic clearance and mass dismissals for political reasons at public universities are not an ordinary incident. Similar purges were rarely observed previously in other countries, such as Nazi Germany (Heiber 1993, Grüttner 2007). A comprehensive study of the impact of the State of Emergency Period on academic life in Turkey is currently lacking. To illustrate, what impact did the dismissal of thousands of academics' scientific publications have on the remaining colleagues' performance? This question has yet to be subjected to thorough investigation.

The paucity of available literature precludes a definitive response to this inquiry. A study by Aktürk demonstrated a notable decline in productivity among the remaining academics in family medicine following the mass dismissal of their colleagues. However, the study was confined to a single medical specialty (Aktürk 2020). Similarly, the Freedom for Academia report evaluated the impact of academic dismissals on academic publications in only 12 selected universities between 2016 and 2017 (Erzurumluoglu 2018). A comprehensive study on the impacts of mass dismissals is required. Unfortunately, it is currently not feasible to conduct critical writing or academic research on this issue in Turkey. It is imperative that comprehensive, evidence-based studies be conducted to address this knowledge gap.

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As it is not feasible to investigate the consequences of mass redundancies at universities on-site, we posit that the number of international publications providing quantifiable data represents a valuable and credible assessment tool for demonstrating this effect. Accordingly, the objective of this study was to examine the impact of the mass dismissals and detentions of academics from state universities in Turkey on the scientific publication trends.

2. Method

2.1. Study Design

All data were obtained from publicly accessible online sources. Data on higher education in Turkey were gathered through a comprehensive search of various online platforms. Information on the number of academics employed at Turkish state universities between 2012 and 2019 was sourced from the Turkish Council of Higher Education's website (www.yok.gov.tr). For universities established after 2016, data were attributed to their founding universities. Details on the number of academics dismissed from their posts were drawn from the Emergency Law Decrees (in Turkish: Olaganustu Hal Kararnameleri, KHK), published in the Official Gazette of the Republic of Turkey (www.resmigazete.gov.tr) between July 2016 and July 2018. The names and positions of all dismissed officials, including academics, were publicly listed in the Official Gazette.

The dataset comprises solely those individuals occupying the ranks of professor, associate professor, and assistant professor. To preclude the possibility of bias, the dataset excludes the other academic employees (lecturers, instructors, research assistants, and experts). The roles and responsibilities of lecturers, instructors, and experts vary considerably across Turkish universities, contingent on the specific institutional approaches that are in place. To illustrate, some individuals occupy the dual role of researcher and lecturer at certain universities, while others are solely engaged in lecturing or are tasked with technical responsibilities. The total number of scientific publications produced by each state university was extracted from the Web of Science database (www.webofknowledge.com).

2.2 Data Analysis

The primary outcome variable of the study was the total number of publications listed in the Web of Science database. In Turkey, the primary criterion for academic promotion is the number of articles that have been indexed in the Web of Science database. Accordingly, the evaluation was based on the aforementioned publications. The data were collected during the months of September and October in the year 2020. To ascertain the annual publication numbers for each university, the search terms "Organizations-Enhanced" were employed. The data were collected over a seven-year period, from 2012 to 2019. Moreover, the mean and total number of publications were calculated. Furthermore, the mean and total number of publications per year from 2012 to 2019 were calculated for all state universities. The universities were then categorized according to the dismissal levels compared to the number of academics in 2016 as follows: <5.0% (n=47, Group 1), 5.0-10.0% (n=41, Group 2), and >10.0% (n=20, Group 3).

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2.3. Bias

Although the dismissal process continued for two years and the publication of an article typically takes approximately six months from submission to a journal (Ronit 2017), we did not consider these factors to be substantial sources of bias. Moreover, to ensure the accuracy and integrity of the data, two authors conducted a thorough review of all retrieved data to prevent any potential bias in the data collection process.

2.4 Sample Size, Power, and Precision

A sample size calculation was performed using the primary outcome variable, "total number of publications." To compare the three dismissal groups in nine time points using the repeated measures ANOVA, a total sample size of 108 universities is required to achieve a comparison with an alpha error of 5%, an effect size of 0.15 (low), and a power of 99.9%, assuming the correlations between the repeated measurements are 0.5 and a non-sphericity correction of 1 (Faul 2007).

