

Preparing Educational Leaders for Resonant Management and Sustainable Development

By Iryna Shumilova¹, Sergiy Nemchenko², Danylo Dodonov³, Taras Gorbatiuk⁴,
Olena Laut⁵, Svitlana Heiko⁶, Ivan Fedovych⁷, Svitlana Khrypko⁸,
Oksana Patlaichuk⁹, Kuprii Tetiana¹⁰

ABSTRACT:

This article examines the preparation of educational institution leaders for resonant management under conditions of crisis uncertainty. The study aims to provide theoretical substantiation and empirical testing of an integrated preparation model using a mixed-methods design combining quantitative and qualitative approaches. The study involved 148 school leaders divided into experimental and control groups. The integrated model comprises value-motivational, cognitive-analytical, emotional-reflexive, and innovative-activity components. The experimental group demonstrated statistically significant growth across all competence domains ($p < 0.001$) with very large effect sizes (Cohen's $d > 2.7$). Correlation analysis confirmed the formation of an integrated competence system reflecting the synergistic character of resonant management.

Keywords: sustainable development; crisis management; educational leadership; resonant management; leader preparation; emotional resilience; innovativeness.

¹Iryna Shumilova, Doctor of Pedagogical Sciences, Professor, National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine. ORCID: <https://orcid.org/0000-0002-9565-7245>

²Sergiy Nemchenko, Doctor of Pedagogical Sciences, Professor, Zhytomyr Ivan Franko State University, Zhytomyr, Ukraine. ORCID: <https://orcid.org/0000-0002-9565-7245>

³Danylo Dodonov, Candidate of Political Sciences, Assistant of the Department of Health Care Management, Educational and Research Institute of Public Health and Preventive Medicine, Bogomolets National Medical University, Kyiv, Ukraine. ORCID: <https://orcid.org/0009-0001-6487-8248>

⁴Taras Gorbatiuk, Candidate of Philosophical Sciences, Associate Professor, National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine. ORCID: <https://orcid.org/0000-0002-4304-376X>

⁵Olena Laut, PhD, Associate Professor of the Department of Philosophy and International Communication, National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine. ORCID: <https://orcid.org/0000-0002-6118-0258>

⁶Svitlana Heiko, PhD in Philosophy, Associate Professor, National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine. ORCID: <https://orcid.org/0009-0008-0119-7673>

⁷Ivan Fedovych, Head of the Department of Land Management and Accounting; Forestry Mechanization, Teacher-Methodologist, Malyn Applied College, Malyn, Ukraine. ORCID: <https://orcid.org/0009-0006-4601-9817>

⁸Svitlana Khrypko, PhD in Philosophy, Associate Professor, Department of Philosophy, Borys Grinchenko Kyiv Metropolitan University, Kyiv, Ukraine. ORCID: <https://orcid.org/0000-0001-9426-4549>

⁹Oksana Patlaichuk, Candidate of Philosophical Sciences (PhD in Philosophy), Associate Professor, Department of Social-Humanitarian Disciplines and Philosophy, Educational and Scientific Humanitarian Institute, Admiral Makarov National University of Shipbuilding, Mykolaiv, Ukraine. ORCID: <https://orcid.org/0000-0002-1448-3360>

¹⁰Tetiana Kuprii, PhD in World History, Associate Professor, Deputy Dean for Research, Faculty of Social Sciences and Humanities, Department of Philosophy and Religious Studies, Borys Grinchenko Kyiv Metropolitan University, Kyiv, Ukraine. ORCID: <https://orcid.org/0000-0002-7305-5411>

1. Introduction

Education systems around the world have come under unprecedented pressure. The COVID-19 pandemic, armed conflicts, mass forced migration, accelerated digitalization, and deepening socioeconomic inequality – all of these have not merely complicated the daily functioning of schools but have fundamentally transformed the context in which school governance is carried out. School principals today routinely make decisions in situations where reliable information is scarce, time is even scarcer, and the cost of a mistake is measured in the lives and well-being of entire teaching communities.

Under such conditions, traditional management models designed for stable environments and clearly defined procedures are increasingly proving inadequate. Recent studies indicate that leaders who demonstrate effectiveness during crises combine strategic clarity with emotional sensitivity toward people and a willingness to take risks in pursuit of change (Harris & Jones, 2022; Ainscow, 2023). None of these qualities is innate; rather, each requires deliberate and systematic development.

At the same time, the academic discourse increasingly approaches educational management through the lens of sustainable development. This perspective implies not only achieving effective performance in the short term but also ensuring the leader's capacity to maintain long-term organizational resilience, foster the human potential of the educational staff, and align managerial decisions with social and environmental priorities (OECD, 2021; OECD, 2023). For a school principal, this means the ability to think not only about the current academic year but also about what the school will become over the next decade.

Among the concepts seeking to address these challenges, resonant leadership occupies a particularly significant position. Developed by Goleman, Boyatzis, and McKee (2002), the concept describes a leader capable of creating a positive emotional climate in which staff members feel heard, protected, and able to act effectively even during periods of crisis. Boyatzis, Rochford, and Taylor (2015) further clarified the neuropsychological mechanism underlying this phenomenon through the concept of the Positive Emotional Attractor: a shared vision and sense of hope that activate individuals' capacity for learning, mutual support, and innovation.

Transformational, instructional, and distributed leadership – each of these models has proven itself well in stable conditions, but each has limitations in crisis situations (Leithwood & Sun, 2018; Hallinger & Hosseingholizadeh, 2020; Spillane, 2006). Resonant leadership does not seek to replace these approaches; instead, it provides the emotional and value-based foundation without which any leadership model eventually loses its effectiveness under conditions of prolonged instability.

Reviews of educational leadership preparation programmes reveal a concerning tendency: they remain predominantly focused on administrative and procedural competencies while paying insufficient attention to developing emotional resilience, reflective capacity, and innovative thinking (Bush, 2018; Orr, 2023). This gap between the demands of contemporary educational realities and the content of leadership preparation programmes constitutes the central focus of the present study.

The relevance of this topic is particularly evident within the Ukrainian context. During recent years, educational leaders in Ukraine have simultaneously addressed the

consequences of the COVID-19 pandemic, organized education under conditions of armed conflict, managed school communities in which many teachers and students have been forcibly displaced, and maintained a psychological climate capable of retaining educators within the profession. Resilience under such circumstances cannot be based solely on administrative competencies; it requires notably the qualities described by the concept of resonant leadership.

The aim of this article is to provide a theoretical justification for and an empirical validation of an integrated model for preparing educational leaders for resonant leadership, taking into account the principles of sustainable development and the realities of crisis-related uncertainty. The objectives are to analyse the theoretical foundations of resonant leadership and related concepts; to develop and describe an integrated four-component model; to validate the model through a quasi-experimental study involving 148 educational leaders; and to analyse and interpret the findings using a mixed-methods approach.

The scientific novelty of this study lies in the fact that resonant leadership is examined, for the first time, not merely as a descriptive concept but as an operationalized construct with clearly defined components, measurable indicators, and a replicable training framework. The approach makes it possible to move beyond asking whether resonant leadership is important toward investigating precisely how and under what conditions it develops, thereby representing a fundamentally different level of analysis and practical significance.

