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The Role of Discipline and System Thinking in Shaping Individual and Organizational Success: A Social Science Perspective

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Abstract: The purpose of this study is to determine the relationship between individual discipline, the development of systems thinking, and personal performance in a professional environment. Based on a synthesis of more than twenty contemporary scientific publications (2020–2025), theoretical analysis has identified six interrelated clusters: cognitive-psychological, organizational-managerial, pedagogical-educational, socio-philosophical, technological, and cultural-behavioral. Together, these clusters form a multidimensional model of discipline and systems thinking that integrates individual, collective, and organizational levels of development. The empirical part of the study combines elements of sociological survey, psychometric assessment, and behavioral analysis. The study involved 100 respondents representing the fields of business,

education, public administration, and IT. The questionnaire consisted of 15 statements divided into three blocks: discipline, systematic thinking, and effectiveness. The reliability of the tool was confirmed by Cronbach's values ranging from 0.80 to 0.85, indicating high internal consistency of the scales. The results showed that respondents with high levels of discipline and systems thinking (38% of the sample) were the most effective, as reflected in their strategic vision, analytical flexibility, and consistent achievement of goals. A comparative analysis by social role showed that managers received the highest scores on all measures, while students demonstrated lower but more diverse results, reflecting the process of self-organization skill formation. The practical implications are significant for sports coaching and athlete development, where disciplined self-regulation and systematic thinking determine both individual progress and team success. The model proposed in this study can be adapted for training programs focused on enhancing mental discipline, strategic awareness, and collaborative efficiency in high-performance environments.

Keywords: behavioral discipline, cognitive development, organizational success, self-regulation, social sciences, systemic thinking, sustainable development, team interaction.

Introduction

Today, systemic changes permeate all levels of social organization, from the behavior of individuals to the methods used in managing organizations. Therefore, the key parameter for a results-oriented future may be not only creativity or flexibility but also established discipline through systematic actions linked to long-term goals. Discipline, expressed as a form of self-regulation and systematic thinking, understood as an intellectual method that combines knowledge with actions for their integration, is paramount for the creation of effective social and organizational structures. However, the synergistic relationship between them requires deeper empirical and theoretical understanding. The relevance of the topic is determined by the need to form a new socio-scientific paradigm that combines individual self-regulation, ethical responsibility, and collective coherence of thinking as the basis for organisational success. This approach allows us to rethink the concept of 'success' in terms of sustainability, social capital, and cognitive culture, which is of practical importance for change management, leadership, and the development of educational and corporate ecosystems.

Research Problem

Recent scientific literature demonstrates growing recognition of the interconnection between discipline, self-regulation, and systems thinking as determinants of sustainable individual and organisational success. The integration of systems-based approaches into management reflects a consistent trend towards enhancing strategic adaptability and organisational competitiveness through the establishment of long-term linkages between decisions, resources, and a dynamic external environment (Siriram & Plessis, 2024; Kunc, 2024). Practical applications of systemic management competence models confirm positive effects on management quality and team interaction (Rabieh et al., 2023), whilst research on strategic alignment demonstrates the role of

systems thinking in fostering organisational stability (Bui & Galanou, 2022). Concurrently, within a related but distinct field of inquiry, substantial evidence has accumulated regarding the critical importance of discipline and self-regulation for productivity and stress resilience. Meta-analytical studies of self-organised learning confirm the significant influence of self-discipline on knowledge acquisition effectiveness, particularly in distance learning contexts (Xu et al., 2022). Similar patterns emerge in workplace settings, where the development of internal self-regulation correlates with enhanced well-being and sustained productivity (Demerouti et al., 2024), whilst self-control and perseverance serve as key predictors of professional achievement (Gorin et al., 2024). Research into behavioural mechanisms reveals that self-discipline supports ethical standards and reduces professional stress (Wang et al., 2021; Hoff et al., 2024), whilst also mitigating remote work challenges and increasing job satisfaction (Qi et al., 2023). Organisational research indicates that internally focused self-management leadership and responsible employee behaviour strengthen organisational commitment and collective interaction (Knotts & Houghton, 2021; Afridi et al., 2022). Within the broader context of social systems, systems thinking functions as a mechanism for strengthening collective resilience, managerial capacity, and social cohesion during multidimensional transformations (Thelen et al., 2023; Cabrera, 2025). Therefore, current research evidence confirms that discipline, self-regulation, and systems thinking operate as interrelated components of adaptive behaviour, establishing the foundation for integrity, responsibility, and long-term effectiveness within increasingly complex socio-economic systems.

Research Focus

The object of study is discipline and systems thinking as key factors in shaping individual and organizational success in socio-economic systems. The article combines theoretical-analytical and empirical approaches: on the one hand, it considers the current scientific discourse on the role of discipline, self-regulation, and systems thinking in the structure of professional behavior; on the other hand, it presents a questionnaire survey aimed at identifying the actual manifestations of these phenomena in the professional and educational environment. The main focus of this study is on comparing the theoretical propositions formulated in recent publications in the social sciences with the results of empirical analysis based on a survey of respondents. This makes it possible to combine scientific approaches with practical observations, thus revealing the extent to which discipline-oriented and systems thinking contributes to motivation, productivity, teamwork, and adaptability (in situations characterized by both complexity and uncertainty).

