

TUDÁS MENEDZSMENT

A Pécsi Tudományegyetem Bölcsészeti- és Társadalomtudományi Kar
Humán Fejlesztési és Művelődéstudományi Intézet periodikája

ADAPTATION AND RESILIENCE TO THE CHALLENGES OF CONTEMPORARY SOCIETIES

Multidimensional portrait

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Editor's Preface

ADAPTATION AND RESILIENCE TO THE CHALLENGES OF CONTEMPORARY SOCIETIES MULTIDIMENSIONAL PORTRAIT

The present issue brings together a diverse yet conceptually interconnected set of articles that focus on the evolving challenges faced by contemporary societies, educational systems, and professional fields. Although the articles deal with a wide range of topics from children's mental health and long term unemployment to intercultural communication, extracurricular activities, soft skills development, sustainability knowledge, and the ecological transformation of human communities, they share a common intellectual thread. Each contribution examines how individuals, professionals, and institutions respond to rapidly changing social, cultural, and environmental conditions. Together, they offer a multidimensional portrait of adaptation, resilience, and the need for renewed professional, pedagogical, and organisational frameworks.

A recurring theme across the papers is the increasing complexity of human environment, whether social, educational, or ecological, and the corresponding need for interdisciplinary, collaborative, and competence based approaches. The authors collectively argue that traditional structures and practices are no longer sufficient to address emerging challenges they call for systemic transformation, deeper professional and innovative models of learning and cooperation.

The issue opens with Tótová and Gábová's research of children's mental health as a critical challenge for the future of social work and education. Their qualitative analysis underscores that professional preparedness is not merely a matter of technical knowledge but a holistic, long term developmental process involving identity formation, empathy, ethical sensitivity, and collaborative competence. The authors highlight shortcomings in current educational programs and emphasize the need for clearly defined competence frameworks and systematic professional support. Their findings resonate strongly with broader debates on how professionals can be equipped to navigate increasingly complex human needs.

This concern for professional responsiveness is echoed in Celetková's study of individualized approaches in activation work with the long term unemployed. Her comparative analysis of public employment services and non profit organisations reveals that front line counsellors actively reinterpret and modify the concept of individual approach in response to organisational hybridity. While some adaptations prove beneficial, others may hinder client activation. The study thus illustrates how professional practices evolve under structural pressures and how organisational contexts shape the meaning of individual support. Both papers highlight the importance of professional discretion, contextual awareness, and adaptive expertise in human centred fields.

Several contributions in this issue explore how educational systems prepare individuals for participation in increasingly diverse and demanding environments. Fekete's mixed methods study investigates pre service English teachers' attitudes toward teaching culture and intercultural communication (ICC). Her findings reveal a persistent gap between the recognized importance of cultural awareness and its limited presence in teacher education curricula. While cultural products and practices receive attention, deeper cultural perspectives and ICC remain underdeveloped and often misunderstood. The study calls for systematic integration of intercultural competence development into teacher training an imperative that aligns with global educational trends and the growing cultural complexity of classrooms.

Hüber's qualitative research on soft skills training for Hungarian high school students further expands this educational focus. Trainers identify communication skills, self awareness, cooperation, time management, stress management, and emotional intelligence as the most crucial competencies for young people. These skills are seen as foundational for academic success, career decision making, and workplace readiness. The study highlights the rising importance of resilience and creative thinking, reflecting broader societal shifts driven by globalization and digitalization. Together, these papers underscore the need for competence based, interactive, and learner centred educational approaches that prepare students for dynamic and uncertain futures.

Kígyós's quantitative study adds another dimension by examining the transfer effects of childhood extracurricular activities on university students' resilience and academic performance. Her findings demonstrate that participation in multiple activities, especially sports, significantly enhances resilience, while visual arts engagement correlates with improved academic performance. The study provides empirical support for integrated pedagogical models that recognize the long term developmental value of extracurricular experiences. It also reinforces the broader theme of resilience as a key competence in contemporary education.

Lilla Tamás and Imola Csehné Papp shift the focus from individual development to organisational processes, exploring how individual sustainability knowledge becomes embedded in corporate knowledge systems. Their theoretical review highlights the tacit, multidimensional nature of sustainability knowledge and argues that its organisational integration requires intentional mechanisms, trust, communication, and supportive organisational cultures. Without such conditions, individual insights remain isolated and fail to influence practice. This contribution enriches the issue by demonstrating how knowledge management and sustainability intersect, and how organisations must evolve to harness the full potential of employee expertise.

The final paper, by Fábián, offers a broader theoretical perspective on the evolution of human community from an ecological standpoint. Drawing on human ethology, the author argues that human sociability is rooted in biological evolution but is increasingly challenged by the emergence of non organic environmental realities, digital, virtual, and technologically mediated spaces that coexist with traditional organic environments. This dual ecology creates unprecedented pressures on human

sociability and community structures. The paper provides a compelling conceptual framework for understanding contemporary social transformations and complements the more applied studies in the issue by situating them within a long term evolutionary narrative.

Across these diverse contributions, several shared insights emerge. Whether addressing children's mental health, unemployment, teacher education, or sustainability knowledge, the authors emphasize that complex challenges require collaboration across sectors and disciplines. Professional preparedness, intercultural competence, soft skills, resilience, and organisational learning all point to the growing importance of competence based frameworks that integrate cognitive, emotional, social, and ethical dimensions. From hybrid organisational structures to evolving cultural ecologies, the studies highlight how individuals and institutions must continually adapt to fluid and unpredictable contexts. Several papers illustrate how individual experiences, whether professional, educational, or ecological, are deeply embedded in broader organisational, cultural, and environmental systems.

Taken together, the articles in this issue offer a rich and multifaceted exploration of how human beings, professionals, and institutions navigate the challenges of contemporary life. They reveal that resilience, adaptability, and collaboration are not merely desirable qualities but essential conditions for thriving in a world marked by complexity and rapid change. By integrating empirical research, theoretical reflection, and practical insights, this collection contributes meaningfully to ongoing scholarly conversations and provides a foundation for future interdisciplinary inquiry.

Pécs, August, 2026

Katalin Varga
chief editor

Nika Tótvá – Kristýna Gábová

*CHILDREN'S MENTAL HEALTH AS A CHALLENGE FOR THE FUTURE
OF SOCIAL WORK: PREPAREDNESS OF EXPERTS IN THE FIELD OF
SOCIAL WORK AND EDUCATION*

Abstract

The paper addresses the issue of children's mental health as one of the key challenges for contemporary social work and education. It draws on theoretical perspectives emphasizing the necessity of interdisciplinary collaboration and systematic professional support. The aim is to introduce the concept of professional preparedness among social workers and teachers, which encompasses not only knowledge and skills but also the formation of professional identity, empathy, ethical understanding, and the ability to cooperate. The study is based on a secondary qualitative analysis of interviews with professionals working in social services, education, and healthcare, supplemented by interviews with parents of children with mental health issues. The findings indicate that professional preparedness is a long-term process combining formal education, lifelong learning, practical experience, and supervision. Identified shortcomings in educational programs and practice highlight the need for a clearly defined competence framework, systematic support for professional development, and stronger collaboration among social workers, teachers, families, and the healthcare sector.

Keywords: Child Mental Health. Social Work. Professional Preparedness

Introduction

Children's mental health is increasingly recognized as a challenge for the future of social work, requiring both well-prepared professionals and the active involvement of parents and educators. In recent years, the issue of children's mental health has become one of the most pressing topics both in society at large and within professional discussions on the direction of social work and education. The growing prevalence of psychological difficulties among children and adolescents—manifested by an increase in anxiety, depression, behavioural disorders, or autism spectrum disorders—demands a systematic and interdisciplinary response. Children with mental health difficulties often face a double burden: not only their own illness but also a lack of understanding and support within the family, school, and society.

Social workers, educators, and other professionals thus find themselves in a situation where they are expected to possess knowledge, skills, and attitudes that extend beyond the framework of traditional education. Professional preparedness, understood as the ability to respond effectively to the specific needs of children and their families, therefore becomes a fundamental prerequisite for high-quality and sustainable support.

The aim of this study is to analyse how professionals perceive their preparedness to work with children with mental health difficulties, what factors they consider essential for their professional growth, and what obstacles they identify in the education and support system. At the same time, the study focuses on the experiences of parents, whose perspective reveals how the specific form of professional assistance affects the coping mechanisms of the entire family in a demanding situation. This links two key angles—professional and lay—which together provide a comprehensive picture of the possibilities and limitations of the current support system.

The significance of the research lies in showing that professional preparedness is not just a matter of formal qualification, but also of the quality of the relationship, empathy, and the capacity for collaborative communication. It also brings important insights into how parents perceive cooperation with professionals, drawing attention to factors that can either strengthen trust and coping or, conversely, deepen the crisis. The findings can serve as a basis for improving educational programs, systemic measures, and the interdisciplinary cooperation that is vital for the effective support of children's mental health.

Children's Mental Health as a Social and Professional Challenge

Mental health is an integral part of social functioning, and social work must actively respond to it. As Navrátil (2000) states, the connection between social work and the field of mental health within the therapeutic paradigm relies on understanding mental well-being as a key prerequisite for social inclusion and stability. However, the healthcare system itself is not sufficiently equipped to address the complex social determinants of mental health, especially in children and adolescents (OECD, 2021). The shift toward more effective support requires structural changes, as defined by the National Action Plan for Mental Health 2020–2030. This plan emphasizes strengthening interdisciplinary cooperation across departments as well as at the level of direct practice—primarily within community health and social teams (Ministry of Health, 2020). The importance of multidisciplinary in the care of children with mental health difficulties is also highlighted by Meier et al. (2023), whose research identified the benefits of interdisciplinary collaboration, particularly higher quality and availability of care, professional background, and enhanced personal support. At the same time, however, they point out the pitfalls of this form of cooperation, such as difficulties in communication and coordination between professions, professional competition, and systemic barriers, including insufficient institutional support. According to the authors, the context of the specific sector also plays a significant role—differences are evident, for example, between healthcare, education, and social services. As Mahrová (2008) states, the spectrum of people involved in the care of individuals with mental illness includes the patient's entire social world. In the case of children, this means that a significant role is played not only by professionals in the field of social work, child psychiatrists, or psychologists, but also by their immediate environment—family and school. Teachers, educators, and other pedagogical staff can represent the first stage of early detection of difficulties, as they spend a large part of the day with children and can notice changes in behaviour, academic

performance, or social relationships (Mareš, 2013). Similarly, social workers and school psychologists represent important actors in the process of risk identification and subsequent support. From the perspective of supporting and integrating children into everyday life, programs focused on strengthening family-school cooperation have proven successful. One example is the FAST (Families and Schools Together) program, which emphasizes improving communication, relationships, and a collaborative approach between parents, educators, and children. According to recent studies, this program appears to be an effective tool for the prevention and support of children's mental health (Kořínek et al., 2024; McDonald et al., 2017).

Preparedness of Experts

The term "professional preparedness" refers to the degree to which a professional can handle the specific demands of their profession. It includes not only a summary of the necessary knowledge, skills, and attitudes, but also the ability to adapt to changing working conditions and a willingness to develop further (Aggarwal et al., 2023). In the context of children's mental health care, this preparedness represents a complex capacity to provide safe, effective, sensitive, and evidence-based support. Thus, it is not just about what the worker "knows" and "can do," but also about how they feel in their role as an expert, whether they can act independently, reflectively, and responsibly within it—and whether they perceive their work as meaningful and sustainable. The preparedness of experts, especially in the field of child mental health care, is one of the essential prerequisites for providing quality and effective care. In the context of direct work with children and adolescents, professional preparedness is defined as a combination of knowledge, skills, attitudes, and behaviours necessary for the effective performance of the profession and for adaptation to the changing demands of practice (Johnson et al., 2023). It encompasses not only professional competence and the ability to professionally lead interventions, but also empathy, ethical understanding, and an established professional identity (Adams et al., 2006; Fitzgerald, 2020). Therefore, preparedness is not understood merely as the completion of formal education, but as a continuous process that includes pre-professional and lifelong learning, practical experience, and the ability to respond to new challenges in the field of child mental health care (Kavanaugh et al., 2021). Managing these challenges presupposes the ability to quickly recognize difficulties, adapt to changing conditions, and act accordingly (Tan et al., 2017). Professional preparedness is closely linked to the development of professional identity, which is formed within the context of a specific work environment and through interaction with the professional community. This development is dynamic, long-term, and involves cognitive, behavioural, and affective dimensions (Kellar et al., 2021). It is precisely the sense of belonging to a profession, the internalization of its values, and the ability to "think, feel, and act" as a member of the professional community that are necessary for long-term retention in the field and the quality of the services provided (Tan et al., 2017). At the same time, research shows that the preparedness of experts is not always sufficient. The most frequently cited areas of inadequate professional background are trauma-informed work (Sadusky et al., 2021), suicide risk assessment (Erps et al., 2020; O'Neill et al., 2020), responding to

pandemic situations (Vilaregut et al., 2022; Wilson et al., 2023), and interdisciplinary collaboration (Arora et al., 2019). The identified shortcomings in these areas point to the need for systematic education, support for professional growth, and a clear competence framework. Despite the growing importance of child mental health care, the concept of professional preparedness remains in some respects vaguely defined and insufficiently anchored in practice. This leads to differences in educational approaches as well as in practice itself, and thus to an uneven quality of care provided. Given the current challenges in the field of children's mental health, it is therefore essential to place greater emphasis on strengthening preparedness not only among social workers but also across the professions represented in multidisciplinary teams, particularly psychologists, psychotherapists, and child psychiatrists (Meier et al., 2023; Ward et al., 2021).

Research Methodology

The findings presented in this study are based on a secondary qualitative analysis conducted as part of a broader research project focused on the experiences of parents and experts with children with mental illness. The research was carried out according to the Health Experience methodology, originally developed at the University of Oxford (Herxheimer et al., 2000) and certified by the Ministry of Labor and Social Affairs of the Czech Republic for use in the field of social work (Tavel et al., 2015). This approach is used in applied research to convey personal experiences to both the professional and lay public (Gabova et al., 2024; Tóťová et al., 2025). The results, adapted for the public and teachers, are available under the topic "For the Health of the Soul" on the website www.hovoryovzdelavani.cz. Participant recruitment was carried out through professional networks, schools, organizations focused on children's mental health, and online support groups. It was a purposive sample, with the main criterion being work experience with children with mental health difficulties. To ensure a diversity of perspectives, a maximum variation strategy was used (Coyne, 1997). Data collection took place between October 2022 and April 2023. For the purposes of this study, data relating to experts—specifically social workers and educators—were selected. The interviews consisted of two parts: the first was narrative, the second semi-structured. The script focused on the participants' professional experiences, their views on children's mental health, and their experience of working with children and collaborating with other professionals and parents. Audio recordings were transcribed verbatim and analysed using inductive thematic analysis (Braun & Clarke, 2006) in NVivo software. For this study, passages concerning professional preparedness and cooperation were examined in detail. The OSOP technique (Ziebland & McPherson, 2006) in the Coggle.it tool was used to organize and interpret codes.

Research Sample

The research sample consisted of 19 experts, including 12 women and 7 men (see Table 1). The experts operated in the fields of social services, education, or healthcare. In their practice, they encountered children with various types of mental illness, such as schizophrenia, mood disorders, personality disorders, anxiety disorders, behavioural and learning disorders, or autism spectrum disorders. They also had experience with children without a formally established diagnosis who, however, exhibited risky behaviour or had gone through a traumatizing life event. For the secondary analyses, we also included interviews with 14 parents, specifically 11 mothers and 3 fathers (see Table 2), who perceived mental health difficulties in their child (or children). In most cases, a diagnosis in the field of mental illness, behavioural disorders, or learning disorders had been established. In three cases, a diagnosis had not yet been determined.

Table 1: Demographic Data of Experts

Number	Region	Gender	Age	Profession	Sector	Length of Practice with Target
01	Pardubický	F	40–49	Special educator in education	Education	11 years
02	Královéhradecký	M	50–59	Director of an NGO, psychotherapist	Social work	20 years
03	Královéhradecký	M	30–39	Coordinator of an NGO	Social work	11 years
04	Prague	F	40–49	Social educator in education	Education	1 year
05	Liberecký	F	40–49	Director of an organization, chairwoman of an association	Social work	3 years
06	Jihomoravský	F	30–39	Psychologist in social service	Social work	3 years
07	Moravskoslezský	M	30–39	Clinical psychologist, psychotherapist	Healthcare	10 years

Number	Region	Gender	Age	Profession	Sector	Length of Practice with Target
08	Zlínský	M	30–39	Psychologist in healthcare	Healthcare	5 years
09	Olomoucký	M	40–49	Psychologist, supervisor, mediator	Social work	5 years
10	Olomoucký	F	40–49	Teaching assistant	Education	10 years
11	Prague	F	20–29	Special educator in an NGO	Social work	2 years
12	Zlínský	F	20–29	Nurse in a multidisciplinary team	Social work	1 year
13	Olomoucký	F	20–25	Psychologist in healthcare	Healthcare	9 months
14	Olomoucký	M	20–29	Psychologist in healthcare	Healthcare	2 years
15	Olomoucký	F	40–49	School principal and teacher	Education	3 years
16	Pardubický	F	30–39	Educator in a children's home with a school	Education	5 years
17	Liberecký	F	30–39	School psychologist	Education	3 months
18	Olomoucký	F	20–29	Social service worker	Social work	9 months
19	Olomoucký	M	30–39	Psychologist in healthcare	Healthcare	6 months

Source: Authors' own construction

Table 2: Demographic Data of Parents

Number	Region	Gender	Participant's Age	Child's Gender	Child's Age at Interview	Child's Age at First Interview
R01	Prague	F	40–49	Boy	13	4
R02	Zlínský	F	40–49	Boy	16	10
R03	Středočeský	F	40–49	Boy	16	14
R04	Prague	F	40–49	Boy	12	4
R05	Moravskoslezský	F	40–49	Boy	19	0
R06	Pardubický	F	40–49	Girl and boy	9, 7	2, 5
R07	Moravskoslezský	M	30–39	Boy	7	3
R08	Prague	M	40–49	Girl	14	12
R09	Olomoucký	M	40–49	Girl	10	2
R10	Pardubický	F	40–49	Boy	Not stated	Not stated
R11	Pardubický	F	50–59	Boy	17	17
R12	Not stated	F	Not stated	Boy	Not stated	Not stated
R13	Olomoucký	F	40–49	Girl	11	1
R14	Prague	F	40–49	Boy	8	3

Source: Authors' own construction

Research Findings

The analysis of the interviews with both professionals and parents of children with mental health difficulties shows that professional preparedness is not a one-time achieved state, but a dynamic and never-ending process formed by the interplay of education, practical experience, and support through supervision and collaboration. The results can be divided into four main thematic areas: the formation of professional identity, university

preparation, lifelong learning, and the role of supervision and collaboration. The findings are supplemented by the results of the analysis of parents' experiences with professional care.

Professional Competence and Identity Formation

Professionals across disciplines emphasized that their growth takes place not only within formal education but also through practical experience and encountering demanding situations. Some described turning points that fundamentally influenced their career path, while others spoke of a gradual but steady maturation. The common denominator is the conviction that professional development is a continuous process requiring an openness to learning. An individual approach and empathy emerge as pivotal elements—the ability to find a way to connect with the child, not to react personally to their behaviour, and to patiently set boundaries. Social workers emphasized that their role is supportive rather than evaluative, which facilitates establishing trust with families. At the same time, they drew attention to the risk of burnout and the need for psychological hygiene and supervision.

University Preparation and its Limits

University education was perceived ambivalently by the participants. While some appreciated the practical parts of the study in later years, the majority criticized the insufficient connection between theory and practice, the absence of specialized subjects on children's mental health, and minimal experience in direct work with the target group. The need for more intensive preparation in the field of child psychiatry, crisis intervention, or working with families was repeatedly mentioned. The experts agreed that they acquired a range of skills—such as working with impulsivity, aggression, or escalated behavioural manifestations—only through practice. They therefore supplemented their university preparation with courses, internships, experiential training, and other forms of education, which they considered crucial for handling everyday situations.

"Sure, university didn't prepare me for that. Even though we had psychiatry, we only visited a child psychiatric clinic once in the whole six years, so it was marginal... I feel like everyday life prepared me for it more, you know."

Lifelong Learning

Lifelong learning was perceived as an essential part of professional growth. Courses, training, or internships provided professionals with new methods and certainty in working with children and families. In this regard, international inspiration (e.g., Norwegian programs combining psychology, psychotherapy, and neuroscience) was positively reflected upon. Experiences showed that practice and real situations carry greater weight than theoretical knowledge. Professionals agreed that true preparedness arises only from a combination of education, practice, and continuous support.

"I definitely don't have enough experience to be able to say: 'Done, I don't need anything else.' And I think nobody in the world can say that, because I believe a person can always develop in something; the work is simply never completely routine..."

Supervision and Collaboration

Supervision and collaboration were described in the interviews as useful sources of professional and emotional support. Participants mentioned not only formal supervision, methodical consultations, and case seminars, but also informal peer consultations and intervision. The topic of supervision appeared mainly among social workers and members of multidisciplinary teams, where supervision was a regular part of the work.

"The multidisciplinary team works really well here, because when we, from different professions, are not fully familiar with a certain issue, we can study it ourselves to some extent, but it will never be as comprehensive as the knowledge that experts have..."

Multidisciplinary teams (psychologists, special educators, social workers, teachers, child psychiatrists, paediatricians) make it possible to view situations from different angles and react more effectively to the needs of children and families. Social workers acted here as "mappers" who connected the school, family, and non-profit organizations, while psychologists and psychiatrists complemented the team with diagnostic and therapeutic competencies.

"The moment one of us is unsure or runs into a more complex or demanding case—let's say diagnostically something that isn't completely clear or simple—we always try to support each other, help each other out, put our heads together, and find an answer we are looking for at that moment. We really try to do that at our workplace; so, we have these consultations, supportive, mutual meetings, you could say."

Parents' Experiences with Professionals

The interviews with parents revealed that the quality of cooperation with professionals fundamentally influenced whether families managed their situation with support or felt completely isolated. In terms of education, parents often pointed out a lack of understanding and sometimes even stigmatization. Some schools refused teaching assistants or did not respect the recommendations of counselling centres, leading to a sense of helplessness. One parent described being taken into the principal's office in front of other parents, which deepened mistrust toward the school. On the other hand, they positively evaluated schools with smaller classes and an individual approach, where teachers were willing to communicate and respect the specific needs of the child.

Regarding psychology and psychiatry, experiences varied. Some parents appreciated the helpfulness and empathy of psychologists who managed to build a relationship with the child and provided the family with concrete tools. Multidisciplinary care within early intervention or day centres was also positively evaluated. Conversely, experiences with psychiatrists had a negative impact, especially if the parent felt blamed for the child's problems, which led to feelings of guilt. One of the interviewed mothers perceived a significant lack of support from a female psychiatrist; she was frequently blamed, told that the child's problems were her fault, and family support was absent, particularly in the initial phase. Long waiting times were also a problem.

In social services, parents appreciated early intervention, social rehabilitation, and supportive programs (e.g., ABA) that brought concrete tools and support to the whole family. However, they criticized the lack of respite services, the limited capacity of day

centres, and the low availability of parental self-help groups. Coordination between schools, healthcare, and social services was often lacking; parents had to arrange it themselves. In the interviews with parents, it was repeatedly emphasized that it is vital for professionals to be willing to communicate, respect the family, and show empathy. Blaming parents or ignoring their experience deepens the crisis, whereas a partnership approach from experts represents crucial support.

The findings indicate that professional preparedness in working with children with mental health difficulties is the result of the intertwining of education, practical experience, continuous professional development, supervision, and collaboration. A significant addition is the experience of parents, which confirms that professional work has a real impact only if it is conducted with respect, empathy, and a willingness to engage in dialogue.

Conclusion

The findings show that the professional preparedness of experts in the fields of social work and education is a dynamic process that cannot be reduced to formal education. Real preparedness takes shape during lifelong learning, practical experience, support within supervisions, and collaboration in multidisciplinary teams. Of particular importance is the capacity for empathy, respect for the family, and a partnership approach, which in the eyes of parents prove to be the critical difference between a supportive and a stigmatizing experience.

The identified shortcomings—especially the low level of integration between theory and practice in university education, insufficient coverage of areas such as trauma-informed work, crisis intervention, or psychiatry, and the limited availability of coordinated care—suggest a need for systemic changes. These should include a clearly defined competence framework, greater institutional support for supervision, and more accessible educational programs focused on children's mental health. For the future of both social work and education, the crucial question remains whether it will be possible to connect professional capacities across sectors, create functional models of cooperation, and support the professional identity of workers so that they are able to face the complex challenges of caring for children's mental health. Only in this way can it be ensured that children and their families do not stand on the margins of the system but receive the sensitive, expert, and coordinated support they need.

References

- Agarwal, M., Abdelhalim, R., Fowler, N., & Oandasan, I. (2023). Conceptualizing “Preparedness for Practice”: Perspectives of Early-Career Family Physicians. *Family Medicine*, 55(10), 667–676. <https://doi.org/10.22454/FamMed.2023.294689>
- Adams, K., Hean, S., Sturgis, P., & Macleod Clark, J. (2006). Investigating the factors influencing professional identity of first-year health and social care students. *Learning in Health and Social Care*, 5(2), 55–68. <https://doi.org/10.1111/j.1473-6861.2006.00119.x>
- Arora, P. G., Levine, J. L., & Goldstein, T. R. (2019). School psychologists' interprofessional collaboration with medical providers: An initial examination of training, preparedness, and current practices. *Psychology in the Schools*, 56(4), 554–568. <https://doi.org/10.1002/pits.22208>

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Coyne, I. T. (1997). Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries? *Journal of Advanced Nursing*, 26(3), 623–630. <https://doi.org/10.1046/j.1365-2648.1997.t01-25-00999.x>
- ERPS, K. H., Ochs, S., & Myers, C. L. (2020). School psychologists and suicide risk assessment: Role perception and competency. *Psychology in the Schools*, 57(6), 884–900. <https://doi.org/10.1002/pits.22367>
- Fitzgerald, A. (2020). Professional identity: A concept analysis. *Nursing Forum*, 55(3), 447–472. <https://doi.org/10.1111/nuf.12450>
- Gabova, K., Meier, Z., & Tavel, P. (2024). Parents' experiences of remote microphone systems for children with hearing loss. *Disability and Rehabilitation: Assistive Technology*, 19(3), 831–840. <https://doi.org/10.1080/17483107.2022.2128443>
- Herxheimer, A., Mcpherson, A., Miller, R., Shepperd, S., Yaphe, J., & Ziebland, S. (2000). Database of patients' experiences (DIPEX): a multi-media approach to sharing experiences and information. *The Lancet*, 355(9214), 1540–1543. [https://doi.org/10.1016/S0140-6736\(00\)02174-7](https://doi.org/10.1016/S0140-6736(00)02174-7)
- Johnson, K., Cunningham, P., Tirado, C., Moreno, O., Gillespie, N., Duyile, B., Hughes, D. C., Scott, E. G., & Brookover, D. (2023). Social Determinants of Mental Health Considerations for Counseling Children and Adolescents. *Journal of Child and Adolescent Counseling*, 9(1), 21–33. <https://doi.org/10.1080/23727810.2023.2169223>
- Kavanaugh, T. C., TOMAKA, J., & MORALES, E. (2021). Professional preparedness and psychosocial beliefs as predictors of quality physical education and recreation services to students with disabilities. *Therapeutic Recreation Journal*, 55(4). <https://doi.org/10.18666/TRJ-2021-V55-I4-11040>
- Kellar, J., Singh, L., Bradley-Ridout, G., Martimianakis, M. A., Van Der Vleuten, C. P. M., Oude Egbrink, M. G. A., & Austin, Z. (2021). How pharmacists perceive their professional identity: a scoping review and discursive analysis. *International Journal of Pharmacy Practice*, 29(4), 299–307. <https://doi.org/10.1093/ijpp/riab020>
- Kořínek, J., et al. (2024). Note: Full reference details for Czech local resources should be validated and explicitly formatted by the authors to match complete APA standards.
- McDonald, L., et al. (2017). Families and Schools Together (FAST): Behavioral outcomes for children and families. *Journal of Educational Research*, 110(2), 130–142.
- Meier, Z., et al. (2023). Interdisciplinary collaboration in child mental health services: opportunities and challenges. *European Journal of Social Work*, 26(4), 512–525.
- Ministry of Health of the Czech Republic. (2020). *Národní akční plán pro duševní zdraví 2020–2030* [National Action Plan for Mental Health 2020–2030]. Ministerstvo zdravotnictví ČR.
- O'Neill, J., et al. (2020). Suicide risk assessment training and preparedness among school-based professionals. *School Mental Health*, 12(3), 441–455.
- OECD. (2021). *A New Benchmark for Mental Health Systems: Tackling the Social and Economic Costs of Mental Ill-Health*. OECD Publishing. <https://doi.org/10.1787/4ed890f0-en>
- Sadusky, J., et al. (2021). Trauma-informed care training and perceived professional preparedness among social work students. *Journal of Social Work Education*, 57(2), 301–315.
- Tan, C., et al. (2017). Developing professional identity and resilience in health and social care professionals. *Medical Education*, 51(8), 810–823.
- Tavel, P., et al. (2015). *Metodika Health Experience Research v sociální práci* [Health Experience Research Methodology in Social Work]. Ministerstvo práce a sociálních věcí ČR.
- Tóťová, N., et al. (2025). Qualitative analysis of professional and lay perspectives on child mental health. *Czech and Slovak Social Work / Sociální práce*, 25(1), 45–60.

