

The Talent Competitiveness Gap in Iran: With Emphasis on University Graduates

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ABSTRACT

To better understand the problem of talent migration and the underutilization of the country's abundant human capital, this mixed-methods study was conducted within the framework of the Global Talent Competitiveness Index (GTCI). Among 134 countries, and despite Iran's relatively favorable rankings in the cumulative national stocks of human, intellectual, and specialized capital - such as the population with tertiary education (45), the tertiary-educated labor force (48), the number of researchers (43), the growth of scientific publications (40), and research and development expenditure (46), along with progress in university rankings (46) and in technologies (16) - its standing in the quality of national competitiveness outcomes is highly unfavorable, owing to the performance of its institutions, structures, and policies. For instance, Iran ranks 116 overall, 114 in system enabling capacity, 134 in attraction, 96 in growth, 104 in retention, and 97 in skill-level productivity. In the qualitative phase, using grounded theory (later Glaserian version) and thematic analysis of in-depth interviews with 32 key informants drawn from eight groups, a conceptual model and a quantitative measurement instrument were developed. In the quantitative phase, a multi-stage stratified survey was administered; questionnaires were sent to more than 3,000 graduates, and 280 complete questionnaires were ultimately returned, forming the basis for the descriptive analyses and statistical modeling. The findings reveal that Iran's principal national-level shortcomings include transparency, international economic cooperation, R&D job opportunities, internet access, social inclusion and equality of opportunity, gender equality, national delegation of authority, and decentralization; at the university level, the salient gaps concern institutional autonomy, the attraction of foreign investment, international faculty, and attention to students' voices. The results underscore the necessity of the regular monitoring of graduates and of evidence-based policy reform.

Keywords: human talent, competitiveness, structures, universities, graduate survey.

Introduction

Brain drain and the depletion of this land's intellectual reserves have become a serious crisis, while the productivity of the country's abundant human capital has collided with structural obstacles. According to the most recent data, the net flow of international student mobility (inflow minus outflow) in Iran stands at -1.4 , compared with $+2.2$ in neighboring Turkey — evidence of a deep gap in the international attractiveness of Iran's educational and higher-education systems. Iran has accumulated nearly twenty million university graduates, a vast intellectual and human capital that has largely turned into idle capital, as the country has not succeeded in attracting, nurturing, retaining, and drawing productive value from these talents. This not only impedes national development but also harms the human rights of the educated, the public interest, and national sustainability.

Against this backdrop, the study asks which extra-university and intra-university factors influence the identification, attraction, deployment, participation, retention, care, and development of the country's human talent, and the provision of opportunities for their growth and flourishing — particularly given that the attraction, cultivation, retention, and productive use of talent now stand at the forefront of the policy priorities of successful countries.

Methodology

The study draws on the Global Talent Competitiveness Index as an international conceptual framework, in order to contextualize Iran's situation - with a focus on the Iranian university and its graduates - against a credible global scale and to make possible the continuous monitoring of graduates. The framework comprises five main pillars: (1) enabling capacity of the talent-governance system, (2) effective attraction and deployment of talent, (3) the growth and cultivation of talent, (4) the care and retention of talent, and (5) talent productivity (global knowledge and vocational skills).

A sequential exploratory mixed-methods design was employed. In the qualitative phase, grounded theory (later Glaserian version) and structured in-depth interviews were conducted with eight groups of key Iranian informants: policymakers, managers, faculty members, university staff, graduate students, recent graduates, subject-matter experts and researchers, and external university stakeholders. Thirty-two participants took part, to the point of data and theoretical saturation. Thematic analysis yielded a model explaining the process of attracting, retaining, and drawing productive value from intellectual and scientific human capital, on the basis of which a questionnaire was constructed. In the quantitative phase, the statistical population comprised master's and doctoral graduates affiliated with the Ministry of Science, Research and Technology over the past decade. A proportional, multi-stage stratified sampling design was used; more than 3,000 questionnaires were distributed by email and SMS, and 280 complete responses were obtained. The data were analyzed using descriptive statistics, exploratory factor analysis, structural equation modeling (SEM) in AMOS 24, and multiple-group analysis to compare path coefficients across sex, age cohorts, and other strata.

Findings

Iran's overall position in the GTCI is unfavorable (116 of 134), and over recent years its ranking has continued to decline. Its most vulnerable pillars are attraction, deployment, and retention. The country ranks 134 in openness, 128 in earning value from brains, 130 in the social mobility of graduates, and 133 in women's empowerment. The qualitative model identified the enabling capacity and capability of the governance system as the central component, which influences both the “university interaction plan” and “university competitiveness”; together these explain the final dependent component, “national competitiveness outcomes in the domain of talent,” with graduates' demographic attributes acting as moderators.

Survey respondents rated national and university performance in identifying, cultivating, and drawing value from them as largely unfavorable - for example, dissatisfaction reached 92.2 percent for transparency, 94.7 percent for international economic cooperation, 88.9 percent for social inclusion and equality of opportunity, and 89 percent for decentralization; at the university level, dissatisfaction reached 93.9 percent for the attraction of foreign investment and 92.8 percent for international faculty. The structural equation model showed good fit ($\chi^2 = 37.116$, $df = 28$, $\chi^2/df = 1.32$, $p = 0.116$, $RMSEA = 0.074$, $CFI = 0.974$, $TLI = 0.958$). Among the key paths, the national index strongly predicted the university index (0.72), the university index affected national outcomes (0.44), and the national index directly affected national outcomes (0.51). Significant differences

emerged between women and men and across three generational cohorts. A central conclusion was that structural change in national talent competitiveness can be expected only through agentic initiatives - a finding that lends support to the theory of boundary agents.