The article is structured as follows: section 2 analyses the theoretical foundations of the study, including classical, crisis-oriented, and innovative models of educational leadership and their relationship to resonant leadership; section 3 describes the methodology, sample, research instrument, and the proposed four-component model; section 4 presents the findings of the quantitative and qualitative analyses; section 5 discusses the results in the context of previous research and offers practical recommendations. The article concludes with the main findings and a list of references.

2. Literature Review

2.1. Classical Models of Educational Leadership and Their Limitations

Transformational leadership has remained the most influential theoretical concept in the field of educational management for the past three decades. In a large-scale meta-analysis, Leithwood and Sun (2018) confirmed that transformational leaders genuinely improve teachers' motivation and the organizational climate. Meidelina, Pietsch, and Tulowitzki (2023) demonstrated that this model is also associated with the psychological well-being of teaching staff, a resource that is critically important for staff retention. However, the same meta-analytical evidence also reveals the other side of the picture: the effects of transformational leadership become unstable in crisis situations, where leaders simply do not have sufficient time or resources to inspire others gradually and develop a shared vision.

Instructional leadership, which positions the principal as the "lead educator," demonstrates a consistent relationship with students' academic achievement. This finding is confirmed by the review conducted by Hallinger and Hosseingholizadeh (2020), which encompassed more than 400 studies across 50 countries. Nevertheless, the same review identifies a significant limitation: under conditions of instability, principals who focus

excessively on standardized performance indicators often reduce their schools' capacity for adaptation. A school where everything is measured and controlled may prove unprepared for situations that extend beyond established procedures.

Distributed leadership (Spillane, 2006) reconceptualizes leadership as a collective practice in which decision-making, responsibility, and initiative are shared among multiple actors. The approach increases organizational engagement and promotes collective learning. Its limitation becomes evident during crises: if a culture of trust has not yet been established within the school, distributing responsibility may instead result in ambiguity, leaving it unclear who is responsible for making critical decisions when urgent action is required.

Significant contributions to understanding the limitations of classical leadership models have been made by Netolicky (2021) and Bush (2020) through comparative international reviews. Both scholars reached similar conclusions: each of the leadership models discussed is optimal within a particular context, yet none provides sufficient tools for leading organizations under conditions of prolonged and unpredictable instability. The question is therefore not which model is "better," but rather what enables leaders to remain effective when no supposedly "correct" leadership style proves adequate.

An important issue that is often overlooked in discussions of leadership styles concerns what actually keeps people committed to the teaching profession. Meidelina, Pietsch, and Tulowitzki (2023) found that teachers' well-being is not merely a by-product of effective leadership but a key variable determining staff retention and long-term organizational sustainability. A principal who believes that effectiveness and humanity represent competing priorities has already misunderstood the issue: in the long term, they are fundamentally inseparable.

Worth noting is that each of the leadership models discussed remains an effective managerial approach provided that leaders are capable of switching flexibly between them according to situational demands. Netolicky (2021) and Bush (2020) reach similar conclusions: situational flexibility is likely to be the most valuable leadership resource, and no single "optimal" model can substitute for the ability to choose the most appropriate approach in a given context. Consequently, different leadership styles should be regarded not as competing alternatives but as complementary approaches, provided that they are grounded in a shared emotional and value-based foundation.

Resonant leadership occupies exactly this function. It does not compete with transformational, instructional, or distributed leadership; rather, it establishes the emotional and value-based foundation without which each of these models ultimately reaches its limitations. Transformational leadership requires a stable motivational climate, and resonant leadership sustains such a climate. Distributed leadership depends on interpersonal trust, and resonant leadership develops that trust. Instructional leadership relies on teachers' psychological safety to engage in pedagogical risk-taking, and resonant leadership creates that psychological safety. Under crisis conditions, when any externally oriented leadership model may become ineffective, resonant leadership remains a reliable source of organizational stability precisely because it is grounded not in procedures but in an internal resource – the quality of relationships and the level of trust within the organization.

2.2. Crisis and Adaptive Leadership

Harris and Jones (2022) conducted a large-scale international study examining how educational systems responded to the COVID-19 pandemic. Their conclusion is concise: school principals whom teachers described as "present" and "supportive" maintained substantially higher levels of team engagement even under conditions of remote work. Ainscow (2023) identifies the leader's key role as that of a facilitator of collective learning: schools where principals not only manage but also help staff members make sense of their shared experiences demonstrate greater resilience to subsequent crises.

Boin and colleagues (2017), in their study of public crisis management, identify four essential tasks of crisis leaders: the early recognition of warning signals, decision-making under conditions of incomplete information, maintaining team effectiveness, and communicating authentically with stakeholders. Chatzipanagiotou and Katsarou (2023) further argue that these tasks become even more challenging in educational settings because crises have become chronic rather than episodic. School principals no longer confront isolated emergencies; instead, they operate within a state of continuous turbulence.

Timperley et al. (2020) developed the concept of adaptive leadership as a continuous process of reflective reconsideration of one's own managerial actions. Day and Gu (2014) associate this form of leadership with personal resilience and demonstrate that resilience is not merely endurance but the capacity to transform experiences of adversity into personal and organizational resources. At the same time, Tan (2024) cautions against idealizing "emotional leadership": without strategic clarity and well-structured decision-making, emotional sensitivity alone cannot guide an organization through a crisis.

In his influential work on leadership in a culture of change, Fullan (2020) emphasizes that a leader's ability to maintain collective confidence when no clear answers yet exist is among the most important and least developed leadership competencies. A principal who honestly admits, "I do not know, but we will figure it out together," often proves more effective than one who presents uncertain assumptions as unquestionable facts. This "honesty in uncertainty" is characteristic of the resonant leader rather than the traditional image of the "strong manager."

The review of research on crisis leadership also reveals an important pattern: the organizations that demonstrate the greatest resilience during crises are not necessarily those with the "best leader," but those with the strongest culture of mutual support. Chatzipanagiotou and Katsarou (2023) show that in schools where relationships of psychological safety and mutual trust had already been established among teachers before the crisis, the recovery period following disruption was approximately twice as short as in typical schools. The finding shifts the focus from the personal qualities of leaders themselves to the organizational environment that they cultivate. It is specifically in this respect that resonant leadership differs fundamentally from heroic leadership.

Crisis leadership is reactive: it mobilizes resources in response to an existing threat. Adaptive leadership is reflective: it teaches organizations to reconsider their actions on the basis of experience. Resonant leadership is proactive: it continuously maintains the level of psychological resources and interpersonal trust that enables organizations to experience crises with less disruption and to recover more rapidly. The Positive Emotional Attractor (Boyatzis et al., 2015) – a state of shared vision and hope – activates neurophysiological

mechanisms associated with learning and mutual support. This proactive organizational "immunity" is precisely what neither crisis leadership nor adaptive leadership provides in isolation.

2.3. Innovative Leadership and Leadership Preparation

Hodzhey (2024), in a systematic review, found that the culture of pedagogical experimentation and teachers' willingness to adopt new approaches are determined primarily by the behaviour of the school principal. Leaders who themselves model openness to risk and tolerance of mistakes foster educational communities in which innovation becomes the norm rather than the exception. Ng (2021) adds that educational leaders in the twenty-first century must combine systems thinking with the ability to support networked innovation, enabling valuable ideas to circulate among classrooms, schools, and educational systems.