- Vilaregut, A., et al. (2022). The impact of pandemic restrictions on mental health service delivery and professional preparedness. *Journal of Community Psychology*, 50(4), 1890-1905.
- Ward, L., et al. (2021). Multidisciplinary teams in child psychiatry: Competence frameworks and professional identity. *Clinical Child Psychology and Psychiatry*, 26(3), 702-715.
- Wilson, M., et al. (2023). Crisis responsiveness and professional preparedness post-pandemic. *Disaster Medicine and Public Health Preparedness*, 17, e142.
- Ziebland, S., & McPherson, A. (2006). Making sense of qualitative data using the One Sheet of Paper (OSOP) technique: a practical guide. *Medical Education*, 40(5), 405-414. <https://doi.org/10.1111/j.1365-2929.2006.02450.x>

Lenka Caletková

*MODIFICATIONS OF THE INDIVIDUAL APPROACH BY HELPING
PROFESSIONALS IN HYBRID WORK ORGANISATION WITH THE LONG-
TERM UNEMPLOYED*

Abstract

The paper explores how professional counsellors and social workers involved in activation work with the long-term unemployed subjectively interpret the meaning of an ‘individual approach’ to clients in different types of cooperating organisations. The use of an individual approach and the integrated performance of different types of services is an important element of the professional logic of helping people towards participation in the labour market and social inclusion. The organisation of the performance of activation work is faced with hybridity.

This research focuses on the role of professional counsellors, who are in direct contact with clients, in modifying the rules of individual approach in two types of organisations in the Czech Republic. First, in the public employment services and second, in non-profit organisations.

The results of the comparison of interpretations in two organisational environments show that (1) in both organisations professional “front-line” workers apply different concepts of individual approach to clients. Their modified approaches and practices appear to be an active response to the need to stabilize activities in these types of organisations. (2) In some cases, professional counsellors appear to have the power to formulate and practice the professional concept of individual approach toward clients in labour offices as well. (3) It appears that only some of these modifications are helpful in solving the problems of the long-term unemployed, and others are inappropriate for the use to client activation.

Keywords: long-term unemployed; individual approach; organisational contexts

Introduction

Long-term unemployment is a current and not easily solved problem in the Czech Republic. Despite the economic growth and stability of the Czech economy, we have failed to reduce the proportion of the long-term unemployed over the past decade. Today, the group of persons who have remained on the register with the Labour Office for more than 12 months account for 26% of the total number of unemployed (MoLSA, 2021). At the same time, the duration of unemployment in this group of jobseekers is increasing, and those with very long registrations at labour offices often lose the last vestiges of motivation and effort to return to employment. For them, long-term unemployment is a real and interrelated problem that is difficult to solve independently.

A number of research studies in the Czech Republic and other European countries show that the long-term unemployed represent a very diverse category of persons. A large proportion of them face multiple social, educational or health disabilities (Sirovátka, 2011; Percy-Smith, 2000). Research on the long-term unemployed in one of the 14 regions of the Czech Republic (the South Moravian Region) showed that only 35% of the long-term unemployed are 'hustlers' who manage to receive some personal gain through their registration at the labour office, e.g., the overlap of welfare benefits and participation in an informal labour market or payment of health insurance by the state. The remaining part of the clients recruits are (1) persons with social obligations (caring for children while on maternity leave, caring for persons with disabilities and persons with long-term illnesses), (2) persons with a specific lifestyle, often homeless or without their own housing, with various types of addictions and strong signs of a culture of poverty, and finally (3) a group of persons showing a combination of various forms of disability and old age and/or low education (Winkler et al., 2018).

All three categories of clientele show a need for an individual approach and involvement of professionals with different professional background working in different types of organisations. Professional provision of counselling and social services to long-term unemployed clients is always based on an individual approach as an important principle of the helping professions in the conceptual documents of Czech social and employment policy. It is therefore important to pay research attention to the performance of these services, which is defined not only by a particular profession but also by the broader social and organisational conditions in the context of which it takes place (Healy, 2012).

Research problem

The presented research describes semantic modifications of the concepts and practices of an "individual approach to clients." These modifications are assumed to result from experts' responses to counselling activities for the long-term unemployed, amid incompatible institutional rules and structural conditions. While researchers have long argued that organisations must respond to multiple institutional requirements (Meyer & Rowan, 1977), depth examination of multiple "institutional logics" within organisations is more recent. This study adopts the definition of institutional logics by Thornton and Ocasio (1999, p. 804) as *"socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules."*

The presence of multiple institutional logics has been identified across various social fields, including health care and professional helping services (Nordegraaf, 2016). Existing research, however, offers contradictory conclusions about their impacts. Some researchers depict multiple logics as a threat to performance, emphasizing conflicts that lead to fragmentation (Battilana & Dorado, 2010). In contrast, others argue that multiplicity makes organisations more sustainable, flexible, and innovative (Kraatz & Block, 2008).

Furthermore, the existing body of research rarely investigates the conditions under which these different outcomes emerge. Besharov and Smith (2014) suggest directing

further research into how multiple logics manifest within organisations, as these internal manifestations vary: multiple logics may influence the core mission in some organisations (Pache & Santos, 2013), while a single logic dominates in others. This context produces two complementary research questions: first, how do multiple institutional logics form within organisations? Second, how do organisations and their actors implement these multiple logics in their attitudes and activities?

This broader formulation of the research problem is applied to the following research objective: to identify heterogeneous interpretations of the meaning of an “individual client approach” among helping professionals in two types of employment and social work service organisations in direct contact with long-term unemployed clients. Another objective is to compare these modifications between the two types of organisations. Previous findings show that institutional logics at Czech labour offices and selected NGOs differ significantly. At labour offices, bureaucratic-administrative and managerial principles prevail, whereas NGOs combine professional and managerial rules (Horák, 2018). These institutional logics are multiple, thus allowing for research on institutional complexity in these contexts.

Micro, meso, and macro levels of institutional logic formation for social assistance

Institutional logics operating in public and social service organisations for the long-term unemployed are formed at three levels. At the macro level, logics result from geographical, historical, cultural, and political contexts (Greenwood et al., 2010). At the meso level, they manifest through organisational dependence on resource providers, funders, and interactions within the specific environment (Jones et al., 2012). At the individual (micro) level, logics manifest through the experience, identity, and cultural interpretations of individual actors (Lok, 2010).

These three levels are intertwined in social assistance. The microstructure is formed at the level of meaningful interpretations within the client-counsellor relationship. Here, both actors define what is understood and conducted as an “individual approach.” The counsellor’s cultural interpretation of client behaviour is based on individual experience and knowledge.

Mesostructures of institutional rules are formed through negotiation and power dynamics in intra- and inter-organisational relationships, typically resulting in norms, agreements, or contracts (Scott, 2014). Research on the Czech social assistance system shows inconsistent interaction between labour offices and non-profit organisations, such as a lack of conformity in formulating cooperation goals (Winkler & Zelenková, 2010). These discrepancies stem from differing institutional logics between organisation types or the coexistence of multiple logics shaped by employment and social policy fields. These multiple logics significantly influence the social work profession, as the identity of workers is anchored within these specific organisational settings.

Macrostructural rules are shaped by law, methodological guidelines, or the professional educational system. However, these macro rules can be significantly modified at the organisational level. Even with standardised training, professionals work

in environments with highly diverse institutional logics, ranging from state authorities to NGOs. Furthermore, political (macro) and organisational (meso) pressures introduce managerial-administrative demands, emphasizing efficiency, effectiveness, and increased bureaucratic reporting (Burton & Van den Broek, 2009). Consequently, efforts to gain client trust may be suppressed in environments strictly focused on efficiency and performance.

Organisational context of services for the long-term unemployed in the czech republic

The organisation and management of services for the long-term unemployed creates an environment where various institutional rules come into contact, presenting either a structurally flexible environment or rigid barriers to individual work.

The Labour Office of the Czech Republic (LO CR) is an administrative office with national competence, strongly influenced by the Ministry of Labour and Social Affairs. It encompasses 14 regional branches and 292 contact points, making it a strongly formally structured organisation.

Research on institutional logics at the LO CR (Vyhlídal & Winkler, 2011) showed a clear dominance of a bureaucratic administration model, characterized by an emphasis on standardisation of services and equality of all clients. Despite mutual consultations, counsellors tend to respect officially prescribed procedures, though the model also contained unexpected rules such as emphasis on informal teamwork, autonomous activity, and innovative problem-solving. Two marginal tendencies were further identified:

- 1) The public services management model: It emphasizes autonomy and decentralization of decision-making towards expert advisors, leading to a greater orientation towards collaboration with other organisations.
- 2) The de-bureaucratisation model: This signals conflicts in the organisational context. Day-to-day activities are perceived as fulfilling objectives set by someone else, making it difficult to follow formal rules. This tendency shapes an institutional logic of conflict and interest group bargaining in a fragmented system (Horák, 2018).

Non-profit organisations (NGOs) providing social services are governed by the Social Services Act No. 108/2006 Coll., requiring registration and compliance with quality standards. Professional social workers focus on helping the unemployed in adverse life situations and increasing their employment chances. The macro level is represented by legal standards and the rules of the professional institution, decoded through professional education.

Workers in NGOs are influenced by organisational rules but possess a degree of decision-making freedom related to the professional logic of social services. Discretion in decision-making provides a legitimate space for the individual's own interpretation of rules within organisational practices (Lipsky, 1980).

This independence of frontline workers can lead to structural flexibility. It involves gaining and using certain power or authority to trigger changes in organisational behaviour, a concept referred to as organisational centrality in the implementation of an institutional logic (Besharov & Smith, 2014). Similarly, the dynamic model of social work practice (Healy, 2005) emphasizes the active role of organisational actors. Here, the helping professional is seen as an active agent whose practice is dynamic, constructed in every interaction, and influenced by client needs, the biographical context of professional identity, and the broader organisational context filled with multiple institutional logics.

The individual approach rule in service organisations for the long-term unemployed

The individualization of activation services in the Czech Republic occurs within two different policy approaches: one focusing on enforcement and discipline, and the other on empowerment (van Berkel & Valkenburg, 2007). These correspond to two activation models:

- 1) The workfare model: Entitlements to social benefits are conditioned by participation in employment or community service. This model forces individuals to accept employment under threat of sanctions (Sirovátka, 2005). Associated with the idea of personal guilt for unemployment, it subjects clients to general rules and individual control without addressing specific needs, operating within an administrative and bureaucratic institutional logic (Winkler & Zelenková, 2010).
- 2) The welfare (social inclusion) model: Focuses on strengthening the partnership with the client, developing competences through training, and selecting jobs according to qualifications and life conditions (Sirovátka, 2005). This approach relies on a professional logic of assessing capabilities and adapting measures, which demands greater financial, human, and coordination resources (Winkler & Zelenková, 2010).

Consequently, activation can be conceptualised by professional counsellors in two ways: (1) activation by participation, based on client needs and involvement, and (2) imposed participation, where the client is obliged to submit to activation conditions without expected active input (Sirovátka, 2005).

In real interactions, the effects of multiple institutional logics manifest within the interpretive activity of professional counsellors. These regulations are reflected in individual semantic interpretations, allowing frontline workers to modify the shared conception of an individual approach, provided they have decision-making freedom. These modifications can be eclectic, based on practical experience, or may imply a total transformation following an alternative institutional logic.

The performance of helping professionals is not a mechanical execution of prescribed procedures, but a complex system combining standards, rules, and formal or informal links (Vyhlídal & Winkler, 2011). While literature uses varying terminology, such as a “personalised” (Kampen & Tonkens, 2019) or “individualised” approach (van Berkel & Valkenburg, 2007), the Methodology of Procedures in Public Employment Services

(MoLSA, 2015) states that an individual approach should form the basis of all counselling work. For the purposes of this research, the individual approach is considered a process of individual casework adjusted to the problems and needs of long-term unemployed clients, taking into account their life situation, with active cooperation from clients in defining these needs and establishing a relationship with the counsellor (Glumbíková, Vávrová & Nedělníková, 2018).

Methodology

The research used a qualitative strategy to identify heterogeneous interpretations of the meaning of an “individual approach toward clients” among professional counsellors and social workers in direct contact with long-term unemployed clients. A deliberate criterion sampling method was established based on: a) work position (job placement/counselling workers at the LO CR or social workers in NGOs), b) geographical nature (South Moravian Region, ranking among the worst in long-term unemployment), and c) voluntary participation.

Collection was carried out through repeated visits to the field. First, 17 interviews were conducted at contact points of the Labour Office of the Czech Republic (LOs); the participant average age was 43 years with 16 years of average experience. Subsequently, representatives of NGOs providing social services to the long-term unemployed were contacted, resulting in an additional 12 interviews; their average age was 34 years with eight years of experience.

In both phases, low-structured conversational interviews were used to collect data, allowing for the exploration of new meanings (Lee, 1999). A total of 29 thematically focused interviews were conducted, focusing on participants’ perceptions of long-term unemployed clients, views on implementing measures, work problems, and suggestions for improvement.

The method of thematic analysis was used to analyse the data (Vaismoradi et al., 2016). To increase research validity, triangulation and a cyclical approach were chosen for data analysis, alongside regular reflection on the collected findings. Expert discussions, as well as rational, referential, and empirical sources, were used to verify and justify the emerging semantic categories (Constas, 1992). The names of these categories were derived from professional literature and the participants’ own expressions. By interconnecting them, thematic relevancies related to an individual approach were created.

The principles of ethical conduct were followed throughout the research (APA, 2016). Limitations include those arising from the longer period over which the research was carried out, potentially impacting how activation programmes were implemented. The findings represent an interpretation of the immediate participants’ statements and perceptions.

Results

The findings that emerged from the analysis and interpretation of the data obtained led us to the need to generalise and relate them to organisational contexts in which counsellors operate. The semantic categories related to each theme are shown in bold and italics in the text.

Theme 1: Modification of the normative concept of individual approach in performance of helping professions

During the analysis, differences in the concept of the application of the individual approach were identified. The normative concept is considered to be the answer to the question of what workers think an individual approach should be like. Based on the answers to this question, three concepts of an individual approach were found:

(1) individual approach as fulfilling the purpose of registration at the LO

- 1) Job placement staff perceive that an important characteristic of an individual approach is the consideration of the client's characteristics to succeed in a labour market and the client's ability to reconcile work and personal life. The goal of individual approach is to find employment for long-term unemployed clients, which involves a more practical view of the life situation of long-term unemployed clients by the placement staff. *"I need to explain to him that he's here because he wants the job, so we will work together to find it, and that he has to accept the fact that when the jobs come up, we have to refer him to those employers"* (R8).

(2) individual approach as comprehensive assistance

- 2) When imagining the individual approach, counsellors perceive as more important the comprehensive consideration of the long-term unemployed client's life situation and its subsequent resolution through gradual steps with the possibility of involving other professionals. *"Basically, during an individual discussion, we try to find out the reason behind the long-term unemployment and all other circumstances. Then we try to put that together with a vacancy offered by the labour office"* (R1).

(3) individual approach focused on building a relationship with the client

- 3) Social workers perceive that an important part of the application of an individual approach is building a trusting, unique relationship and partnership with the client and their significant participation in prioritizing solutions to their current life situation, which should ultimately lead to engagement in the labour market. *"It's definitely a partnership approach to the client. A joint participation in the accomplishment of some of those steps that lead to the goal that we have set"* (R20).

The analysis of the three types of concepts created pointed to further links between work positions of individual workers and instruments that they have available. A common important prerequisite in all normative concepts of individual approach is the *client's interest and active approach to cooperation*. If the client is attentive to the instructions of

the workers and his/her behaviour is directed towards achieving the goals of cooperation, the workers perceive the application of their individual approach concept as effective.

Theme 2: The value of individual approach to the long-term unemployed is determined by the horizon of the client and social worker cooperation to achieve jointly set goals.

One source of barriers to the practical application of individual approach is in *different expectations of cooperation* by clients and workers. Social workers document that long-term unemployed clients mistake them for recruitment agencies. Labour office workers point out that long-term unemployed clients use the registers for purposes other than job search assistance, most of which involve social benefits or health insurance payment. *“Every group has some reason why they’re here, and they try to make that reason their standard, or the problem that justifies why they’re here. Their goal is to survive at the labour office without a job offer, without being put into a retraining programme, without counselling”* (R1).

An individual approach involves voluntary cooperation of the client. However, an individual approach cannot be applied to clients who do not want to cooperate on the common goal of finding longer-term employment. Thus, applying individual approach to long-term unemployed clients may become less relevant if it is above the client’s cooperation on the determined common goals. The semantic framework of client-worker cooperation may differ in both organisational contexts due to the individual knowledge and everyday experiences of workers as well as their personalities and work identities.

All helping professionals *differentiate between their long-term unemployed clients* on the basis of their everyday experience. Even though some professionals resist differentiating of long-term unemployed clients into subgroups, differentiation takes place at least in terms of the target group setup or, in the case of a labour office, according to the criteria for inclusion in activities. In labour offices, workers distinguished between formal and informal differentiation of long-term unemployed clients. Formal differentiation is related to the possibility of applying some labour office instruments, whereas informal differentiation is used for the application of work practices. However, there is a potential risk of introducing routine practices if the clients’ life situation is not adequately assessed and the clients are stereotyped into programmes, which may not lead to the desired result meaning that the individual approach may not be adequately fulfilled.

However, helping professionals also note a changing situation on the labour market and the increase in the number of clients with multiple social disabilities, which often have structural causes. It turns out that *long-term unemployed clients*, to whom helping professionals adapt to their work practices, also *to a large extent influence the application of an individual approach*.

Theme 3: Modification of an individual approach by workers in response to a low capacity of social work and employment service systems to prevent misuse

Some of the labour office workers noted a group of long-term unemployed clients they refer to as “passive” or demotivated. The clients use the setup of the registration conditions with a labour office to their own advantage and for various personal reasons want to stay registered as long as possible. Most often these reasons include health insurance payments and entitlement to material need benefits. *“If it weren’t for the benefits, we’d have half the people here. The only ones who would be here would be the people who really want a job from us in the first place”* (R9). Lack of authority is also perceived by labour office workers in deliberately influencing the content of health attestation for the LO clients issued by physicians. *“What would be interesting here is if only the employment office physician, for example, could issue those health attestations in order for this to be objective. That would probably leave almost no one here”* (R17).

The perception of ineffective areas in the provision of individual approach provokes not only a response from labour office workers in the form of adaptation of work practices, but also a search for solutions to work problems. Some LO workers use *the increased frequency of meetings* and the frequent issuance of referrals, which they see as coercive to activate their long-term unemployed clients. One of the instruments to prevent the purposeful behaviour of some long-term unemployed clients is also the *intensification of control activities of the labour office*. The modification of individual approach by some of labour office workers is therefore intended to increasingly structure the client’s behaviour. By considering solutions to these problems, LO workers are trying to defend the “abused” system.

Theme 4: Modification of individual approach by workers as a result of efforts to make client assistance more effective

On the other hand, some labour office workers *resort to their own variations of work practices when applying an individual approach for the benefit of their long-term unemployed clients*. They show an effort to change the institutional rules of individual approach in order to influence and change the bureaucratic rules of working with long-term unemployed clients in favour of more individualised services. Labour office workers perceive some *administrative tasks* related to their work as a significant organisational barrier. *“I’m not going to fill out those spreadsheets. I’m not going to invite them in to boss them around”* (R3).

Another limiting factor for immediate activation of long-term unemployed clients appears to be the selection criteria based on which clients are included in the projects and activities of a labour office. An increased administrative complexity is manifested in the case of meeting a rule of a certain number of clients within the requirements of superior authorities. Some labour office workers emphasize the lack of consideration of the life situations of long-term unemployed. The workers describe their own defiant behaviour when fulfilling these job duties.

In addition to this, social workers from NGOs perceive *a great deal of discretion when applying an individual approach*; they report that the client, rather than the organisational environment, holds more power to affect a form of individual approach. In the case of complex life situations of long-term unemployed clients, these topics are subject to a *joint discussion* with colleagues during regular meetings, where work practices are clarified, and workers share their experiences. Social workers don't tend to perceive organisational barriers, they only mention administrative tasks that take up their time to spend and work with their long-term unemployed clients. Thus, some social workers bring in different variations of individual planning adapted to the target group. They often point to a perceived trust placed in them by their organisation's management. This manifestation can be put in the context of the managers' perception of themselves as part of the *work team*. There is also an apparent link with the way new staff are selected. Social workers reported that an important criterion for selecting new colleagues was social skills and how a new person "fits in" with an existing team, which they perceived as one of the important prerequisites for an effective functioning of the organisation. In social workers, expertise and experience are more prominent in the conception of individual approach (Healy 2005, 2012). *"At the same time, this group of people in that adolescence are living in the here and now and that's what our individual planning style is called"* (R18). Their expertise is then manifested precisely in their efforts *to modify work practices or guidelines in favour of long-term unemployed clients* and effective individual approach, which may contribute to changing organisational rules.

Theme 5: Modification of individual approach by workers as a result of the broader concept of the "client" by helping professions

The labour office clients do not only include jobseekers but also employers who have reported vacancies to their organisation. The companies expect LO workers to refer jobseekers who contacted them about the vacancy. Labour office staff often face reproach from employers who tend to *transfer the responsibility for the client's inappropriate behaviour* during the interview on to them. This puts labour office workers in conflict situations, as they are obliged to make employment referrals for long-term unemployed clients despite their perceived passivity and refusal to work. Subsequently, they are confronted by the employer that is expecting a candidate interested in the vacancy. *"Then we feel uncomfortable to send them to that job opening because those employers often call us and complain"* (R17).

Again, there is a contradiction in *the conception of the purpose of the registration by job seekers* at the labour office from the perspective of some groups of long-term unemployed clients. The behaviour of these clients makes it difficult for the labour office staff to apply their individual approach toward both, their clients and employers. In the context of a relatively low pay, labour office staff have repeatedly pointed to the *amount of social benefits* for their clients, which in some cases is comparable to their monthly salaries. Also, the labour office workers mention *perceived prejudices and unwillingness of employers* to hire job seekers who have a health disability, criminal record, or foreclosures despite their interest in the job. *"I've had a few people here who had a foreclosure, but they were*

active...however, the employer wouldn't take them because they had a foreclosure and that their accountants wouldn't want deal with it" (R1). On several occasions, the labour office staff also point out the *limitations resulting from the specificities of the local labour market*, where the vacancies offered are not in line with the capabilities of individual groups of long-term unemployed clients. The reasoning of the labour office workers hints that they perceive their long-term unemployed as their priority clients compared to employers. Thus, there may be a reduction in the provision of an individual approach towards clients rather than employers.

Theme 6: Informal communication and coordination of labour office staff and social work services as an instrument for comprehensive assistance to long-term unemployed clients

Establishing cooperation with organisations and workers from the external environment is a common social work practice. Social workers also cooperate to varying degrees with labour offices. However, in their statements, they also expressed their *critical evaluations of the work practices of labour office staff* in the area of information and counselling and dysfunctional communication with long-term unemployed clients. Some social workers see a solution in establishing a more intensive cooperation with labour offices and perceive their activities as a form of assistance to labour office workers. By having more time available, they perceive a *major benefit of cooperation with the LO* in offering closer and deeper cooperation with long-term unemployed clients and longer face-to-face meetings.

Social workers who already *manage to establish such forms of inter-organisational cooperation* perceived the results of the interconnected assistance to long-term unemployed clients as effective and able to respond to diverse life situations of their clients. Also, some *LO workers respond positively* to the budding cooperation with social service organisations and perceive its benefits and need. *"They get to know our options and clientele and in turn they suggest their options how to help us. By getting to know each other, it [cooperation] has opened up and improved"* (R1).

Summary

The results of thematic analysis show that professional counsellors at labour offices reflect the conflicts between organisational and professional rules that cause low effectiveness of their measures. These workers create internally inconsistent, eclectic practices and approaches to clients. They actively modify rules of an individual approach in a variety of ways, ranging from impersonal, stereotypical responses to efforts to be consistent in application of professional individual approach to clients. Both organisational environments also show individual approach concepts that support professionally legitimate approaches to LTU clients. *"I'm not going to fill out those spreadsheets. And I hate what they invented up there...that you're going to do 80 people a week. I don't care, I prefer to invite them in as I see fit"* (R3).

The research concludes that an important modifying role of helping professionals has been documented. Their interpretations and practices of an individual approach can

stimulate spontaneous changes in the performance of activation work, especially in labour offices, but also in social service organisation.

It shows that some of the helping professionals may have the power to formulate and practice professionally appropriate concepts of individual approach to LTU clients even in the bureaucratic organisational context of public employment services. *Helping professionals, by their identity, influence the organisational context, and not just vice versa.* In this context, a new research question arises: How does a fragmented and poorly coordinated organisational environment of the Czech labour office affect the extent of spontaneous modifications?

The fact that many of the activities associated with an individual approach are carried out by staff through their spontaneous practices means that only some of these individual approach modifications help to solve real problems of LTU clients, while others are inappropriate for their employment search. These spontaneous decisions are based on personal and professional knowledge and experience gained during their work life (Ferguson 2018). Helping professionals should continue to educate themselves, develop professionally, and actively reflect not only on their own working strategies with clients, but also on the needs and interests of the organisations in which they are employed. On the other hand, it will be very useful if organisations providing social assistance for the long-term unemployed conceptually think through their HR policies and strategies for their interaction with clients (Andreassen & Natland, 2020; Glumbíková, Petrucijová & Mikulec, 2021).

References

- American Psychological Association (2016). *Ethical Principles of Psychologists and Code of Conduct*. <http://www.apa.org/ethics/code/> (accessed 12 December 2021).
- Andreassen, T. A., & Natland, S. (2020). The meaning of professionalism in activation work: frontline managers' perspectives. *European Journal of Social Work*, 1–13.
- Battilana, J., & Dorado, S. (2010). Building sustainable hybrid organizations: The case of commercial microfinance organizations. *Academy of management Journal*, 53(6), 1419–1440.
- Besharov, A. L., & Smith, W. K. (2014). Multiple Institutional Logics in Organizations: Explaining Their Varied Nature and Implications. *The Academy of Management Review*, 39(3), 364–381.
- Burton, J., & Van den Broek, D. (2009). Accountable and countable: Information management systems and the bureaucratization of social work. *British journal of social work*, 39(7), 1326–1342.
- Constas, M. A. (1992). Qualitative analysis as a public event: the documentation of category development procedures. *American Educational Research Journal*, 29(2), 253–266.
- Ferguson, H. (2018). How social workers reflect in action and when and why they don't: The possibilities and limits to reflective practice in social work. *Social Work Education*, 37(4), 415–427.
- Glumbíková, K., Petrucijová, J., & Mikulec, M. (2021). Formation of practice wisdom in social work with vulnerable children and their families in the Czech Republic. *Social Work Education*, 40(7), 888–900.
- Glumbíková, K., Vávrová, S., & Nedělníková, D. (2018). Optiky posuzování v agendě sociálně-právní ochrany dětí. *Sociální Práce/Sociálna Práca*, 18(6), 78–88.
- Greenwood, R., Diaz, A. M., Li, S. X., & Lorente, J. C. (2010). The multiplicity of institutional logics and the heterogeneity of organizational responses. *Organization Science*, 21(2), 521–539.
- Healy, K. (2005). *Social work theories in context: creating frameworks for practice*. New York: Palgrave Macmillan.