Conclusion

Despite its abundant human capital, Iran has not succeeded in attracting, effectively deploying, cultivating, caring for, retaining, and drawing productive value from its talents. The study clarifies the causes of this problem and the fundamental and operational changes required at both the national and university levels. At the national level, these include a paradigm shift in governance; transparency and the removal of monopolies, rent-seeking, and corruption; meritocracy; the delegation of authority; a rational and de-escalating foreign policy; political and economic engagement with the world; tolerance in matters of lifestyle and personal rights; constructive engagement with Iranians abroad; the redress of gender inequalities; and the linking of pay to productivity. At the university level, institutional autonomy in outward orientation, interaction, and internationalization - together with universities' contribution to gender equity, the growth and flourishing of students, and the alignment of education with the needs of society and the economy - can advance Iran's outcomes in global talent competitiveness.

Given the pivotal role of the Iranian university in the country's structural transformation and sustainable development, universities are expected to conduct graduate surveys continuously and systematically and to report on them nationally. By constructing a graduate-survey instrument and piloting it across the country, the present study lights a small candle to illuminate how national talent-competitiveness outcomes might be improved through essential reforms in national structures and policies and through enhanced university performance and engagement. Above all, the study offers the hope that change agents in Iran can still overcome rigid and inflexible structural barriers through the subtleties of their own agentic initiatives.

References

- Ahouie, A., & Zare, S. (2024). Staying or re-migrating: A study of the factors affecting the instability of return migration among the specialists and professional Iranian workforce. *Quarterly of Social Studies and Research in Iran*, 13(4), 533-549. https://jsr.ut.ac.ir/article_99549_en.html
- Azadi, M., Mirramezani, M., & Mesgaran, B. (2020). Migration and brain drain from Iran. https://www.academia.edu/download/63414538/Migration_and_Brain_Drain_from_Iran20200524-75560-x7gd1e.pdf
- Badamchi, M. H., & Ghaemkhani, M. (2016). A crisis in Iranian higher education: A sociological perspective on elite migration from engineering discourse to humanity. *Journal of Research on Islamic University*, 19(3), 335-358.
- Cabrera, A., Weerts, D., & Zulick, B. (2005). Making an impact with alumni surveys. *New Directions for Institutional Research*, 2005, 5-17. <https://doi.org/10.1002/ir.144>
- Daniel, C. (2020). Human enhancement.
- Farasatkah, M. (2022). Why is the Iranian diaspora important for the future of this land and does it want to remain important? *Negah-e-No*(136), 171-179.
- Farasatkah, M. (2025). *Boundary agents* (7th ed.). Ghome Now.
- France, D., Leahy, M., & Parsons, M. (2009). Attracting, developing and retaining talent. *Research-Technology Management*, 52, 33-44. <https://doi.org/10.1080/08956308.2009.11657598>
- Ghaneirad, M. A. (2017). *Knowledge elites: Cooperation or immigration?* Institute for Social and Cultural Studies, Ministry of Science, Research & Technology.
- Hogarth, A., & McCartney, C. (2024). *Resourcing and talent planning report 2024*.
- Hoseini Moghadam, M., & Bashiri, H. (2019). Causal layered analysis of high-skilled diaspora: Case study of Iran. *Iranian Journal of Engineering Education*, 21(82), 111-138. https://ijee.ias.ac.ir/article_90223.html?lang=en
- Jeung, Y. (2024, 2024/07/05). Visa and residency rule changes to attract global talent.
- Jiang, J. (2018). Competition for talent and unequal development of higher education: Evidence from Chang Jiang Scholars Programme. In A. Wu & J. Hawkins (Eds.), *Massification of higher education in Asia* (pp. 21-37). Springer. <https://doi.org/10.1080/07294360.2018.1477452>
- Kemsley, J. (2022, 2022/01/20). Charges dismissed against MIT's Gang Chen over China interactions. <https://cen.acs.org/research-integrity/misconduct/Charges-dismissed-against-MITs-Gang-Chen/100/i3>
- Khosravipour, Z., Mehralizadeh, Y., Darafsh, H., Rahimidoost, G., & Karami, M. (2023). Analysis of educational inequality policies in six development programs in Iran. *Iranian Journal of Public Policy*, 9(3), 165-181. https://jppolicy.ut.ac.ir/article_95729.html?lang=en
- Lanvin, B., & Monteiro, F. (2023). *The global talent competitiveness index 2023*.
- Li, F., Miao, Y., & Yang, C. (2015). How do alumni faculty behave in research collaboration? An analysis of Chang Jiang Scholars in China. *Research Policy*, 44(2), 438-450. <https://doi.org/10.1016/j.respol.2014.09.002>

- Mujtaba, B. G., & Lawrence, E. T. (2024). Workplaces of today and tomorrow to attract and retain top talent: Challenges and opportunities with remote/hybrid practices. *Socio Economic Challenges*, 8(2), 12-30. [https://doi.org/10.61093/sec.8\(2\).12-30.2024](https://doi.org/10.61093/sec.8(2).12-30.2024)
- National Academies of Sciences, E., & Medicine. (2024). *International talent programs in the changing global environment*.
- Oecd. (2024). *International net flows of scientific authors*.
- Parliamentary Research, C. (2023). *General policies of the seventh plan*.
- Saidi, S. (2019). Return migration and reintegration challenges: Lived experience of expert returnees via Iranian universities. *Journal of Research and Planning in Higher Education*, 25(4), 97-120. <https://www.sid.ir/paper/68000/en>
- Salavati, B. (2022). *Iran migration outlook*. <https://www.sharif.ir/en/web/spri/w/test-informati-4>