Fusarelli and Fusarelli (2024), having analysed the consequences of the COVID-19 pandemic for leadership preparation, reached a concerning conclusion: programmes that existed before 2020 developed leadership skills suitable for stable environments but failed to prepare leaders for conditions of chronic instability. Bush (2018) and Orr (2023) arrive at similar conclusions, arguing that a structural gap exists between the competencies that researchers identify as essential for contemporary educational leaders and those that leadership preparation programmes actually cultivate.

Xiao, Li, and Chen (2025), in a comparative study, found that programmes that genuinely transform leadership practice consistently combine four elements: theoretical understanding, structured practical experience, mentoring, and reflective practice. None of these elements alone produces a comparable effect. Karimi and Khawaja (2023) point out that most studies in this field rely primarily on participants' self-reports and short-term measurements, which substantially reduces the evidential strength of positive conclusions.

Uhl-Bien and Arena (2018) introduce the concept of adaptive space, an organizational environment in which operational stability and opportunities for innovation coexist. A leader's ability to create such a space represents one of the defining characteristics of resonant leadership: staff members feel sufficiently secure to take risks while remaining sufficiently stable to embrace change without fear.

Digitalization introduces an additional dimension to these challenges. The OECD (2023) reports that leaders who lack confidence in using digital technologies themselves rarely implement them successfully within schools. The principal obstacle is not a lack of technical knowledge but rather an unwillingness to appear incompetent before colleagues. Once again, psychological safety becomes the decisive factor: leaders must be willing to learn publicly, make mistakes, and acknowledge those mistakes openly. These are specifically the qualities fostered through resonant leadership.

At the intersection of the various research directions discussed above emerges a common question: what should constitute the central focus of educational leadership preparation? Uhl-Bien and Arena (2018) argue convincingly that the priority should not be narrowly defined competencies but rather the capacity for adaptive thinking and action – the ability to perceive and understand organizational systems from within while maintaining personal equilibrium. Both the concept of resonant leadership and the

leadership preparation programme evaluated in the present study are grounded in this very principle.

3. Materials and Methods

3.1. Research Design

The study is grounded in the mixed-methods research paradigm (Creswell & Plano Clark, 2018). This choice is determined by the nature of the subject matter: managerial competencies encompass both measurable behavioural indicators and subjective experience that cannot be reduced to numerical data. The quantitative component provides statistical analysis of dynamics; the qualitative component offers insight into the mechanisms and meanings of the transformations that have occurred.

A quasi-experimental design with parallel groups – an experimental group (EG) and a control group (CG) – was selected as the structure of the empirical investigation. A randomised controlled design is practically unattainable in a real educational setting owing to organisational and ethical constraints; consequently, quasi-experimentation constitutes a recognised standard for evaluating educational and managerial interventions (Harris & Jones, 2022; Orr, 2023).

The empirical investigation was conducted in three consecutive stages. During the theoretical-analytical stage, the relevant scholarly literature was systematically reviewed, and the conceptual model together with the diagnostic instruments was developed. During the intervention stage, a 12-week leadership preparation programme was implemented for the experimental group, whereas the control group continued its professional activities under regular conditions. During the evaluation stage, post-intervention measurements were conducted, and qualitative data were collected to assess the programme's effectiveness.

The three stages lasted 8, 12, and 6 weeks, respectively. The overall research cycle covered almost an entire academic year, thereby minimizing the influence of seasonal factors, particularly the transition from the first to the second semester, which is typically accompanied by changes in workload and organizational intensity. Conducting parallel assessments of the control group at each measurement point made it possible to distinguish the effects of the intervention from natural professional development and broader organizational changes.

3.2. Sample

The study involved 148 current and prospective leaders of general secondary schools, including 62 school principals, 41 deputy principals, and 45 participants enrolled in educational leadership preparation programmes. Including representatives from different leadership levels made it possible to examine the effectiveness of the programme across diverse professional contexts.

Table 1: Characteristics of the Study Sample

Indicator	Experimental group (n = 76)	Control group (n = 72)
School principals	32	30
Deputy principals	21	20

Leadership program participants	23	22
Experience up to 5 years	18	17
Experience 6-15 years	34	32
Experience over 15 years	24	23
Urban schools	44	41
Rural schools	32	31

Participants were assigned to the experimental and control groups according to the principle of equivalence. The two groups were comparable with respect to gender, leadership experience, type of educational institution, and regional affiliation. At the baseline stage, no statistically significant differences were identified between the groups ($p > 0.05$), thereby ensuring the internal validity of the research design. Access to participants was facilitated through regional institutes of in-service teacher education and educational administration authorities.

The representativeness of the sample in a broader sense remains limited. Participants volunteered to participate through professional development institutions, which inevitably introduced a degree of positive self-selection. Nevertheless, this recruitment strategy enhanced the homogeneity of the learning conditions, as all participants possessed practical leadership experience, clearly defined professional roles, and authentic organizational contexts in which newly acquired competencies could be applied.

3.3. Integrated Training Model

The model is grounded in the concept of resonant leadership (Goleman, Boyatzis, & McKee, 2002), the theory of the Positive Emotional Attractor (Boyatzis, Rochford, & Taylor, 2015), and the principles of effective leadership preparation programmes (Xiao, Li, & Chen, 2025). It integrates four interrelated components, each of which reinforces and complements the others.

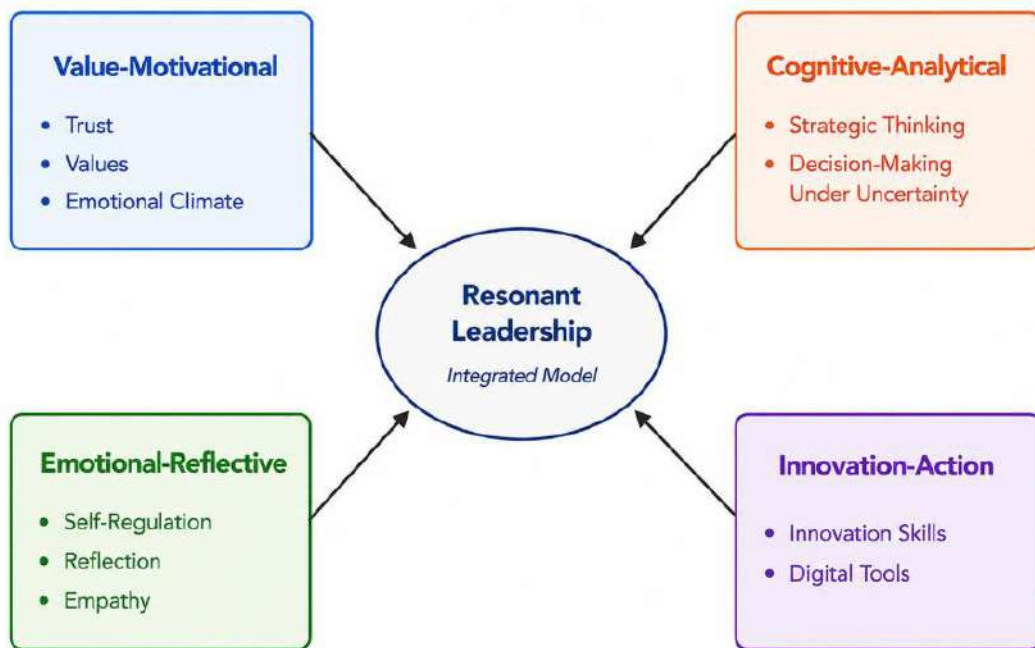
The value-motivational component focuses on awareness of personal values as the foundation of managerial decision-making, the development of relationships based on trust and mutual respect, and an understanding of the emotional climate as a strategic organizational resource. Without a value-based foundation, all other competencies remain merely technical skills devoid of meaningful leadership content; no methodology or procedure can substitute for this underlying dimension.