Research Aim and Questions

The aim of the study is to scientifically substantiate the role of discipline and systematic thinking in shaping individual and organizational success through theoretical analysis of scientific discourse and empirical study of practical aspects by combining both aspects.

To achieve this goal, the following research tasks were identified:

1. To analyse contemporary scientific approaches to defining the concepts of "discipline", "self-regulation", and "systems thinking" within the context of the social sciences, and to

identify key trends in academic discourse concerning the influence of these phenomena on the effectiveness of personal development and organisational management.

2. To design a questionnaire for examining the perception of discipline and systems thinking among representatives of different professional and educational groups, to conduct an empirical survey, and to perform both quantitative and qualitative analyses of the obtained data.
3. To synthesise the findings and formulate practical recommendations for fostering discipline and systems thinking as integral components of social and managerial capital.

Literature review / Theoretical Overview

Contemporary scientific discourse on systemic, self-regulatory, critical and creative thinking encompasses a wide range of approaches that reflect the interdisciplinary integration of cognitive, behavioural, educational and management theories. In strategic management, systemic thinking is seen as an alternative to reductionist models and as a way to overcome complex socio-ecological challenges through awareness of co-evolutionary processes and interdependencies (Grewatsch et al., 2023). Further development of this direction is demonstrated by research in engineering and education, which emphasises the need to measure not only technical but also socio-contextual aspects of systems thinking, in particular through behavioural indicators and index models (Dugan et al., 2022; Liu et al., 2024). In healthcare, systems thinking is interpreted as an ethical and social discipline that combines an analytical approach with a desire to reduce inequality and develop partnerships (Gadsby & Wilding, 2024). At the same time, a behavioural and psychological approach is developing, focused on mechanisms of self-regulation and self-control in a changing work environment. Field and longitudinal studies show that interventions aimed at developing self-regulation increase employee innovation, adaptability, and productivity, and also demonstrate that discipline can be both resourceful and dynamic (Demerouti et al., 2024; Troll et al., 2022; Baumann et al., 2023; Wehrt et al., 2022). Here, self-control is seen not only as an internal resource, but also as a flexible skill that develops under the influence of motivation, experience, and social environment. Studies of personality traits and self-regulatory mechanisms (Nilsen et al., 2024) deepen the understanding of discipline as a psychological construct, while empirical works devoted to the professional development of teachers (Li et al., 2021) show it to be a key factor in emotional stability and successful adaptation to new working conditions. Conceptual reviews (Hagger & Hamilton, 2024) emphasise the cognitive-motivational nature of self-control, which ensures consistency between intention and action, forming the basis of behavioural discipline.

In the organisational and managerial sphere, systems thinking is becoming an important tool for strategic development, integrating the environmental, economic and social dimensions of responsible management (Burato et al., 2023; Pourahmadi & Kalkowska, 2022). In works on organisational theory, systemic thinking is seen as a prerequisite for training a new generation of leaders capable of combining analytical vision, innovation and ethical responsibility (Onyshchenko, 2025). This position is supported by studies that highlight self-management and a culture of self-development as the basis for productivity, corporate discipline and security (Leskiv et al., 2025), as

well as works that define organisational culture as a key factor in sustainable development and internal consistency of actions (Vasina, 2024).

The educational and pedagogical direction is represented by studies in which discipline is understood as an integrated result of self-reflection, responsibility, and active interaction in the educational environment. The student-centred learning model emphasises the role of conscious student participation in planning their own educational trajectory, and creative thinking is seen as a component of a systematic approach that is formed through interactive learning technologies (Lysenko, 2024). Critical thinking, in turn, is defined as a cognitive form of internal discipline that provides reflection, self-regulation and resistance to manipulation (Usanova et al., 2024). The development of digital competence in education (Dorohan-Pisarenko et al., 2022) demonstrates that consistency and responsibility in working with information are a modern form of intellectual discipline. In works that focus on predicting sociological opinion as a solid basis for management decisions and methods of social control in a digital group (Skvorets, 2022), the socio-philosophical aspect becomes apparent. In this context, the appropriate response to dangers and challenges – the mental asset of group strength – is found through systemic thinking.

To generalize theoretical approaches and identify dominant concepts, a lexical-semantic analysis of text corpora was used – all scientific articles processed from 2020 to 2025 inclusive. The combined corpora contain one document with a total of 5,634 words, of which 1,409 are different word forms. Such structural saturation indicates a high diversity of the terminological field, reflecting the interdisciplinary nature of the topic. The vocabulary density is 0.250, which is an indicator of the balance of the corpus: terminological units are not overly duplicated, and the content has sufficient conceptual diversity. The readability index is 18.866, which corresponds to the level of scientific publications and demonstrates the complexity of syntactic structure and content saturation. The average sentence length is 25 words, which is typical for academic style. As a result of automated text processing, the most frequent lexemes were identified: independence (95), control (71), thinking (63), systems (38), productivity (38). They represent the conceptual core of the problem under study – self-control, systems thinking, performance, development, and organisational learning – which are consistent with the identified theoretical directions. The results are shown in Figure 1, constructed using the ‘word cloud’ visualisation tool.

