

Structural Pathologies in Korean Secondary Education: Metric Dominance, Experiential Exclusion, and Consequences for Talent Development

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Abstract

South Korea consistently ranks among the top performers in international assessments of student achievement. At the same time, the country faces deepening concerns about youth mental health, rising rates of young people neither in employment nor education or training, and questions about whether its education system is developing the full range of capabilities that future organizations will require. This paper argues that these phenomena are connected through four interrelated structural pathologies in secondary education: the near-complete exclusion of experiential diversity, widespread academic burnout driven by excessive study time and performance pressure, a high degree of standardization that limits recognition of individual developmental trajectories, and a distortion of goal-setting processes in which narrow, highly visible metrics crowd out broader developmental purposes. Drawing on Korean government statistics, OECD data, and theoretical resources from psychology and organizational studies, the analysis shows how these pathologies reinforce one another and systematically constrain the development of adaptability, purpose clarity, and the capacity to work with and develop other people. The paper concludes by identifying the implications of these constraints for Korea's future talent pipelines in both established organizations and emerging platform ecosystems.

Keywords: Korean education; academic burnout; experiential learning; talent development; metric distortion; youth disengagement; secondary education; Goodhart's Law

1. Introduction

South Korea has achieved one of the most rapid and sustained expansions of educational opportunity in modern history. The tertiary attainment rate among 25- to 34-year-olds reached 69.7 percent in recent OECD data, the highest among member countries. Korean students have also maintained strong average performance on international assessments in mathematics, science, and reading. These accomplishments reflect substantial public and private investment in education and the efforts of students, families, and educators.

Yet alongside these aggregate indicators, other measures point to significant strain. In 2024, total household expenditure on private education reached a record 29.2 trillion KRW according to Statistics Korea and Ministry of Education figures. Participation rates in private tutoring remain very high. At the same time, surveys of middle and high school students show elevated levels of perceived stress and depressive symptoms. Data from the 2024 Youth Health Behavior Survey indicate that 42.3 percent of middle and high school students reported high stress perception, up

5 percentage points from the previous year, while 27.7 percent reported experiencing depressive symptoms in the past year. Student suicide numbers reached 221 in the most recent reporting period covered by Ministry of Education data, the highest figure recorded since systematic collection began.

Parallel trends appear in labor market and social indicators. The proportion of young people aged 15–29 classified as NEET (not in employment, education, or training) stood at 18.3 percent in available comparative data, above the OECD average. The “resting” population among those in their twenties and thirties has reached record levels in recent years. Employers and policy analysts have also noted persistent difficulties in filling roles that require integrative thinking, comfort with ambiguity, and the ability to develop the capabilities of others.

These patterns are not random. They reflect the cumulative effects of an education system whose core organizing principle — intense preparation for a single, high-stakes university entrance examination — has produced strong performance on the metrics it directly targets while generating significant collateral effects on other dimensions of development. The purpose of this paper is to identify and analyze four structural pathologies that arise from this configuration and to trace their consequences for the development of future talent.

The analysis draws primarily on secondary sources: government statistical releases, OECD reports, and existing research literature. It does not present new primary data. Its contribution lies in integrating these sources into a coherent account of how specific design features of the education system interact with psychological and organizational processes.

2. Theoretical Resources

Four bodies of work inform the analysis. Goodhart’s Law provides a framework for understanding what happens when a single, easily measured indicator becomes the dominant target of effort within a complex system. When university entrance examination scores function as the central metric around which secondary education is organized, resources and attention flow toward activities that improve performance on that metric, often at the expense of harder-to-measure developmental outcomes.

Self-Determination Theory, developed by Ryan and Deci, identifies three basic psychological needs — autonomy, competence, and relatedness — whose satisfaction supports autonomous motivation and well-being. Educational environments that severely constrain student voice, tie self-worth to relative ranking, and emphasize competitive rather than collaborative relationships tend to frustrate these needs. The theory predicts higher rates of controlled motivation, burnout, and disengagement under such conditions, patterns visible in Korean youth mental health data.

Work on multipotentiality and sampling periods, notably Epstein’s *Range* and related research, challenges the assumption that early and narrow specialization is always optimal for long-term performance in complex domains. Individuals who have opportunities to explore multiple domains before committing to deeper specialization often develop greater adaptability, integrative capacity, and resilience. Systems that provide little time or permission for such exploration may therefore limit the development of these capacities.

Finally, research on academic burnout documents the consequences of chronic performance pressure without adequate recovery. Burnout is not simply fatigue; it involves emotional exhaustion, cynicism,

and a reduced sense of accomplishment that depletes precisely the psychological resources needed for sustained, self-directed work in uncertain environments.

These perspectives are not independent. Metric dominance shapes the structure of daily experience, which in turn affects psychological need satisfaction and the availability of exploratory opportunities. The following sections examine each pathology in turn before considering their combined effects.