The cognitive-analytical component develops strategic thinking and long-term planning under conditions of uncertainty, the analysis of organizational situations from the perspectives of multiple stakeholder groups, and decision-making when information and time are limited. This component provides structure and rationality precisely where uncertainty encourages impulsive action.

The emotional-reflective component encompasses the recognition and regulation of one's own emotional states in stressful situations, reflective practice as a continuous means of interpreting leadership experience, as well as empathy and the ability to support the psychological well-being of school staff. The component constitutes the core of resonant leadership, since a positive emotional climate is impossible without it by definition.

The innovation-action component develops leaders' readiness to initiate and facilitate organizational change, overcome resistance to innovation, utilize digital management tools, coordinate teams remotely, and create conditions that promote educational innovation and collaborative learning. It transforms values and reflection into concrete leadership actions.

Figure 1: Integrated Model for Preparing Educational Leaders for Resonant Leadership



Synergistic Effect: the Development of Each Component Reinforces the Others

The 12-week leadership preparation programme combined classroom instruction (36 hours), practical case-based sessions (24 hours), individual reflective work (18 hours), and project-based learning (12 hours). Each of the four components was developed over a three-week period, after which two weeks were devoted to integrative tasks aimed at transferring the acquired competencies into holistic leadership practice.

Reflective practice was implemented through structured leadership journals that participants completed on a weekly basis. Case-based sessions were built around authentic leadership situations collected from schools within the region. The project component required participants to develop and defend their own "School Development Plan through Resonant Leadership", a document specifically tailored to the circumstances of their own educational institution and the practical challenges currently facing the principal or deputy principal.

Mentoring support took the form of biweekly individual sessions with a programme facilitator – an experienced educational administrator or organisational coach. The mentoring conversation was structured around a real managerial challenge that the

participant had encountered over the preceding two weeks. This ensured the transfer of learning concepts into a living practical context: participants did not "study" resonant leadership in the abstract; rather, they "tested" it in their own schools and analysed the results with their mentor.

Theoretical engagement with the programme was organised according to the principle of a reading seminar: participants each week processed one or two short texts (scholarly articles or excerpts from monographs), after which, during sessions, they discussed not abstract ideas but how the reading connected with their specific managerial situations. The facilitator did not "deliver" the content of theoretical concepts; rather, he or she helped the group to construct connections between theory and practice through reflexive dialogue. The form of work approximates the model of so-called "communities of practice," which Netolicky (2021) identifies as the most effective format for transformative impact on managerial beliefs.

The pedagogical logic of the programme was built upon the principle of "progressive immersion": each successive component drew upon the preceding one and, simultaneously, enriched it in retrospective view. For example, when participants in the sixth week commenced work on the emotional-reflexive component, they returned to the values-related issues of the first week – and, as a rule, discovered new meaning in them through the lens of the reflexive tools they had just acquired. This effect of "spiral integration" was documented in the journals of the majority of EG participants.

The assessment structure of the programme consciously departed from traditional tests and examinations: evaluation focused on the reflexive depth of journal entries, the quality of case analyses, and the practical soundness of the final project. From the very first sessions, participants understood that there were no "correct answers" – only decisions that were more or less thoroughly considered. This approach, in the words of the participants themselves, already served as a model of the managerial culture they were to transfer to their own schools: where there is no single "right answer," what is valued is the capacity to justify and refine decisions – rather than merely to follow instructions.

3.4. Instruments and Data Analysis

The primary quantitative instrument was an original questionnaire comprising 64 items, developed and validated for the purposes of this study. Its structure consisted of 16–18 items per component, measured on a five-point Likert scale (1 – "never / strongly disagree," 5 – "always / strongly agree"). Instrument development included an analysis of related questionnaires, content validation by 12 independent experts, and pilot testing with 38 educational leaders.

Table 2: Structure of the Research Instrument and Reliability Indicators

Competency domain	Number of items	Example indicators	Cronbachs α
Value-motivational	16	Trust, ethical decision-making	0,88
Cognitive-analytical	18	Strategic thinking, decision-making	0,91
Emotional-reflective	14	Emotional regulation, reflection	0,81

Innovation– action	16	Change initiation, digital leadership	0,89
-----------------------	----	---	------

Reliability of the subscales was confirmed by Cronbach's alpha coefficients ($\alpha = 0.81\text{--}0.91$). Construct validity was verified through confirmatory factor analysis: the four-factor model demonstrated acceptable fit indices (CFI = 0.94; RMSEA = 0.058). The obtained parameters meet commonly accepted criteria for satisfactory model fit and indicate that the proposed four-component structure is empirically justified.

Qualitative data were collected through semi-structured individual interviews with 24 EG participants and 6 external experts in the field of educational management (duration: 45–60 minutes). Interview topics included changes in participants' own managerial practice, concrete examples of new approaches, challenges encountered during the preparation process, and changes in the school's emotional climate. Recordings were transcribed with participants' consent.

Quantitative analysis encompassed descriptive statistics, normality testing (Shapiro–Wilk test), independent-samples t-tests and paired-samples t-tests for within-group changes, calculation of Cohen's d, and Pearson correlation analysis. Statistical significance was set at $\alpha = 0.05$. Qualitative analysis was conducted using thematic coding (Braun & Clarke, 2006) in a convergent version: two independent coders first processed the transcripts separately, then reconciled coding categories until consensus was reached. Quantitative and qualitative data were triangulated at the final analytical stage. All participants provided informed voluntary consent; personal data were anonymised.

3.5. Methodological Limitations

The quasi-experimental design, chosen under the conditions of a real educational setting, carries several inherent limitations. First, selection effects: participants who voluntarily agreed to take part in the study may systematically differ from other educational leaders in their level of openness to change and intrinsic motivation. Second, contextual specificity: the programme was implemented within particular institutional and regional conditions, which limits the direct transferability of the findings. Third, short-term scope: a 12-week programme does not allow for the determination of how stable the observed changes will prove to be after a year or two. Fourth, the risk of socially desirable responses in self-report measures. These limitations do not call into question the internal validity of the study, but they do define the boundaries of generalisability and outline priorities for future research.