The graphical representation in Fig. 1 allows us to see the correlation between the frequency and significance of terms that form the cognitive-conceptual field of the topic. Visual analysis demonstrates that the core of the corpus consists of the concepts of self / control / thinking / systems / development, which are grouped around the interrelated concepts of ‘self-regulation – thinking – productivity – organisational development’.

Figure 1

Analysis of Key Concepts in the Research Corpus



Source: Author’s own development

This indicates the logical consistency of scientific discourse and allows us to move on to structuring the theoretical field according to content areas. Based on content analysis of sources and frequency distribution of key concepts, generalised clusters of research in the discipline and systems thinking have been formed, reflecting the interdisciplinary nature of the problem. They combine cognitive-psychological, managerial, pedagogical, and socio-philosophical dimensions, forming a coherent analytical structure.

Table 1

Cognitive and Content Structure of Clusters in the Study of Discipline and Systems Thinking

Cluster Title	Integrated Research Areas	Description and Logic of Integration
Cognitive-psychological cluster of self-control and self-regulation	Demerouti et al. (2024); Troll et al. (2022); Baumann et al. (2023); Wehrt et al. (2022); Nilsen et al. (2024); Li et al. (2021); Hagger & Hamilton (2024)	Integrates studies that conceptualise discipline as an individual cognitive-behavioural mechanism of self-regulation, motivation, and the overcoming of exhaustion. Discipline is portrayed as a flexible skill developed under environmental influences, determining innovation, productivity, and employee well-being.
Systems-managerial cluster of strategic thinking and organisational development	Grewatsch et al. (2023); Pourahmadi & Kalkowska (2022); Burato et al. (2023); Onyshchenko (2025); Vasina (2024); Leskiv et al. (2025)	Groups approaches that view systems thinking as a new managerial paradigm combining strategic rationality, ethical responsibility, and corporate discipline. It forms a holistic understanding of the organisation as an adaptive system oriented towards sustainable development.

Methodological-analytical cluster of systems thinking assessment	Dugan et al. (2022); Liu et al. (2024)	Encompasses research focused on the operationalisation of systems thinking, including the development of indices, metrics, and behavioural formats for assessing cognitive skills. It contributes to the creation of tools for the quantitative verification of complex managerial and educational processes.
Ethical-social cluster of social justice and collective responsibility	Gadsby & Wilding (2024); Skvorets (2022)	Highlights systems thinking as an ethical and social resource aimed at reducing inequality, enhancing trust, and advancing social governance in a risk-oriented society. Within this cluster, discipline emerges as a collective behavioural norm and a factor of societal resilience.
Educational-cognitive cluster of thinking formation in educational systems	Lysenko (2024); Usanova et al. (2024); Dorohan-Pisarenko et al. (2022)	Brings together studies that consider education as a space for the development of critical, creative, and systems thinking. Emphasis is placed on student-centred learning, reflection, and digital competence as new forms of academic discipline.
Self-organisational cluster of personal and professional development	Leskiv et al. (2025); Li et al. (2021); Onyshchenko (2025)	Focuses on internal mechanisms of self-management, self-education, and self-development as prerequisites for the formation of sustainable professional and organisational practices. Discipline is regarded as an integrated system of personal responsibility and professional coherence.

Source: Author's own development

Thus, six interrelated clusters can be identified that represent the multidimensional structure of the phenomenon of discipline and systematic thinking – from the individual cognitive level to the organisational and social levels. Together, they form a conceptual model in which thinking, self-control and systematicity emerge as interrelated components of the intellectual and behavioural culture of modern society.

Research Methodology

General Background

The study is based on a comprehensive approach that combines elements of sociological surveys, psychometric measurements, and behavioural analysis. The goal is to empirically verify the relationship between the level of discipline, the development of systematic thinking, and individual performance. The survey covered 100 respondents from various fields of activity – business, education, public administration and IT – and reflects a realistic cross-section of the modern professional environment. A structured questionnaire was used, containing fifteen statements rated on a five-point agreement scale. Each block of questions was related to a separate dimension of the study: discipline (self-regulation and organization), systems thinking (ability to see connections and

predict consequences), and effectiveness (productivity and consistency of actions). The survey was conducted online using Google Forms to ensure accessibility, anonymity, and representativeness of the sample. After preliminary testing of the questionnaire, a high level of internal consistency of statements was determined (Cronbach's alpha from 0.80 to 0.85). The data obtained allowed for quantitative and qualitative analysis, comparison of results between social groups, and determination of typological combinations of levels of discipline and systems thinking. Overall, the study provides an empirical basis for assessing how the combination of structured behaviour and cognitive flexibility determines a person's success in complex socio-professional systems.

Participants / Sample

The study involved 100 respondents aged 20 to 50, representing various professional and social groups. The sample was formed based on the principle of diversity of employment areas, which allows obtaining representative data on the characteristics of discipline and systematic thinking in various contexts of professional activity.

The respondents were distributed as follows by field of work: business and entrepreneurship – 34%, education and science – 28%, public administration – 20%, IT – 18%. A structured questionnaire was used, containing fifteen statements rated on a five-point agreement scale. Each block of questions was related to a separate dimension of the study: discipline (self-regulation and organization), systems thinking (ability to see connections and predict consequences), and effectiveness (productivity and consistency of actions). The survey was conducted online using Google Forms to ensure accessibility, anonymity, and representativeness of the sample.