2.5 Statistical Methods

The data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 25.0 software (SPSS Inc., Chicago, IL, USA). The results were presented as frequencies, percentages, means, and standard deviations (SD). The Kolmogorov–Smirnov test was employed to ascertain the normality of the distribution of the numerical variables. The equality of variances was evaluated through the implementation of Levene's test. Finally, a repeated measures ANOVA was employed to compare the numerical variables between the three groups. The mean and total number of publications in 2012, 2013, 2014, 2015, and 2016 were used as inputs to calculate expected projections for 2017, 2018, and 2019 using the FORECAST function in Microsoft Excel (Nadler 2007). A one-way ANOVA (post hoc Tamhane) was employed to ascertain significant differences in mean publications between the dismissal groups, with the total number of academics in 2016 serving as the covariate. A p-value of less than 0.05 was deemed statistically significant.

3. Results

According to the official data of the Turkish Council of Higher Education, 108 state universities were active in Turkey in 2016.

3.1 Recruitment

The total number of academics (full professors, associate professors, and assistant professors) in state universities increased by about ten percent annually (43,464 in 2012, 47,015 in 2013, 54,244 in 2014, 57,212 in 2015, and 60,385 in 2016). However, during the state of emergency between July 2016 and July 2018, 3,452 of the 60,385 academics (5.7%) were dismissed by government decrees. Thus, the total number of academics decreased slightly in 2017 (59,800), but then increased to 63,382 in 2018 and 67,382 in 2019.

The number of scientific publications from the universities surveyed increased from 34,130 in 2012 to 52,168 in 2016 (52.9% increase, approximately 13.2% per year). In 2017, the total number of scientific publications decreased to 47,940 (8.1% decrease), and after this decrease, a new increasing trend was observed (52,171 in 2018 and 57,013 in 2019). However, the number of publications increased by only 3.1% per year from 2016 to 2019. Based on the total number of publications in 2012, 2013, 2014, 2015 and 2016, the expected total number of scientific publications at the studied universities was calculated using the FORECAST function of Excel as 55,643 for 2017, 60,225 for 2018 and 64,806 for 2019. The difference between the expected and observed publications was more than ten percent per year in the following years (Figure 1).

3.2 Statistics and Data Analysis

The total number of scientific publications per university during the study years ranged from 0 to 3,074 (Table 1). Using the mean number of publications in 2012, 2013, 2014, 2015, and 2016, the expected mean number of scientific publications per year for each university was calculated with the FORECAST function of Excel as 514 in 2017, 555 in 2018, and 597 in 2019 (Figure 2). The difference between the expected and observed mean number of publications per university was more than ten percent between 2017 and 2019 (Figure 2).

Table 1. Comparison of the mean number of total publications throughout the study years concerning the dismissal categories of universities.

Dismissal rate:	**Group 1 0.0-4.9% (n=41)**			**Group 2 5.0-9.9% (n=40)**			**Group 3 ≥10.0% (n=17)**				
Year	**Mean**	**SD**	**Range**	**Mean**	**SD**	**Range**	**Mean**	**SD**	**Range**	**F**	**p value**
2012	461.6	529.3	12-2163	275.7	335.8	12-1485	249.4	190.1	21-593	2.651	0.076
2013	475.5	533.4	19-2239	298.3	330.5	5-1543	293.2	207.1	30-676	2.247	0.111
2014	463.0	536.7	5-2427	310.2	334.7	5-1539	310.1	209.3	17-666	1.656	0.196
2015	530.1	639.5	8-2850	381.1	396.7	10-1790	362.8	256.0	0-761	1.237	0.295
2016	606.4	676.1	12-3074	413.2	408.2	28-1915	336.2	267.8	0-865	2.433	0.093
2017	570.3	631.4	20-2848	373.7	348.2	17-1687	290.7	217.1	0-722	3.101	**0.049**
2018	635.0	643.3	24-2792	391.8	354.6	26-1711	313.2	208.9	0-703	4.224	**0.017**
2019	669.5	672.0	37-2996	450.5	385.6	54-1736	353.8	223.0	1-737	3.404	**0.037**

*Three new universities were established in 2015 and two in 2016. SD= Standard deviation, F=One-way ANOVA test result.