4. Results

4.1. Overall Findings

All 148 participants completed the full research cycle – from baseline to post-intervention measurement. The absence of attrition attests to stable engagement and the organisational reliability of the procedure. The Shapiro–Wilk test confirmed the normality of distribution across all scales ($p > 0.05$), justifying the use of parametric methods of analysis.

At the baseline stage, no significant differences were found between the groups: EG – M = 3.12, SD = 0.41; CG – M = 3.09, SD = 0.39; $t(146) = 0.47$, $p = 0.639$. Both

groups commenced at a level corresponding to a moderate level of managerial competence development. Following the 12-week programme, the picture changed dramatically: EG – $M = 4.21$, $SD = 0.36$; CG – $M = 3.18$, $SD = 0.40$; $t(146) = 17.84$, $p < 0.001$; $d = 2.94$. Within-group dynamics for the EG: $t(75) = 21.16$, $p < 0.001$. In the CG, changes did not exceed the level of statistical noise ($p > 0.05$).

Table 3: Comparative Analysis of Resonant Leadership Competencies

Group	Pre-test (M $\pm$ SD)	Post-test (M $\pm$ SD)	t	p	Cohen's d
Experimental group	3.12 $\pm$ 0.41	4.21 $\pm$ 0.36	17.84	< .001	2.94
Control group	3.09 $\pm$ 0.39	3.18 $\pm$ 0.40	1.12	> .05	0.18

To verify the equivalence of the groups prior to the intervention, an additional t-test was conducted across all four components: none of the pairwise comparisons revealed significant differences (all $p > 0.10$). This confirms that baseline differences between the EG and CG were statistically insignificant and could not have influenced the interpretation of the final results.

Table 4: Dynamics of Indicators Across Resonant Leadership Components in EG and CG

Component	EG pre-test (M)	EG post-test (M)	CG pre-test (M)	CG post-test (M)	p	Cohen's d
Values-motivational	3,18	4,32	3,15	3,22	< ,001	2,80
Cognitive-analytical	3,25	4,28	3,22	3,27	< ,001	2,78
Emotional-reflexive	3,05	4,19	3,02	3,10	< ,001	2,75
Innovative-action	3,01	4,25	3,04	3,13	< ,001	2,82
Overall indicator	3,12	4,21	3,09	3,18	< ,001	2,94

The internal homogeneity of the results was also examined separately: post-test variance in the EG ($SD = 0.36$) proved lower than at pre-test ($SD = 0.41$), which indicates that EG participants after the programme not only raised their overall level but also became more similar to one another in their competence profiles. The reduction in variance may suggest that the programme brought up participants with initially low scores, rather than merely strengthening those who were already at a higher level. This constitutes an important argument in favour of equitable access to programme effects across diverse managerial contexts.

4.2. Values-Motivational Component

Pre-test: EG – $M = 3.18$, $SD = 0.44$; CG – $M = 3.15$, $SD = 0.46$. Post-test: EG – $M = 4.32$, $SD = 0.38$; CG – $M = 3.22$, $SD = 0.43$. Between-group differences: $t(146) = 17.02$, $p < 0.001$; $d = 2.80$. Within-group dynamics for the EG: $t(75) = 19.34$, $p < 0.001$.

The greatest gains were observed in indicators of the quality of managerial relationships: the capacity to build trust (+1.21 points), support of emotional climate (+1.09), and readiness to acknowledge one's own mistakes (+0.94). In the CG, changes did not exceed 0.10–0.15 points. In interviews, EG participants most frequently described the awareness of values as the "starting point of decisions" – this was what they identified as the principal personal shift. The words of one principal are telling: "I always thought that values were nice words on the wall. Now I understand: they are either in decisions, or they do not exist at all."

4.3. Cognitive-Analytical Component

Pre-test: EG – M = 3.25, SD = 0.40; CG – M = 3.22, SD = 0.41. Post-test: EG – M = 4.28, SD = 0.35; CG – M = 3.27, SD = 0.39. Between-group differences: $t(146) = 16.94$, $p < 0.001$; $d = 2.78$.

The greatest increases were observed in: strategic thinking (+1.03), analysis of ambiguous situations (+0.98), and decision-making under information deficit (+1.01). Notably, this component had the highest initial level (M = 3.25) – traditional preparation programmes do indeed develop a certain cognitive foundation. However, the gain here was also substantial, indicating considerable untapped potential even in a relatively well-developed domain. Participants described not so much new knowledge as a new way of structuring uncertainty: instead of searching for the "correct answer" – formulating the "best decision based on available data" with a readiness to adjust it as new information emerges.

4.4. Emotional-Reflexive Component

This component demonstrated the lowest initial level (EG – M = 3.05; CG – M = 3.02) and, at the same time, the highest relative dynamics. Post-test: EG – M = 4.19, SD = 0.39; CG – M = 3.10, SD = 0.44. $t(146) = 16.87$, $p < 0.001$; $d = 2.75$.

The most substantial shifts were observed in: emotional self-regulation (+1.18), reflexivity of decisions (+1.06), and support of staff well-being (+1.09). The low initial level is symptomatic: it confirms that traditional preparation does indeed ignore the emotional dimension of management. The fact that this component showed one of the highest absolute gains is perhaps the most compelling practical argument in favour of the programme: participants developed skills that had previously remained almost untouched.

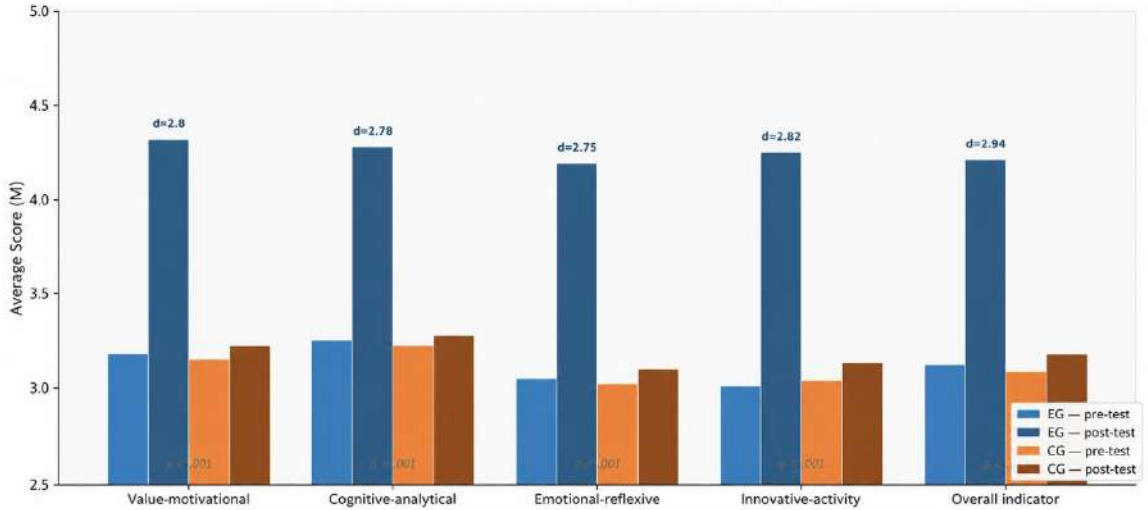
Particularly revealing is the shift in the understanding of reflection: whereas prior to the programme the majority of participants viewed it as "summing up after events," afterwards they regarded it as a continuous tool accompanying decision-making in real time. This represents a fundamentally different level of reflexive practice, and it is precisely this that distinguishes a leader capable of learning on the go from one who learns only retrospectively.