Instrument and Procedures

A structured questionnaire combining elements of psychometric testing and sociological survey was used to collect empirical data. Fifteen statements were organized into three content blocks: discipline, systems thinking, and productivity; all responses were rated on a five-point Likert scale (1 – “strongly disagree”; 5 – “strongly agree”). To verify its content validity, the questionnaire was tested on a pilot group of twenty respondents. After minor adjustments to the wording of the statements, Cronbach's internal consistency coefficient was between 0.80 and 0.85, proving the reliability of this tool. The online survey, made possible by Google Forms, guaranteed the anonymity and voluntary participation of respondents and made it easily accessible to them. It took about seven to ten minutes per participant, and two weeks to collect all the data per person, until everything was finally checked, whether any cleaning was done at the beginning, and if so, how much, and then aggregated indicators were formed for further analysis.

A structured questionnaire allowed us to integrate cognitive, behavioral, and analytical measurements of the phenomenon under study. High internal consistency scores proved the reliability of the tools used, explaining the links between disciplinary-systemic thinking and effectiveness using mixed-format questions. The next stage of the study was to conduct a survey to collect data, which will subsequently be statistically processed for comparative analysis between different groups of respondents.

Table 2*Fragment of the Questionnaire Used in the Study*

Statement	Block	Type of Assessment
I follow my personal schedule even without external control	Discipline	Likert scale 1-5
I don't leave things half done	Discipline	Likert scale 1-5
I plan my day according to priorities	Discipline	Likert scale 1-5
I consider the delayed consequences of decisions made	Systems thinking	Likert scale 1-5
I strive to see the overall picture rather than only individual details	Systems thinking	Likert scale 1-5
I use analytical frameworks to solve complex problems	Systems thinking	Likert scale 1-5
I achieve goals within the set deadlines	Performance	Likert scale 1-5
I work effectively even in difficult conditions	Performance	Likert scale 1-5
My activities have a positive impact on the team's results	Performance	Likert scale 1-5
I constantly analyze my own results and change my approach	Performance	Likert scale 1-5

Source: Author's own development

Data Analysis

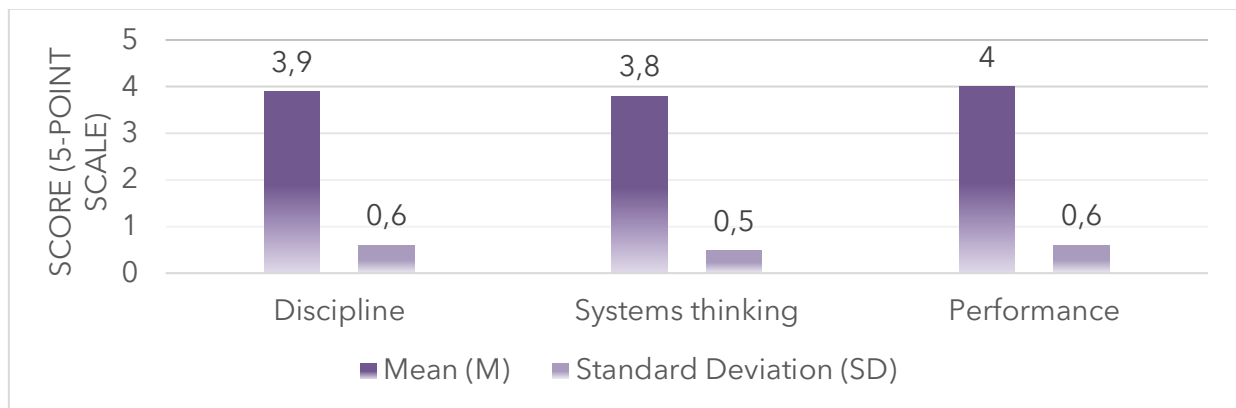
Data was collected online over a two-week period via Google Forms, ensuring anonymity and voluntary participation. All respondents were informed in advance about the purpose of the study, confidentiality principles, and the option to decline participation. After the collection of information was completed, the database was initially cleaned up – incomplete or incorrect questionnaires were removed, and the consistency of responses was checked. For further processing, the data was aggregated according to three main variables: discipline (D), systems thinking (S) and performance (R). The statistical analysis included the calculation of mean values (M), standard deviations (SD) and correlation coefficients between key indicators. Cluster analysis was used to identify typical combinations of characteristics, which allowed us to distinguish four groups of respondents according to their level of discipline and systems thinking. The results were presented in the form of tables and graphical visualisations reflecting the relationships between the variables studied and allowing generalisations to be made about the behavioural and cognitive models of the participants.

Results

The results of empirical research confirm the close relationship between the level of personal discipline, the development of systematic thinking and individual performance. The average scores for the three blocks range from 3.8 to 4.0 on a five-point scale, indicating a fairly high level of development of the characteristics studied in the sample. The highest average values were recorded for the 'Performance' block, demonstrating the practical effect of combining organisation with an analytical approach to activities (Figure 2).