3. Four Structural Pathologies

3.1 The Systematic Exclusion of Experiential Diversity

Korean secondary education allocates the overwhelming majority of student time, family resources, and institutional attention to preparation for the national university entrance examination. While policy documents and curriculum guidelines emphasize creativity, character education, and career development, the high-stakes reality of university admission means that project-based learning, extended work with external stakeholders, iterative prototyping, and other forms of experiential engagement exist primarily at the margins. They are often treated as optional extras that must be subordinated to examination preparation or pursued in limited after-school or vacation programs.

This pattern has direct developmental consequences. Epstein and others have shown that in domains characterized by complexity and uncertainty — precisely the conditions under which future talent managers and entrepreneurs operate — an extended period of sampling across different kinds of problems and contexts supports the development of integrative thinking and adaptive expertise. When the dominant selection mechanism renders such experiences invisible or even costly in terms of examination performance, students and families rationally deprioritize them.

The exclusion is structural rather than merely a matter of time allocation. Because examination scores function as the primary signal for university admission and subsequent opportunity, activities whose benefits are longer-term, harder to measure, or not captured by the dominant metric receive systematically less investment. Schools, teachers, and parents optimize for the visible, high-stakes indicator. The result is a cohort of young adults who have accumulated substantial declarative knowledge and test-taking skill but have had limited structured opportunity to develop the capacities that come from sustained engagement with real problems, diverse collaborators, and iterative failure.

3.2 Widespread Academic Burnout from Excessive Studying and Performance Pressure

Korean students spend extraordinary amounts of time on academic study. The combination of regular school hours, after-school programs, and extensive private education means that many middle and high school students have minimal time for sleep, physical activity, unstructured social interaction, or non-academic interests. Data from the 2024 Youth Health Behavior Survey show that stress perception among middle and high school students reached 42.3 percent, with notable increases among younger students. Depressive symptom experience stood at 27.7 percent. These figures are consistent with broader patterns documented in Ministry of Education reports on student mental health.

From the perspective of Self-Determination Theory, this pattern reflects chronic frustration of basic psychological needs. Autonomy is constrained by the near-total external specification of learning goals and methods. Competence becomes contingent on relative performance in a zero-sum ranking system rather than on progress toward meaningful mastery. Relatedness often takes a competitive

rather than collaborative form. The resulting motivational profile — high controlled motivation, lower autonomous motivation — is robustly associated with higher burnout, reduced persistence on complex tasks, and poorer long-term well-being.

Burnout is not only an individual mental health issue. It is also a talent development issue. Young people who enter early adulthood with depleted reserves of resilience, intrinsic motivation, and clarity of purpose are less well equipped for the sustained, ambiguous, and often self-directed work required in talent management and entrepreneurial roles. The depletion is not incidental; it is produced by the structure of incentives and time allocation that characterizes the dominant educational pathway.

3.3 Educational Standardization and Uniformity

Korean secondary education is characterized by a high degree of standardization. Students of the same age cohort progress through nearly identical curricula, are evaluated on the same high-stakes examinations, and are ranked on a single national metric for university admission. This structure has produced impressive average performance and relatively low variance on conventional academic measures. It has also come at a cost to individualization, differentiation, and recognition of diverse strengths and developmental trajectories.

When a single metric dominates selection and resource allocation, the system optimizes all students toward performance on that metric. Investment in alternative pathways and capabilities that are not well captured by the metric is reduced. The result is a form of educational monoculture in which multipotentiality — the capacity to draw from and integrate multiple domains — is systematically underdeveloped for the majority of students.

Standardization also has equity implications. Families with greater economic and cultural resources can supplement the standardized system with additional private education, overseas experiences, specialized programs, or strategic use of alternative admission pathways. Students without such resources are more tightly constrained to the single standardized pathway. The system therefore tends to amplify rather than mitigate the effects of family background on developmental opportunity.

3.4 Distorted Goal-Setting and Value Systems

Perhaps the most consequential pathology concerns the goals that students internalize. When university entrance examination scores become the dominant and most visible marker of success, young people learn to define achievement and self-worth in narrow, extrinsic, and highly contingent terms. The goal is not primarily to develop valuable capabilities, contribute to others, or pursue personally meaningful projects; it is to achieve a number that unlocks the next stage of the credentialing pipeline.

This distortion has several effects. First, it crowds out the development of intrinsic motivation and purpose clarity. When goals are predominantly external and controlled, the psychological conditions that support autonomous motivation and sustained engagement with complex, self-directed work are weakened. Second, it produces highly optimized performance on the specific tasks the metric rewards — test-taking, short-term memorization, compliance with external expectations — while leaving other capabilities relatively underdeveloped. Third, it provides limited practice in setting and pursuing self-endorsed, long-term, value-aligned goals. The capacity to do so is precisely what entrepreneurial initiative and authentic talent management leadership require.