4.5. Innovative-Action Component

Pre-test: EG – M = 3.01, SD = 0.43; CG – M = 3.04, SD = 0.42. Post-test: EG – M = 4.25, SD = 0.37; CG – M = 3.13, SD = 0.41. $t(146) = 17.21$, $p < 0.001$; $d = 2.82$. Together with the values-motivational component, this component showed the highest d among all four components. The greatest gains were observed in: readiness to initiate

change (+1.19), support of teachers' innovativeness (+1.11), and skills in digital tools (+1.05). Like the emotional-reflexive component, this component had a low starting level – further evidence of a blind spot in existing preparation practices.

Figure 2: Changes in Resonant Leadership Competencies in the Experimental and Control Groups

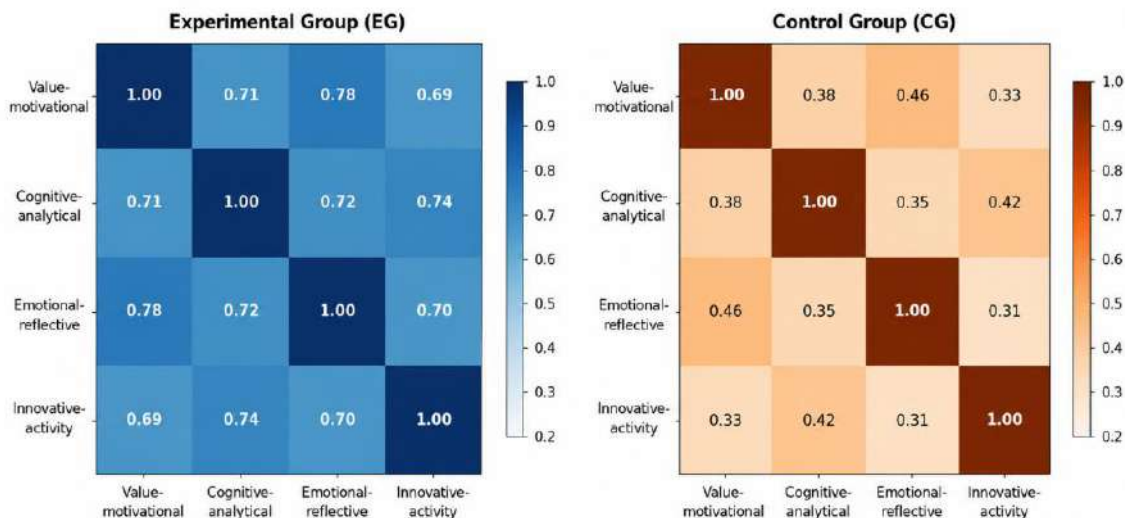


4.6. Correlation Analysis

Following the implementation of the programme, strong positive correlations emerged among all four components of resonant leadership within the experimental group, ranging from $r = 0.69$ to $r = 0.78$ ($p < 0.001$). The strongest relationships were identified between the emotional-reflective and value-motivational components ($r = 0.78$), and between the cognitive-analytical and innovation-action components ($r = 0.74$). These relationships reflect the internal structure of the model: the former pair represents the leader's identity core, whereas the latter characterizes the leader's operational capacity.

Importantly, at the baseline stage the correlations within the experimental group were relatively weak ($r = 0.28$ – 0.43), closely resembling those observed in the control group. Thus, the strong interdependence of the four components cannot be regarded as an initial characteristic of the participants but rather as a direct outcome of the intervention programme. In the control group, post-test correlations remained moderate ($r = 0.31$ – 0.46) and showed no substantial changes. This contrast provides compelling evidence of the synergistic effect produced by the integrated leadership preparation programme.

Figure 3: Correlation Matrix of Resonant Leadership Components in the Experimental and Control Groups (Post-test, Pearson's r)



A particularly noteworthy finding concerns the transformation of the correlation structure between the pre-test and post-test assessments. Prior to the intervention, the four components functioned as relatively independent domains, a pattern typical of competencies developed separately without an integrating framework. Following completion of the programme, however, the components formed a coherent and interconnected system in which improvements in one domain were consistently accompanied by improvements in the others. These findings support the theoretical proposition that resonant leadership should be understood as an integrated system rather than a collection of independent competencies.

A more detailed examination of the correlation structure within the experimental group revealed several meaningful patterns. The strongest relationship, observed between the emotional-reflective and value-motivational components ($r = 0.78$), is consistent with the theoretical assumption that reflective practice can be sustained only when leaders possess an intrinsic motivation to engage in honest self-reflection, a motivation fundamentally rooted in their personal values. By contrast, the strong association between the cognitive-analytical and innovation-action components ($r = 0.74$) reflects the operational logic of leadership: the ability to analyse complex situations enhances leaders' willingness to pursue innovation because uncertainty becomes more understandable and manageable. Together, these two pairs of components constitute two complementary dimensions of resonant leadership: the identity axis and the action axis.

4.7. Qualitative Analysis

The thematic analysis of the 24 interviews identified three central themes: the transformation of leadership perceptions, changes in leadership practice, and the reconceptualization of the role of the emotional climate. Most participants described a qualitative shift in the way they interpreted organizational situations, moving from an emphasis on observable behavioural symptoms toward a deeper understanding of the underlying emotional needs of individuals. Leadership decisions, administrative

documentation, and approaches to working with school staff changed substantially, and these changes extended beyond participants' self-assessments.

One school principal with twelve years of leadership experience commented: "After completing the programme, I look at conflict situations completely differently. Previously, I tried to resolve them as quickly as possible. Now I understand that every conflict reflects genuine emotional needs. If I ignore those needs, the conflict will inevitably return."

A deputy principal with seven years of experience observed: "The most important realization for me was that strategic thinking and emotional sensitivity are not contradictory; they simply cannot function effectively without one another. I used to believe that a good principal was someone who always thought ahead. Now I understand that a good leader is also someone who genuinely understands what people are experiencing."

Similarly, a lyceum principal with nine years of experience stated: "I noticed that teachers began approaching me with ideas much more frequently. Previously, they waited for instructions. I cannot say exactly what changed, but I believe I started listening more and judging less."

The analysis of leadership documentation – including school development plans, minutes of pedagogical council meetings, and analytical reports – confirmed the qualitative changes described during the interviews. Documents produced by participants in the experimental group contained substantially more references to strategies for staff support, the development of psychologically safe working environments, and the promotion of collaborative innovation. Comparable changes within the control group were isolated and infrequent. These findings indicate that the transformation observed in the experimental group extended beyond subjective self-perception and was reflected in authentic leadership practice.

Interviews with external experts revealed an additional pattern that would likely have remained unnoticed if only quantitative data had been analysed. Following completion of the programme, participants in the experimental group began framing leadership challenges differently. Rather than asking, "What should be done?", they increasingly asked, "What is important for the people affected by this situation?" According to the experts, the shift in problem framing constitutes evidence of a deeper internalization of the values underlying resonant leadership, extending beyond declarative knowledge to genuine transformation of leadership thinking.