Figure 2

Average scores by main blocks (n=100)

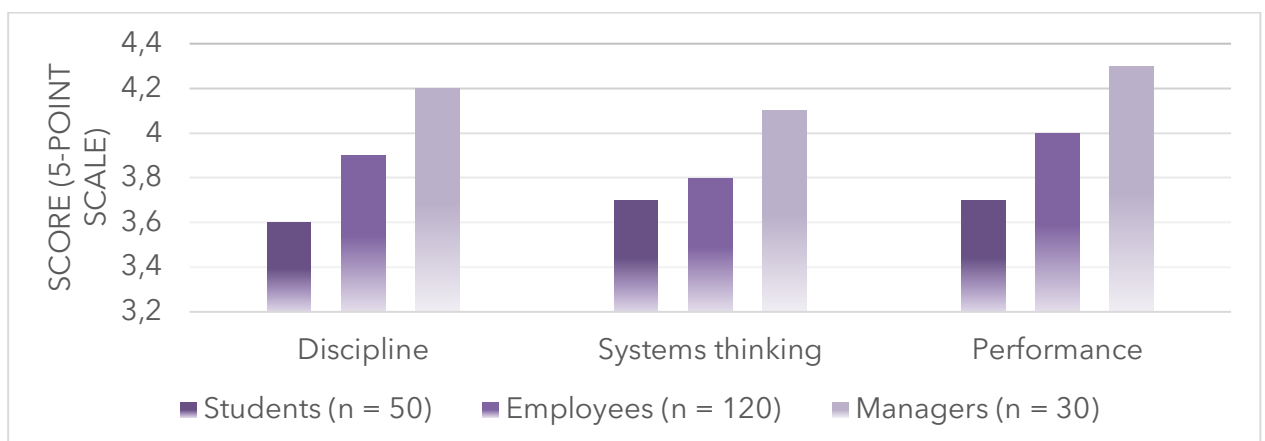


Source: Author's own development

The data obtained indicate internal consistency between behavioural and cognitive characteristics. High discipline scores are accompanied by a corresponding level of systematic thinking, confirming the complementary nature of these competencies. The low variability of results ($SD \leq 0.6$) indicates the stability and homogeneity of the sample. A comparative analysis of social roles showed a clear trend toward an increase in the values of discipline, systematic thinking, and productivity with an increase in the level of managerial responsibility. Managers received the highest scores on all three variables, indicating the necessity of these qualities in leadership positions for their effectiveness (Figure 3).

Figure 3

Indicators by respondent roles



Source: Author's own development

This pattern confirms that discipline and systems thinking are key cognitive and behavioral components in the development of managerial competence, emphasizing not only the organization of processes, but also strategic vision and responsibility for results. For a deeper interpretation by cross-combining the levels of discipline (D) and systematic thinking (S), respondents were grouped into clusters. Four typical groups were identified, reflecting different strategies of professional

behavior (Table 3).

Table 3

Combinations of Discipline and Systems Thinking

Combination	Share, %	Description
High D & High S	38	Highest performance level, consistent goal attainment, and systemic coherence.
High D & Low S	23	Highly organized, but limited strategic vision, tendency to think operationally
Low D & High S	27	Broad vision, but difficulty implementing decisions
Low D & Low S	12	Chaotic actions, low efficiency, and poor task execution

Source: Author's own development

The majority of respondents (38%) belonged to the high discipline and systematic thinking group, representing the most productive combination of characteristics. These individuals demonstrated key elements of professional maturity, including stability, effective planning capacity, and flexible adaptation to change through collaborative teamwork. In their open-ended responses, several participants reported employing specific self-regulation behavioural practices, such as time boxing, the two-minute rule, digital hygiene protocols, weekly reviews, and kanban boards. These implementation strategies not only enhance personal effectiveness but also foster an environment conducive to disciplined team collaboration. The systems operate synergistically, mutually reinforcing one another and establishing a foundation for optimal productivity. High-level discipline and systematic thinking characteristics ensure alignment between intentions and actions, whilst supporting the development of integrated cognitive-behavioural competencies. Thus, discipline ceases to be merely an ethical or administrative aspect; it acquires the characteristics of an intellectual technology of success that determines the effectiveness of the individual, the team, and the organisation as a whole.

Discussion

Modern professional activity is characterised by a high level of dynamism and uncertainty, which places new demands on an individual's cognitive and behavioural resources. In the digital economy, the ability to combine a systematic view of processes with disciplined action and self-control is of key importance. Therefore, an urgent scientific problem is to find patterns of interaction between discipline and systemic thinking in shaping the performance of specialists in various fields. The purpose of the discussion is to interpret the results obtained, compare them with the scientific approaches of other authors, and outline the contribution of this study to the modern scientific field.

Discipline and systematic thinking are related cognitive and behavioral mechanisms that support stable results and growth in managerial competencies. The dual combination of high levels of discipline and systems thinking, observed in 38% of respondents, clearly reflects the current trend toward combining analytical abilities and self-regulation to serve integrative behavioral intelligence in professional activities. This conclusion confirms the following assumption: in a complex socio-

economic environment, effectiveness goes beyond personal organization; it is about the ability to understand systemic relationships and predict the consequences of management decisions. There was a wider variability in student performance, indicating an active process of self-organization skill formation along with various strategies for adapting to modern educational formats.