- Healy, K. (2012). *Social work methods and skills: the essential foundations of practice*. New York: Palgrave Macmillan.
- Horák, P. (2018). Zhodnocení reformy systému veřejných služeb zaměstnanosti z perspektivy změn ve způsobu jeho řízení a správy. *Fórum sociální politiky*. Praha: Výzkumný ústav práce a sociálních věcí, 12(1), 2–19.
- Jones, C., Maoret, M., Massa, F. G., & Svejenova, S. (2012). Rebels with a cause: Formation, contestation, and expansion of the de novo category "modern architecture", 1870-1975. *Organization Science*, 23(6), 1523–1545.
- Kampen, T., & Tonkens, E. (2019). A personalised approach in activation. Workfare volunteers' experiences with activation practitioners. *European Journal of Social Work*, 22(6), 1038–1049.
- Kraatz, M., & Block, E. (2008). Organizational implications of institutional pluralism. In R., Greenwood, C., Oliver, R., Suddaby, R., & K., Sahlin-Andersson (eds), *Handbook of organizational institutionalism* (pp. 243–275). London: Sage.
- Lee, T. W. (1999). *Using qualitative methods in organizational research*. Thousand Oaks, Calif.: Sage Publications.
- Lipsky, M. (1980). *Street-level bureaucracy: dilemmas of the individual in public services*. New York: Russell Sage Foundation.
- Lok, J. (2010). Institutional logics as identity projects. *Academy of Management Journal*, 53(6), 1305–1335.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340–363.
- Ministry of Labour and Social Affairs. (2015). *Metodika postupů ve veřejných službách zaměstnanosti*. https://www.mpsv.cz/files/clanky/23597/Metodika_postupu_ve_veřejných_sluzbach_zamestnanosti.pdf (accessed 14 June 2019).
- Ministry of Labour and Social Affairs. (2021) *Měsíční statistika struktury uchazečů a volných pracovních míst*. <https://www.mpsv.cz/struktura-uchazecu> (accessed 20 October 2021).
- Nordegraaf, M. (2016). Reconfiguring professional work: Changing forms of professionalism in public services. *Administration & Society*, 48(7), 783–810.
- Pache, A., & Santos, F. (2013). Inside the hybrid organization: Selective coupling as a response to competing institutional logics. *Academy of Management Journal*, 56(4), 972–1001.
- Parliament of the Czech Republic, Act No. 108/2006 Coll., On social services.
- Percy-Smith, J. (2000). *Policy responses to social exclusion*. Philadelphia, PA: Open University Press.
- Scott, W. R. (2014). *Institutions and organizations: ideas, interests, and identities*. Los Angeles: SAGE.
- Sirovátka, T. (2005). Individuální přístup a strategie aktivace v politice na trhu práce v České republice. *Sociální práce/Sociálna práca*, 5(1), 40–55.
- Sirovátka, T. (2011). Politiky aktivace v České a Slovenské republice. In J., Winkler, & M., Žižlavský (eds), *Institucionální změna a veřejná politika: analýza politiky zaměstnanosti* (pp. 31–51). Brno: Masarykova univerzita.
- Thornton, P. H., & Ocasio, W. (1999). Institutional logics and the historical contingency of power in organizations: Executive succession in the higher education publishing industry, 1958–1990. *American journal of Sociology*, 105(3), 801–843.
- Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2016). Theme development in qualitative content analysis and thematic analysis. *Journal of Nursing Education and Practice*, 6(5), 100–110.
- Van Berkel, R., & Valkenburg, B. (2007). *Making it personal: individualising activation services in the EU*. Bristol, UK: Policy.
- Vyhlídal, J., & Winkler, J. (2011). Identifikace organizačních modelů aktivace na úřadech práce v ČR. In J., Winkler, & M., Žižlavský (eds). *Institucionální změna a veřejná politika: analýza politiky zaměstnanosti* (pp. 150–164). Brno: Masarykova univerzita.

Winkler, J., Sirovátka, T., Hora, O., Horák, P., Horáková, M., Horňáček, J., & Žižlavský, M. (2018). *Analýza faktorů dlouhodobé nezaměstnanosti působících na území Jihomoravského kraje v období ekonomického růstu*. Brno: Krajský úřad Jihomoravského kraje, Odbor regionálního rozvoje.

Winkler, J., & Zelenková, I. (2010). Služby zaměstnanosti a formy spolupráce s občanským sektorem na regionálním trhu práce. In J., Winkler, & L., Klímplová (eds). *Nová sociální rizika na trhu práce a potřeby reformy české veřejné politiky* (pp. 123–140). Brno: Masarykova univerzita.

Adrienn Fekete

*PRE-SERVICE ENGLISH TEACHERS' ATTITUDES TOWARD AND
EXPERIENCE OF TEACHING CULTURE AND INTERCULTURAL
COMMUNICATION: A MIXED-METHODS CASE STUDY OF A
HUNGARIAN UNIVERSITY*

Abstract

Research into cultural awareness (Moran, 2001) and intercultural communication (ICC) (Byram, 2008) has gained increasing research attention in recent decades; however, their role within teacher education programs remains underexplored. This mixed-methods study investigates the extent to which culture and ICC are represented in English teacher education at the University of Pécs (UP) and explores pre-service English teachers' attitudes toward and experience of teaching these areas. Data were collected through a curriculum analysis of six English teacher education programs and a self-designed online questionnaire completed by 153 pre-service English teachers. Quantitative data were analyzed using descriptive statistics, while qualitative responses were examined through thematic analysis.

The findings indicate that culture is generally regarded as an important component of English language teaching, although it is typically allocated a limited proportion of classroom time. Participants most frequently associated culture with cultural products and practices, such as literature, traditions, holidays, food, and everyday life, while deeper cultural perspectives received considerably less attention. Teaching culture was commonly linked to audiovisual materials and communicative activities. In contrast, ICC emerged as a less familiar and less frequently taught domain. Participants reported uncertainty regarding its meaning and implementation, which may reflect the limited presence of intercultural training within current curricula. The study highlights the need for more systematic integration of culture, intercultural communication, and intercultural competence (Deardorff, 2006) development into English language teacher education.

Keywords: Teaching culture; Intercultural communication; Teacher education

Introduction

Hungarian cities and university campuses are becoming increasingly multilingual and multicultural, requiring teachers and students to be able to interact successfully and appropriately with culturally diverse interlocutors. Therefore, the success and inclusivity of multicultural education hinge on teachers' ability to develop learners' intercultural competence (Deardorff, 2006), cultural openness (Fekete, in press a), and empathy (Fernández-Corbacho et al., 2024) toward creating inclusive educational practices in their local contexts.

Language teacher education in Hungary usually focuses on teaching methodology, pedagogy, and classroom issues, preceded by foundational subjects in language development, literature, culture, history, and linguistics. University programs tend to prioritize developments in language teaching methodology by integrating communicative, task-based, content-and-language integrated learning (CLIL), and technology-enhanced teaching approaches, along with the study of classroom techniques, discourse analysis, and assessment practices into the curricula. Teaching culture (Moran, 2001) and intercultural communication (Byram, 2008), developing intercultural competence (Deardorff, 2006), multicultural teacher competence (Lin & Chung, 2024), or fostering inclusive education (Dezső, 2022; Egitim & Akaliyski, 2024) may remain optional or supplementary components in Hungarian teacher education.

To fill the above gap, the present study examines six English teacher education curricula at the University of Pécs (UP) as well as the statistical and textual data collected from 153 English teacher trainees via a self-designed online questionnaire examining pre-service English teacher trainees' attitudes toward and experience of teaching culture and intercultural communication (ICC) in their current or prospective language classroom.

Literature review

Teaching culture

Culture has been defined by many, resulting in a myriad of interpretations over the centuries. An early definition of culture from the 19th century was provided by Matthew Arnold (1867/2009), who distinguished between high culture and popular culture (or 'folkways'). High culture in this sense encompasses canonized artistic and intellectual products and endeavors, such as the arts and literature. The problematic aspect of this view was the argument that only a marginal part of society has culture, resulting in prejudice and discrimination against those outside this group (Spencer-Oatey, 2012). He put forth that these 'cultureless' social groups were bound to cause anarchy in society (Arnold, 1867/2009).

The ethnographic foundation of culture was laid down by the English anthropologist Edward B. Tylor (1871/1889), who equated culture and civilization and viewed it as a complex whole, including "knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society" (p.1). The German-born American anthropologist Franz Boas (1911/1938) further expanded this definition by viewing culture as the collective behavior of a social group, characterizing both the individual and the group, including the products of these activities and their role in the life of the group (p. 159). This definition signaled a shift toward viewing culture as a way of life. Boas's view of culture cautions against valorizing different cultures or distinguishing between high or low cultures or between civilized and uncivilized social groups. He argued that culture consists of everyday learned behaviors, habits, and traditions shared by a group. Raymond Williams (1958) took this view a step further and defined culture as "a whole way of life" (p. 344). He highlighted the qualities of the "common life" (p. 314) and "popular culture" (p. 325), resulting from the democratization

of society, industrialization, and mass communication, thus highlighting the emerging role of the working class in modern society. He concluded that culture is not elitist but ordinary, shared by all of society (Williams, 1958/1989).

The works of Tylor, Boas, and Williams pinpoint a shift from an elitist definition of culture to a democratizing understanding of culture, signaling economic and political changes in modern societies. With the democratization of science and knowledge at the turn of the millennium, culture is interpreted at the intersection of culture, society, and science (Márkus, 2017). Recent definitions of culture encompass broad interpretations, increasingly emphasizing the invisible values, beliefs, and cognitive assumptions that underpin culture as a lived way of life.

[Culture] is the collective programming of the mind which distinguishes the members of one group or category of people from another.' Hofstede, 1994, p. 4

... the set of attitudes, values, beliefs, and behaviors shared by a group of people, but different for each individual, communicated from one generation to the next. Matsumoto 1996, p. 16

Culture is a fuzzy set of basic assumptions and values, orientations to life, beliefs, policies, procedures and behavioural conventions that are shared by a group of people, and that influence (but do not determine) each member's behaviour and his/her interpretations of the 'meaning' of other people's behaviour. Spencer-Oatey 2008, p. 3

A recent conceptualization of culture as a way of life that is also taught by professors teaching the course *Teaching Culture and Intercultural Communication* at UP, including the author of this paper, was coined by Moran.

Culture is the evolving way of life of a group of persons, consisting of a shared set of practices associated with a shared set of products based upon a shared set of perceptions on the world and set within specific social contexts. Moran, 2001, p. 24.

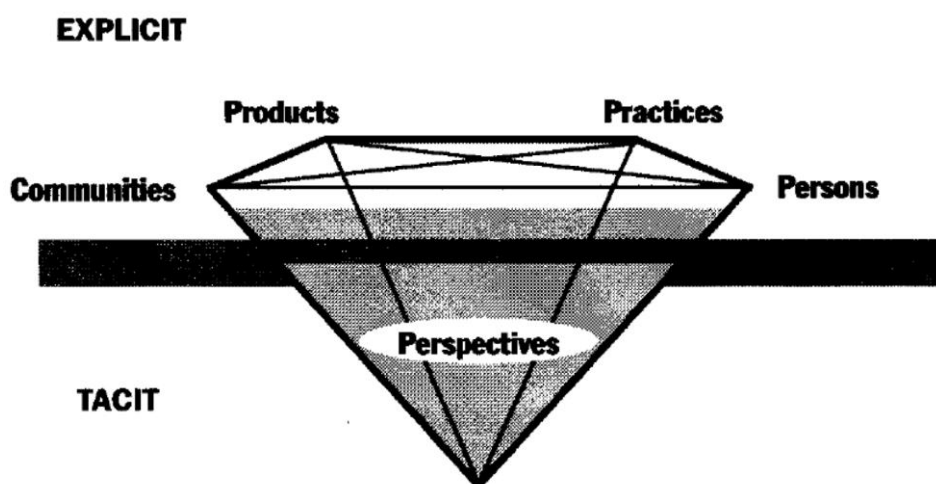
Moran's definition highlights the dynamic nature of culture as a way of life and identifies five universal dimensions of culture.

- 1) **Cultural products:** This dimension denotes the objects, systems, and entities that people in different cultures create and use, such as language, the system of education, law, politics, healthcare or religion, urban and natural environments, everyday objects, food, outfits, means of transport, money, etc. In short, this dimension highlights what 'things' people have and use in a culture.
- 2) **Cultural practices:** This dimension addresses how people behave, speak, think, feel, and live their daily lives using certain cultural objects, such as how language is used verbally and non-verbally with different interlocutors across situations, how emotions are expressed, how work and free time are spent, how children and the elderly are treated, how holidays are celebrated, etc.
- 3) **Cultural persons:** This dimension describes individuals who use certain cultural products, participate in certain cultural practices, and belong to certain cultural communities. For example, a rocker may wear vintage leather jackets, drive a motorbike, play an electric guitar, frequent local underground venues, and belong to a tight-knit subculture of classic metal enthusiasts.

- 4) **Cultural communities:** This dimension describes communities that participate in certain cultural practices, use certain cultural products, and consist of cultural persons. For example, a neighborhood dog park forms a "cultural community" where local dog owners and their dogs gather each evening to let their pets play, exchange training advice and dog anecdotes, carry leashes, tennis balls, and dog treats, and use shared park amenities.
- 5) **Cultural perspectives:** This dimension explains why individuals and communities participate in certain cultural practices and why they use certain cultural objects based on underlying values, assumptions, perceptions, attitudes, and beliefs. For example, let us examine the different cultural perspectives on food across cultures by contrasting the mainstream American perspective on food as a convenient, easily replaced commodity where waste is a byproduct of abundance and a comfortable lifestyle, with the traditional Hungarian perspective, treating food as a sacred result of hard labor and a valued possession in a time of need, thus producing a strong moral obligation to preserve and repurpose every leftover.

The iceberg representation of culture proposed by Moran (2001) (Figure 1) suggests that while cultural products, practices, persons, and communities are mostly visible to observers, the underlying cultural perspectives explaining why people act, think, believe, and feel the way they do in a certain culture stay hidden from observers.

Figure 1. The Iceberg of Culture



Source: adopted from Moran (2001, p. 28)

Language is an essential means of conveying information in communication. Describing cultural information as a way of life includes utterances and written descriptions of objects, entities, and persons, as well as their thoughts, beliefs, values, feelings, and behaviors (Fekete, 2020). Language is also a carrier of cultural content, such as literature, music, theater, and history. However, language also carries a great deal of implicit cultural information, encoded in each language, because every language is the cultural product of a distinct speech community agreed upon by convention (Kramsch, 1998). Linguistic relativity proposes that language shapes (but does not determine) thoughts and the information speakers must specify in different languages (Boroditsky, 2012). Therefore,

every language reflects the conventional interpretations of natural and social phenomena in the world agreed upon by its speakers. Post-structuralist researchers such as Kramsch (2009) and Fekete (2020) argue that every language offers a novel way of self-expression and way of thinking, shaping multilingual individuals' various personal and collective identities. Thereby, language learners can rid themselves of the cultural, linguistic, emotional, and behavioral constraints of their mother tongue (L1) and its culture by learning a new language (L2) that offers novel freedoms, emotions, behaviors, thoughts, and meaning-making processes that can transform not only identities but also entire lives.

Teaching intercultural communication

English used to be a foreign language (FL) just like French, German, or Italian. Foreign language education usually follows the 'native speaker norm' (Kabel, 2009), rendering native-like proficiency and flawless language use the ultimate goals of language instruction. FLs are usually limited to classroom environments, and the performance of teachers and learners is measured against the native speaker norm, oftentimes resulting in a sense of incompetence and inferiority in FL speakers who fall short of this expectation (Medgyes, 2017).

However, English today has become a lingua franca (ELF) (Jenkins, 2007, 2009), a mediator language between speakers of distinct mother tongues (L1). The goals of ELF use include successful communication and mutual understanding despite potential mistakes and errors in ELF interactions. With the development of nativized post-colonial English varieties, known as New Englishes or World Englishes, as well as distinct ELF varieties, English is no longer the sole property of native speakers (Dewey & Leung, 2010) but a symbol of world citizenship (Widdowson, 2012).

English has also become an international (Widdowson, 2012) and intercultural language (Byram, 2008), providing a bridge between different cultures and communities. Intercultural communication, introduced by Hall (1959), examines communication processes across cultural boundaries. On the other hand, intercultural competence refers to the knowledge, skills, attitudes, and behaviors that enable effective and appropriate interaction in intercultural situations (Deardorff, 2006). Within language education, Byram (1997) introduced the concept of intercultural communicative competence, which integrates language proficiency with intercultural knowledge, skills, attitudes, and cultural awareness.

Intercultural communication is inherently linked to multiculturalism, which may be viewed in two interrelated ways (Szigeti, 2002). On the one hand, multiculturalism may refer to the mere coexistence of multiple cultures within society. On the other hand, multiculturalism may describe a culturally diverse society as a whole. Multiculturalism inherently addresses attitudes towards "difference", whether cultural, ethnic, social, religious or sexual. My observation of internationalized university classes at UP reveals a double-edged reality: while classrooms are culturally diverse, this cultural diversity merely reflects the passive coexistence of cultures with minimal interaction among them. This observation particularly describes the dynamic between Hungarian and international students.

Nevertheless, English as an intercultural language can lay the foundation for both multicultural and inclusive education (Lin & Chung, 2024) when paired with targeted interventions and inclusive pedagogies. Consequently, language education must extend beyond basic language development to actively foster cultural awareness, openness, empathy, and intercultural competence. This expectation, however, places a significant socio-educational responsibility on teacher education, teacher educators, and ultimately in-service teachers.

Empirical research

The analyses of English textbooks at the elementary school and university levels indicate that the cultural information included in English books is insufficient, and cultural representation is inconsistent (Elizondo-Gonzales, 2018; Gashi, 2021). A bias towards either American or British culture over other cultures via English as an international/intercultural language has been observed, indicating a marked preference for target language and culture representations. Research has revealed a lack of explicit focus on teaching culture in the English classroom; thus, culture remains a supplementary and marginal component of language education (Elizondo-Gonzales, 2018). The findings of the above studies suggest that teaching culture is often restricted to descriptions of cultural products and practices presented in the coursebook that do not invite students to share their own experiences or opinions on the topic, thus hampering experiential learning (Kolb, 1984) that could shape learners' (inter)cultural attitudes, perceptions, and beliefs.

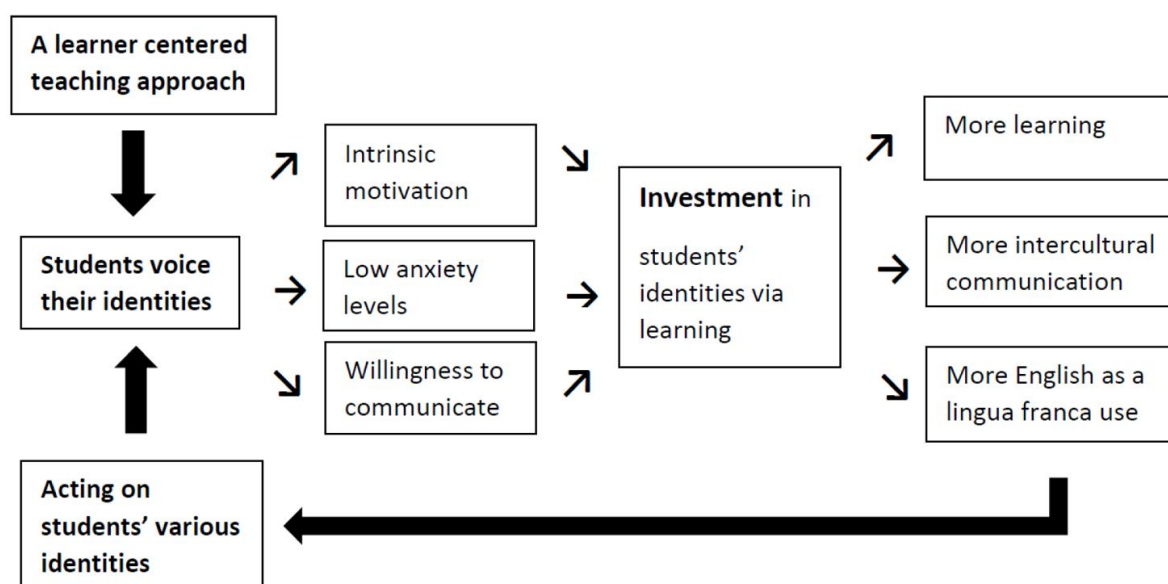
Regarding teaching intercultural communication, Lies Sercu and her colleagues (2005) conducted an international empirical survey across seven countries to assess how secondary school foreign language teachers conceptualize and implement intercultural competence development in their classes. Their findings revealed a pronounced gap between attitude and practice: while most teachers expressed strong, positive attitudes toward integrating intercultural communication in their practice, their actual classroom instruction remained heavily constrained by traditional linguistic priorities, for example, teaching grammar and vocabulary, and reliance on textbooks.

In the Hungarian context, studies have examined the intercultural competencies and intercultural sensitivity of medical students (Lucza et al., 2023; Németh et al., 2022), the development of English majors' intercultural communicative competence (Menyhei, 2013; Talbi, 2020), teacher trainees' beliefs about integrating the development of intercultural communicative competence in language teaching (Lázár, 2011), teacher educators' beliefs about pluricentricity in language education (Huber, 2025), the impact of language socialization and linguistic competence on intercultural communication frequency (Fekete, in press b), and the influence of language knowledge and language ideologies on multilingual and multicultural identity development (Fekete, in press c).

Furthermore, Dombi linked intercultural communicative competence to pragmatics (2020) and individual differences (2021), and Fekete (2022) introduced an identity-aware and learner-centered model of teaching and facilitating intercultural communication (Figure 2). Fekete's model draws on a pedagogy that encourages the

expression of students' various identities, thereby enhancing motivation and willingness to communicate while reducing language anxiety in the classroom. These favorable psychological conditions promote learners' investment in learning and facilitate intercultural communication, which, in turn, shapes their various identities.

Figure 2. Identity-based Model of Teaching and Facilitating Intercultural Communication



Source: adopted from Fekete (2022, p. 423)

In this study, Fekete (2022) implemented an educational-cultural intervention based on a pre-post test research design to measure university students' attitudes toward and perceptions of their peers' cultures in a multicultural classroom at UP. The results indicated quantitative and qualitative changes in students' perceptions of cultural stereotypes and preconceptions, thereby establishing an inclusive educational environment for multicultural education.

Research methodology

Research aim and context

The research was conducted at a Hungarian university with the aim of identifying pre-service English teachers' attitudes toward incorporating culture and intercultural communication into their current or prospective teaching practice, as well as the impact of their university courses on these attitudes and perceptions.

Regarding teacher education programs at UP, the current and the previous undivided English Teacher Education MA programs, lasting for 5 and 6 years, respectively, along with 3 part-time English teacher training MA programs, lasting for 2 or 3 semesters, are Hungarian-accredited programs for those wishing to teach in the Hungarian school system. Therefore, students enrolled in these programs are usually Hungarian. However, the English Instructor MA Program, lasting for two semesters, is open to both international and Hungarian students. Nevertheless, all the above programs might host students with diverse cultural backgrounds. The curricula of these 6 MA programs were

included in the document analysis that complemented the survey completed by pre-service English teachers at UP.

Research questions

The research seeks to answer six research questions (RQs) specified below.

- 1) What characterizes English teacher trainees' teaching experience and specialization?
- 2) What courses do the participants complete regarding teaching culture and ICC?
- 3) What characterizes their attitudes toward and experience of teaching culture in the language classroom?
- 4) What teaching methods and techniques do pre-service English teachers envision using to teach culture?
- 5) What characterizes their attitudes toward and experience of teaching intercultural communication?
- 6) What teaching methods and techniques do pre-service English teachers envision applying to teach ICC?

Participants

A total of 153 pre-service English teachers participated in the research via convenience sampling (Dörnyei, 2007). The participants' mean age was 22.5 years, and the gender ratio was quite balanced with 86 females (56%), 66 males (43%), and one non-binary student (1%). The majority (n=146, 95.5%) were Hungarian, while the international students (n=7, 4.5%) were from Russia (n=2), India, Malaysia, Turkey, and Germany (n=1 each), and one student did not indicate their country of origin. Regarding English proficiency levels, 3 students self-identified as native English speakers, 9 reported measured C2 proficiency level, 108 indicated measured while 3 noted perceived C1 proficiency level, and 32 reported measured while 5 indicated perceived B2 proficiency level. In summary, most respondents were at the C1 proficiency level in English at the time of the research.

Most respondents (n=121, 79%) were enrolled in the undivided teacher education MA program, 19 participants (12.5%) studied in the English Language Instructor international MA program, and 13 students (8.5%) majored in one of the three short-cycle, part-time MA teacher training programs. Regarding the year of their studies, 49 students (32%) were in their first year, 47 (31%) in their second year, 28 (18%) in their third year, 9 (6%) in their fourth year, 17 (11%) in their fifth year, and three (2%) in their sixth year.

Of the 121 participants enrolled in the 5- or 6-year MA program, 32 were in their first year, 46 in their second year, 28 in their third year, and 9 were in their fourth year at university. Since teaching practice starts in the third year of this program, students gain more teaching experience as they progress in their studies. Therefore, first and second-year students were not expected to have school-based teaching experience; however, they might have had teaching experience in other contexts.

Research instrument and procedures

Two research instruments were used in this research. The first instrument was an online questionnaire, designed by the researcher, to assess intercultural attitudes and experiences. It was administered to pre-service English teacher trainees via Google Forms in English owing to their high command of the language. The items included multiple-choice and open-ended questions, as well as demographic questions on country of origin, gender, age, study program, and English proficiency levels. The questionnaire items used in the research are available in Appendix B. The second data collection instrument was a collection of 6 documents retrieved from the university's website (specified in Appendix A), including the curriculum of the 6 MA programs the respondents were enrolled in.

Research methods and data analysis

The present research is mixed-methods in nature (Dörnyei, 2007), as it includes textual data and numerical data collected via the questionnaire and the six curricula. Descriptive statistics were calculated using the IBM SPSS software (version 30), and the qualitative data were coded and categorized to answer the research questions. The six curricula were analyzed as documents verifying the educational training English pre-service teachers receive regarding teaching culture and intercultural communication in the language classroom.

Results

English teacher trainees' teaching experience and specialization

This section presents English teacher trainees' teaching experience and specialization. Regarding their teaching experience, Table 1 shows that the majority (76.5%) had no teaching experience, followed by one year of teaching experience (9.2%) and two years of experience (4.6%). This finding is not surprising, as most students do not hold a job during their university years, and the only exposure to teaching for many is the compulsory teaching practice sessions. However, participants enrolled in the short-cycle teacher training programs were working adults, often holding a teaching job in another subject. Of the 153 students, 33 had completed at least one teaching practice, and 41 reported teaching activities outside the university.

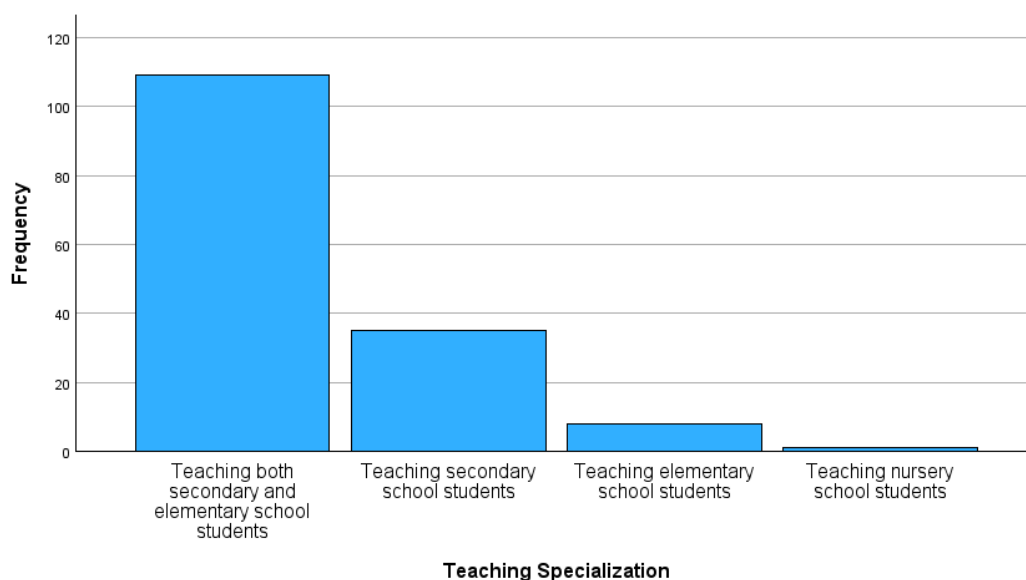
Table 1. Pre-service English Majors' Teaching Experience in the Order of Frequency

Years of Teaching Experience	<i>n</i>	%
0 years	117	76.5
1 year	14	9.2
2 years	7	4.6
6–10 years	5	3.3
4 years	4	2.6
21–30 years	2	1.3
5 years	2	1.3
16–20 years	1	0.7
3 years	1	0.7
Total	153	100.0

Source: Author's own data

Concerning teaching specialization (Figure 3), most students ($n=109$, 71.2%) were trained to teach in both secondary and elementary schools. However, a considerable number ($n=35$, 22.9%) opted to teach secondary schoolers, a few ($n=8$, 5.2%) chose elementary schoolers, and only one student (0.7%) indicated a desire to work with nursery school children.