5. Discussion

The data confirm the effectiveness of the proposed model. The statistically significant improvement observed in the experimental group (EG), combined with the absence of comparable changes in the control group (CG), provides strong evidence that the observed effects resulted from the training program rather than from external factors. Importantly, improvement occurred consistently across all four components, indicating comprehensive managerial development rather than isolated gains in specific competencies.

The very large effect sizes ($d > 2.7$) require careful interpretation. Such values are uncommon in educational research. Several factors support the credibility of these findings. First, the observed changes were confirmed not only through self-report measures but also through independent analyses of management documents. Second, the qualitative data revealed concrete behavioral changes rather than general positive impressions. Third, no comparable effects were found in the control group despite identical measurement conditions. Although the influence of the Hawthorne effect – that is, changes resulting simply from participation in the study – cannot be completely excluded, it is unlikely to account for the systematic improvement observed across all competency domains.

The findings support the theoretical proposition that resonant leadership functions as a meta-level framework for educational leadership. Improvements in the value-motivational component provide the foundation for transformational leadership. Development of cognitive-analytical competencies strengthens the capacity for instructional leadership. Emotional-reflective and innovation-action competencies create the conditions necessary for effective distributed leadership. Thus, resonant leadership does not replace existing leadership models; rather, it enables and strengthens their implementation.

The substantial improvement observed in the innovation-action component ($d = 2.82$) is consistent with Hodzhey's (2024) conclusion regarding the relationship between leadership support and a culture of pedagogical experimentation. However, the present findings further clarify the underlying mechanism. Innovation increased not in isolation but simultaneously with improvements in the emotional-reflective (+1.14) and value-motivational (+1.14) components, indicating a systemic rather than an isolated effect. Likewise, the significant improvement in emotional-reflective competencies is consistent with the established role of core self-evaluations in resilience (Kammeyer-Mueller, Judge, & Scott, 2009). Nevertheless, the qualitative data suggest a more nuanced mechanism: participants described not merely becoming more resilient but fundamentally changing the way they perceived their own emotions – from suppressing emotions to consciously using them as a source of managerial information. Compared with crisis leadership (Boin et al., 2017) and adaptive leadership (Timperley et al., 2020), resonant leadership demonstrated a proactive orientation: participants in the experimental group began intentionally fostering organizational trust and psychological safety before crises emerged rather than merely responding once crises had occurred.

The strong correlations among the four competency domains in the experimental group ($r = 0.69$ – 0.78), contrasted with the relatively weak correlations in the control group ($r = 0.31$ – 0.46), indicate a clear synergistic effect. Previously independent competencies became integrated into a coherent system. This corresponds to the logic of sustainable development, according to which social, organizational, and innovative dimensions reinforce rather than compete with one another.

The qualitative findings help explain the mechanisms underlying these effects. Reflective practices enabled participants to identify and reconsider previously unconscious managerial assumptions. Case-based simulations provided a psychologically safe environment for testing new leadership strategies. Project-based activities facilitated the transfer of newly acquired knowledge and competencies into authentic managerial

practice. It appears that the integration of these three instructional formats produced systemic rather than superficial change.

From a practical perspective, the findings suggest the need for a comprehensive revision of educational leadership preparation programs. Effective programs should include systematic development of emotional resilience, reflective capacity, and innovative thinking rather than focusing exclusively on administrative procedures. For the preparation of facilitators of such programmes, this entails a fundamentally different pedagogical challenge: instead of transmitting knowledge, facilitators should model resonant leadership interactions and cultivate psychologically safe learning environments in which participants can openly examine and discuss their own professional limitations.

The institutional conditions necessary for implementing programs of this type also deserve particular attention. The observed effects were achieved under conditions in which participants had protected time for reflection, regular access to mentoring support, and opportunities to make "safe mistakes" within case simulations. If the program were reduced to a lecture-based format delivered during a single weekend without a reflective component, comparable outcomes would be highly unlikely. Consequently, the findings concern not only the content of leadership preparation but also the organizational and pedagogical conditions under which it is delivered.

The qualitative analysis also revealed an additional outcome worthy of attention. Participants in the experimental group described a shift in their attitudes toward fellow school principals – from competition and professional isolation toward collaboration, knowledge sharing, and peer learning. Unintentionally, the program became a catalyst for horizontal networks of mutual professional support. Several participants subsequently initiated informal regional meetings of school principals designed specifically for exchanging practical experiences through formats similar to the case-based sessions used during the program. This is precisely why the findings pertain not only to the content of preparation but also to its organisational and pedagogical conditions.

Comparison of the qualitative and quantitative findings also provides important insight into the nature of the observed improvements. While the quantitative results demonstrate significant increases on the "values-motivational" and "emotional-reflexive" scales – but the qualitative data reveal that what occurred was not merely "acquisition of new skills" but a reconfiguration of role identity. EG participants began to understand themselves not as "process managers" but as "stewards of organisational culture." This represents a second-order transformation – not merely a change in behavior but a redefinition of the leader's professional role. According to research in organizational management (Uhl-Bien & Arena, 2018), such changes are among the most stable forms of long-term professional development.

More broadly, the findings raise crucial questions regarding the priorities of national systems for preparing educational leaders. If the value-motivational and emotional-reflective domains are initially the least developed while simultaneously demonstrating the greatest improvement, this constitutes a direct indication that professional development programs require structural reorientation. The issue is no longer whether school leaders need so-called soft skills; rather, it is why leadership preparation systems continue to neglect these competencies despite substantial evidence of their critical importance.

In particular, the issue of the methodological validity of educational leadership preparation programs also warrants broader discussion within both academic and professional communities. Karimi and Khawaja (2023), in their review of systematic analyses in this field, concluded that most leadership development programs operate without any systematic evaluation of their effectiveness – not because such evaluation is impossible but because it is not institutionally embedded. The study demonstrates that even within the ordinary capacities of regional professional development institutes, it is feasible to implement a quasi-experimental design with rigorous outcome measurement rather than relying solely on participants' post-training feedback. This is fundamentally a question of establishing an institutional culture of evidence-based practice and is therefore as important as the content of the training itself.

The study operationalizes the concept of resonant leadership (Goleman et al., 2002) through measurable competency domains and a validated professional development program. Furthermore, it demonstrates that resonant leadership can be understood as a practical mechanism for implementing the principles of sustainable development within educational organizations. In this context, sustainable development should not be viewed exclusively as an environmental or technological agenda but primarily as a human-centered one. An organization that preserves its human potential and continually supports collective learning possesses sustainability in its most fundamental sense.

The quasi-experimental design and the relatively short observation period constitute the principal limitations of the present study. Future research should therefore prioritize several directions. First, longitudinal investigations examining the sustainability of program effects over one to three years are needed to determine whether the observed improvements persist or gradually diminish under the influence of routine organizational practice. Second, future studies should investigate the relationships between resonant leadership competencies and concrete educational outcomes, including student achievement, teacher satisfaction, and teacher retention. Third, expanding the sample to include diverse educational institutions and regions would improve the external validity of the findings. Fourth, international comparative studies could clarify the extent to which the effectiveness of resonant leadership is culturally specific or universally applicable. Finally, further research should examine how resonant leadership interacts with traditional leadership models within real educational organizations.