This is consistent with scientific developments, where systems thinking is seen as an alternative to reductionism and a factor of strategic coherence and adaptability within organizations (Grewatsch et al., 2023; Burato et al., 2023). In view of this, the empirical data obtained deepen these approaches, demonstrating that at the individual level, systematic thinking enhances the influence of discipline, promoting coordination of actions and long-term orientation. This pattern confirms the thesis that systematic thinking is not limited to analytical procedures but is transformed into a socio-practical ability to shape a culture of responsibility.

In the field of organisational behaviour, the results coincide with conclusions about the role of self-regulation in conditions of autonomy and flexible employment formats (Kossek et al., 2022), where discipline is not an instrument of control but a mechanism for coordination between freedom and responsibility. Similarly, a link has been proven between career engagement and the ability to independently structure professional activities (Cahill et al., 2022), which is consistent with our observation of the systematic use of time management practices (Pomodoro, Kanban boards) by respondents. The data also confirm the importance of self-control, autonomous motivation, and internal regulation as factors of innovation and stress resistance (Demerouti et al., 2024; Zaman & Ansari, 2023), which echoes the concept of grit and perseverance as determinants of success (Gorin et al., 2024). In addition, internal self-management leadership is associated with increased organisational commitment and willingness to cooperate (Knotts & Houghton, 2021; Afridi et al., 2022), while self-reflection and self-assessment promote responsible managerial behaviour (Yan et al., 2023). In the pedagogical dimension, it has been established that master's students demonstrate the formation of self-organisation and critical thinking skills, although their level of consistency is lower than that of employees or managers (Lysenko, 2024; Usanova et al., 2024). This indicates a gradual transition from academic discipline to professional responsibility. Socio-philosophical approaches (Skvoretz, 2022) are consistent with the data obtained, confirming that discipline and systematic thinking are the basis of social cohesion and adaptability in the information society.

Together, these results allow us to propose an integrative model in which cognitive analytics (awareness of interrelationships, prediction of consequences) is combined with behavioural structure (planning, self-control, task completion). This model explains why the combination of discipline and systematic thinking increases the effectiveness of management decisions and contributes to the formation of organisational stability. Limitations of the study. Despite the consistency of the results, the study has certain limitations. The sample included 100 people and reflected only part of the professional spectrum, so the results cannot be fully generalised to all industries. The data were obtained through self-assessment, which may have led to a social desirability effect in the responses. In addition, the cross-sectional design of the study does not allow for definitive conclusions about the causal relationships between variables. Further research should focus on expanding the sample, including experimental methods and longitudinal observations. The

study contributes to the development of an interdisciplinary approach to analysing the relationship between cognitive and behavioural factors of performance. The novelty lies in the comprehensive consideration of discipline and systems thinking not as separate characteristics, but as a single synergistic system that forms the basis of professional competence. For the first time, it has been substantiated that the combination of these qualities creates a behavioural-cognitive framework that ensures productivity, adaptability and organisational stability. The practical significance of the results lies in the possibility of using them to develop programmes for the development of self-regulation, systems thinking and managerial responsibility in educational and corporate environments.

Conclusions and Implications

The study confirmed the hypothesis of the interdependence of discipline, systematic thinking and individual performance as interrelated elements of professional behaviour. Empirical results showed that a combination of high self-regulation and cognitive systematicity ensures stable goal achievement, strategic vision, and coordinated teamwork. The combination of high discipline and systematic thinking found in 38% of respondents reflects the emergence of an integrated type of behaviour that combines planning, analytical thinking and adaptability – key characteristics of 21st century competencies. The scientific novelty of the work lies in the formation of a holistic model of interaction between cognitive (systemic thinking) and behavioural (discipline) factors, which together determine the effectiveness of professional activity. Unlike previous studies, where these characteristics were considered separately, the proposed model demonstrates their synergistic effect and opens up opportunities for quantitative measurement of the relationship between them in sociological and psychological contexts. The practical value of the results lies in the possibility of using the data obtained to improve personnel management systems, educational programmes and training courses for the development of soft skills. An approach based on a combination of discipline and systems thinking can be implemented in business, public administration and education as a tool for improving organisational resilience, team effectiveness and leadership potential.

Suggestions for Future Research

Future research should focus on deepening our understanding of the relationship between the cognitive, emotional-motivational and behavioural components of discipline and systems thinking. First and foremost, the mechanisms explaining how self-regulation transforms into collective discipline and how systems thinking is formed at the level of organisational structures need to be clarified. A promising direction is the development of psychometrically valid instruments for the quantitative measurement of systems thinking in a professional context, both as an individual and organisational characteristic. This will increase the accuracy of interdisciplinary comparisons and create conditions for the formation of a unified methodology for assessing cognitive and behavioural competencies. It is also important to study the gender, age and cultural aspects of discipline and systems thinking in the context of digital autonomy, remote work and hybrid management formats. These factors can influence the nature of self-regulation, decision-making strategies and types of thinking. Special attention should be paid to studying educational mechanisms for the development of systems thinking, particularly the integration of active learning methods, reflective practices and

digital environments that contribute to the formation of analytical and behavioural discipline. In this context, pedagogical experiments can deepen our understanding of the process of developing integrative cognitive skills. At the macro level, it is promising to study the impact of systems thinking on the social sustainability of organisations and communities, particularly in the context of crisis situations, digital transformations and post-war recovery. This creates the basis for the formation of new models of management culture, in which discipline acts not as control but as an intellectual strategy for collective development.