The effect of dismissals on universities was examined with a repeated-measures ANOVA analysis, using the total number of academic staff in 2016 as a covariate. The significances reported in Table 1 did not change after adjusting for the number of academics. There was a significant increase in the total number of publications compared between years (repeated-measures ANOVA Greenhouse-Geisser $F=6.448$, $p<0.001$). However, although there was no

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significant difference between groups in 2012 to 2016, this amount became significant in 2017, 2018, and 2019 (Table 1). Universities in group 3, those that dismissed 10% or more of their staff, were significantly more affected after the academic dismissal process. Repeated measures ANOVA showed a significant interaction between dismissal groups and total number of publications over the years (Greenhouse-Geisser F=2.776, p=0.014).

In 2016 the mean number of publications decreased only in Group 3, but in 2017 in all three groups (Table 1). After 2016, the difference between the dismissal categories became significant and remained (Figure 3). Again, group 2 and Group 3 were more affected than Group 1. However, post hoc analyses demonstrated significant differences only between Group 1 and Group 3 (Tamhane p for 2017, 2018, and 2019, 0.027, 0.009, and 0.017, respectively).

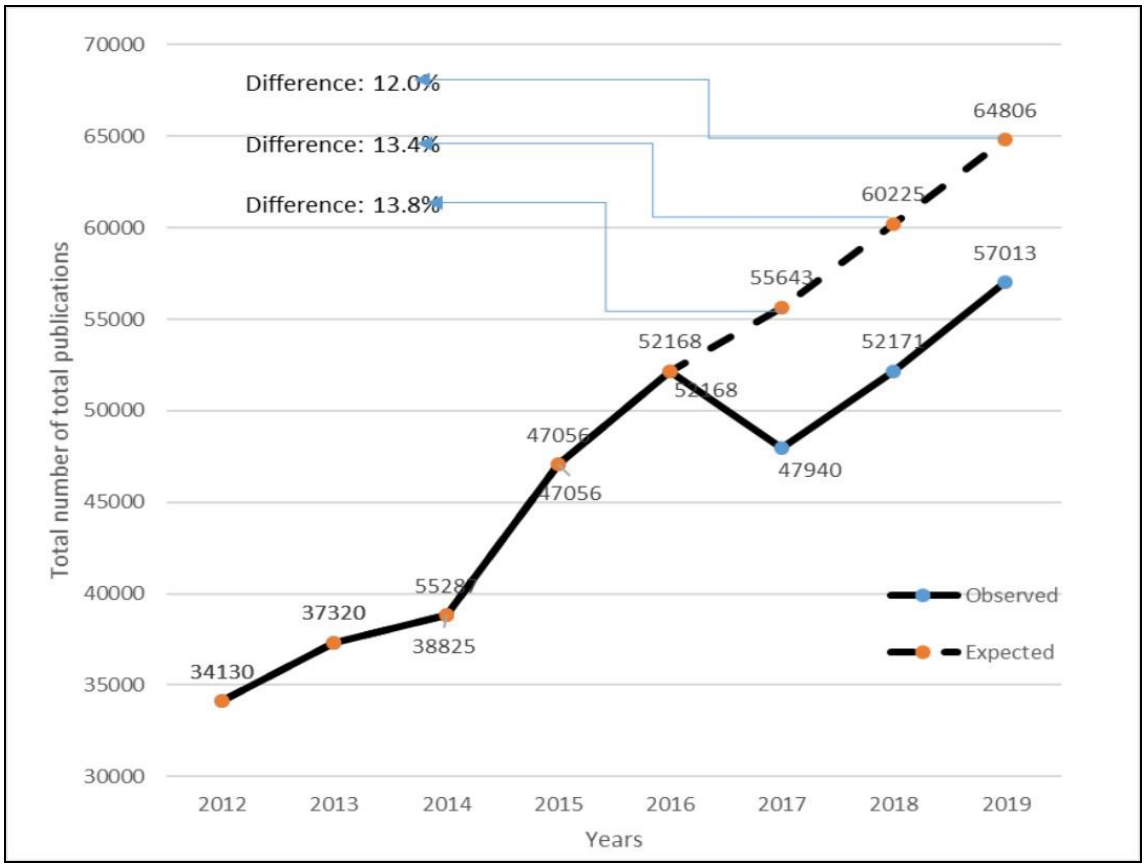

Figure 1. Distributions of the observed and expected number of publications at all public universities throughout the years.