6. Conclusions

The integrated model for preparing educational leaders for resonant leadership proved to be effective. The overall mean score in the experimental group increased from $M = 3.12$ ($SD = 0.41$) to $M = 4.21$ ($SD = 0.36$), whereas the control group demonstrated only a marginal, statistically insignificant increase ($M = 3.09$ – 3.18). The difference between the groups was statistically significant, $t(146) = 17.84$, $p < 0.001$, with a very large effect size ($d = 2.94$). Such an effect is rarely observed in educational research and indicates substantial improvements in actual leadership practice rather than merely in participants' self-perceptions.

At the level of individual components, consistent improvements were observed across all four domains: the value-motivational component ($d = 2.80$), the cognitive-

analytical component ($d = 2.78$), the emotional-reflective component ($d = 2.75$), and the innovation-action component ($d = 2.82$). All improvements were statistically significant ($p < 0.001$). The consistency of these effects indicates that the programme fostered comprehensive leadership readiness rather than enhancing isolated competencies.

Correlation analysis revealed strong relationships among all four components within the experimental group ($r = 0.69\text{--}0.78$, $p < 0.001$), whereas only weak correlations were observed in the control group ($r = 0.31\text{--}0.46$). In the experimental group, previously separate competencies became integrated into a coherent system. This integration represents perhaps the most significant outcome of the study, as the synergy among competencies is substantially more valuable than the simple accumulation of isolated skills. The qualitative findings complemented the quantitative results by revealing the underlying mechanisms and individual trajectories of participants' professional transformation.

The observed changes were confirmed through three independent sources of evidence: quantitative self-assessment data obtained from the questionnaire, independent analyses of leadership documentation, and semi-structured interviews. The methodological triangulation provides strong evidence that the identified changes reflect genuine professional development rather than methodological artefacts.

The study also demonstrated the practical effectiveness of a relatively compact leadership development programme. Twelve weeks represent a comparatively short period for achieving systemic changes in leadership practice. Nevertheless, the findings indicate that when a programme is built upon a clear conceptual framework and incorporates reflective practice, case-based learning, and project-based activities, meaningful professional transformation can be achieved within such a timeframe. This finding is of considerable practical importance, as extended academic programmes are inaccessible to many practicing school principals, while professional development initiatives are typically limited to programmes of comparable duration.

Of particular significance is the finding that the lowest baseline scores were observed precisely in those competency domains that traditionally receive the least attention in leadership development programmes – the emotional-reflective and innovation-action components. If the least developed competencies are simultaneously those most critical for effective leadership under conditions of crisis and uncertainty, this finding itself constitutes a compelling strategic argument for reforming educational leadership preparation.

The proposed model may serve as a practical framework for redesigning both pre-service and in-service educational leadership programmes. From the perspective of sustainable development, resonant leadership represents a practical mechanism for implementing its principles within educational organizations. By integrating human potential, organizational adaptability, and innovative development, resonant leadership promotes leadership practices oriented toward long-term organizational resilience and balanced institutional development under conditions of continuous transformation.

References

1. Ainscow, M. (2023). Leading schools in times of uncertainty. *Educational Management Administration & Leadership*, 51(2), 195–210.

2. Bush, T. (2018). Preparation and induction for school principals: Global perspectives. *Management in Education*, 32(2), 66–71.
3. Boin, A., 't Hart, P., Stern, E., & Sundelius, B. (2017). *The politics of crisis management: Public leadership under pressure* (2nd ed.). Cambridge University Press.
4. Boyatzis, R. E., Rochford, K., & Taylor, S. N. (2015). The role of the positive emotional attractor in vision and shared vision. *Frontiers in Psychology*, 6, Article 670.
5. Bush, T. (2020). *School leadership and management*. Sage.
6. Chatzipanagiotou, P., & Katsarou, E. (2023). Crisis management, school leadership in disruptive times and the recovery of schools in the post COVID-19 era: A systematic literature review. *Education Sciences*, 13(2), Article 118.
7. Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Sage.
8. Day, C., & Gu, Q. (2014). *Resilient teachers, resilient schools: Building and sustaining quality in testing times*. Routledge.
9. Fullan, M. (2020). *Leading in a culture of change*. Jossey-Bass.
10. Fusarelli, B. C., & Fusarelli, L. D. (2024). Rethinking leadership preparation in a post-pandemic world. *Journal of Educational Administration*, 62(1), 1–16.
11. Goleman, D., Boyatzis, R. E., & McKee, A. (2002). *Primal leadership: Realizing the power of emotional intelligence*. Harvard Business School Press.
12. Hallinger, P., & Hosseingholizadeh, R. (2020). Exploring instructional leadership in Iran: A mixed methods study of high- and low-performing principals. *Educational Management Administration & Leadership*, 48(6), 1001–1021.
13. Harris, A., & Jones, M. (2022). Leading during a pandemic – what the evidence tells us. *School Leadership & Management*, 42(3), 199–212.
14. Hojeij, Z. (2024). Innovative leadership in education: A systematic review. *Educational Review*, 76(1), 1–22.
15. Karimi, S., & Khawaja, N. G. (2023). Methodological challenges in leadership development research. *Leadership & Organization Development Journal*, 44(6), 812–827.
16. Kammeyer-Mueller, J. D., Judge, T. A., & Scott, B. A. (2009). The role of core self-evaluations in the coping process. *Journal of Applied Psychology*, 94(1), 177–195.
17. Leithwood, K., & Sun, J. (2018). Academic culture: A promising mediator of school leaders' influence on student learning. *Journal of Educational Administration*, 56(3), 350–363.
18. Meidelina, M., Pietsch, M., & Tulowitzki, P. (2023). Transformational leadership and teacher well-being: A systematic review. *Journal of Education and Learning (EduLearn)*, 17(3), 591–601.
19. Netolicky, D. M. (2021). *Transformational professional learning: Making a difference in schools*. Routledge.
20. Ng, P. T. (2021). Educational leadership for 21st century schools. *Educational Research for Policy and Practice*, 20(1), 1–15.
21. OECD. (2021). *School leadership for learning*. OECD Publishing.
22. OECD. (2023). *Trends shaping education*. OECD Publishing.
23. Orr, M. T. (2023). Preparing school leaders for complexity. *Educational Management Administration & Leadership*, 51(3), 391–408.
24. Spillane, J. P. (2006). *Distributed leadership*. Jossey-Bass.
25. Tan, C. (2024). Emotional leadership revisited. *Educational Philosophy and Theory*, 56(4), 397–410.
26. Timperley, H., Ell, F., Le Fevre, D., & Twyford, K. (2020). *Leading professional learning: Practical strategies for impact in schools*. ACER Press.
27. Uhl-Bien, M., & Arena, M. (2018). Leadership for organizational adaptability: A theoretical synthesis and integrative framework. *The Leadership Quarterly*, 29(1), 89–104.
28. Xia, J., Li, X., & Chen, H. (2025). Leadership preparation programs and career intentions. *Educational Administration Quarterly*, 61(1), 89–118.