Goodhart's Law operates here at the psychological level. The measure (examination score) has become the goal. In optimizing for it, both individuals and the systems around them distort the

underlying developmental processes that education is meant to serve.

4. Interaction Effects and Consequences for Talent Development

The four pathologies do not operate in isolation. They form a self-reinforcing system. Metric dominance produces standardization and the marginalization of experiential diversity. The resulting narrow pathway frustrates autonomy, competence, and relatedness, increasing the likelihood of burnout and controlled motivation. Burnout and narrow extrinsic goals in turn reduce the psychological resources available for exploratory, intrinsically motivated activity, reinforcing reliance on external metrics for direction and validation.

The cumulative result is a cohort of young adults who enter the labor market and organizational leadership pipelines with strong credentials on conventional academic measures but with capability deficits in precisely the areas that contemporary research identifies as critical for future talent management and entrepreneurship: adaptability, integrative thinking, collaborative leadership, purpose-driven persistence, and the ability to recognize and develop potential in others.

This is not merely a problem of individual adjustment. It represents a structural mismatch between the outputs of the dominant educational pathway and the human capital requirements of organizations operating in complex, uncertain, and increasingly AI-augmented environments. Organizations seeking to build future-ready leadership face a pipeline in which many candidates have had limited opportunity to develop the relevant capacities through sustained, supported experience.

5. Conclusion

The Korean education system's strong average performance on conventional academic metrics masks four structural pathologies that systematically constrain the development of future talent managers and talent entrepreneurs. The exclusion of experiential diversity, widespread academic burnout, educational standardization, and distorted goal-setting processes interact to produce young adults who are credential-rich but experience-poor, extrinsically motivated, and under-prepared for the adaptive, purpose-driven, and collaborative demands of twenty-first-century organizational and entrepreneurial work.

These pathologies are not inevitable features of high-performing education systems. They are the predictable consequences of specific design choices, particularly the dominance of a single high-stakes metric and the optimization of the entire system around that metric. Goodhart's Law, Self-Determination Theory, and research on multipotentiality and burnout provide resources for understanding these consequences and for designing alternatives.

The analysis presented here is diagnostic rather than prescriptive. It identifies constraints and their mechanisms. A companion paper develops a dual-track framework for addressing these constraints through more deliberate cultivation of both talent management and entrepreneurial pathways from the secondary school years. Implementation questions — how such pathways can be designed, assessed, and sustained within Korean institutional realities — are taken up in a third paper in the series.

Future research should include longitudinal studies of young people who have participated in alternative developmental experiences, comparative analysis of dual-track approaches in other

national contexts, and more fine-grained examination of how family background interacts with standardized systems to shape opportunity. Policy attention should focus on creating regulatory and incentive environments that enable — rather than penalize — shifts toward experientially richer, psychologically supportive, and purpose-aligned talent development.

References

- Bacigalupo, M., Kampylis, P., Punie, Y., & Van den Brande, G. (2016). *EntreComp: The entrepreneurship competence framework*. Publications Office of the European Union.
- Bank of Korea. (2023). *AI and the labor market* (Issue Note 2023-30). Bank of Korea.
- Collings, D. G., & Mellahi, K. (2009). Strategic talent management: A review and research agenda. *Human Resource Management Review*, 19(4), 304–313.
- Epstein, D. (2019). *Range: Why generalists triumph in a specialized world*. Riverhead Books.
- Goodhart, C. A. E. (1975). Problems of monetary management: The UK experience. In *Papers in Monetary Economics*. Reserve Bank of Australia.
- Ministry of Education & Korea Disease Control and Prevention Agency. (2025). *2024 Youth Health Behavior Survey*. Ministry of Education.
- Ministry of Education. (2025). *Student suicide report 2024*. Ministry of Education.
- Neck, H. M., & Greene, P. G. (2011). Entrepreneurship education: Known worlds and new frontiers. *Journal of Small Business Management*, 49(1), 55–70.
- OECD. (2024). *PISA 2022 Results (Volume III): Creative Minds, Creative Schools*. OECD Publishing.
- OECD. (2025). *Education at a Glance 2025: OECD Indicators*. OECD Publishing.
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Press.
- Statistics Korea & Ministry of Education. (2025). *Private Education Expenditures Survey of Elementary, Middle and High School Students in 2024*. Statistics Korea.
- Wapnick, E. (2017). *How to be everything: A guide for those who (still) don't know what they want to be when they grow up*. HarperCollins.
- World Economic Forum. (2025). *The Future of Jobs Report 2025*. World Economic Forum.

This is a working paper prepared for preprint distribution on SSRN, OSF, and Zenodo. A companion paper develops the Dual-Track for Multipotential Youth Talent (DTMYT) framework in greater detail. Comments and suggestions are welcome.

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