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Conflict of Interest

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References

- Afridi, F. E. A., Jan, S., & Shah, F. A. (2022). The critical role of self-leadership's in work engagement and organizational citizenship behaviors. *Revista Amazonia Investiga*, 11(49), 198-209. <https://doi.org/10.34069/ai/2022.49.01.22>
- Baumann, J., Danilov, A., & Stavrova, O. (2023). Self-control and performance while working from home. *PloS One*, 18(4), e0282862. <https://doi.org/10.1371/journal.pone.0282862>
- Bui, H. T. M., & Galanou, E. (2022). Translation of systems thinking to organizational goals: A systematic review. *Journal of General Management*, 47(4), 233-245. <https://doi.org/10.1177/03063070211035749>
- Burato, M., Tang, S., Vastola, V., & Cenci, S. (2023). Organizational system thinking as a cognitive framework to meet climate targets. *Proceedings of the National Academy of Sciences of the United States of America*, 120(41), e2309510120. <https://doi.org/10.1073/pnas.2309510120>
- Cabrera, D. (2025). Critical thinking: Broken by design: Diagnosing the flaws in our most trusted

cognitive tool. *Journal of Systems Thinking*, 5(1). <https://doi.org/10.54120/jost.2025-000004>

- Cahill, K. E., Giandrea, M. D., Quinn, J. F., Sacco, L. B., & Platts, L. G. (2022). Does bridge employment mitigate or exacerbate inequalities later in life? *Work, Aging and Retirement*. <https://doi.org/10.1093/workar/waac020>
- Demerouti, E., Roth, C., Ebner, K., Soucek, R., & Moser, K. (2024). Toward a better understanding of self-regulation promoting interventions: When performance management and job crafting meet. *Human Resource Management*, 63(5), 849-867. <https://doi.org/10.1002/hrm.22236>
- Dorohan-Pisarenko, L., Bezkrivnyi, O., Pryidak, T., Leha, O., Yaloveha, L., & Krasota, O. (2022). Designing a tool for economics students digital competence measurement. In *Communications in Computer and Information Science* (pp. 320-333). Springer International Publishing. https://doi.org/10.1007/978-3-031-14841-5_21
- Dugan, K. E., Mosyjowski, E. A., Daly, S. R., & Lattuca, L. R. (2022). Systems thinking assessments in engineering: A systematic literature review. *Systems Research and Behavioral Science*, 39(4), 840-866. <https://doi.org/10.1002/sres.2808>
- Gadsby, E. W., & Wilding, H. (2024). Systems thinking in, and for, public health: a call for a broader path. *Health Promotion International*, 39(4). <https://doi.org/10.1093/heapro/daae086>
- Gorin, A. A., Leahey, T. M., Cornelius, T., Bourgea, K., & Powers, T. A. (2024). Self-control and grit: associations with weight management and healthy habits. *Journal of Behavioral Medicine*, 47(1), 160-167. <https://doi.org/10.1007/s10865-023-00431-9>
- Grewatsch, S., Kennedy, S., & (Tima) Bansal, P. (2023). Tackling wicked problems in strategic management with systems thinking. *Strategic Organization*, 21(3), 721-732. <https://doi.org/10.1177/14761270211038635>
- Hagger, M. S., & Hamilton, K. (2024). Trait self-control as a determinant of health behavior: Recent advances on mechanisms and future directions for research. *Current Opinion in Psychology*, 60(101887), 101887. <https://doi.org/10.1016/j.copsyc.2024.101887>
- Hoff, I., Farkas, A., Melicherova, U., Köllner, V., Hoyer, J., Strobel, A., & Strobel, A. (2024). The role of cognitive motivation and self-regulation in coping with occupational demands. *Frontiers in Psychology*, 15, 1422724. <https://doi.org/10.3389/fpsyg.2024.1422724>
- Knotts, K. G., & Houghton, J. D. (2021). You can't make me! The role of self-leadership in enhancing organizational commitment and work engagement. *Leadership & Organization Development Journal*, 42(5), 748-762. <https://doi.org/10.1108/lodj-10-2020-0436>
- Kossek, E. E., Perrigino, M. B., & Lautsch, B. A. (2022). Work-life flexibility policies from a boundary control and implementation perspective: A review and research framework. *Journal of Management*, 014920632211403. <https://doi.org/10.1177/01492063221140354>
- Kunc, M. (2024). The Systems Thinking approach to Strategic Management. *Systems*, 12(6), 213.