Figure 3. Participants' Teaching Specialization

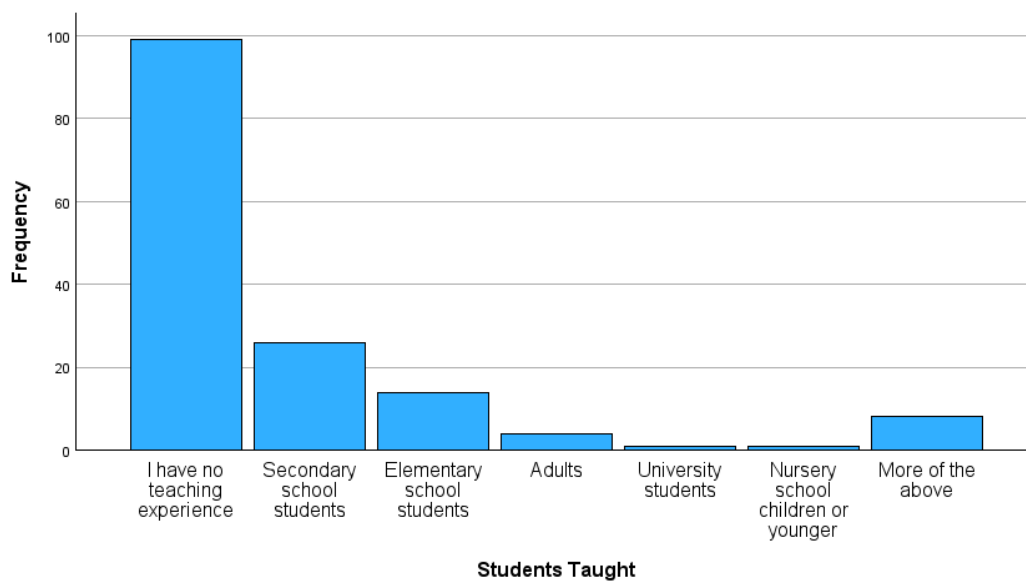


Source: Author's own data

Concerning their teaching experience with different student populations (Figure 4), the majority ($n=99$, 64.7%) reported no experience teaching any student group. Students had the most experience teaching secondary school learners ($n=26$, 17%), followed by experience with elementary school students ($n=14$, 9.2%). Experience teaching university students and nursery school children was noted by one student (0.7%) each. Finally,

teaching experience with diverse student populations was reported by eight respondents (5.2%).

Figure 4. Participants' Experience with Student Groups



Source: Author's own data

Educational training on how to teach culture and ICC that the participants receive in their degree programs

Regarding educational training on culture and ICC teaching, Table 2 presents the different courses pre-service English teachers complete in the various programs offered by UP.

Table 2. Courses That Pre-service English Teachers Complete in Different Degree Programs

Courses					
Degree program	<i>Introduction to Intercultural Communication</i> – Lecture	<i>Practicing Intercultural Communication</i> – Seminar	<i>Teaching Culture and Intercultural Communication</i> – Seminar	<i>World Englishes and ELF</i> Seminar	-
Full-time MA program 5 or 6 yrs 2017-2022	X	X	X		
Full-time MA program 5 yrs 2022-present			X	X	
English Instructor MA 2 semesters			X		
Part-time MA 1 2 semesters					
Part-time MA 2 2 semesters			X		
Part-time MA 3 3 semesters			X		

Source: Author's own data

Substantial differences in educational training were found across the teacher education programs offered by UP (Table 2). The most comprehensive preparation was provided in the previous undivided MA program (2017–2022), which included dedicated courses on intercultural communication (both a lecture and a seminar), and a seminar course on teaching culture and intercultural communication. In contrast, the current 5-year MA program (2022–present) offers a more limited training, including only two seminars: *Teaching Culture and Intercultural Communication* and *World Englishes and ELF*. The English Instructor MA program offers a single course on teaching culture and intercultural communication, while the part-time MA programs offer either no specific training in these areas or only one course on teaching culture and intercultural communication.

English pre-service teachers' attitude toward and experience of teaching culture in the language classroom

Table 3 shows students' educational experience with teaching culture in the language classroom. Students were allowed to choose more options in line with their experience. Not surprisingly, roughly half of the students (55%) reported no such experience, while every fourth student (26%) indicated completing a seminar course, and about one in five students (18%) mentioned attending a lecture course on the topic. Extramural activities were reported by 18 students (12%). Altogether, 15 students (9.8%) reported more than one training experience, most of which (14) included a lecture and seminar course on the topic.

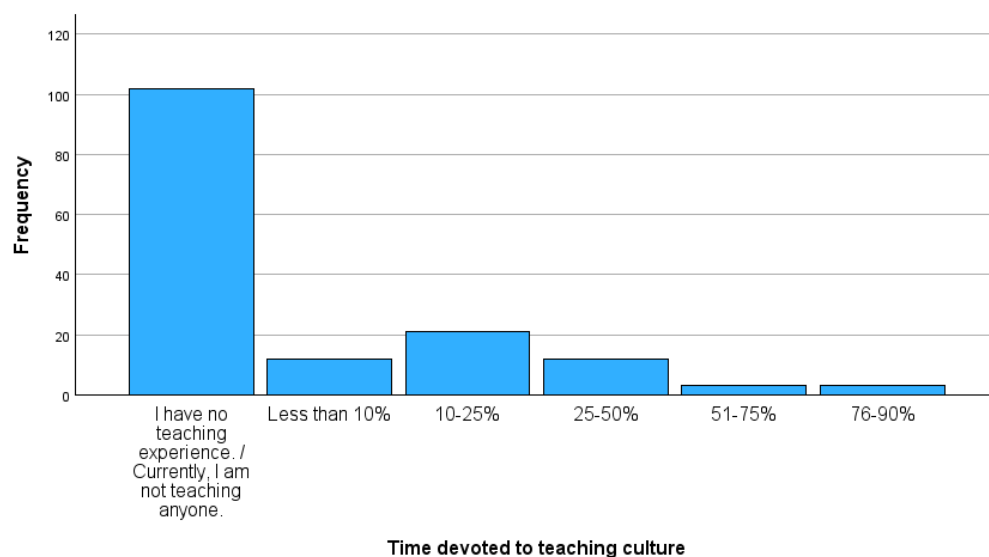
Table 3. Pre-service English Teachers' Educational Experience in Teaching Culture

Type of experience	<i>n</i>	%
No experience	84	55
Attending a university seminar	40	26
Attending a university lecture	28	18
Watching a couple of videos and/or doing some research on the topic	15	10
Attending a course outside the university (e.g., an online course, professional training, etc.)	3	2

Source: Author's own data

Figure 5 shows how much time the participants reported devoting to teaching culture in their teaching practice. Apart from students with no teaching experience ($n=102$, 66.7%), the majority ($n=21$, 13.7%) reported devoting 10-25% of teaching time to teaching culture, followed by less than 10% and 25-50% each ($n=12$, 7.8%). A total of six students (4%) indicated dedicating more than 50% of lesson time to teaching culture.

Figure 5. Reported Time Devoted to Teaching Culture



Source: Author's own data

Next, students were asked to explain the kind of cultural topics they would teach or had taught before in the English classroom (Table 4). The majority (n=109) reported not teaching any cultural topic due to a lack of teaching experience. The remaining students, however, reported a desire to teach high culture (n=62), popular culture (n=15), lifestyle (n=27), communication (n=9), cultural differences (n=7), and social issues (n=19). Only one student (0.7%) noted an exclusive focus on textbook-based cultural topics. Teaching cultural traditions, literature, and history were the most frequently cited topics within high culture. Popular culture mostly included movies, TV shows, music, dances, and fashion. Culture as a way of life was addressed in terms of food and cuisine, followed by daily and family life. Teaching greetings, social etiquette, language use, local vernaculars, and slang constituted aspects of communication that respondents would teach in the classroom. Teaching cultural diversity was mentioned by seven students in total. Various societal issues reported included religion, education, sports, and global challenges.

Table 4. The Respondents' Cultural Topic Ideas to Teach

Topics		Frequency
High culture	Holidays, traditions	30
	Literature	11
	History	11
	Famous sites	5
	Arts	4
	Traditional wedding	1
Pop culture	Movies, music, TV shows, dances	9
	Fashion	5
	Media, entertainment	1
Way of life	Food, cuisine	18
	Daily and family life	9
Communication	Greetings, language use, etiquette	9
Cultural differences	In general	5
	Cultural perspectives	2
Society	Social issues	4
	Religion	3
	Education	3
	Sports	3
	Global and environmental challenges	2
	Career and work	1
	Health	1
	Politics	1
	Technology	1
Textbook	Textbook-based cultural topics	1

Source: Author's own data

Some students provided a list of specific cultural and intercultural topics to teach.

High culture, low culture; culture shock; culture embedded in language; migration; nonverbal stuff; language as a barrier; acculturation.

History, idioms, slang, food and traditional dishes, traditions, festivals and holidays, customs, manners, media and entertainment

If I were teaching currently, I would teach: habits of English people, English arts (e.g., music), English cuisine, national costumes, cultural history of English-speaking countries, and teaching different accents and dialects.

Two students noted culturally sensitive topics such as “racism”, “minorities”, and “slavery”.

Specific holidays described by respondents usually included traditions celebrated in English-speaking countries, such as “Halloween” (n=3), “Thanksgiving” (n=3), “Christmas” (n=1), and “St. Patrick’s Day” (n=1), as well as landmarks such as “London” and New York (n=1). Teaching the cultures of the UK and the USA was mentioned by three students, while teaching the cultures of other countries in English was explicitly described by two students.

Target language culture: British and American holidays and traditions (Christmas, Halloween, Thanksgiving); daily life and school systems in English-speaking countries; famous landmarks and cities (London, New York, etc.).

Cultures around the world, cultural festivals around the world.

One student, however, found the cultural topics incorporated in English textbooks sufficient:

I've dealt with several types of textbooks, so each book probably covers 2-3 cultural topics.

Most cultural topics listed by the respondents did not specify whose culture they were going to teach, or whether they considered the lingua franca and intercultural nature of English today. Specific examples, however, included both English-speaking and non-English-speaking cultures.

Teaching methods and classroom techniques to teach culture

Students were asked to elaborate on their favored methods of teaching culture. Apart from 112 mentions of no teaching experience, Table 5 shows the teaching methods and techniques pre-service English teachers envisioned for teaching culture in the language classroom.

Table 5 Methods and Techniques to Teach Culture

Methods	Techniques	Frequency
Audio-visual stimuli N=46	Videos, films	27
	Song, music	6
	Pictures	4
	Listening tasks	4
	Presentations	4
	Documentaries	1
Communication N=25	Roleplays	8
	Discussions	7
	Interactive tasks	6
	Storytelling	2
	Showing dialects, new languages	2
Reading and writing N=15	Reading texts, stories, books	10
	Writing	2
	Vocabulary development	2
	Completing handouts	1
Gamification N=11	Online games	5
	Online quizzes	5
	Websites and apps	1
Experiential learning N=7	Trying traditional food and snacks	3
	Dressing in traditional outfits	1
	Demonstrations using objects	1
	Sharing personal experiences	1
	Understanding cultural perspectives	1
Specific topics N=2	Cross-country comparisons	1
	Wedding ceremonies	1
Classroom management N=6	Group and project work	4
	Independent study	2
Official documents N=2	Textbook-based cultural topics	1
	Curriculum-based cultural topics	1
Teaching methods N=2	Content and Language Integrated Learning	1
	Drama-based teaching and learning	1

Source: Author's own data

The most frequently cited classroom techniques indicate that cultural input was prioritized via audiovisual stimuli. Teaching language and cultural content indicated the use of CLIL; however, this teaching method was specified by a single student. Focusing on meaningful communication was the second most frequently reported technique, although it was not associated with communicative language teaching as a method. The most popular technique within this category was role play; however, only one student linked this activity to drama-based teaching (DBT). Reading and writing activities, along with gamification techniques, were moderately frequent in the responses. Experiential

learning, providing hands-on experiences with cultural products and practices, was the least frequently cited teaching approach. Trying traditional food and snacks was the most popular experiential learning technique. Two students mentioned specific cultural topics, and six students specified classroom management forms. Group work was mentioned most frequently, and independent study was linked to student research and student presentations. Two students highlighted compliance with official documents, including the textbook used and the curriculum.

Some students described complex, multimodal, and experiential learning experiences.

If I were teaching currently, I would teach in these ways: preparing national dishes or just tasting them if there is no opportunity to cook; getting dressed in national costumes; explaining habits of English people then to act out that habit in a role-play; to get a song played connected to English culture; showing pictures, tools etc. connected to cultural history; to speak in different dialects and practice it with the students.

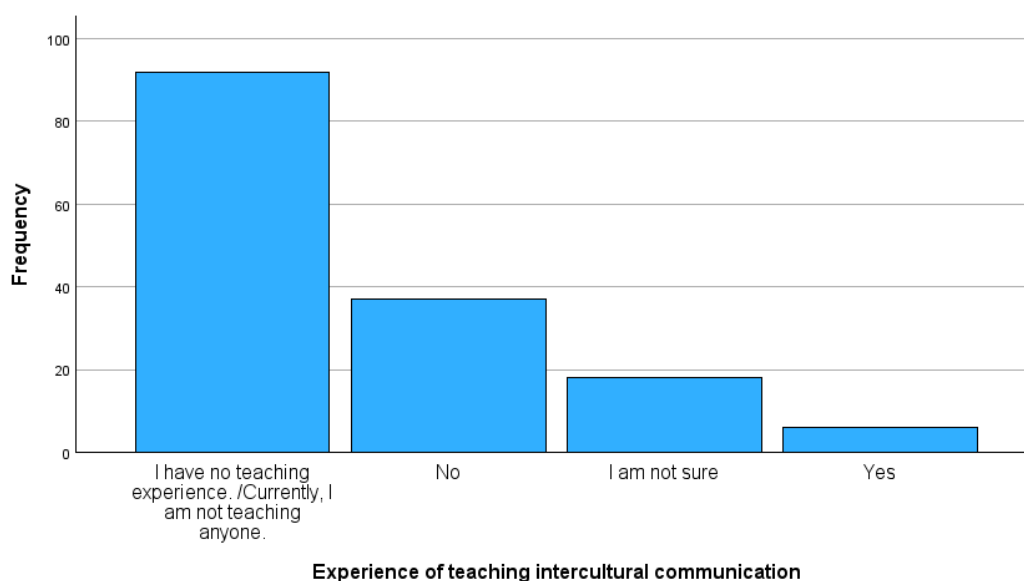
Students can share dishes from their cultures and use multicultural media such as books and videos. Hands-on activities, storytelling, and community involvement also help students engage with diverse cultural perspectives.

In summary, responses indicate either a lack of experience or a complex set of creative ideas for teaching culture, most probably reflecting their exposure to university courses on the topic.

Attitudes toward and experience of teaching intercultural communication

Figure 6 shows the proportion of students with experience teaching intercultural communication. Apart from 92 students (60%) lacking teaching experience, the majority (n=37, 24%) reported not teaching ICC, 18 students (12%) were unsure whether their teaching addressed ICC, and only 6 students (4%) confirmed their ICC teaching experience. Of the 61 students with teaching experience, only 10% reported ICC teaching experience.

Figure 6. Participants' Experience with Intercultural Communication



Source: Author's own data

Since it was expected that students would show limited experience teaching ICC, they were asked why they had not taught or would not teach it in the future. Of the 153 respondents, 135 (88%) reported no such experience, mostly because they were students in training. Three students reported experience teaching ICC, and two expressed their desire to teach it in the future.

During this semester, we are learning a lot about the topic, so I would like to include this field more and in a better way in the future.

The remaining students specified the reasons for not teaching ICC. One student reported not knowing how to teach ICC, and one did not know the meaning of the term. Two respondents complained about their students' low English proficiency levels, and one proposed that young learners were too young to be taught ICC.

They [Students] are not on that proficiency level to be able to [learn about it] yet.

Some of my students are pretty young or struggle with the basics of the language; I want them to enjoy learning it before I teach them such things.

Two students complained about the lack of time to teach ICC. One of them taught English to groups in a language school, and the other taught IT in English in a local secondary school.

These groups wanted to go abroad quickly, and I had 3 months to teach them the language. We do not have time for that [teaching ICC].

I teach English in relation to IT for a year for each class and must mainly focus on what is relevant to them (vocabulary of IT terms, basic grammar structures, formal letters, CVs, cover letters), so there is hardly any space left for creativity.

One student highlighted that ICC “is not part of the curriculum”. Another argued that they did not address ICC because they did not “teach in school”. Finally, two respondents expressed reluctance and felt unprepared to teach ICC.

It is not in my focus, nor is it my field of expertise.

I'm not a teacher yet, and even if I were, I don't think I'd qualify.

Although only a few students expressed their views explicitly, the student statements underscore the diversity of reasons for not including ICC in their teaching practice. While only two students expressed willingness to incorporate ICC in their future teaching practice, ten respondents showed reluctance for different reasons.

Teaching methods and classroom techniques to teach ICC

Table 6 shows the classroom techniques and cultural topics reported by the participants.

Table 6. Classroom Techniques and Topics to Teach ICC

Topics		Frequency
Techniques	Roleplays	5
	Discussions	4
	Watching videos	2
	Experiential learning	1
	Reading articles	1
	Authentic tasks	1
	Multimedia use	1
Topics	Politeness	5
	Sharing student experiences	3
	Cultural perspectives	3
	Cultural practices	2
	Body language and gestures	2
	Cross-country comparisons	2
	Hofstede's cultural dimensions	1
	Moran's 5 cultural dimensions	1
	Amy Cuddy's TED talk on body language	1
	Communication styles	1
	Greetings	1
	Humor	1

Source: Author's own data

The most frequently cited classroom techniques included roleplays and discussions, linked to drama-based and communicative language teaching. Experiential learning referred to “sharing cultural foods through potlucks,” and authentic tasks were equated with “real-life scenarios”. Concerning cultural topics, specific examples of teaching culturally appropriate politeness included a distinction between the usage of the words “British” and “English”, the inclusion of “please in most requests”, and “talking about

culturally sensitive, potentially racist, and generally problematic words and expressions". In conclusion, the specific examples reported by the 10 students with ICC teaching experience indicate their familiarity with the topic, probably resulting from their university courses.

Discussion

The findings provide valuable insights into pre-service English teachers' preparedness to teach culture and ICC at UP. Given that approximately three-quarters of the participants had no teaching experience at the time of data collection, the results largely reflect beliefs and intentions rather than established classroom practices. This finding is unsurprising, as most participants were still enrolled in teacher education programs (and many within the first two years) and therefore had limited exposure to extensive teaching practice. Nevertheless, their responses offer important indications of how future English teachers conceptualize culture and ICC and how university education may shape these perceptions.

Most participants were preparing to teach both elementary and secondary school learners; however, secondary education emerged as the preferred teaching context and the one in which students most frequently had teaching experience. This preference may partly explain the relatively strong emphasis on cultural content, as English language teaching at the secondary level often incorporates cultural topics alongside language development. The participants' educational preparation for teaching culture primarily originated from university lectures and seminars, suggesting that teacher education programs play a central role in shaping their understanding of culture and interculturality. However, the fact that intercultural (communicative) competence (Byram, 2008; Deardorff, 2006) development is not incorporated directly into any of the current curricula may explain pre-service English teachers' reluctance to teach ICC. The only course that is systematically included in all but one program is a seminar course on teaching culture and ICC.

Regarding the amount of lesson time devoted to culture, most participants would allocate between 10% and 25% of instructional time to cultural topics. This finding aligns with previous research (Elizondo-Gonzales, 2018) that culture is generally viewed as an important but supplementary component of language teaching rather than a central organizing principle of instruction. While pre-service English teachers complete a course called *Task-based Approaches to Content and Language Integrated Learning (CLIL)*, the integration of CLIL into teaching language and culture does not emerge in the responses. Considerable variation in responses also indicates a lack of consensus regarding the role of culture in English language teaching. Such differences may reflect broader tensions within the field between viewing language primarily as a linguistic system (Medgyes, 2017) and viewing language learning as a way of cultural learning and a process of intercultural engagement (Byram, 1997, 2008).

The cultural topics identified by participants reveal a strong preference for teaching cultural products and practices, such as holidays, traditions, literature, food, music, films, daily life, and communication etiquette. These findings align closely with Moran's (2001) model of culture, which distinguishes among cultural products, practices, perspectives,

communities, and persons. Participants demonstrated considerable awareness of products and practices, while cultural perspectives, describing underlying values, beliefs, assumptions, and worldviews that shape observable behavior, received very limited attention. Only a small number of respondents explicitly mentioned teaching values, attitudes, beliefs, or cultural viewpoints. Consequently, culture was frequently approached at the more visible levels of the cultural iceberg, whereas the less visible dimensions of culture remained largely unexplored.

A similar pattern emerges when considering the distinction between high culture (Arnold, 1867/2009) and culture as a way of life (Williams, 1958). High culture, including literature, history, arts, and famous landmarks, was among the most frequently cited cultural domains. This finding is understandable given that English teacher education programs traditionally include substantial coursework in British and American literature, history, and civilization. Exposure to these disciplines likely influences pre-service teachers' perceptions of what constitutes legitimate cultural knowledge. At the same time, many respondents also referred to food, daily life, family practices, and popular culture, reflecting a broader anthropological understanding of culture as a way of life. Although this represents a more contemporary view of culture, the prominence of high culture suggests that traditional perspectives continue to exert considerable influence on future teachers' conceptualizations of culture.

The findings also raise important questions regarding whose culture should be taught in contemporary English language classrooms. Most responses failed to specify this dimension of teaching culture. Of the few participants addressing this issue, three referred explicitly to British and American cultural traditions, landmarks, and holidays, reflecting a traditional target-culture orientation in English language teaching, and only two respondents mentioned teaching cultures beyond the English-speaking world. This finding appears somewhat inconsistent with contemporary perspectives on ELF and English as an intercultural language, which view English not as the property of native speakers (Dewey & Leung, 2010) but as an international language used among people from diverse linguistic and cultural backgrounds (Jenkins, 2009). From an ELF perspective, cultural learning should go beyond British and American cultures to include the diverse cultures of English users worldwide (Jenkins, 2014). The limited attention given to non-English-speaking cultures, therefore, suggests that many participants may still hold relatively traditional views of the relationship between language and culture.

The methodological findings reveal that audio-visual materials constituted the most frequently reported approach to teaching culture. Videos, films, music, pictures, and presentations offer learners rich opportunities to observe cultural products and practices in authentic contexts and are commonly recommended in language pedagogy. This finding suggests a preference for auditory and visual teaching/learning styles (Fleming & Mills, 1992). Communicative techniques such as roleplays and discussions formed the second most frequently cited category, reflecting the influence of communicative language teaching (Richards & Rodgers, 2014) embedded in the sociocultural model of language learning (Vygotsky, 1978). These activities should allow students to move beyond factual cultural knowledge toward interaction and meaning-making.

Nevertheless, relatively few participants explicitly connected these activities to the development of intercultural competence (Deardorff, 2006), critical or in-depth cultural awareness (Moran, 2001), or inclusive education (Lin & Chung, 2024).

Interestingly, experiential learning (Kolb, 1984) and gamification (Kapp, 2012) occupied a middle position among the reported teaching methods. Activities such as tasting traditional food, sharing personal experiences, or engaging with cultural artefacts have the potential to facilitate deeper cultural engagement by connecting learners emotionally and personally to cultural content and letting students voice their identities. Such identity-aware and learner-centered pedagogies have been proven to facilitate active engagement, motivation, and learning in the language classroom (Fekete, 2022). Their relatively limited presence in the responses may reflect the participants' lack of teaching experience rather than a lack of appreciation for experiential approaches. The examples provided by some respondents suggest considerable creativity and a willingness to incorporate multimodal (García-Barroso & Fonseca-Mora, 2023) and experiential learning (Kolb, 1984) opportunities into future teaching practice.

The results concerning intercultural communication reveal an even greater gap both in theoretical preparation and classroom implementation. The current curricula lack systematic theoretical or practical training in intercultural communication or intercultural competence development. Such training may be incorporated in other theoretical or methodological courses to some extent, probably depending on the teachers' specific pedagogical goals and requirements. Although culture was frequently mentioned as a part of English language teaching, very few participants reported actual experience teaching ICC. This finding aligns with previous research (Sercu et al., 2005), suggesting that teachers often feel more confident teaching cultural facts than facilitating intercultural learning. Culture may be perceived as a body of knowledge that can be transmitted, whereas ICC requires the development of attitudes, skills, critical reflection, and behaviors, which many teachers find more challenging to teach and assess.

Several participants reported uncertainty regarding the meaning of ICC or how it should be taught. Others perceived language proficiency, student age, curriculum requirements, or time constraints as barriers to implementation. These responses suggest that ICC may still be viewed as an optional addition rather than an integral component of language education. Such perceptions contrast with influential models of intercultural communicative competence, including those proposed by Byram (1997), which emphasize that language and intercultural competence are inseparable. From this perspective, language learning should not merely prepare learners to communicate accurately but also to interact effectively and appropriately with people from different cultural backgrounds (Deardorff, 2006).

The classroom activities reported by the small number of participants with ICC teaching experience indicate a more sophisticated understanding of intercultural learning. Roleplays, discussions, comparisons across cultures, analyses of cultural perspectives, and explorations of politeness conventions all correspond to key components of intercultural competence (Deardorff, 2006). Notably, some participants referred to Moran's cultural dimensions and Hofstede's framework, suggesting that

university courses have provided conceptual tools for teaching cultural differences. Furthermore, activities focusing on body language, communication styles, humor, and culturally appropriate language use move beyond teaching cultural facts toward developing intercultural awareness and interactional competence.

Conclusion and pedagogical implications

The findings of the document analysis suggest a gradual reduction in coursework dedicated to new developments in English language teaching across newer and shorter program formats, with explicit instruction in intercultural communication and World Englishes/ELF becoming less consistently available to pre-service English teachers.

The results of the questionnaire indicate that pre-service English teachers show emerging awareness of the importance of culture and intercultural communication, yet their understanding remains more developed in relation to culture than to ICC. Their conceptualizations of culture are strongly influenced by cultural products, practices, and high-cultural content, while deeper cultural perspectives and intercultural processes receive less attention. The results also indicate that traditional target-culture orientations continue to coexist with more contemporary understandings of culture as a way of life.

Given the omniscient role of English across the world, teacher education programs would benefit from placing greater emphasis on ELF, intercultural communicative competence, and the exploration of diverse global cultures. Such training could help future teachers move beyond transmitting cultural information toward facilitating meaningful intercultural learning experiences that prepare students for communication in culturally diverse contexts, as well as fostering inclusive educational practices.

Limitations and further directions

A major strength of the research is the use of mixed methods, including textual and statistical data, complemented by document analysis. However, self-reports may not be fully reliable; therefore, future research could include classroom observations or behavioral data collected from pre-service and in-service language teachers alike. In addition, interviews with diverse groups could shed more light on pre-service and in-service teachers' attitudes toward and experiences of teaching culture and ICC.

References

- Arnold, M. (2009). *Culture and anarchy* (J. Garnett, Ed.). Oxford University Press. (Original work published 1867)
- Boas, F. (1938). *The mind of primitive man* (Rev. ed.). The Macmillan Company. (Original work published 1911)
- Boroditsky, L. (2012). How the languages we speak shape the ways we think: The FAQs. In M. Spivey, K. McRae, & M. Joannisse (Eds.), *The Cambridge handbook of psycholinguistics* (pp. 615–632). Cambridge University Press. <https://doi.org/10.1017/CBO9781139029377.032>
- Byram, M. (1997). *Teaching and Assessing Intercultural Communicative Competence*. Multilingual Matters.
- Byram, M. (2008). *From foreign language education to education for intercultural citizenship*. Multilingual Matters.