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4. Discussion

This study demonstrated a significant performance loss in scientific publications after dismissing approximately 6% of the faculty members at the Turkish public universities with the state of emergency decrees. Besides, this study confirmed that universities face a much more significant loss of academic output than the proportion of academics they lose. It is noteworthy that even the scientific activities of academics who were not expelled slowed down during the last years. As a parallel process, recruiting more academics has become a recent governmental policy after 2017. These efforts have somewhat overshadowed the decline in academic output.

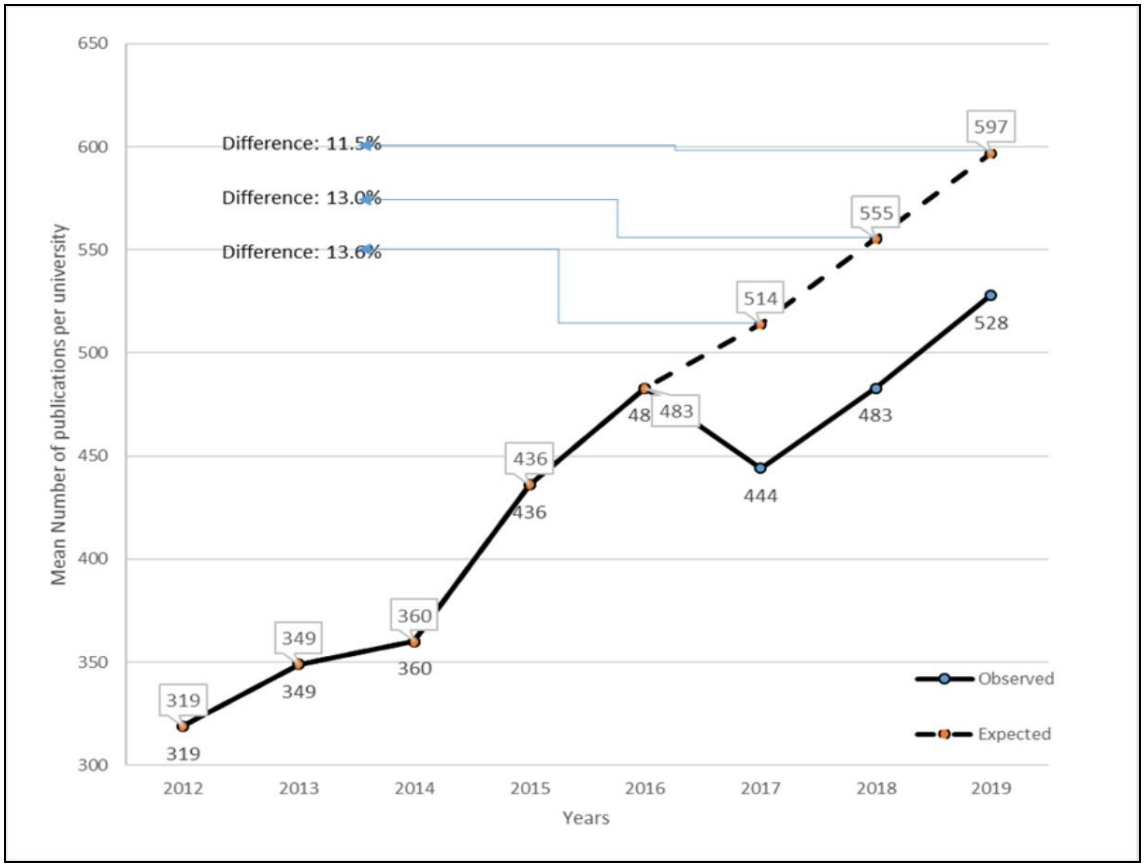

Figure 2. Distributions of the observed and expected number of publications per university throughout the years.

Scientific publications are increasing, and approximately 3% more academic articles are published worldwide every year (Larsen and von Ins 2010). Similarly, scientific publications originating from Turkey under normal circumstances follow an increasing gradient. However, from 2016 to 2018, this trend was reversed in Turkey. A previous report from Freedom for Academia revealed this remarkable decline in the academic publications in some selected state universities just after the beginning of the state of emergency (Erzurumluoglu 2018).