<https://doi.org/10.3390/systems12060213>

- Leskiv, H., Marchenko, O., & Voronka, O. (2025). Self-management and self-development in the organization: Principles of ensuring sustainable safety development. *Current Issues of Economic Sciences*, 8. <https://a-economics.com.ua/index.php/home/article/view/306>
- Li, J.-B., Leung, I. T. Y., & Li, Z. (2021). The pathways from self-control at school to performance at work among novice kindergarten teachers: The mediation of work engagement and work stress. *Children and Youth Services Review*, 121(105881), 105881. <https://doi.org/10.1016/j.chidyouth.2020.105881>
- Liu, N.-Y. G., Mahmoudi, H., Triantis, K., & Ghaffarzadegan, N. (2024). A multi-dimensional index of evaluating systems thinking skills from textual data. *Systems Research and Behavioral Science*. <https://doi.org/10.1002/sres.3033>
- Lysenko, T. A. (2024). Student-centered learning in the context of interdisciplinary education: New approaches to the formation of professional competencies. *Academic Visions*, 38. <https://academy-vision.org/index.php/av/article/view/1577>
- Nilsen, F. A., Bang, H., & Røysamb, E. (2024). Personality traits and self-control: The moderating role of neuroticism. *PLOS ONE*, 19(8), e0307871. <https://doi.org/10.1371/journal.pone.0307871>
- Onyshchenko, O. (2025). Applying organizational theory to the development of managerial leadership competencies. *European Scientific Journal of Economic and Financial Innovation*, 4(18), 131-142. <https://journal.eae.com.ua/index.php/journal/article/view/608>
- Pourahmadi, B., & Kalkowska, J. (2022). Characterizing the relationship between growth and development in the context of strategic management via systems thinking: A systematic literature review. *Sustainability*, 14(9), 5561. <https://doi.org/10.3390/su14095561>
- Qi, L., Xu, Y., & Liu, B. (2023). Work out of office: how and when does employees' self-control influence their remote work effectiveness? *Frontiers in Psychology*, 14, 1265593. <https://doi.org/10.3389/fpsyg.2023.1265593>
- Rabieh, M., Pandari, A. R., Amiri, Z., Esmaeili, M., & Naeini, S. M. (2023). The organizational systems thinking excellence model (OSTEM). *Systems Research and Behavioral Science*, 40(4), 740-756. <https://doi.org/10.1002/sres.2934>
- Siriram, R., & Plessis, C. D. (2024). A systems thinking approach to improving firms' competitive capabilities and firm performance. *Systemic Practice and Action Research*, 37(6), 1241-1280. <https://doi.org/10.1007/s11213-024-09704-z>
- Skvorets, V. (2022). The problem of the development of sociological thinking in a digital society. *Epistemological Studies in Philosophy, Social and Political Sciences*, 5(2), 104-117. <https://doi.org/10.15421/342226>
- Thelen, J., Sant Fruchtmann, C., Bilal, M., Gabaake, K., Iqbal, S., Keakabetse, T., Kwamie, A., Mokalake,

- E., Mupara, L. M., Seitio-Kgokgwe, O., Zafar, S., & Cobos Muñoz, D. (2023). Development of the Systems Thinking for Health Actions framework: a literature review and a case study. *BMJ Global Health*, 8(3), e010191. <https://doi.org/10.1136/bmjgh-2022-010191>
- Troll, E. S., Venz, L., Weitzenegger, F., & Loschelder, D. D. (2022). Working from home during the COVID-19 crisis: How self-control strategies elucidate employees' job performance. *Psychologie Appliquee [Applied Psychology]*, 71(3), 853-880. <https://doi.org/10.1111/apps.12352>
- Usanova, L., Usanov, I., & Shtepa, O. (2024). Formation of critical thinking in the system of competence-based training of specialists. *Ukrainian Professional Education*, 16, 48-55. <https://doi.org/10.33989/2519-8254.2024.16.314293>
- Vasina, A. (2024). Organizational culture in ensuring organizational development. *Regional Aspects of Productive Forces Development of Ukraine*, 1(29), 55-63. <https://doi.org/10.35774/rarrpsu2024.29.055>
- Wang, Y.-J., Chen, K.-Y., Dou, K., & Liu, Y.-Z. (2021). Linking self-control to voluntary behaviors at workplace: The mediating role of job satisfaction. *Frontiers in Psychology*, 12, 530297. <https://doi.org/10.3389/fpsyg.2021.530297>
- Wehrt, W., Casper, A., & Sonnentag, S. (2022). More than a muscle: How self-control motivation, depletion, and self-regulation strategies impact task performance. *Journal of Organizational Behavior*, 43(8), 1358-1376. <https://doi.org/10.1002/job.2644>
- Xu, Z., Zhao, Y., Zhang, B., Liew, J., & Kogut, A. (2022). A meta-analysis of the efficacy of self-regulated learning interventions on academic achievement in online and blended environments in K-12 and higher education. *Behaviour & Information Technology*, 1-21. <https://doi.org/10.1080/0144929x.2022.2151935>
- Yan, Z., Panadero, E., Wang, X., & Zhan, Y. (2023). A systematic review on students' perceptions of self-assessment: Usefulness and factors influencing implementation. *Educational Psychology Review*, 35(3). <https://doi.org/10.1007/s10648-023-09799-1>
- Zaman, S., & Ansari, A. H. (2023). Pathways to job engagement: evidences from the software industry. *VINE Journal of Information and Knowledge Management Systems*, 53(1), 100-118. <https://doi.org/10.1108/vjikms-06-2020-0102>