- Deardorff, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education*, 10(3), 241–266. <https://doi.org/10.1177/1028315306287002>
- Dewey, M. & Leung, C. (2010). English in English language teaching: Shifting values and assumptions in changing circumstances. *Working Papers in Educational Linguistics*, 25(1), 1–15.
- Dezső, R. A. (2022). *Intelligenciák – más-kép(p)*. Gondolat Kiadó.
- Dombi, J. (2020). Supportive moves in intercultural ELF interactions: A study on discourse-level realizations of external request modification. In A. Fekete, M. Lehmann, & K. Simon (Eds.), *UPRT 2019: Empirical studies in English applied linguistics* (pp. 96–121). Lingua Franca Csoport.
- Dombi, J. (2021). *Intercultural communicative competence and individual differences: A model for advanced EFL learners*. Cambridge Scholars Publishing.
- Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative and mixed methodologies*. Oxford University Press.
- Egitim, S., & Akaliyski, P. (2024). Intercultural experience facilitates majority-group acculturation through ethnocultural empathy: Evidence from a mixed-methods investigation in Japan. *International Journal of Intercultural Relations*, 98, Article 101908. <https://doi.org/10.1016/j.ijintrel.2023.101908>
- Elizondo-González, J. F. (2018). Analyzing Moran's dimensions of culture in an English conversational course at UCR. *Revista de Lenguas Modernas*, 28, 343–371.
- Fekete, A. (2020). Desire, freedom, and pain in English learners' emotional responses to SLA: A holistic look at English learners' multilingual identity construction. *ERL Journal*, 2(4), 84–99. <https://doi.org/10.36534/erlj.2020.02.10>
- Fekete, A. (2022). Introducing an identity based model of teaching and facilitating intercultural communication: A learner centered approach. In E. Charamba (Ed.), *Handbook of Research on Teaching in Multicultural and Multilingual Contexts*. IGI Global. <https://doi.org/10.4018/978-1-6684-5034-5.ch022>
- Fekete, A. (in press a). Investigating cultural openness and empathy among English teacher trainees. *ERL Journal*.
- Fekete, A. (in press b). Language socialization and linguistic competence shape multilingual identities and intercultural interaction patterns among culturally diverse university students. *Argumentum*.
- Fekete, A. (in press c). How many languages make a person multilingual? Language repertoires, language ideologies, and identities: Evidence from a mixed-methods study. *Hungarian Journal of Applied Linguistics*.
- Fernández-Corbacho, A., Cores-Bilbao, E., & Flor-Arasil, P. (2024). Ethnocultural empathy development of future language teachers through digital multiliteracy resources for low-literacy adult migrants. *Frontiers in Psychology*, 15. <https://doi.org/10.3389/fpsyg.2024.1398457>
- Fleming, N. D., & Mills, C. (1992). Not another inventory, rather a catalyst for reflection. *To Improve the Academy*, 11(1), 137–155. <https://doi.org/10.1002/j.2334-4822.1992.tb00213.x>
- García-Barroso, L., & Fonseca-Mora, M. C. (2023). Multiliteracies for adult language learners: A narrative review. *Porta Linguarum*, 40, 199–213. <https://doi.org/10.30827/portalin.vi40.26661>
- Gashi, L. (2021). Intercultural awareness through English language teaching: The case of Kosovo. *Interchange*, 52(3), 357–375. <https://doi.org/10.1007/10780-021-09441-5>
- Hall, E. T. (1959). *The Silent Language*. Doubleday.
- Hofstede, G. (1991/1994). *Cultures and Organizations: Software of the Mind*. Harper Collins Business.
- Huber, M. I. (2025). Teacher trainers' beliefs about pluricentricity in teaching English and German as foreign languages. *Alkalmazott Nyelvtudomány*, 25(2), 110–127. <http://dx.doi.org/10.18460/ANY.2025.2.008>
- Jenkins, J. (2007). *English as a lingua franca: Attitude and identity*. Oxford University Press.
- Jenkins, J. (2009). English as a lingua franca: Interpretations and attitudes. *World Englishes*, 28(2), 200–207. <https://doi.org/10.1111/j.1467-971X.2009.01582.x>

- Jenkins, J. (2014). *Global Englishes: A Resource Book for Students* (3rd ed.). Routledge. <https://doi.org/10.4324/9781315761596>
- Kabel, A. (2009). Native-speakerism, stereotyping and the collusion of applied linguistics. *System*, 37, 12-22.
- Kapp, K. M. (2012). *The gamification of learning and instruction: Game-based methods and strategies for training and education*. Pfeiffer.
- Kramsch, C. (1998). *Language and culture*. Oxford University Press.
- Kramsch, C. (2009). *The multilingual subject*. Oxford University Press.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.
- Lázár, I. (2011). Teachers' beliefs about integrating the development of intercultural communicative competence in language teaching: Case studies of Hungarian pre-service English teachers. *ForumSprache*, 5, 113-127.
- Lin, S.-Y., & Chung, K. K. H. (2024). Linking teacher empathy to multicultural teaching competence: The mediating role of multicultural beliefs. *Social Psychology of Education: An International Journal* 27, 3573-3595. <https://doi.org/10.1007/s11218-024-09893-4>
- Lucza, L., Martos, T., Sallay, V., Weiland, A., Vermeir, P., & Csabai, M. (2023). Az Interkulturális Érzékenység Skála magyar változatának pszichometriai vizsgálata orvostanhallgatók és pszichológia szakos hallgatók mintáján. *Magyar Pszichológiai Szemle*, 78(1), 61-80. <https://doi.org/10.1556/0016.2022.00044>
- Matsumoto, D. (1996). *Culture and Psychology*. Brooks/Cole.
- Márkus, Gy. (2017). *Kultúra, tudomány, társadalom: A kultúra modern eszméje*. Atlantisz Könyvkiadó.
- Medgyes, P. (2017). *The non-native teacher* (2nd ed.). Swan Communication.
- Menyhei, Z. (2013). Developing English majors' intercultural communicative competence in the social constructivist classroom: The students' views. In J. Dombi, J. Horváth, & M. Nikolov (Eds.), *UPRT 2013: Empirical Studies in English Applied Linguistics* (pp. 16-31). Lingua Franca Csoport. <https://mek.oszk.hu/12400/12495/>
- Moran, P. (2001). *Teaching Culture. Perspectives in Practice*. Heinle.
- Németh, T., Marek, E., Faubl, N., Suto, B., Jon, M., & Hild, G. (2022). Developing intercultural competences for more effective patient care and international medical and research collaborations. *Orvosi Hetilap*, 163, 1743-1750. <https://doi.org/10.1556/650.2022.32614>
- Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching* (3rd ed.). Cambridge University Press.
- Sercu, L., Bandura, E., Castro, P., Davcheva, L., Laskaridou, C., Lundgren, U., Méndez García, M. C., & Ryan, P. (2005). *Foreign language teachers and intercultural competence: An international investigation*. Multilingual Matters.
- Spencer-Oatey, H. (2008). *Culturally Speaking. Culture, Communication and Politeness Theory. 2nd edition*. Continuum.
- Spencer-Oatey, H. (2012). What is culture? A compilation of quotations. *GlobalPAD Core Concepts*.
- Szigeti, L. L. (2002). A multikulturalizmus esztétikája. *Helikon: Irodalom- és Kultúratudományi Szemle*, 48(4), 393-421.
- Talbi, M. (2020). Developing intercultural communicative competence within the framework of a university language course: The case of a BA in English Studies programme in Hungary. *Working Papers in Language Pedagogy*, 14, 55-79. <https://doi.org/10.61425/wplp.2020.14.55.79>
- Tylor, E. B. (1871/1889). The science of culture. In *Primitive culture: Researches into the development of mythology, philosophy, religion, language, art and custom* (Vol. 1, 3rd ed., pp. 1-25). Henry Holt and Company. <https://doi.org/10.1037/12987-001>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Widdowson, H. G. (2012). ELF and the inconvenience of established concepts. *Journal of English as a Lingua Franca*, 1(1), 5-26.

Williams, R. (1958). *Culture and Society, 1780–1950*. Chatto & Windus.

Williams, R. (1989). Culture is ordinary. In R. Williams, *Resources of hope: Culture, democracy, socialism* (pp. 3–18). Verso. (Original work published 1958)

Appendix

Appendix A

Degree program curricula analyzed in the research

Available at: <https://btk.pte.hu/hu/hallgatoinknak/tantervkereso>

Retrieved for this research on June 12, 2026.

- Curriculum of the current undivided teacher education MA program: [osztatlan angol nyelv és kultúra tanára ANGKONO222301.pdf](#)
- Curriculum of the previous undivided teacher education MA program: [osztatlan angol nyelv és kultúra tanára ANGKONO171801_1.pdf](#)
- Curriculum of the international English instructor MA program: [Angol nyelvoktató MT-ANYOTANMA232401.pdf](#)
- Curriculum of short cycle English teacher training MA program 1: [tanár - angol nyelv és kultúra tanára MT-OT-L-ANG60.SZE-242501.pdf](#)
- Curriculum of short cycle English teacher training MA program 2: [angol nyelv és kultúra tanára \(3 félév\) MT-OT-L-ANG90.UT-252601.pdf](#)
- Curriculum of short cycle English teacher training MA program 3: [tanár - angol nyelv és kultúra tanára MT-OT-L-ANG60.M-232401.pdf](#)

Appendix B

Questionnaire items included in the research

4. How old are you? (Open-ended question)
5. What is your gender? (Multiple-choice question)
6. Are you from Hungary? (Yes/no question)
7. Which country are you from if you are not from Hungary? (Open-ended question)
8. Describe your English proficiency level. Indicate your most recent achievement or your current proficiency level by choosing one option from the list below. (Multiple-choice question)
9. Are you an English teacher trainee? (Yes/no question)
10. Which degree program are you enrolled in? (Multiple-choice question)
11. Which year are you in at university? (Multiple-choice question)
12. As a teacher trainee, what is your teaching specialization? (Multiple-choice question)
13. How many years of teaching experience do you have? (Multiple-choice question)
14. What kind of teaching experience do you have? (Multiple-choice question)

15. What kind of students are you currently teaching or have you taught most recently?
(Multiple-choice question)
16. As a language teacher trainee, have you ever attended a course on how to teach culture in the language classroom? You may choose more options. (Multiple-choice question)
17. What kind of cultural topics do you teach in your English lessons/classes? List as many as you can think of. (Open-ended question)
18. How do you usually teach culture (e.g., the cultural topics you mentioned above)?
What kind of activities do you do? (Open-ended question)
19. How much time do you devote to teaching culture in your English lessons? (Multiple-choice question)
20. Have you ever taught intercultural communication in your English lessons/classes?
(Multiple-choice question)
21. How did you teach intercultural communication in your English lessons/classes?
What topics did you teach? What kind of activities did you do? (Open-ended question)
22. If you have never taught intercultural communication, please explain why. (Open-ended question)

Borbála Kigyós

*TRANSFER EFFECTS OF CHILDHOOD EXTRACURRICULAR
ACTIVITIES ON UNIVERSITY STUDENTS' RESILIENCE
AND ACADEMIC PERFORMANCE
A QUANTITATIVE STUDY AMONG ARCHITECTURE STUDENTS*

Abstract

This study presents the results of quantitative empirical research examining the relationships between childhood extracurricular activities – music, visual arts, and sports – and the resilience and academic performance of university students. The theoretical framework is grounded in the theory of psychological transfer effects and the multidimensional model of resilience. Data were collected from 197 architecture students at the Faculty of Engineering and Information Technology of the University of Pécs using a structured survey questionnaire incorporating the Connor–Davidson Resilience Scale (CD-RISC 25). Participants were analysed across eight activity-combination groups. Results indicate that students engaged in all three activities show significantly higher resilience scores ($M = 77.31$; $SD = 14.61$) compared to the control group ($M = 64.46$; $SD = 18.61$; $t(40) = 2.42$; $p = .020$; $d = 0.81$). Secondary school GPA was also significantly higher ($t(40) = 2.77$; $p = .009$; $d = 0.92$); however, the current semester average did not differ significantly ($p = .207$). A significant positive Pearson correlation was found between number of activities and resilience ($r = .149$; $p = .037$), confirmed by dose-response analysis ($\chi^2(3) = 7.86$; $p = .049$; $V = .200$). Sport participation is the strongest resilience predictor in the sample ($d = 0.61$, medium effect; $p = .001$), while visual arts activity is significantly associated with better academic performance ($d = 0.44$; $p = .006$) but shows no main effect on resilience ($p = .856$). The research confirms the synergistic transfer effects of combined activities and highlights the need for integrated pedagogical models in higher education.

Keywords: resilience; transfer effects; architecture students

Introduction

One of the most pressing challenges of 21st-century higher education is student mental health and academic performance. According to global surveys, the prevalence of anxiety, burnout, and mental health problems among university students continues to rise (WHO, 2022; Auerbach et al., 2018). Architecture students constitute a particularly affected group: studio-based education, the distinctive atmosphere of design critique, and high-performance expectations place unique psychological demands that require exceptional adaptability (Ayalp & Civici, 2021; Cuff, 1991).

Resilience – an individual's capacity to successfully cope with stress and adapt flexibly – is not an innate trait but a set of developable, learnable capacities (Connor & Davidson,

2003; Masten, 2014; Rutter, 2012). Pedagogical and psychological research is devoting increasing attention to the long-term developmental effects of extracurricular activities – particularly music, visual arts, and sport – collectively referred to as transfer effects (Perkins & Salomon, 1992).

This study presents the results of the empirical investigation of a doctoral research project. The leading research question is: How do the type and combination of childhood extracurricular activities relate to the resilience and academic performance of architecture students? The study involved 197 architecture students and is organised around the following hypotheses:

(H1) Students who participated in all three activities (music, visual arts, sport) show significantly higher resilience and better academic performance than the control group (0 activities).

(H2) The number of activities pursued is positively associated with resilience and academic performance indicators.

(H3–H4) Individual activity types (music, visual arts, sport) and their combinations show differentiated associations with resilience scores and academic performance.

(H5–H6) The manifestation of transfer effects is independent of sociodemographic background and cultural socialisation.

Theoretical Background

The Concept, Models, and Measurement of Resilience

The Development of the Concept of Resilience

The concept of resilience has been discussed systematically in the psychological literature since the 1970s, primarily following the landmark Kauai longitudinal studies by Werner and Smith (1982, 1992). These pioneering studies tracked children born into adverse conditions on the Hawaiian island of Kauai over several decades and identified a subset who thrived despite significant risk factors – thereby establishing the empirical basis for resilience research. Early approaches treated resilience primarily as a stable personality trait or a fixed individual characteristic; however, this view has been substantially revised in subsequent decades.

Contemporary perspectives interpret resilience within a dynamic, systems-oriented framework: as an adaptive capacity emerging from the interaction between the individual and their environment (Luthar et al., 2000; Masten, 2014; Rutter, 2012). This relational and developmental view has important implications: resilience is not simply something a person has or lacks, but a process that can be cultivated through appropriate social, educational, and psychological conditions. Masten's (2014) influential metaphor of 'ordinary magic' highlights that resilience arises not from exceptional or heroic qualities, but from the normal functioning of human psychological systems – including the capacity to form attachment relationships, regulate emotion, and find meaning in experience. These capacities are, crucially, developable and teachable.

Bonanno (2004) further refines the conceptual landscape by distinguishing resilience from recovery: whereas recovery implies a measurable return to a prior level of functioning after a period of disruption, a resilient individual never fully departs from their baseline – they experience otherwise disruptive events with relatively low levels of distress and maintain stable functioning throughout. This distinction has practical relevance for educational settings, where the goal of resilience-building programmes is not to help students 'bounce back' from failure, but to equip them with the psychological resources to navigate challenges without significant impairment in the first place.

A further theoretical development is the shift from unidimensional to multidimensional conceptualisations of resilience. Earlier models focused on a single latent factor of psychological hardiness; more recent frameworks, including the one operationalised by Connor and Davidson (2003), recognise resilience as a multifactorial construct encompassing cognitive, emotional, social, and even spiritual dimensions. This theoretical pluralism is reflected in the diversity of measurement tools currently in use, each capturing slightly different facets of the construct.

The Connor–Davidson Resilience Scale (CD-RISC 25)

Connor and Davidson (2003) developed the CD-RISC 25 as a psychometrically robust instrument capable of capturing the multidimensional nature of resilience. Their five-factor model distinguishes the following components: (1) personal competence, high standards, and tenacity – reflecting confidence in one's abilities and persistence in the face of setbacks; (2) trust in one's intuitions, tolerance of negative affect, and strengthening effects of stress – capturing the capacity to tolerate uncertainty and convert adversity into growth; (3) positive acceptance of change and secure relationships – reflecting adaptability and the protective function of social connectedness; (4) control – encompassing a sense of agency and the belief that one can influence outcomes; and (5) spiritual influences – reflecting the capacity to draw meaning from transcendent or value-based frameworks.

The CD-RISC 25 questionnaire contains 25 items rated on a five-point Likert scale (0–4), yielding a total score of 0–100. The scale has excellent psychometric properties in its original English-language validation: Cronbach- α = 0.89, and test-retest reliability of r = .87. It has been used extensively in clinical, occupational, and educational contexts, and has been validated in numerous language versions. Its Hungarian adaptation was conducted by Kiss and colleagues (2015), who demonstrated satisfactory factorial validity and internal consistency in a Hungarian population. The internal consistency measured in the present study is Cronbach- α = 0.917, exceeding the threshold for excellent reliability (Nunnally & Bernstein, 1994), which supports the suitability of the instrument for this specific student population.

Transfer Effects in Extracurricular Activities

The Concept and Types of Transfer

Transfer refers to the application of knowledge, skills, or attitudes acquired in one learning context to another context (Perkins & Salomon, 1992). The theoretical study of transfer has a long history in educational psychology, dating back at least to Thorndike and Woodworth's (1901) 'identical elements' theory, which proposed that transfer occurs to the extent that two tasks share common components. Subsequent research expanded this view substantially: Barnett and Ceci (2002) proposed a multidimensional taxonomy of transfer that distinguishes near and far transfer along multiple dimensions, including the surface similarity between tasks, the temporal gap between learning and application, and the social context of the transfer situation.

In the context of extracurricular activities, the concept of far transfer is particularly relevant. Far transfer describes the generalisation of learning across contexts that are superficially dissimilar – for example, the application of rhythmic discipline acquired through musical training to the management of academic deadlines, or the use of spatial reasoning developed through drawing practice in architectural design problems. Transfer research concerning extracurricular activities identifies effects primarily in three domains: cognitive (including executive functions, spatial reasoning, and working memory), emotional-social (including self-regulation, empathy, and prosocial behaviour), and motivational (including growth mindset, goal orientation, and persistence) (Hallam, 2010; Tomporowski et al., 2011; Winner et al., 2013).

A crucial distinction must also be drawn between specific and non-specific transfer. Specific transfer refers to the direct application of a particular skill or piece of knowledge – for instance, visual-spatial competence acquired through drawing being applied to architectural representation. Non-specific transfer refers to the generalisation of broader cognitive strategies, habits of mind, or affective dispositions – for instance, the self-discipline and frustration tolerance developed through years of musical practice being applied to demanding academic coursework. The present study provides evidence for both types within a specialised higher education context.

Transfer Effects of Music Education

The cognitive transfer effects of music training constitute one of the most thoroughly researched areas in educational psychology. A foundational study by Schellenberg (2004) demonstrated, through a randomised controlled experiment with children, that music lessons produced significant IQ gains compared to control conditions receiving drama lessons or no instruction – with the effect being most pronounced in the area of spatial-visual reasoning. This finding generated considerable scholarly debate and subsequent replication efforts, with a meta-analysis by Hetland (2000) confirming a reliable positive relationship between sustained music instruction and spatial-temporal reasoning.

Hallam (2010) provided a comprehensive synthesis of the intellectual and social effects of music education, concluding that the evidence base supports positive transfer to language development, mathematics, reading, and general cognitive ability, while noting

that effect sizes vary according to the duration, intensity, and pedagogical approach of music instruction. Particularly relevant to resilience is the finding that music education is associated with improved self-esteem, reduced anxiety, and enhanced emotional regulation – capacities that are theoretically central to the construct of resilience as measured by the CD-RISC 25. Relatedly, music-making in ensemble contexts fosters cooperation, attentive listening, and the capacity to subordinate individual expression to a collective goal – skills with clear relevance to the team-based nature of architectural practice.

In the Hungarian context, the Kodály method occupies a special position in music pedagogy. Developed by Zoltán Kodály and his collaborators, this approach emphasises the use of folk song, relative solmisation, and rhythmic movement as primary tools for musical development. It has been shown to be particularly effective in developing auditory processing capacity, phonological awareness, and social cohesion – outcomes that extend well beyond musical skill in the narrow sense (Demorest & Morrison, 2000). The Kodály method's integration into the Hungarian primary school curriculum means that the music education experienced by the participants in the present study is likely to reflect its distinctive pedagogical features, including an early start, high frequency of instruction, and strong links between music and broader language and social development.

The age-differentiated findings of the present study – showing significant resilience correlations for music training at ages 6–10 and 11–14, but not 15–18 – are consistent with the broader literature on sensitive periods in musical development. The neurological plasticity of early and middle childhood creates particular responsiveness to the structural demands of musical learning, and it is during these periods that the foundational habits of sustained practice, attentive listening, and emotional expression through sound are most deeply consolidated (Schlaug et al., 2005). By adolescence, while musical skill may continue to develop, the formative psychological effects of early musical engagement appear to be largely established.

Effects of Sport on Resilience

The relationship between physical activity and psychological resilience is supported by a substantial body of neurophysiological and psychological evidence. At the neurobiological level, regular physical exercise has been shown to promote the release of brain-derived neurotrophic factor (BDNF), which supports neural plasticity, reduces stress reactivity in the hypothalamic-pituitary-adrenal (HPA) axis, and enhances the regulation of cortisol – the primary stress hormone (Cotman & Berchtold, 2002). These neurophysiological effects create a biological substrate for the psychological experience of greater resilience: lower baseline stress arousal, faster recovery from acute stressors, and more adaptive appraisal of threatening situations.

The meta-analysis by Tomporowski and colleagues (2011) demonstrated that regular physical activity significantly improves executive functions – including working memory, cognitive flexibility, and inhibitory control – as well as stress management capacity in children and adolescents. These effects are mediated in part by the neurophysiological

mechanisms described above and in part by the psychosocial demands of structured sport participation: learning to follow rules, cope with competitive pressure, manage victory and defeat, and coordinate with teammates all constitute forms of psychological training that transfer to non-sporting contexts.

Fletcher and Sarkar (2012, 2016) demonstrated in elite sport contexts that competitive athletic training is associated with significantly higher psychological resilience, mediated by protective factors including goal focus, self-regulation, and motivational persistence. Sarkar and Fletcher (2014) further systematised these protective factors, identifying goal focus and self-regulation as central mechanisms through which sport-related demands translate into durable psychological strengths. These findings are directly relevant to the present study's sample of architecture students, for whom the capacity to manage demanding deadlines, tolerate critical feedback on creative work, and persist through repeated revisions closely parallels the psychological demands of competitive athletic training. The large effect size observed in the present study ($d = 0.61$) for the resilience–sport relationship aligns with the magnitudes reported in the sport psychology literature (Fletcher & Sarkar, 2012; Sarkar & Fletcher, 2014), strengthening the empirical coherence of this finding.

Effects of Visual Arts Education

Research into the transfer effects of visual arts education has historically produced more equivocal findings than the music and sport literatures. Two factors account for this. Visual arts instruction is more heterogeneous in its aims and methods, and the outcome domains most plausibly affected – spatial reasoning, creativity, aesthetic perception – are more difficult to operationalise and measure. Winner and colleagues' (2013) comprehensive OECD-commissioned analysis examined this evidence base critically and concluded that while there is clear empirical support for positive effects of visual arts training on creativity, visual-spatial reasoning, and critical observation, claims of broad cognitive transfer to unrelated academic subjects are not consistently supported.

However, Winner et al. (2013) importantly distinguish between near and far transfer in the visual arts domain, noting that domain-specific transfer – the application of visual-spatial skills acquired through drawing and design to other spatially demanding tasks – is robustly supported. This is precisely the type of transfer most relevant to architecture students, for whom visual-spatial competence is not a peripheral skill but a central disciplinary demand. The finding in the present study that visual arts experience is significantly associated with better academic performance in the architecture programme ($d = 0.44$) but not with resilience represents a theoretically coherent pattern: visual arts training equips students with domain-relevant cognitive tools but does not primarily develop the stress-management and emotional regulation capacities that underlie resilience.

In the Hungarian educational context, the Lantos–Apagyi integrative visual education method (Lantos, 1992) occupies a distinctive position. Developed by Ferenc Lantos and extended by Margit Apagyi, this approach is grounded in the principle that visual and musical experience are not separate domains but complementary modes of perceiving

and representing the world. By systematically linking visual observation, musical listening, and spatial exploration, the method aims to develop an integrated perceptual sensitivity that transcends the boundaries of individual art forms. For architecture students, this integrative orientation is particularly congruent with the discipline's own dual demands of technical spatial reasoning and aesthetic sensibility.

Traditions of Integrated Pedagogy

The theoretical case for integrated, multi-domain arts and physical education finds historical grounding in several influential pedagogical traditions. Waldorf pedagogy, developed by Rudolf Steiner (1919/1996), places artistic activity – including movement, music, visual arts, and drama – at the centre of the curriculum at every developmental stage, on the grounds that these activities cultivate not only aesthetic sensitivity, but the will forces and imaginative capacities that underlie all meaningful learning. Empirical studies of Waldorf graduates have found elevated levels of creative thinking and intrinsic motivation, though the distinctive organisational and philosophical features of Waldorf schools make causal attribution difficult (Randoll & Peters, 2015).

The Reggio Emilia educational philosophy, developed in the post-war Italian city of the same name and articulated by its founding theorist Loris Malaguzzi (1993), similarly emphasises what Malaguzzi termed ‘the hundred languages of children’ – the full range of symbolic, expressive, and physical modes through which children represent and communicate their understanding of the world. In the Reggio approach, the visual arts occupy a privileged position not as a subject of instruction but as a primary medium of inquiry, documentation, and community-making. Research on children educated in Reggio-inspired settings suggests enhanced narrative and representational capacity, as well as greater competence in collaborative problem-solving (Edwards et al., 2012).

The El Sistema music programme, originating in Venezuela under the leadership of José Antonio Abreu and subsequently adapted in numerous international contexts, provides perhaps the most extensively documented large-scale evidence for the transformative effects of intensive, socially embedded music education (Booth & Tunstall, 2016). El Sistema's model – which places group music-making rather than individual skill development at the programme's centre, and deliberately situates musical participation within the social fabric of disadvantaged communities – has been associated with improvements in cognitive functioning, social inclusion, and long-term educational outcomes, though critics have noted methodological limitations in the evaluation literature (Baker, 2014).

The Finnish educational system, frequently cited as a global benchmark for educational excellence and student wellbeing, incorporates phenomenon-based learning as a key structural principle (Niemi et al., 2012). Rather than organising knowledge into discrete disciplinary subjects, phenomenon-based learning invites students to investigate real-world phenomena through the integrated application of multiple knowledge domains and ways of knowing. The strong performance of Finnish students on international assessments, combined with their comparatively low stress and anxiety levels, provides indirect support for the proposition that integrated, multi-modal learning promotes not

only cognitive achievement but psychological resilience. These diverse traditions converge on a shared insight: that the deepest and most enduring learning occurs when cognitive, emotional, physical, and aesthetic dimensions of human experience are cultivated in concert rather than in isolation.

Method

Research Design and Ethics

The study employed a quantitative, cross-sectional design using SPSS 26.0 statistical software. Participants were informed of the research objectives and the option of voluntary participation through a detailed information letter. Data collection was anonymous, in accordance with GDPR requirements.

Sample

The study sample comprised 197 architecture students at the Faculty of Engineering and Information Technology of the University of Pécs (PTE MIK), enrolled in the undivided architecture programme. Gender distribution: women 68.0% ($n = 136$), men 29.5% ($n = 59$), other/no response 2.5% ($n = 5$). Year distribution: Year 1: 26.5% ($n = 53$), Year 2: 36.0% ($n = 72$), Year 3: 30.5% ($n = 61$), Years 4–5: 5.5% ($n = 11$).

Instruments

Connor–Davidson Resilience Scale (CD-RISC 25)

Resilience was measured using the CD-RISC 25 as part of a structured survey questionnaire. The Hungarian adaptation of the scale validated by Kiss and colleagues (2015), comprises 25 items rated on a 0–4 Likert scale, yielding a total score between 0 and 100. In the present sample, the scale demonstrated excellent internal consistency ($M = 72.89$; $SD = 14.49$; Cronbach- $\alpha = 0.917$)

Table 1. Descriptive Statistics of CD-RISC 25 Subscales

Subscale	Items	Max	<i>M</i>	<i>SD</i>	α
Personal competence	8	32	24.23	5.12	0.88
Trust in one's intuitions	7	28	19.52	4.71	0.85
Positive acceptance of change	5	20	15.61	3.06	0.79
Control	3	12	8.58	2.54	0.76
Spiritual influences	2	8	4.94	2.15	0.71
Total score	25	100	72.89	14.49	0.917

Note. $N = 197$. M = mean; SD = standard deviation; Max = maximum score;
 α = Cronbach's alpha.

Source: Author's own data

Academic Performance

Academic performance was operationalised using three indicators: the average of secondary school grades ($M = 4.43$; $SD = 0.46$), the average of school-leaving examination results ($M = 4.47$; $SD = 0.50$), and the GPA of the last university semester ($M = 4.27$; $SD = 0.67$). In the analysis of hypotheses, the primary indicator was the secondary school average, which reflects stable long-term academic performance; the current semester GPA is included for informational purposes.