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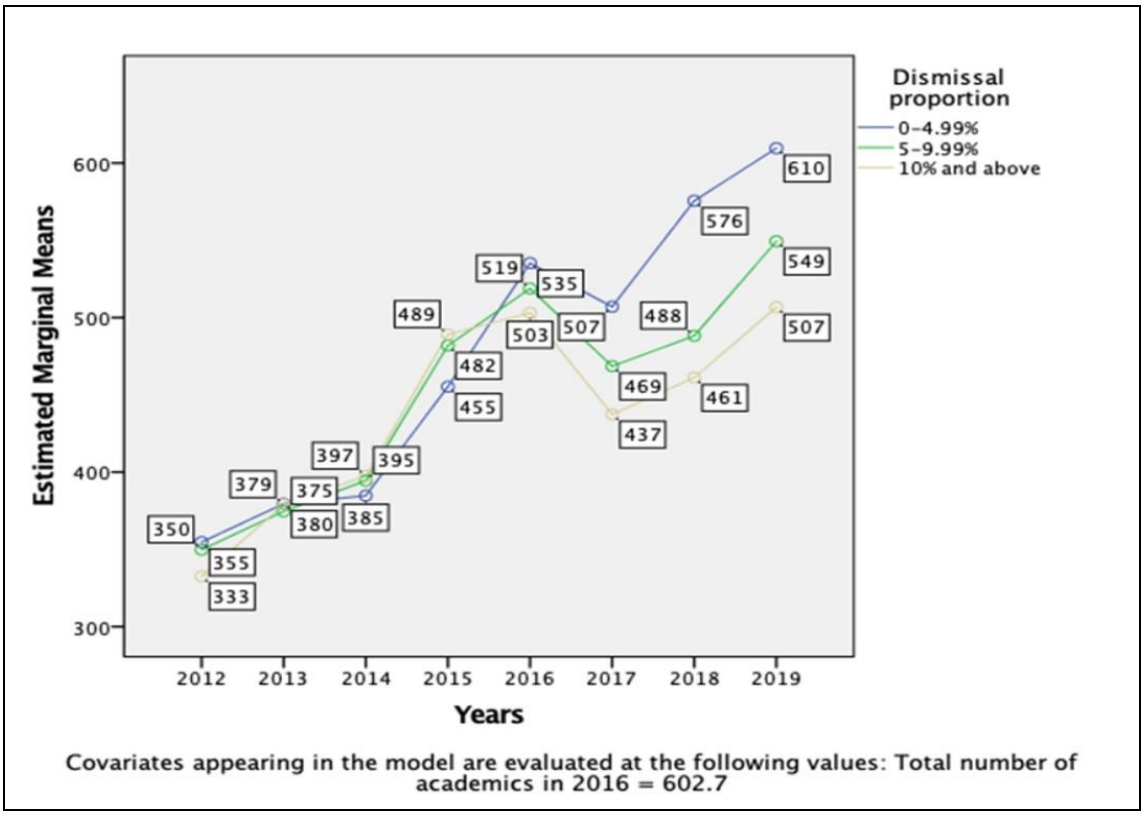
Academic life requires stability, a safe environment, academic immunity, and solidarity more than any other profession. Academic freedom is accepted as a basis of democracy, which has improved throughout several centuries in the history of humanity. However, academic life is always hypersensitive against political disturbances and imbalances, mainly when the dominant powers aim to academicians and universities (Mulnix 2017, Ignatieff 2018). The Turkish government has implemented much heavier and worse oppressions regarding universities and academics during this process. A typical example of the instrumentalization of anti-terror laws is the recent experience in Turkey. Thousands of academics have been dismissed and jailed using these laws. Moreover, all this was done under the pretext of protecting democracy. Because of the unlawful dismissals, thousands of academics faced many tragedies (Baser 2017, Özkirimli 2017, Saliba 2018, Aktas 2019, Aktürk 2024).



*The total number of academics in 2016 was used as the covariate.

Figure 3. Comparisons of the distributions of the mean number of publications among the three groups of universities with time.

On the other hand, despite significant investments in establishing new universities and expanding existing ones as part of its national higher education policy, Turkey has faced a decline and failure in academic performance. The main reason for this disappointing situation is apparent political pressure and clear discrimination in academic life. Naturally, the unlawful dismissals of thousands of academics complete the essential parts of these implementations. The existence of

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many universities, a considerable number of academic staff, enormous university buildings, advanced laboratories do not make a country scientifically sound and competent; these are not enough to establish an ideal academic environment. Academic life must be supported by academic freedom, equal opportunities, appropriate employment guarantees, and predictable legal processes. The existence of academic freedom cannot be claimed under conditions where academics lose their jobs for political reasons, and thousands of academics get detained without independent court processes. If such extreme examples have become the routine of a country, the regime cannot be called a democracy or a constitutional state. In recent years, similar contentions and conflicts occurred in Egypt (Nagy et al. 2017) and Turkey, the latter being more aggressive against academics about dismissal processes (SAR 2016; O'Malley 2017; SCF 2018).