Measurement of Extracurricular Activities

Data on extracurricular activities were collected via retrospective self-report (regular: at least 2 sessions per week). In the sample: 81.7% ($n = 161$) participated in sport, 46.7% ($n = 92$) studied music, and 28.4% ($n = 56$) engaged in visual arts activities. Based on the eight possible activity combinations, participants were assigned to eight groups.

Data Analysis

Analyses were conducted using SPSS 26.0. The methodological decisions are presented below in the order of the procedures applied.

Descriptive statistics and distribution analysis. The normal distribution of variables was assessed using the Shapiro–Wilk test and visual inspection of Q-Q plots (CD-RISC 25: $W = 0.969$, $p < 0.001$; negative skewness = -0.715). Skewness and kurtosis indicators were compared against the threshold $|z| > 3.29$ (Tabachnick & Fidell, 2019).

Internal consistency. The reliability of the scale and subscales was characterised using Cronbach's α and McDonald's ω (≥ 0.70 acceptable, ≥ 0.80 good, ≥ 0.90 excellent; Nunnally & Bernstein, 1994). Within the item analysis, corrected item-total correlations (CITC) were examined, and items with values below 0.30 were flagged.

Group comparisons. One-way ANOVA was applied to compare the eight activity-combination groups (with Games-Howell post-hoc procedure where homogeneity of variance was not met) and a combined four-group analysis (0/1/2/3 activities). For pairwise comparisons, Welch's independent-samples t-test was used. Effect sizes were calculated as Cohen's d (small ≈ 0.20 ; medium ≈ 0.50 ; large ≥ 0.80) and η^2 (small ≈ 0.01 ; medium ≈ 0.06 ; large ≥ 0.14) (Cohen, 1988).

Correlation analyses. Pearson's correlation coefficient was used to examine associations between variables. In cases of non-normal distribution, Spearman's rank correlation coefficient (ρ) was applied.

Dose-response analysis. Cross-tabulation analysis was conducted using a dichotomised resilience variable (≤ 74 vs. > 74 points) with number of activities (χ^2 test, Cramér's V). The significance level was $\alpha = 0.05$. Where $p < 0.10$, results are described as trend-level associations ($\dagger$).

Results

Activity Profile of the Sample

6.6% of participants ($n = 13$) had not engaged in any of the studied activities during childhood (control group). The detailed distribution of the sample's activity profile across the eight activity combinations is presented in Table 2. The highest resilience mean was shown by the group engaging in all three activities ($M = 77.31$), and the highest academic average by the visual arts + music combination ($M = 4.80$). The lowest resilience value was shown by the visual arts only group ($M = 54.60$), and the lowest academic average by the sport + music group ($M = 3.96$).

Table 2. Distribution of the Sample Across the Eight Activity-Combination Groups

Activity group	<i>n</i>	%	<i>M</i> (CD-RISC) <i>SD</i>	Academic avg. <i>M</i> (<i>SD</i>)
None (control)	13	6.6	64.46 (18.61)	4.15 (0.55)
Sport only	70	35.5	74.14 (15.37)	4.29 (0.59)
Music only	13	6.6	71.00 (13.13)	4.54 (0.52)
Sport and music	45	22.8	74.29 (11.31)	3.96 (0.80)
Visual arts only	5	2.5	54.60 (5.94)	4.40 (0.89)
Sport and visual arts	17	8.6	71.41 (13.61)	4.53 (0.51)
Visual arts and music	5	2.5	67.20 (8.96)	4.80 (0.45)
All three	29	14.7	77.31 (14.61)	4.41 (0.63)
Total	197	100.0	72.89 (14.49)	4.27 (0.67)

Note. $N = 197$. Academic average refers to the last semester's university GPA (1–5 scale). M = mean; SD = standard deviation; CD-RISC = Connor–Davidson Resilience Scale.

Source: Author's own data

Hypothesis H1: The Combined Effect of Three Activities

To test Hypothesis H1, the control group ($n = 13$) and students who participated in all three activities ($n = 29$) were compared. The results are summarised in Table 3.

Table 3. Comparison of the Control Group and Students Engaging in All Three Activities

Variable	Group	n	M	SD	$t(40)$	p	d
CD-RISC total score	Control	13	64.46	18.61	2.42	.020	0.81
	All three	29	77.31	14.61			
Secondary school avg.	Control	13	4.33	0.47	2.77	.009	0.92
	All three	29	4.63	0.24			
Current sem. avg. (informational)	Control	13	4.15	0.55	1.28	.207	0.43
	All three	29	4.41	0.63			

Note. $N = 42$. Secondary school average refers to the mean grades across secondary school years (1–5). The university semester average is included for informational purposes. d = Cohen's d .

Source: Author's own data

Regarding resilience, the group engaging in all three activities shows significantly higher values ($M = 77.31$ vs. $M = 64.46$; $t(40) = 2.42$; $p = .020$; $d = 0.81$) – a large effect size. A significant difference also appears in secondary school GPA ($M = 4.63$ vs. $M = 4.33$; $t(40) = 2.77$; $p = .009$; $d = 0.92$) – a large effect size. It is important to note, however, that the difference in current semester GPA is not statistically significant ($t(40) = 1.28$; $p = .207$; $d = 0.43$), suggesting that the effects of activities are primarily measurable in long-term academic performance. Hypothesis H1 was confirmed regarding resilience and secondary school GPA, but not regarding current semester GPA. In both confirmed cases, large effect sizes were observed.

Hypothesis H2: The Effect of Number of Activities – Dose-Response Relationship

Students were divided into four groups according to the number of activities pursued (0, 1, 2, or 3 activities). The results are presented in Table 4.

Table 4. Resilience and Academic Average by Number of Activities – ANOVA Results

No. of activities	n	Resilience <i>M (SD)</i>	Sec. sch. avg. <i>M (SD)</i>	Sem. avg. <i>M (SD)</i>	ANOVA Resilience	ANOVA Sec. sch. avg.
0 – Control	13	64.46 (18.61)	4.33 (0.47)	4.15 (0.55)	$F(3,193) = 2.43$	$(3,193) = 2.77$
1 – One activity	88	72.57 (15.29)	4.51 (0.43)	4.33 (0.60)	$p = .066 \dagger$	$p = .043^*$
2 – Two activities	67	73.03 (11.80)	4.60 (0.32)	4.16 (0.77)	$\eta^2 = .036$	$\eta^2 = .041$
3 – All three	29	77.31 (14.61)	4.63 (0.24)	4.41 (0.63)		

Note. $N = 197$. The 1- and 2-activity categories show weighted aggregate means. $\dagger p < .10$ (trend level). $^* p < .05$.

Source: Author's own data

Resilience shows a monotonically increasing trend with the number of activities (64.46 → 72.57 → 73.03 → 77.31; total difference: +12.85 points). However, the one-way ANOVA confirms only a trend-level main effect ($F(3, 193) = 2.43$; $p = .066$; $\eta^2 = .036$) – the difference is not statistically significant. The analysis examining eight activity combinations confirms a significant between-group difference ($F(7, 189) = 2.59$; $p = .014$; $\eta^2 = .088$). For secondary school GPA, the linear trend is clear, and the one-way ANOVA shows a significant main effect ($F(3, 193) = 2.77$; $p = .043$; $\eta^2 = .041$). The dose-response cross-tabulation analysis confirms the progressive relationship: the proportion of high resilience (>74 points) is 15.4% in the control group, 48.9% in the one-activity group, 47.8% in the two-activity group, and 62.1% in the all-three-activities group ($\chi^2(3) = 7.86$; $p = .049$; Cramér's $V = .200$). The number-of-activities–resilience Pearson correlation: $r = .149$; $p = .037$.

Hypotheses H3–H4: Effects of Individual Activity Types

The effects of sport, music, and visual arts activity are summarised in Table 5.

Table 5. Associations of Individual Activity Types with Resilience Score and Academic Performance

Activity	CD-RISC <i>r/d</i>	<i>p</i>	Acad. avg. <i>d</i>	<i>p</i>
Music ages 6–10 (H3)	<i>r</i> = .220	.035*	–	–
Music ages 11–14 (H3)	<i>r</i> = .234	.025*	–	–
Music ages 15–18 (H3)	<i>r</i> =.052	.620	–	–
Visual arts (H4)	<i>d</i> =–0.03	.856	<i>d</i> =0.44	.006**
Sport vs. non-sport (H3a)	<i>d</i> =0.61	.001	–	–

Note. *N* = 197 (sport, visual arts); *n* = 92 (music age groups). *r* = Pearson correlation coefficient; *d* = Cohen's *d*. Dashes indicate that the association was not tested for this variable.

* *p* < .05. ** *p* < .01.

Source: Author's own data

The resilience mean of groups including sport (*n* = 161) was significantly higher ($t(195) = 3.31, p = .001, d = 0.61$ –medium effect). Music lessons at ages 6–10 showed a significant positive correlation with resilience ($r = .220, p = .035, n = 92$), as did lessons at ages 11–14 ($r = .234, p = .025, n = 92$), but not at ages 15–18 ($r = .052, p = .620$). Visual arts activity has no significant main effect on resilience ($t(195) = -0.18, p = .856, d = -0.03$), but shows a significant positive effect on current semester GPA ($t(195) = 2.81, p = .006, d = 0.44$ – medium effect) and secondary school GPA ($t(195) = 2.40, p = .017, d = 0.38$).

Hypotheses H5–H6: Demographic Moderators

The effects of activities are significant and robustly independent of the examined sociodemographic variables as moderators. The main effect of parental education is not significant ($p = .666$), nor is the interaction ($p = .947$). Place of residence type shows no significant moderating effect, though it is a significant negative predictor in the regression model ($\beta = -.145; p = .046$): students from larger cities show lower resilience values. Cultural activity (attending classical music concerts, exhibitions) shows a mild positive

association with resilience ($r = .138-.148$), and cultural activity at ages 15–18 significantly correlates with secondary school GPA ($r = .188$; $p = .008$).

Discussion

Synergistic Effects of Combined Activities

The most important finding of the research is the empirical confirmation of the synergistic effects of combined activities. Students engaging in all three activities significantly exceed the control group in both resilience and secondary school academic performance – with large effect sizes in both cases ($d = 0.81$ and $d = 0.92$). These magnitudes are noteworthy in the context of educational psychology, where effect sizes of this magnitude are relatively rare in observational studies and are comparable to those produced by targeted psychological interventions (Hattie, 2009). The dose-response analysis further strengthens this finding. The proportion of high resilience increases from 15.4% in the control group to 62.1% in the three-domain group. This progressive gradient is consistent with a genuine cumulative effect rather than an artefact of group composition.

The theoretical interpretation of this synergistic pattern draws on the neurocognitive literature on multisensory and multimodal learning. Zatorre and Salimpoor (2013) have demonstrated that musical experience engages an unusually wide network of cortical and subcortical brain regions including those responsible for motor planning, auditory processing, emotional regulation, and reward. The simultaneous activation of these systems through music-making may promote more robust and flexible neural connectivity than domain-specific training alone. When musical experience is combined with the embodied, spatially rich demands of visual arts practice and the physiological and psychological conditioning of sport, the result may be a particularly broad and integrated set of neural resources available for adaptation to stress. This interpretation is consistent with the observation that the All-Three group's resilience advantage is substantially greater than the sum of the individual activity effects, pointing to a genuine interaction rather than mere additive combination.

Comparison with existing literature on resilience-building programmes further contextualises these findings. Structured mindfulness-based interventions in higher education typically produce effect sizes in the range of $d = 0.40-0.60$ for resilience outcomes (Galante et al., 2018), while cognitive-behavioural skills training programmes report comparable magnitudes. The effect size of $d = 0.81$ observed in the present study for the combined-activities group exceeds these benchmarks – though it should be noted that the nature of the comparison is fundamentally different: the present study measures the accumulated effects of years of childhood activity involvement rather than the acute effects of a structured intervention. This distinction suggests that the 'treatment' examined here is not a circumscribed programme but a formative developmental pathway, and that the resilience differences observed may reflect deeply consolidated psychological dispositions rather than recently acquired coping strategies.

Differentiated Effects of Individual Activities

Sport is consistently the strongest resilience predictor in the present study ($d = 0.61$, a medium effect by conventional criteria), a finding that aligns with the convergent evidence from neurophysiological and psychological research reviewed in Section 2. The neurobiological mechanisms through which sport builds resilience – including HPA axis regulation, BDNF-mediated neural plasticity, and the development of behavioural inhibition under pressure – are well-established (Cotman & Berchtold, 2002; Tomporowski et al., 2011). What is perhaps less appreciated is the degree to which structured sport participation constitutes a systematic form of psychological training. The repeated experience of managing competitive arousal, coping with defeat, and returning to practice after failure amounts to a graduated exposure to manageable adversity. This closely parallels the mechanisms identified in clinical resilience-building programmes.

For architecture students in particular, whose education involves regular exposure to critical assessment of their creative work, this capacity to receive and process negative feedback without catastrophising is of direct and practical relevance.

The age-differentiated pattern for music – significant correlations with resilience for early and middle childhood music participation, but not for adolescent music instruction – is consistent with the concept of sensitive developmental periods and with the broader literature on the timing of musical training effects. Schlaug and colleagues (2005) demonstrated that children who begin music lessons before the age of seven show distinctive neurological features – including a larger corpus callosum and greater bilateral representation of motor sequences – compared to those who begin later or not at all. These structural differences suggest that early musical training leaves a lasting neurological signature that may underlie the psychological resilience advantages observed in the present study. The absence of a significant resilience correlation for music training at ages 15–18 is also theoretically interpretable: by adolescence, musical participation may increasingly serve expressive and social functions – identity formation, peer affiliation, aesthetic exploration – rather than the structural psychological functions that appear to contribute to resilience.

The result for visual arts activity represents perhaps the most theoretically interesting finding of the study, precisely because it departs from a simple additive model. The absence of a main effect on resilience ($p = .856$; $d = -0.03$) alongside a significant medium effect on academic performance ($d = 0.44$) constitutes a double dissociation that carries specific theoretical implications. It suggests that visual arts training operates through a distinct psychological pathway from sport and music – one oriented not toward stress regulation and emotional hardiness, but toward the development of domain-specific cognitive tools that facilitate performance in spatially demanding academic contexts. This is consistent with Winner et al.'s (2013) cautious conclusions regarding visual arts transfer: the evidence supports near transfer to visually and spatially similar tasks, but not the broader far transfer to social-emotional outcomes that advocates of arts education sometimes claim.

The additive value of the visual component within the All-Three group is further confirmed by the significant difference between this group and the Sport+Music group in

academic performance ($\Delta = +0.46$; $d = 0.62$; $p = .011$). This finding implies that for architecture students specifically – unlike students in less visually oriented disciplines – visual arts experience constitutes a genuine and measurable academic advantage, one that complements rather than duplicates the contributions of sport and music. Taken together, these three activity domains appear to constitute a functionally complementary set of developmental inputs: sport building the psychological robustness needed to cope with stress; early music training building the attentional discipline, emotional regulation, and neural flexibility needed for complex cognitive work; and visual arts training building the spatial and perceptual competencies most directly applicable to architectural practice.

Resilience and Academic Performance: Distinct but Related Outcomes

A consistent pattern across the present findings is the partial independence of resilience and academic performance as outcome variables. While both are elevated in the All-Three group relative to the control group, the specific predictors of each differ: sport is the dominant resilience predictor, visual arts the dominant academic performance predictor, and music is associated with resilience in age-specific ways without showing a clear academic performance effect. This differentiation challenges simplistic assumptions that resilience and academic performance are interchangeable markers of student wellbeing and suggests that educational interventions targeting one outcome may not automatically produce gains in the other.

The finding that current semester GPA does not significantly differ between the All-Three and control groups ($d = 0.43$; $p = .207$), despite significant differences in secondary school GPA ($d = 0.92$; $p = .009$), raises an important question about the temporal dynamics of transfer effects in higher education. One interpretation is that the transition to university-level study introduces new contextual demands – unfamiliar social environment, increased autonomy, greater complexity of tasks – that temporarily attenuate the academic performance advantages conferred by prior activity involvement. An alternative interpretation is that secondary school GPA reflects a more stable composite of cognitive ability, motivation, and behavioural habits, while current semester GPA in an architecture programme is more sensitive to the specific technical demands of the curriculum at each level. Longitudinal research would be needed to distinguish these interpretations.

Methodological Limitations

The cross-sectional design does not allow for causal inferences. Retrospective self-report may introduce bias, particularly given the long retrospective timespan of childhood. The small sample sizes of the control group ($n = 13$) and some combination groups ($n = 5$) reduce statistical power. Single-faculty sampling limits generalisability. Future research should employ longitudinal designs, objective activity records, and multi-institutional samples to replicate and extend these findings.

Conclusions and Pedagogical Recommendations

Theoretical Contribution

The research makes three main contributions: (1) it empirically confirms the synergistic transfer effects of combined extracurricular activities in a higher education context, with large effect sizes ($d = 0.81\text{--}0.92$); (2) it provides a differentiated picture of the distinct mechanisms of individual activity types – sport primarily supports resilience, while visual arts education supports academic performance; (3) it provides data on the understudied population of architecture students.

Pedagogical Recommendations

Based on the findings, differentiated pedagogical recommendations can be formulated. For the development of resilience, multimodal programmes including sport are recommended, ideally integrating all three domains. For improving academic performance – particularly in architecture and engineering programmes – the combination of cognitive-aesthetic activities (music + visual arts) shows the best results. It may be useful for higher education institutions to develop induction processes that map students' prior activity profiles, and to incorporate integrated pedagogical approaches – particularly programmes similar to the Lantos–Apagyi method – into the foundational curriculum. Student counselling and academic support services might productively use activity-profile screening as an early indicator of students at risk of resilience challenges.

Summary

This study examined the associations between childhood extracurricular activities and the resilience and academic performance of architecture students using quantitative methods. The main findings: students who participated in all three activities (sport, music, visual arts) show significantly higher resilience and better secondary school GPA with large effect sizes ($d = 0.81$ and 0.92) – however, the difference in current semester GPA is not significant. The dose-response analysis confirms a progressive relationship ($\chi^2(3) = 7.86$; $p = .049$; $V = .200$). Sport is the strongest resilience predictor ($d = 0.61$, medium effect), visual arts education is primarily associated with academic performance ($d = 0.44$) but shows no main effect on resilience. Transfer effects manifest independently of sociodemographic background. The research confirms the need to develop integrated pedagogical models in higher education.

References

- Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., Demyttenaere, K., Ebert, D. D., Green, J. G., Hasting, P., Murray, E., Nock, M. K., Pinder-Amaker, S., Sampson, N. A., Stein, D. J., Vilagut, G., Zaslavsky, A. M., & Kessler, R. C. (2018). WHO World Mental Health Surveys International College Student Project. *Journal of Abnormal Psychology*, 127(7), 623–638. <https://doi.org/10.1037/abn0000362>
- Ayalp, G. G., & Civici, T. (2021). Critical stress factors influencing architecture students in Turkey: a structural equation modelling approach. *Open House International* 46(2): 281-303. <https://doi.org/10.1108/OHI-10-2020-0150>
- Baker, G. (2014). *El Sistema: Orchestrating Venezuela's Youth*. Oxford University Press.

- Barnett, S. M., & Ceci, S. J. (2002). When and where do we apply what we learn? A taxonomy for far transfer. *Psychological Bulletin*, 128(4), 612–637. <https://doi.org/10.1037/0033-2909.128.4.612>
- Bonanno, G. A. (2004). Loss, Trauma, and Human Resilience. *American Psychologist*, 59(1), 20–28. <https://doi.org/10.1037/0003-066X.59.1.20>
- Booth, E., & Tunstall, T. (2016). *Playing for Their Lives: The Global El Sistema Movement for Social Change Through Music*. W.W. Norton & Company.
- Cohen, J. (1988). *Statistical power analysis for the behavioural sciences (2nd ed.)*. Lawrence Erlbaum Associates.
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18(2), 76–82. <https://doi.org/10.1002/da.10113>
- Cotman, C. W., & Berchtold, N. C. (2002). Exercise: A behavioural intervention to enhance brain health and plasticity. *Trends in Neurosciences*, 25(6), 295–301. [https://doi.org/10.1016/s0166-2236\(02\)02143-4](https://doi.org/10.1016/s0166-2236(02)02143-4)
- Cuff, D. (1991). *Architecture: The Story of Practice*. MIT Press.
- Demorest, S. M., & Morrison, S. J. (2000). Does music make you smarter? *Music Educators Journal*, 87(2), 33–58. <https://doi.org/10.2307/3399646>
- Edwards, C., Gandini, L., & Forman, G. (Eds.). (2012). *The hundred languages of children: The Reggio Emilia experience in transformation (3rd ed.)*. Praeger.
- Fletcher, D., & Sarkar, M. (2012). A grounded theory of psychological resilience in Olympic champions. *Psychology of Sport and Exercise*, 13(6), 669–678. <https://doi.org/10.1016/j.psychsport.2012.04.007>
- Fletcher, D., & Sarkar, M. (2016). Mental fortitude training: An evidence-based approach to developing psychological resilience for sustained success. *Journal of Sport Psychology in Action*, 7(3), 135–157. <https://doi.org/10.1080/21520704.2016.1255496>
- Galante, J., Dufour, G., Vainre, M., Wagner, A. P., Stochl, J., Benton, A., Lathia, N., Howarth, E., & Jones, P. B. (2018). A mindfulness-based intervention to increase resilience to stress in university students (the Mindful Student Study): a pragmatic randomised controlled trial. *Lancet Public Health*, 3(2), e72–e81. [https://doi.org/10.1016/S2468-2667\(17\)30231-1](https://doi.org/10.1016/S2468-2667(17)30231-1)
- Hallam, S. (2010). The power of music: Its impact on the intellectual, social and personal development of children and young people. *International Journal of Music Education*, 28(3), 269–289. <https://doi.org/10.1177/0255761410370658>
- Hattie, J. (2009). *Visible learning*. Routledge.
- Hetland, L. (2000). Learning to Make Music Enhances Spatial Reasoning. *Journal of Aesthetic Education*, 34(3–4), 179–238. <https://doi.org/10.2307/3333643>
- Kiss, E., Vajda, D., Káplár, M., Csókási, K., Hargitai, R., & Nagy, L. (2015). A 25-itemes Connor-Davidson Reziliencia Skála (CD-RISC) magyar adaptációja. *Mentálhigiéné és Pszichoszomatika*, 16(1), 93–113. <https://doi.org/10.1556/mental.16.2015.1.4>
- Lantos, F. (1992). A zenei és vizuális adottságok összefüggése és fejleszthetőségük. In E. Czeizel & A. Batta (Eds.), *A zenei tehetség gyökerei*. Arktisz Kiadó.
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543–562. <https://doi.org/10.1111/1467-8624.00164>
- Malaguzzi, L. (1993). For an education based on relationships. *Young Children*, 49(1), 9–12. <https://www.jstor.org/stable/i40102590>
- Masten, A. S. (2014). *Ordinary magic: Resilience in development*. Guilford Press.
- Niemi, H., Toom, A., & Kallioniemi, A. (Eds.). (2012). *Miracle of Education. The Principles and Practices of Teaching and Learning in Finnish Schools*. Sense Publishers.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory (3rd ed.)*. McGraw-Hill.
- Perkins, D. N., & Salomon, G. (1992). Transfer of learning. In *International encyclopedia of education (2nd ed., pp. 425–441)*. Pergamon Press.

- Randoll, D., & Peters, J. (2015). Empirical research on Waldorf education. *Educar em Revista*. (56), 33-47. <https://doi.org/10.1590/0104-4060.41416>
- Rutter, M. (2012). Resilience as a dynamic concept. *Development and Psychopathology*, 24(2), 335-344. <https://doi.org/10.1017/S0954579412000028>
- Sarkar, M., & Fletcher, D. (2014). Psychological resilience in sport performers: A review of stressors and protective factors. *Journal of Sports Sciences*, 32(15), 1419-1434. <https://doi.org/10.1080/02640414.2014.901551>
- Schellenberg, E. G. (2004). Music lessons enhance IQ. *Psychological Science*, 15(8), 511-514. <https://doi.org/10.1111/j.0956-7976.2004.00711.x>
- Schlaug, G., Norton, A., Overy, K., & Winner, E. (2005). Effects of music training on the child's brain and cognitive development. *Annals of the New York Academy of Sciences*, 1060(1), 219-230. <https://doi.org/10.1196/annals.1360.015>
- Steiner, R. (1996). *The Foundations of Human Experience* (R. F. Lathe & N. P. Whittaker, Trans.). Anthroposophic Press. (Original work published 1919)
- Tabachnick, B. G., & Fidell, L. S. (2019). *Using Multivariate Statistics* (7th ed.). Pearson.
- Tomporowski, P. D., Lambourne, K., & Okumura, M. S. (2011). Physical activity interventions and children's mental function: an introduction and overview. *Preventive Medicine*, 52(Suppl. 1), S3-S9. <https://doi.org/10.1016/j.ypmed.2011.01.028>
- Werner, E. E., & Smith, R. S. (1982). *Vulnerable but invincible: A longitudinal study of resilient children and youth*. McGraw-Hill.
- Werner, E. E., & Smith, R. S. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Cornell University Press.
- Winner, E., Goldstein, T. R., & Vincent-Lancrin, S. (2013). *Art for art's sake? The impact of arts education*. OECD Publishing. <https://doi.org/10.1787/9789264180789-en>
- Woodworth, R. S., & Thorndike, E. L. (1901). The influence of improvement in one mental function upon the efficiency of other functions. *Psychological Review*, 8(3), 247-261. <https://doi.org/10.1037/h0074898>
- World Health Organization. (2022). *World mental health report: Transforming mental health for all*. World Health Organization.
- Zatorre, R. J., & Salimpoor, V. N. (2013). From perception to pleasure: music and its neural substrates. *Proceedings of the National Academy of Sciences of the United States of America*, 110(Suppl. 2), 10430-7. <https://doi.org/10.1073/pnas.1301228110>

Margit Gabriella Hüber

TRAINERS' PERCEPTIONS OF THE MOST IMPORTANT SOFT SKILLS FOR HIGH SCHOOL STUDENTS

Abstract

The rapid transformation of labour market expectations driven by globalization, digitalization, and technological change has increased the importance of soft skills in both educational and workplace contexts. This study examines soft skills training programs designed specifically for Hungarian high school students and explores which competencies are considered the most important for development by professionals working in the field. The research was based on the assumption that labour market expectations and educational needs increasingly require the systematic development of non-cognitive competencies. A qualitative research design was applied. Data collection was conducted through semi-structured interviews with 18 trainers who actively deliver soft skills training programs for secondary school students in Hungary. The interviews were analysed using qualitative content analysis supported by MAXQDA software. The findings indicate that communication skills represent the highest priority area for development, followed by self-awareness, cooperation, time management, stress management, and emotional intelligence. Participants emphasized that communication and self-awareness form the foundation of several other competencies and significantly influence academic performance, career decision-making, motivation, and workplace success. The results also highlight the growing importance of resilience and creative thinking in response to rapidly changing social and labour market conditions. From a theoretical perspective, the research contributes to the understanding of soft skills development among adolescents. Practically, the findings support the expansion of training-based and interactive educational approaches that foster competencies essential for successful transition into higher education and the labour market.

Keywords: soft skills; secondary school students; training programs

The Rationale and Relevance of the Topic

The social, economic, and technological developments of the twenty-first century are fundamentally transforming the world of work. As a result of increasing globalization, the expansion of digitalization, and demographic changes, employers are required to ask for a broader range of competencies from employees. These developments necessitate that education systems also adapt to the changing circumstances and align their educational content and teaching methods with the expectations of the labour market.

There is broad consensus in the academic literature that the systems of education, the economy, and employment are mutually interrelated and influence one another. Schultz's (1983) human capital theory highlights that the quality of education is a determining factor in economic development, as it significantly influences the success rate of young

individuals on the labour market. The effectiveness of educational institutions plays therefore a crucial role in determining the extent to which students are able to meet the expectations of the world of work.

There has been a significant increase in research studies analysing the role of soft skills and opportunities for their development in recent years. Although various definitions of soft skills can be found in the academic literature, the present study adopts the interpretation proposed by Sunarto (2015). Based on this definition, soft skills comprise a set of behavioural, attitudinal, cognitive, and personal characteristics that facilitate individuals' effective functioning, self-management, and collaboration with others. Soft skills can be divided into two main categories: intrapersonal and interpersonal competencies. Intrapersonal competencies are associated with self-management and include, for example, time management, stress management, and creative thinking, whereas interpersonal competencies support the effective management of human relationships, including communication, motivation, and negotiation skills (Galla, 2021, citing Sunarto, 2015).

Numerous studies have also highlighted that, in certain occupations, the importance of soft skills may even surpass that of professional or technical knowledge (Csehné, 2013). The structure of competencies required in the workplace has undergone significant changes in recent decades. Skills associated with routine and repetitive tasks have become less important, while abilities such as problem-solving, critical thinking, collaboration, and adaptability have gained increasing prominence. Feedback from both economic and industrial stakeholders emphasizes that one of the most important responsibilities of education is to foster the development of soft skills that are indispensable for the workforce of the future (Molnár, 2017; Bihari, 2023).

Developing soft skills is not confined to training sessions explicitly designed for this purpose, such as communication or presentation skills training. Educational approaches based on cooperative structures, collaborative teaching and learning techniques, continuous interaction, and reflection also contribute significantly to the development of soft skills, thereby preparing students for their future roles in the workplace. Numerous studies have demonstrated that students who regularly participate in learning activities organized within cooperative learning frameworks enter the labour market with a competitive advantage and are better prepared for the challenges they encounter there (Igel & Urquhart, 2012). Furthermore, the fundamental principles of cooperative structures are explicitly embedded in many interactive educational methods, including the training methodology explored in the present study. This methodology is discussed in greater detail in the following sections.

Today, a wide range of interactive and reflective educational tools and techniques are available, and their relevance is strongly supported by the considerations outlined above. The selection of the research topic was motivated, in part, by more than twelve years of professional experience gained across three sectors of the Hungarian educational system: public education, higher education, and talent development. During this period, I worked as a teacher, lecturer, trainer, and training coordinator. In my role as a training coordinator, I organized interactive and reflective sessions specifically designed for high

school students, with the aim of developing practical skills and competencies that are not always explicitly addressed within formal education, such as effective time management, conflict resolution, communication and presentation skills, and cooperation. Over the past several years, I have organized approximately 200 such sessions for high school students and delivered nearly 100 training programs as a trainer. My professional experience suggests that students perceived these programs as filling an important gap in their education and reported that they helped them prepare for future labour market challenges.

In recent years, the number of trainers who focus not only on organizational and corporate audiences but also on high school students, and in some cases even younger age groups, has increased considerably. These professionals offer programs for skill development and training-methodology-based activities designed to foster competencies that are increasingly valued both in education and in the labour market.

In my view, and based on my professional experience many educational activities are labelled as interactive and reflective. In practice however, these characteristics are often limited to the inclusion of a few questions within an otherwise lecture-based format. At the same time, it is important to acknowledge that many educators working within the Hungarian public education system already make meaningful use of cooperative structures and collaboration-based teaching and learning techniques. However, institutional constraints and limited instructional time continue to hinder the wider adoption of these methodologies.

My considerations influenced the decision to focus on high school students as the target group of the present research is threefold. First, both international and Hungarian studies consistently suggest that young people entering the labour market often lack adequately developed soft skills, while higher education does not always provide sufficient opportunities to acquire them. Fazekas (2017) draws attention to several studies (Borghans et al., 2008; Bowles et al., 2001; Knudsen et al., 2006) emphasizing the importance of parenting, family environment, and early childhood development in lifelong learning processes. These studies demonstrate that non-cognitive skills developed during childhood have far-reaching consequences extending beyond the individual to society and the economy as a whole. Such competencies influence educational attainment in adulthood, the prevalence of teenage pregnancy, and even rates of smoking and criminal behaviour. Consequently, the development of these skills should begin as early as possible and at the earliest stages of education. Although numerous studies support the effectiveness of early intervention, such initiatives are often absent in educational practice.

Second, my professional experience indicates that high school students have become an increasingly important target group for trainers in response to current educational trends. Third, my long-standing involvement in this field facilitated access to relevant participants and made data collection feasible.

The choice of research topic was also influenced by the extent to which the field has been explored, its novelty, and the potential applicability of the findings. During the past decade, Hungarian educational researchers have published numerous studies examining

interactive and reflective teaching methods across a variety of educational settings and from different methodological perspectives. A review of the relevant literature led to the conclusion that the expansion of training methodologies specifically targeting high school students still offers considerable untapped potential. At the same time, rapidly changing labour market expectations make further research on soft skills development increasingly necessary and timely.

This study presents the partial results of a research project based on qualitative content analysis, focusing on the content and contextual examination of soft skills training programs organized for high school students in Hungary. The first part of the study presents the rationale for and relevance of the chosen topic, followed by an overview of the research objectives and methodological framework. This is followed by a presentation of the results of the empirical research and concludes with a summary of the main findings.

Empirical Research and Findings

As noted earlier, this study presents a subset of findings from a broader research project. The overall aim of the research was to examine soft skills training programs specifically designed and advertised for Hungarian high school students (Grades 9–12), whose primary objective is the intentional development of one or more soft skills. The study included only those training programs that explicitly referred to the development of a particular soft skill in their title or official description. These included, among others, training programs focusing on communication, cooperation and teamwork, self-awareness, problem-solving, resilience and adaptability, creativity, time management, emotional intelligence, critical thinking, leadership competencies, and conflict management. The concept of soft skills was applied in accordance with the interpretive framework outlined above. The research did not include activities or sessions that may indirectly contribute to the development of soft skills but were not advertised as training programs.

The study employed a qualitative research approach. Data were collected through semi-structured expert interviews with Hungarian trainers actively involved in the field under investigation.

The findings presented in this study focus on identifying those soft skills that, according to the students participating in the research, are considered as the most important areas for further development.

Semi-Structured Interviews with Trainers

Sampling Procedure and Participant Characteristics

In the interview-based research, the selection of participants plays a crucial role. In the present study, participants were recruited through purposive sampling. Based on the predefined research objectives and research questions, it was necessary to establish clear theoretical selection criteria and determine who would be eligible for inclusion in the sample. I sought individuals who specifically conduct training programs for high school

students and whose advertised programs explicitly identify a particular soft skill in their title or description (e.g., communication training, time-management training, etc.).

This clarification was also necessary from the perspective of the study's limitations, as a wide range of educational and developmental activities may contribute to the development of soft skills, including literary therapy programs or drama-based educational workshops. Consequently, the term soft skills training would have been overly broad and potentially misleading without a more precise definition.

From a practical perspective, particularly regarding participant accessibility, I was in a favourable position, as my previous and current professional roles provided access to a substantial network of individuals relevant to the research topic. During the sampling process, convenience sampling was supplemented by snowball sampling. Trainers already known to me recommended additional potential participants, thereby expanding the sample.

When designing the sample, careful consideration was given to the desired level of homogeneity and heterogeneity within the participant group. Initially, I considered it important to ensure internal diversity in order to enhance the breadth and transferability of the findings. Particular attention was therefore paid to achieve a relatively balanced representation of trainers working in Budapest and those working in other regions of Hungary.

With regard to gender distribution, it should be noted that women appear to be overrepresented in this professional field, according to both my personal experience and the recommendations received during recruitment. This tendency was also reflected in the final sample. Although I aimed to achieve diversity in terms of age, trainers in their thirties and forties constituted the majority of participants. This is mostly due to the fact that many professionals enter the training field only after completing their initial degree, most commonly in education, and gaining several years of professional experience.

A total of 18 interviews were conducted with trainers, including 3 men and 15 women. In terms of geographical distribution, five trainers worked nationwide, three primarily in Budapest and its surrounding area, four exclusively in Budapest, and five in rural regions of Hungary. During the analysis, no substantial differences were observed with respect to gender, geographical location, or age group. Consequently, these variables were not included as analytical categories in the final analysis.

Preparations and Data Collection Method

Prior to the interviews, I developed the semi-structured interview guide in line with the research objectives and research questions. Due to geographical distance, the interviews were conducted in three different formats: by telephone, via video call, and in person. Of the 18 interviews, four were conducted in person, two via video call, and twelve by telephone in the spring of 2025. No differences were observed in the analysis of the responses in relation to the mode of data collection.

Before conducting the interviews, participants were informed, in accordance with legal requirements, about the method of data processing. They were told that the conversations would be recorded for the purpose of further analysis and that only I would have access

to the recordings. During the analysis, the complete anonymity of all participants was ensured. Participants were also informed that the recordings would not be shared with any third party and that, by taking part in the interview, they acknowledged and consented to the processing of the data and responses shared during the conversation for the purposes of the research. The interviews were recorded using audio-recording software.

In qualitative interview analysis, data extraction refers to the process through which interpretable and systematizable information is derived from raw interview material. Several methods can be used for this purpose, depending on the analytical strategy applied. Before the analysis begins, the recorded interviews must be transcribed. Transcription may be verbatim, when every word and mode of expression is considered relevant, or selective, when only the key parts of the interview are recorded in written form. In this research, I chose verbatim transcription, for which I used the Alrite software.

Alrite is an advanced AI-based speech recognition tool that enables the quick and simple transcription of audio and video files. The system also supports real-time dictation, allowing users to convert speech into text immediately; however, I only became aware of this function later and therefore did not use it in the present research. The software supports the upload and transcription of audio and video files in various formats, such as MP3, MP4, and WAV. A further advantage is that, due to its deep learning technology, it recognizes speech with a high degree of accuracy. After recording the interviews, I uploaded the MP3 audio files to the Alrite system, which converted them into written transcripts. The transcripts were approximately 90% accurate; however, in some cases, certain words were transcribed incorrectly, and typographical errors also occurred in the material. Although speech recognition algorithms are becoming increasingly sophisticated, subtler communicative cues, such as nuances of tone, sighs, gestures, or irony, cannot be reproduced with complete accuracy in written form. Therefore, reviewing and, where necessary, refining the transcribed text was essential in order to ensure that the content reflected the original conversations not only at the textual level but also in terms of meaning.

Data Structuring and Extraction

Several methods can be used for data extraction. In this research, coding was carried out within the framework of qualitative content analysis, with the aim of identifying recurring themes, concepts, and patterns. The analysis was supported by the previously mentioned MAXQDA software. A combined logic was applied in developing the coding categories. At the beginning of the coding process, I used a deductive approach, meaning that the data identified in the texts were organized under predefined main codes. These main codes were developed on the basis of the thematic areas of the interview questions. Subsequently, an inductive approach was also applied, during which additional main codes and subcodes were created on the basis of the data.

One of the most important functions of MAXQDA is coding itself, which makes it possible to assign labels and categories to individual words, sentences, or even single characters within the text. After uploading the interview transcripts into the software, I

first created the main codes developed deductively, then manually selected the relevant text segments and assigned the appropriate main codes to them. The software does not limit the number of codes; it allows for hierarchical organization, and the coding system can be expanded to a depth of up to ten levels.

After the main codes had been established, further codes were created inductively on the basis of recurring themes and patterns in the trainers' responses. The codes were also visually distinguished using different colours. This facilitated the analysis, as the use of colours made it easier to identify thematic relationships and layers of meaning within the text segments. During coding, it is also possible to assign weighting to text segments, which allows the researcher to determine how relevant a given coded element is from a particular analytical perspective. This makes it possible to highlight those relationships that are of particular significance in relation to the analysed text and the assigned code (Sántha, 2020).

Results

As the third part of the soft skills topic, I examined which soft skills trainers, based on their own professional experience, considered the highest priority for development in training settings. Among the results, the narrative emphasizing the development of communication skills emerged most prominently, suggesting that this is the area most needed among this age group. Most participants agreed that, especially when students enter higher education, it quickly becomes apparent that many of them are unable to communicate effectively. They often experience fear when they are required to present professional material, provide feedback, or formulate an independent opinion. "Communication skills are also very important. If I may add my own field of expertise, presentation skills development is particularly important, because I have often seen at the university that students arrive at the age of 20 or 22 and are unable to speak for five minutes about a topic they are familiar with. We also see this during final examinations." (Trainer 16, capital city)

In addition, the impact of the COVID-19 pandemic also emerged, as communication had largely been limited to online platforms during that period. "Communication and cooperation can be extremely valuable, especially for this current group, who really struggled during COVID, including with online functioning." (Trainer 14, capital city and rural areas)

Within the broader topic of communication, the relationship between emotions and communication also appeared, particularly the question of how individuals are able to communicate their emotions. The need to develop assertive communication was strongly emphasized in the responses. "I am not sure I would phrase it as assertiveness, but rather as self-advocacy. And this is a very important issue: where is the middle ground where I'm not throwing it in someone's face and saying it no matter what, that is more of a rebellious attitude, and where is the point where you can actually allow yourself not to let others do anything they want to you." (Trainer 11, rural area)

Nonviolent communication also appeared among the narratives related to communication alongside the assertive approach, the significance however, was less

prominent. According to the interviewees, after communication skills, self-awareness is the next most important area for development. “It always has to start with self-awareness work. I believe that young people should encounter the concept of self-awareness, and the word itself, as early as possible, because I think they hear it, but that is about it. And if there is no teacher in such an environment who deals with this, and let us forget simple homeroom classes, then the later this point is postponed, the harder it becomes, or in my opinion, the less chance they have to start working on themselves as early as possible.” (Trainer 3, nationwide)

One interviewee traced the order of importance back from communication situations to the level of self-awareness. This opinion also makes it clear that, in order to be able to express something assertively, one must possess an adequate level of self-awareness. “So I would not necessarily first teach them how to express themselves assertively; rather, I would teach them to look inward in terms of self-awareness and examine what intention they bring into a communication situation. And that again points back to self-awareness.” (Trainer 15, capital city and rural areas)

The previously mentioned connection between career guidance and self-awareness also emerged. Trainers attributed particular importance to mapping strengths and areas for development, defining this, together with self-awareness, as one of the prerequisites for career choice. “I think the development of self-awareness is a very important part of this. We come from a career guidance perspective, but we do not specifically deal with career knowledge; rather, we usually talk about career-building skills. So this kind of approach, career-building competencies, often enters our self-awareness training sessions. On what basis do you make decisions? How well do you know your own values, skills, interests, and needs?” (Trainer 14, capital city and rural areas)

Another opinion also emphasized that a general foundation of self-awareness is extremely useful from the perspective of career choice. However, it is particularly important that students do not experience this as a deficiency, but rather as an area in which they can develop. If they are able to accept themselves together with these aspects, this not only supports decision-making but also makes them more confident about their future. Self-awareness is therefore not merely an additional factor in career guidance, but a fundamental tool that supports conscious and realistic decision-making.

The narrative of self-awareness is followed by cooperation: the development of social skills, connection, relationship-building, and the role of mutual acceptance were also mentioned. “Anything that educates you for social cooperation, anything that helps connection. I consider that the most important. Accepting one another, building relationships with others, that is the circle.” (Trainer 9, rural area)

The next most important soft skill was time management, followed by stress management. These were followed, less prominently, by conflict management, resilience, creative thinking, emotional intelligence, and nonviolent communication. Regarding time management, a broader narrative also emerged, which one trainer defined under of personal effectiveness. “What I see in them is time management in a much broader context. I would not only include specifically how I allocate my time or how I prioritize, but also how they can manage the kind of stress and information overload that surrounds

them. I have seen this summarized in several places under the label personal effectiveness, and that is exactly why I also structure my own training sessions in this way, so that it becomes clear that this applies to private life and to work, and in their case, work means learning. So, in order to feel good in my private life, I need many things, such as being able to allocate time to the private part of my life as well. Can I determine whether this is important to me right now or not? Should I answer the phone or not? Should I reply or not? Do I want to watch another YouTube channel, subscribe to it? Do I need TikTok as well? Do I have to chat with Pisti for an hour every evening? So these are the kinds of skills they need to have.” (Trainer 15, capital city and rural areas)

Within the topic of emotional intelligence, participants discussed the importance of becoming aware of basic emotions and helping students learn to recognize them. Those who mentioned the role of emotional intelligence believed that there is a great need for its development and that it has a clearly positive impact. In their view, it can influence academic performance in such a way that even in the case of lower-performing students, it may lead to unexpected and significant results that cannot be achieved through traditional methods alone.

One of the trainers, who also works as a learning methodology consultant, reported that introducing various learning techniques is ineffective if the student lacks motivation. Based on this trainer’s experience, motivation can best be strengthened through self-awareness and skills development. In their view, if students are supported, for example, in developing their communication skills so that they can act more confidently in certain situations, this may ultimately lead them to begin learning from intrinsic motivation. According to this experience, the development of soft skills also has a direct impact on academic achievement. Students with higher emotional intelligence and well-developed skills are more successful in their studies, as they do not rely solely on learning techniques, but are more self-aware, manage challenges more effectively, and act from intrinsic motivation.

Finally, resilience and creative thinking also emerged as important areas. According to one interviewee, the development of resilience is a particularly high-priority area. Although they do not yet perceive it as widespread, the abundance of new stimuli, stress factors, and rapid changes makes the development of this skill necessary from the high school years onward.

Conclusions

The findings of the present study highlight the importance of soft skills training programs for high school students in preparing them for the labor market and societal challenges of the twenty-first century. Based on the interviews conducted with trainers, the development of communication skills emerged as the highest priority. According to the participants, a considerable proportion of young people experience difficulties in expressing their opinions, providing feedback, speaking in public, and asserting themselves, which may subsequently create challenges both in higher education and in the workplace.

Alongside communication, self-awareness emerged as the second most important area for development. The interviewees emphasized that self-awareness is not only the foundation of personal development but is also closely linked to informed career decision-making, the maintenance of motivation, and effective interpersonal communication. The findings suggest that the development of self-awareness may be regarded as a prerequisite for the development of several other soft skills.

The study also highlighted the importance of fostering cooperation and teamwork skills, time management, stress management, and emotional intelligence. According to the trainers' experiences, these competencies not only improve the quality of interpersonal relationships but may also have a direct impact on academic performance, the development of intrinsic motivation, and long-term personal success. Particular attention should be paid to the finding that time management is increasingly interpreted within the broader framework of personal effectiveness, encompassing the ability to cope with information overload, navigate the digital environment, and manage everyday stress.

The interview findings further indicate that the development of resilience, creative thinking, and emotional intelligence remains less prominent in current educational practice. Nevertheless, the importance of these competencies is expected to increase as societies and labour markets continue to undergo rapid change. The experiences of the COVID-19 pandemic have also reinforced the necessity of developing communication and collaboration skills among young people.

Overall, the competencies identified by the trainers as the most important areas for development largely correspond with those highlighted by the international literature and by labour market stakeholders. The findings therefore support the argument that soft skills training programs for high school students should play an increasingly prominent role in educational practice and that the systematic development of these competencies deserves greater attention within both formal and non-formal educational settings.

References

- Bihari, I. (2023). A hátrányos helyzetű tanulók nem-kognitív problémamegoldó készségének fejlődése a tanodában. *Acta Medicinæ et Sociologica*, 14(36), 41–69. <https://doi.org/10.19055/ams.2023.05/31/2>
- Borghans, L., Duckworth, A. L., Heckman, J. J., & Ter Weel, B. (2008). The economics and psychology of personality traits. *Journal of Human Resources*, 43(4), 972–1059. <https://doi.org/10.1353/jhr.2008.0017>
- Bowles, S., Gintis, H., & Osborne, M. (2001). The determinants of earnings: A behavioral approach. *Journal of Economic Literature*, 39(4), 1137–1176.
- Csehné Papp, I. (2013). A munkaerőpiac igényeinek megfelelő oktatási rendszer? In J. T. Karlovitz & J. Torgyik (Eds.), *Vzdelávanie, výskum a metodológia = Oktatás, kutatás és módszertan: Neveléstudományi és szakmódszertani konferencia* (pp. 650–657). <http://www.irisro.org/pedagogia2013januar/0708CsehnePappImola.pdf>
- Fazekas, K. (2017). *Nem kognitív készségek kereslete és kínálata a munkaerőpiacon* (Budapesti Munkagazdaságtani Füzetek No. 9). Magyar Tudományos Akadémia Közgazdaság- és Regionális Tudományi Kutatóközpont, Közgazdaság-tudományi Intézet. https://real.mtak.hu/70290/1/FK_BWP1709_jav_OE_FKjav_u.pdf
- Galla, D. D. (2021). *Gyerekek. Otthon. Együttműködés. Kreativitás* (Doctoral dissertation, Budapesti Corvinus Egyetem).

https://phd.lib.uni-corvinus.hu/1156/1/galla_daniella_dhu.pdf

Igel, C., & Urquhart, V. (2012). Generation Z, meet cooperative learning. *Middle School Journal*, 43(4), 16–21.

https://www.researchgate.net/publication/261974219_Generation_Z_Meet_Cooperative_Learning

Knudsen, E. I., Heckman, J. J., Cameron, J. L., & Shonkoff, J. P. (2006). Economic, neurobiological, and behavioral perspectives on building America's future workforce. *Proceedings of the National Academy of Sciences*, 103(27), 10155–10162. <https://doi.org/10.1073/pnas.0600888103>

Molnár, Sz. (2017). A megrekedt magyar modernizáció kiútkeresése a sokrétű digitális megosztottság útvesztőjéből. *Információs Társadalom*, 17(2), 30–47. <https://doi.org/10.22503/inftars.XVII.2017.2.2>

Sántha, K. (2020). Abdukció a kvalitatív tartalomelemzésben. *Neveléstudomány*, 8(2), 26–36. <https://doi.org/10.21549/NTNY.29.2020.2.2>

Schultz, T. W. (1983). *Beruházás az emberi tőkébe*. Közgazdasági és Jogi Könyvkiadó.

Sunarto, M. J. (2015). Improving students' soft skills using thinking process profile based on personality types. *International Journal of Evaluation and Research in Education*, 4(3), 118–129.

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*MECHANISMS AND INFLUENCING FACTORS OF TRANSFORMING
INDIVIDUAL SUSTAINABILITY KNOWLEDGE INTO ORGANISATIONAL
KNOWLEDGE*

Abstract

This study aims to explore the mechanisms and organisational conditions that facilitate the integration of sustainability knowledge acquired at the individual level into corporate knowledge management systems. The paper is based on a theoretical review that examines the interrelationships between sustainability, knowledge management, and individual-level factors. Drawing on the literature, it highlights the multidimensional, action-oriented, and often tacit nature of sustainability knowledge, and reviews knowledge management models that provide a conceptual framework for its organisational utilisation.

The analysis demonstrates that the integration of sustainability knowledge is a complex process that cannot be reduced to simple information transfer. Rather, its organisational embedding occurs through interactions, learning situations, and deliberately designed mechanisms. In this context, communication, trust, organisational culture, incentives, and tools that support knowledge sharing and formalisation play a critical role.

Based on the reviewed literature, the study concludes that the organisational application of sustainability knowledge depends on the organisation's ability to establish conditions that support knowledge sharing, formalisation, and practical utilisation. In the absence of such conditions, individual experiences are only partially embedded in organisational practices. The findings contribute to a deeper understanding of the relationship between sustainability and knowledge management and provide a foundation for future empirical research.

Keywords: sustainability knowledge; knowledge management; organisational knowledge integration

Introduction

The global environmental crisis is having an increasingly direct impact on the functioning of economic systems. The overexploitation of natural resources poses not only ecological challenges but also significant business and financial risks. A substantial proportion of the major risks expected to shape the next decade will likely be environmental in origin (World Economic Forum, 2026).

Sustainability has moved from the periphery of corporate operations to become a strategic priority. Organizations now view it both as a regulatory requirement and as a potential source of competitive advantage. Consequently, achieving sustainability goals

requires the effective management of relevant knowledge, particularly experiential knowledge embedded in employees' everyday practices.

The literature examining the relationship between knowledge management and sustainability has devoted considerable attention to the role of knowledge management systems, particularly their impact on organizational performance and their function in supporting sustainability goals (Martins et al., 2019). Research on the relationship between organizational learning and sustainability has likewise highlighted the importance of knowledge and learning processes in sustainability transitions (Feeney et al., 2023). However, the literature examines in less detail the processes through which individual-level sustainability knowledge becomes organizational knowledge and enduring organizational practice.

This study aims to explore the knowledge management and organizational learning processes through which individual-level sustainability knowledge can become organizational knowledge and enduring organizational practice. To this end, it critically compares relevant knowledge management models, reviews related theories of organizational learning, and systematizes the organizational conditions and mechanisms that support the integration of sustainability knowledge. Building on a synthesis of the theoretical and conceptual literature, the study develops an integrative interpretation that connects knowledge creation, knowledge sharing, organizational embedding, and practical application.

Sustainability

The concept of corporate sustainability has gradually evolved through economic and societal responses to environmental challenges. During the 1960s and 1970s, attention focused primarily on reducing the environmental impacts of corporate activities. The Brundtland Report broadened the conceptual framework of sustainability. It defined sustainable development as meeting present needs without compromising the ability of future generations to meet their own needs (Keeble, 1988).

From the 1990s onwards, the understanding of corporate sustainability continued to expand. This development is also reflected in the concept of the "triple bottom line," which emphasizes the joint evaluation of economic, social, and environmental performance (Elkington, 1998). The same period saw the emergence of demand for the standardization of sustainability reporting, for which the Global Reporting Initiative (GRI) provided an important framework (Hedberg & von Malmberg, 2003).

From the 2000s onwards, sustainability became a strategic concern, while environmental, social, and governance (ESG) considerations gradually became central elements of corporate governance, investor decision-making, and sustainability reporting. The global expansion of ESG requirements strengthened expectations regarding transparency, accountability, and the assessment of non-financial performance. The implementation of these expectations was increasingly supported by institutionalized reporting and assessment frameworks (Fagbemi et al., 2025; Matos, 2020).

As a result, corporate sustainability has shifted from an approach focused on mitigating environmental impacts towards an integrated, strategic perspective. Within this development, the human factor and organizational culture have assumed increasing importance, as the achievement of sustainability goals is fundamentally a knowledge- and people-centred process (Csehné Papp et al., 2021).

Sustainability Knowledge

Sustainability knowledge encompasses the knowledge, skills, and attitudes associated with sustainable practices and sustainable operations. It can exist at both individual and collective levels and relates to environmental, social, and economic dimensions. The literature conceptualizes it as a multidimensional and competence-based construct (Bianchi, 2020; Sanchez et al., 2025). This study adopts this interpretation.

Sustainability knowledge is action-oriented, as it contributes to problem-solving, decision-making, and the development of sustainable practices (Bianchi, 2020). In the workplace, it includes practical knowledge related to the responsible use of energy and other resources, waste management, socially responsible decision-making, and the development of sustainable work processes.

A substantial proportion of sustainability knowledge is experiential and closely connected to practical action. It therefore cannot be reduced solely to explicitly articulated factual knowledge (Kollmuss & Agyeman, 2002; Sanchez et al., 2025). Its tacit elements are highly context-dependent and difficult to formalize. This characteristic represents one of the most significant challenges to its organizational integration (Klingenberg & Rothberg, 2020; Nonaka & Takeuchi, 1995).

Organizations therefore face the challenge of making sustainability knowledge held by individuals, and often expressed informally, accessible and usable at the collective level. In this process, knowledge management systems can provide mechanisms that support knowledge sharing, formalization, and organizational embedding.

Foundations of Knowledge Management

According to Bencsik (2015), knowledge management is a managerial practice and perspective aimed at identifying, organizing, developing, sharing, and utilizing an organization's knowledge assets. Its purpose is to ensure that both existing and newly created knowledge contribute to the achievement of strategic objectives, the strengthening of innovation capacity, and improved organizational effectiveness.

According to Davenport and Prusak (1998), knowledge is one of the most important organizational resources and provides a basis for sustaining competitive advantage. A defining characteristic of knowledge is that it is not depleted through use; rather, it grows through sharing. The authors argue that knowledge assets increase through use: ideas generate further ideas, while shared knowledge remains with the provider and simultaneously enriches the recipient's knowledge (Davenport & Prusak, 1998). This characteristic distinguishes knowledge from traditional organizational resources and makes it a central element of value creation.

A fundamental issue in knowledge management concerns how organizations manage both readily codifiable knowledge and experiential knowledge that is more difficult to articulate. This distinction is particularly important in the case of sustainability knowledge, as a substantial proportion of it is closely linked to specific situations and practical experience (Nonaka & Takeuchi, 1995).

In this sense, knowledge management involves the development of organizational conditions, processes, and tools that support the acquisition, sharing, retention, and application of knowledge. This perspective provides an appropriate basis for examining the organizational processes through which sustainability knowledge can become subject to shared interpretation and applicable in practice.

The Relationship Between Individual and Organizational Knowledge

Understanding the organizational integration of sustainability knowledge requires a distinction between the individual and organizational levels of knowledge, as well as an examination of the transition between them.

Individual knowledge develops through learning situations, work experience, and social interactions. In addition to codified knowledge, it includes professional routines, practical experience, and interpretive frameworks. These knowledge elements are often closely tied to the individual and to a specific work context. Their organizational utilization therefore requires knowledge sharing, shared interpretation, and appropriate opportunities for application.