As expected, if a government dismisses thousands of well-educated academics from their jobs, this will have severe consequences for the intellectual capacity. There are a few historical examples, similar to the recent purge in Turkey. The best-known example is the dismissal of Jewish academics in Nazi Germany. The expelling process was conducted based on the 'Law for the Restoration of the Professional Civil Service'. Soon, its scope was extended to include non-civil university lecturers in May 1933 (Heiber 1993). Including instructors, around 18.6% of the teaching staff at German universities were dismissed in 1933 and the following years. With the addition of the 'voluntarily' resignations, the figure had increased to19.3% (Heiber 1993, Grüttner 2007, Vogt 2007). In Germany, the dismissal of the Jew and dissident academics, forcing them to migrate, caused serious regression and weakening in science and art (Heiber 1993). Our findings indicate a similar process in Turkey. Although the expelling proportions were less than Nazi Germany's, the results of this study showed an apparent decline in academic publishing. Interestingly, some of these migrants were invited to Ataturk's Turkey with the hope of transforming Turkish higher education (Reisman 2007). Studies comparing the two eras may shed further light on this event.

We suppose that these lawless dismissals and detentions have created a substantial fear in the academics who continued their job and sometimes their freedom, thus, preventing them from being productive. That could be a realistic explanation concerning the disproportion between the dismissals and loss of academic productivity in 2017, 2018, and 2019. Another justification could be that the dismissed academics are significantly more qualified than the remainings. As a result, the opposed academicians and others are tended to migrate to western countries to escape from the suffocating and oppressive atmosphere. The Turkish Medical Association reported an increasing trend in medical doctors leaving Turkey. In 2019, 1 047 medical doctors left the country (Inanc 2021, Kurnaz Ay 2024).

Unfortunately, this whole-long process destroys academic freedom in Turkey, and it continues to be institutionalized. The efforts of dismissed academic personnel, who could reach democratic countries and hold on to life, to announce this process to the free world have not been successful enough yet. The efforts are very weak and inadequate to depict the complete picture of the demise of academic freedom to the world public opinion (Kinzelbach et al. 2020). Some

academic circles in close cooperation with the government contribute to this failure and destroy academic freedom (O'Malley 2016b). Academic life is constantly under pressure and fragile in dictatorships and authoritarian countries. Academic freedoms in such countries are prone to the danger of curtailments by the governments' allegations of characteristic conditions of the countries. The last events in Turkey became a typical example of this process.

Some limitations of this study deserve mentioning. As stated, there is no absolute precision in the submission time of the articles because of the publication process. However, we think that these approximately six months-differences can be ignored. Dismissed academics published some studies after their dismissal, and the remainder of the academics also published some shared studies. Another limitation can be the dismissal timing of the academics. The researchers lost their jobs with different decrees within two years. The universities in all three groups have very different characteristics (e.g., having a medical school or focusing on social sciences) may make the evaluation difficult. Still, the same universities before 2016 and after 2016 are compared here, eliminating this problem. Furthermore, including data on the quality of the scientific works could provide valuable information, which could not be accomplished this time.

Conclusion

Between 2016 and 2018, the Turkish government dismissed 3,452 professors from public universities, comprising 5.7% of the total. A significant number of these academics were detained. This process became part of the totalitarian control of universities, and during this time, there was a substantial reduction in academic freedom. The crucial adverse effects of this destructive process have not been studied yet. This study showed that the purge from the state universities significantly affected total academic productivity more than expected. The elimination of inviolability of academic positions and legal security is a serious threat to intellectual productivity. An international sensitivity is needed to support academic freedom. Future studies should concentrate on the individual and discipline-wise losses compared with similar events in human history.

Preprint

An earlier version of this paper is available at Research Square as a preprint: https://assets-eu.researchsquare.com/files/rs-2504188/v1/deaa3f99-5d80-4091-be1a-15ce4812c450.pdf?c=1674676952

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