Organizational knowledge refers to knowledge that is collectively interpreted by members of the organization and applied in organizational operations. It may be manifested in shared meanings, decision criteria, procedures, routines, and documented practices. Individual experiences become organizational knowledge when they are made accessible to others, incorporated into shared interpretive frameworks, and begin to shape organizational decisions or operational practices. The knowledge created in this way can support strategic decision-making and the renewal of organizational practices (Crossan et al., 1999; Nonaka & Takeuchi, 1995).

In the case of sustainability knowledge, the organizational utilization of individual experience is particularly important because it can reveal problems, risks, and potential solutions that are less visible in formal systems. Tacit knowledge developed through work activities may, for example, contribute to identifying sources of environmental impact, managing unexpected situations, and developing preventive solutions (Boiral, 2002). The shared interpretation and organizational use of these experiences can enrich the knowledge base of decision-making and facilitate the integration of sustainability considerations into organizational operations.

Overview and Comparison of Knowledge Management Models

Knowledge management models describe from different perspectives how individual knowledge becomes part of organizational operations. They share the assumption that knowledge creation, flow, retention, and application constitute organizational processes.

However, they differ considerably in their conceptualization of knowledge and their analytical focus. Some approaches emphasize the social creation and sharing of knowledge, whereas others focus on its organizational structuring, strategic alignment, or practical utilization. These differences allow the models to illuminate distinct components of sustainability knowledge integration.

Davenport and Prusak (1998) describe knowledge as a combination of experience, interpretation, values, and expertise. Its organizational utilization is shaped by personal relationships, communication, and a culture that supports knowledge sharing. Sustainability-related experiences may become part of organizational knowledge flows through direct exchanges of experience, internal communication, or formalized documentation. The effectiveness of this process is also influenced by trust, openness, and incentive systems (Bencsik & Juhász, 2018; Davenport & Prusak, 1998).

Nonaka and Takeuchi's (1995) SECI model focuses on the conversion between tacit and explicit knowledge. The interrelated processes of socialization, externalization, combination, and internalization create a knowledge spiral that connects the individual, group, and organizational levels. The model contributes to understanding the experiential and context-dependent nature of sustainability knowledge by demonstrating how insights developed through work activities can become shareable, documentable, and applicable on a broader scale (Easa & Fincham, 2012). One limitation of the model is that some forms of tacit knowledge can be verbalized and formalized only partially (Gourlay, 2006). Davenport and Prusak primarily highlight the organizational conditions of knowledge sharing, whereas the SECI model explains conversions between different forms of knowledge. Together, the two approaches help explain how individual experiences can become knowledge shared at the organizational level.

Bukowitz and Williams (1999) conceptualize knowledge management as a cyclical process. Their model encompasses knowledge acquisition and use, learning, contribution to the organizational knowledge base, assessment, building and sustaining, and divestment. Employee contributions may be supported by internal forums, professional workshops, and digital knowledge-sharing platforms. Information technology solutions can improve the accessibility and organizational sharing of knowledge (Rusilowati et al., 2023). The model also regards the deliberate divestment of obsolete knowledge or knowledge that has lost its strategic value as an integral part of knowledge management. This is relevant during sustainability transitions, as the introduction of new practices and perspectives often involves revising established routines, procedures, and decision principles.

Probst et al. (2006) conceptualize knowledge management as a system of interrelated processes. Their model connects the definition of knowledge goals with knowledge identification, acquisition, development, sharing, retention, utilization, and measurement. Knowledge identification includes mapping available knowledge sources and interpreting their organizational significance. Bukowitz and Williams emphasize employee contribution and the renewal of the organizational knowledge base, whereas Probst and colleagues provide an integrated framework for connecting knowledge goals, knowledge processes, and measurement.

In Zack's (1999) approach, knowledge forms the basis of organizational capabilities and competitive advantage. A central element of the model is identifying the gap between existing knowledge and the knowledge required to achieve strategic objectives. In the context of sustainability, this enables an examination of whether the organization possesses the knowledge, experience, and competencies required to achieve its goals. The identified knowledge gaps can guide internal development and the acquisition of external knowledge.

Wiig (1997) focuses on the creation, structuring, retention, and application of knowledge. In this approach, the value of knowledge depends on how well it is organized, how accessible it is, and how effectively it can be used in practice. The model helps demonstrate that documented knowledge becomes an organizational resource only when it is retrievable and can be effectively applied in decision-making situations. Zack supports the strategic identification of required knowledge, whereas Wiig facilitates an examination of the forms in which this knowledge is available and the extent to which it can be applied in organizational operations.

The limitations of these models arise from their respective theoretical focuses. The knowledge conversion approach can only partially capture knowledge that is difficult to articulate (Gourlay, 2006). Process- and system-oriented models assume relatively orderly and consciously manageable knowledge processes, whereas organizational knowledge flows are often informal, fragmented, and shaped by divergent interests. Strategic approaches interpret the significance of knowledge primarily in relation to organizational goals and performance. Consequently, they capture the social, ethical, and stakeholder-related dimensions of sustainability less comprehensively.

Sustainability knowledge includes scientific, professional, experiential, and value-based elements. Its creation and application are often associated with knowledge flows that cross organizational, professional, and institutional boundaries. Its integration requires shared interpretation, translation across different professional perspectives, and the adaptation of knowledge to local conditions (Carlile, 2004). The applicability of sustainability knowledge obtained from external sources is shaped by its relevance, credibility, and perceived legitimacy among stakeholders (Cash et al., 2003).

In the interpretation adopted in this study, the organizational integration of individual sustainability knowledge is a multilevel, feedback-driven process. It encompasses knowledge creation, sharing, and shared interpretation, as well as making knowledge accessible, retaining it, aligning it with strategy, measuring it, and applying it in practice. Experiences gained through application feed back into organizational knowledge, operational practices, and the interpretation of sustainability goals. The models discussed capture different components of this process and can therefore be used as complementary analytical frameworks. Their combined application demonstrates how individual experiences can become knowledge that has a lasting influence on organizational operations and the achievement of sustainability goals.

The Role of Organizational Learning in the Integration of Sustainability Knowledge

Knowledge management and organizational learning are closely related approaches, although they differ in their analytical emphases. Knowledge management focuses on processes that support the creation, sharing, retention, and utilization of knowledge. Organizational learning examines how individual and collective experiences shape organizational interpretations, decisions, and operational practices (Argyris & Schön, 1978; Crossan et al., 1999). The integration of individual sustainability knowledge can therefore be understood as a process in which knowledge creation, sharing, and utilization are closely connected to changes in organizational operations.

Argyris and Schön (1978) distinguish between forms of organizational learning that differ in depth. In single-loop learning, organizations correct errors while maintaining their existing objectives and operational frameworks. Double-loop learning also involves revising the underlying assumptions, norms, and values that shape organizational operations. Achieving sustainability goals may require both forms of learning. Reductions in energy use or waste generation can often be achieved by adjusting existing operations. Transforming organizational priorities, decision criteria, and structures of responsibility, however, requires a deeper learning process.

Crossan et al.'s (1999) 4I model provides a detailed account of how individual insights are utilized at the organizational level. The model connects the interrelated processes of intuiting, interpreting, integrating, and institutionalizing. Through interpretation, individual experiences become accessible to others. Integration can lead to the development of shared meanings and coordinated action. Through institutionalization, learning can become embedded in rules, procedures, decision criteria, and organizational routines.

The 4I model incorporates both feed-forward and feedback learning processes. Individual insights can progress to the group and organizational levels, while institutionalized practices influence how organizational members interpret subsequent experiences (Crossan et al., 1999). From this perspective, the integration of sustainability knowledge is a feedback-driven process. Employee insights can shape organizational practices, while established routines influence the recognition, acceptance, and application of new knowledge.

Among the elements of Senge's (1990) concept of the learning organization, systems thinking, shared vision, and team learning are particularly relevant to the integration of sustainability knowledge. Systems thinking facilitates the recognition of relationships among environmental, social, and economic impacts. A shared vision enables sustainability to emerge as a collectively understood organizational objective. Team learning supports the sharing and coordination of diverse professional experiences. These capabilities can facilitate the wider dissemination of sustainability knowledge and its incorporation into organizational decisions and practices.

The organizational learning perspective complements knowledge management models by linking the organizational integration of knowledge to enduring changes in organizational operations. Knowledge sharing, documentation, and accessibility create

the conditions for utilization. Organizational learning becomes observable when individual insights lead to changes in shared interpretations, decision criteria, and organizational routines. On this basis, the integration of sustainability knowledge can be described as a multilevel, feedback-driven process. Within this process, knowledge management explains the organizational handling of knowledge, while organizational learning explains its enduring effects on organizational operations.

Conditions for the Effective Organisational Integration of Sustainability Knowledge

The organizational integration of sustainability knowledge requires an organizational environment that deliberately supports the identification, sharing, development, retention, and application of relevant knowledge. Sustainability considerations must be aligned with organizational objectives, governance processes, and operational decisions. This creates the conditions for knowledge held at the individual level to become accessible and usable at the organizational level.

Vágner and Bencsik's (2022) knowledge sustainability model emphasizes the identification, development, sharing, and retention of organizational knowledge required over the long term. In addition to organizational memory, the model incorporates leadership, organizational culture, trust, and ethical considerations. The integration of sustainability knowledge is therefore shaped both by the tools available for managing knowledge and by the social and cultural conditions that support its sharing and application.

Formal systems alone do not ensure the organizational utilization of knowledge. Active employee participation is also required. Knowledge sharing and collaboration can be supported by leadership and incentive practices that recognize employee contributions, provide feedback on the organizational uptake of initiatives, and create opportunities for shared interpretation (Foss et al., 2015; Klimkina & Dorner, 2026). Participation may also be strengthened when employees perceive that their experiences genuinely influence organizational decisions and practices.

Sustainability knowledge becomes an enduring part of organizational operations when it is incorporated into decision criteria, procedures, performance evaluation, and resource allocation. In this sense, knowledge integration is a process of institutionalization: individual and collective insights become embedded in rules, routines, and organizational arrangements (Crossan et al., 1999). Sustainability goals can thus become considerations that shape everyday organizational operations.

Knowledge management systems can mediate between sustainability knowledge and organizational operations. Documentation, knowledge bases, training materials, indicators, and reports support the organization, accessibility, and retention of knowledge. Sustainability reports and indicators can also provide a shared reference point for interpreting and communicating performance (Hedberg & von Malmborg, 2003). These formal tools make a meaningful contribution to integration when they are connected to employee experience, decision-making processes, and organizational feedback.

On this basis, the effective integration of sustainability knowledge is jointly shaped by strategic alignment, leadership support, a culture that encourages knowledge sharing, employee participation, and organizational systems that support institutionalization. These conditions determine whether individual experiences remain isolated knowledge elements or become knowledge that has a lasting influence on organizational decisions and operational practices.

Sustainability-Related Attitudes

Sustainability-related attitudes are shaped by values, beliefs, environmental knowledge, and broader worldviews, and influence individuals' willingness to engage in sustainable action (Berze et al., 2022). In organizational settings, these attitudes may also affect the extent to which employees regard the sharing and practical application of their knowledge as meaningful and feasible.

The literature suggests that sustainability knowledge alone does not automatically lead to pro-environmental behaviour. This is illustrated by the attitude–behaviour gap, which refers to the discrepancy between knowledge, attitudes, and actual behaviour (Kollmuss & Agyeman, 2002).

Sustainable behaviour is shaped by both internal factors and external conditions. Internal factors include values, motivations, and emotions, while external conditions include social norms, institutional support, and economic incentives (Kollmuss & Agyeman, 2002). In organizational settings, these factors may also influence the practical application of sustainability knowledge.

Mechanisms for the Integration of Individual Sustainability Knowledge

The organizational utilization of individual sustainability knowledge is not an automatic process. Organizations require mechanisms that connect individual experience with collective learning, organizational memory, and everyday operations.

According to the literature, a substantial proportion of sustainability knowledge is tacit and context-dependent. Consequently, it becomes manifest at the organizational level through learning and interaction processes (Klingenberg & Rothberg, 2020; Nonaka & Takeuchi, 1995).

Knowledge management models suggest that the organizational embedding of individual knowledge depends on deliberately designed mechanisms (Bukowitz & Williams, 1999; Davenport & Prusak, 1998). Social learning processes are particularly important in the case of tacit knowledge. These include collaborative work, mentoring, and communities of practice. Such mechanisms create opportunities for the informal transfer and shared interpretation of experiential knowledge (Bashouri & Duncan, 2014; Nonaka & Takeuchi, 1995).

The formalization of individual experience is also of considerable importance. Sustainability-related good practices can be documented in internal procedures, guidelines, or training materials, thereby enabling personal experience to become part of organizational memory (Davenport & Prusak, 1998; Nonaka & Takeuchi, 1995).

Identifying and retaining the knowledge that the organization requires over the long term supports the continuity of organizational memory and the subsequent use of that knowledge (Vágner & Bencsik, 2022). Sustainability indicators and reports can provide shared reference points for interpreting and communicating performance (Hedberg & von Malmborg, 2003).

Digital platforms and information systems play an important role in organizing and retaining knowledge (Bukowitz & Williams, 1999; Wiig, 1997). They can be complemented by training programmes and organizational practices that encourage knowledge sharing and strengthen employees' active participation in the practical application of sustainability knowledge (Csehné Papp et al., 2021).

Some sustainability knowledge originates outside the organization. Absorptive capacity is therefore also a significant factor in its integration. It refers to an organization's ability to recognize, assimilate, and apply external knowledge within its own operations (Cohen & Levinthal, 1990). Absorptive capacity can enable knowledge obtained from external sources to contribute to an organization's sustainability performance (Forés & Fernández-Yáñez, 2023).

Knowledge sharing is also supported by organizational practices based on feedback and recognition. Such practices can increase the likelihood that experiences will be shared and contribute to the expansion of a shared knowledge base (Foss et al., 2015).

A recent empirical study emphasizes the importance of an organizational culture that supports knowledge sharing and of leadership support. Based on their study of international relations offices at European higher education institutions, Klimkina and Dorner (2026) found that the integration of knowledge management and organizational learning is strengthened by institutional leadership, an environment that supports collaboration, and an established learning culture.

The approaches discussed in this section suggest that the organizational integration of sustainability knowledge occurs through several interrelated mechanisms. Social learning, formalization, digital knowledge management, and the absorption of external knowledge can jointly create knowledge flows that inform both everyday practice and strategic decision-making (Davenport & Prusak, 1998; Nonaka & Takeuchi, 1995). The process becomes vulnerable when individual experiences are not given opportunities for practical application.

Table 1 summarizes the main areas, mechanisms, and organizational effects of sustainability knowledge integration.

Table 1. Key Areas, Mechanisms, and Organisational Effects of Sustainability Knowledge Integration.

Key areas of knowledge integration	Organisational mechanisms and tools	Organisational effects
Social and informal learning	Collaborative work, mentoring, communities of practice, internal workshops, and consultations (Bashouri & Duncan, 2014; Nonaka & Takeuchi, 1995)	Enables the informal transfer and shared interpretation of experiential (tacit) knowledge.
Formalisation and codification	Internal audits, procedures, guidelines, training materials, knowledge bases, sustainability indicators, and reports (Davenport & Prusak, 1998; Hedberg & von Malmberg, 2003)	Makes experience documentable and retrievable, while knowledge required over the long term can become embedded in organizational memory (Vágner & Bencsik, 2022).
Digital knowledge management	Data collection and information systems, and digital knowledge-sharing platforms (Bukowitz & Williams, 1999; Wiig, 1997)	Supports the organization, accessibility, flow, and long-term retention of information.
Absorption of external knowledge	Collaboration with experts, research projects, and industry networks (Cohen & Levinthal, 1990; Forés & Fernández-Yáñez, 2023)	Through absorptive capacity, the organization can recognize, assimilate, and integrate externally sourced knowledge into its internal structures.
Encouraging knowledge sharing	A trust-based organizational culture, recognition and feedback practices, goal-oriented incentives, and leadership-supported knowledge-sharing routines (Foss et al., 2015)	Strengthens employees' willingness to share knowledge, thereby increasing the likelihood that shared experiences will become embedded in collective practices.

Source: Authors' own construction

Drawing on the theoretical approaches presented above, the table systematizes the mechanisms that support the organizational embedding and practical utilization of individual sustainability knowledge.

Conclusions

Based on the literature reviewed and the theoretical models discussed, the organizational integration of sustainability knowledge is shaped both by the nature of the knowledge itself and by the organizational environment in which it emerges and is utilized. Sustainability-related knowledge is action-oriented, often experiential, and context-dependent. Its organizational embedding therefore cannot be adequately described as a simple process of information transfer. Integration involves interactions and learning situations that enable the shared interpretation of individual experiences and their utilization at the organizational level.

The theoretical frameworks of knowledge management provide insight into how individual knowledge can become an organizational resource. A common conclusion of the models is that this transformation requires deliberately designed mechanisms. Of particular importance are the organization of knowledge sharing, the quality of communication, the development of a trust-based organizational culture, and the establishment of relevant incentive systems and supporting tools.

The theoretical review suggests that individual sustainability knowledge can be utilized at the organizational level when organizations create opportunities for both knowledge sharing and practical application. In the absence of such conditions, valuable individual knowledge may remain isolated and make only a limited contribution to organizational learning and the achievement of sustainability goals.

From a theoretical perspective, the study concludes that the organizational implementation of sustainability is closely related to the processes of knowledge flow, knowledge utilization, and organizational learning. The organizational conditions that enable individual knowledge to be applied within the organization are equally important.

The theoretical contribution of this study lies in connecting knowledge management and organizational learning perspectives within a unified process. In this interpretation, integration extends from knowledge sharing and shared interpretation through institutionalization and practical application to feedback.

From a practical perspective, the study highlights that achieving sustainability goals requires the organizational integration of relevant knowledge alongside technological, regulatory, and financial conditions. Leaders are responsible for creating an environment that provides opportunities for employees to share their experiences, interpret them collectively, and utilize them within the organization. This process can be supported by knowledge-sharing forums, communities of practice, mentoring practices, targeted training, and incentives that recognize knowledge sharing.

Sustainability knowledge becomes durably embedded in organizational operations when it is incorporated into decision criteria, procedures, performance evaluation, and resource allocation. In addition to documenting knowledge, management should therefore monitor the outcomes of its practical application, the organizational uptake of employee initiatives, and the sustainability impacts of established practices. This can strengthen organizational adaptability and innovation performance, while also improving long-term sustainability performance.

Further empirical research is needed across different organizational contexts. Such research could contribute to identifying the mechanisms and practices that strengthen the organizational integration of sustainability knowledge. The main limitations of the study are its theoretical nature and the absence of empirical validation.

References

- Argyris, C., & Schön, D. A. (1978). *Organizational learning: A theory of action perspective*. Addison-Wesley.
- Bashouri, J., & Duncan, G. (2014). Communities of practice: Linking knowledge management and strategy in creative firms. *Journal of Business Strategy*, 35(6), 49–57. <https://doi.org/10.1108/JBS-08-2013-0072>
- Bencsik, A. (2015). *A tudásmenedzsment elméletben és gyakorlatban*. Akadémiai Kiadó.
- Bencsik, A., & Juhász, T. (2018). Tudásorientált szervezetek értékítélete a bizalom gazdasági hatásairól. *Vezetéstudomány – Budapest Management Review*, 49(1), 30–39. <https://doi.org/10.14267/VEZTUD.2018.01.04>
- Berze, I. Z., Varga, A., Mónus, F., Néder, K., & Düll, A. (2022). Measuring environmental worldviews: Investigating the dimensionality of the New Environmental Paradigm Scale for children in a large Central European sample. *Sustainability*, 14(8), Article 4595. <https://doi.org/10.3390/su14084595>
- Bianchi, G. (2020). *Sustainability competences: A systematic literature review (EUR 30555 EN, JRC123624)*. Publications Office of the European Union. <https://doi.org/10.2760/200956>
- Boiral, O. (2002). Tacit knowledge and environmental management. *Long Range Planning*, 35(3), 291–317. [https://doi.org/10.1016/S0024-6301\(02\)00047-X](https://doi.org/10.1016/S0024-6301(02)00047-X)
- Bukowitz, W. R., & Williams, R. L. (1999). *The knowledge management fieldbook*. Financial Times Prentice Hall.
- Carlile, P. R. (2004). Transferring, translating, and transforming: An integrative framework for managing knowledge across boundaries. *Organization Science*, 15(5), 555–568. <https://doi.org/10.1287/orsc.1040.0094>
- Cash, D. W., Clark, W. C., Alcock, F., Dickson, N. M., Eckley, N., Guston, D. H., Jäger, J., & Mitchell, R. B. (2003). Knowledge systems for sustainable development. *Proceedings of the National Academy of Sciences of the United States of America*, 100(14), 8086–8091. <https://doi.org/10.1073/pnas.1231332100>
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128–152. <https://doi.org/10.2307/2393553>
- Crossan, M. M., Lane, H. W., & White, R. E. (1999). An organizational learning framework: From intuition to institution. *Academy of Management Review*, 24(3), 522–537. <https://doi.org/10.5465/amr.1999.2202135>
- Csehné Papp, I., Nagy, C., & Karácsony, P. (2021). Az emberi erőforrás menedzsment szerepe a fenntartható fejlődésben. *Észak-magyarországi Stratégiai Füzetek*, 18(3), 103–112. <https://doi.org/10.32976/stratfuz.2021.45>
- Davenport, T. H., & Prusak, L. (1998). *Working knowledge: How organizations manage what they know*. Harvard Business School Press.
- Easa, N. F., & Fincham, R. (2012). The application of the socialisation, externalisation, combination and internalisation model in cross-cultural contexts: Theoretical analysis. *Knowledge and Process Management*, 19(2), 103–109. <https://doi.org/10.1002/kpm.1385>
- Elkington, J. (1998). *Cannibals with forks: The triple bottom line of 21st century business*. New Society Publishers.
- Fagbemi, B. T., Saah, B. P., Nduka, A. I., & Aloke, E. M. (2025). The evolution of ESG and sustainability reporting: A review of standards, challenges, and impacts on corporate transparency. *Journal of Economics, Business, and Commerce*, 2(2), 297–305. <https://doi.org/10.69739/jebc.v2i2.1239>

- Feeney, M., Grohnert, T., Gijssels, W., & Martens, P. (2023). Organizations, learning, and sustainability: A cross-disciplinary review and research agenda. *Journal of Business Ethics*, 184(1), 217–235. <https://doi.org/10.1007/s10551-022-05072-7>
- Forés, B., & Fernández-Yáñez, J. M. (2023). Sustainability performance in firms located in a science and technology park: The influence of knowledge sources and absorptive capacity. *Journal of Knowledge Management*, 27(11), 112–135. <https://doi.org/10.1108/JKM-11-2022-0883>
- Foss, N. J., Pedersen, T., Reinholt Fosgaard, M., & Stea, D. (2015). Why complementary HRM practices impact performance: The case of rewards, job design, and work climate in a knowledge-sharing context. *Human Resource Management*, 54(6), 955–976. <https://doi.org/10.1002/hrm.21649>
- Gourlay, S. (2006). Conceptualizing knowledge creation: A critique of Nonaka's theory. *Journal of Management Studies*, 43(7), 1415–1436. <https://doi.org/10.1111/j.1467-6486.2006.00637.x>
- Hedberg, C.-J., & von Malmberg, F. (2003). The Global Reporting Initiative and corporate sustainability reporting in Swedish companies. *Corporate Social Responsibility and Environmental Management*, 10(3), 153–164. <https://doi.org/10.1002/csr.38>
- Keeble, B. R. (1988). The Brundtland report: "Our common future." *Medicine and War*, 4(1), 17–25. <https://doi.org/10.1080/07488008808408783>
- Klimkina, E., & Dorner, H. (2026). Knowledge management and organizational learning for university internationalization: Overlooked practices in international relation offices. *Journal of Adult Learning, Knowledge and Innovation*, 8(2), 113–128. <https://doi.org/10.1556/2059.2025.00122>
- Klingenberg, B., & Rothberg, H. N. (2020). The status quo of knowledge management and sustainability knowledge. *Electronic Journal of Knowledge Management*, 18(2), 136–148. <https://doi.org/10.34190/EJKM.18.02.004>
- Kollmuss, A., & Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behaviour? *Environmental Education Research*, 8(3), 239–260. <https://doi.org/10.1080/13504620220145401>
- Martins, V. W. B., Rampasso, I. S., Anholon, R., Quelhas, O. L. G., & Leal Filho, W. (2019). Knowledge management in the context of sustainability: Literature review and opportunities for future research. *Journal of Cleaner Production*, 229, 489–500. <https://doi.org/10.1016/j.jclepro.2019.04.354>
- Matos, P. (2020). *ESG and responsible institutional investing around the world: A critical review*. CFA Institute Research Foundation. <https://doi.org/10.2139/ssrn.3668998>
- Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford University Press. <https://doi.org/10.1093/oso/9780195092691.001.0001>
- Probst, G. J. B., Raub, S., & Romhardt, K. (2006). *Wissen managen: Wie Unternehmen ihre wertvollste Ressource optimal nutzen* (5th rev. ed.). Gabler.
- Rusilowati, U., Metarini, R. A., & Sunarsi, D. (2023). Utilizing information technology in knowledge sharing to enhance the performance of public organizations. *Jurnal Ilmiah Ilmu Administrasi Publik*, 13(1), 325–332. <https://doi.org/10.26858/jiap.v13i1.47494>
- Sanchez, S.-J., Piedrahita Guzman, Y., Sosa-Molano, J., Robertson, D., Ahern, S., & Garza, T. (2025). Systematic literature review: A typology of sustainability literacy and environmental literacy. *Frontiers in Education*, 10, Article 1490791. <https://doi.org/10.3389/feduc.2025.1490791>
- Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. Doubleday.
- Vágner, V., & Bencsik, A. (2022). Organisational knowledge sustainability. *European Conference on Knowledge Management*, 23(2), 1368–1374. <https://doi.org/10.34190/eckm.23.2.512>
- Wiig, K. M. (1997). Knowledge management: An introduction and perspective. *Journal of Knowledge Management*, 1(1), 6–14. <https://doi.org/10.1108/13673279710800682>
- World Economic Forum. (2026). *The Global Risks Report 2026* (21st ed.).

Zack, M. H. (1999). Developing a knowledge strategy. *California Management Review*, 41(3), 125–145.
<https://doi.org/10.2307/41166000>

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*ON THE EVOLUTION OF HUMAN 'COMMUNITY':
AN ECOLOGICAL PERSPECTIVE*

Abstract

Given that recent interdisciplinary scholarship in the humanities has extensively documented a major transformation in human communities—specifically regarding the individual's immediate social environment—our work aims to reveal some of the underlying causes of this phenomenon to inform cultural theories research and to offer a new aspect of future disciplinary studies may build on. Drawing on human ethology, this paper builds on the premise that the human community is inherently biological in origin, and as such, a direct product of evolution. Consequently, our primary focus is the fundamental sociability of the human species, which evolved from the ancestral behavioral traits of the great apes. To properly analyze the interplay among the environment, community, and human culture, we introduce a functional model demonstrating how culture has driven human evolution from the emergence of *Homo sapiens* to the present day. Our model suggests recent alterations in the interaction between community culture—a relatively stable element of our biology—and a rapidly changing ecological environment. Our theoretical investigation posits that following millions of years of cultural evolution, the present community ecology is characterized by the rapid emergence of non-organic environmental realities alongside the traditional organic reality of the human species. Ultimately, this novel ecological system of parallel organic and non-organic realities may trigger challenges for human sociability, for which *Homo sapiens* appears unprepared at this stage of its history.

Keywords: community, culture, ecology, evolution

Introduction

All theories of culture presuppose the concept of community in one form or another.

In classical cultural theory, this concept is rooted in a holistic Greek paradigm—frequently examined in history, literature, and philosophy—which addresses the complexity of the phenomenon at the intersection of the group, individual belonging, and locality. A defining feature of this classical approach is that it conceptualizes the individual as simultaneously operating within a societal role-set and acting as an autonomous person. At the same time, contemporary research encompasses a wide range of different conceptualisations. These definitions vary significantly based on the chosen analytical focus, timeframe, disciplinary grounding, focal components, and linguistic context. To navigate this conceptual complexity, current cultural studies often categorize and investigate human communities based on shared geography, mutual interests, or intellectual and spiritual alignment.

The concept of ‘community’ is also investigated across numerous other humanities and social science disciplines, including anthropology, history, sociology, sociobiology, psychology, and communication. A vast body of literature within these fields examines the life of human communities across time and space. These studies analyze the social dynamics governing the emergence, development, and dissolution of groups, explore how member interactions impact individuals across varied contexts, and investigate the cultural values, motivations, and assets of specific communities from the past to the present.

Nevertheless, both theoretical discussions and empirical research concerning human communal behavior converge on the premise that the ‘community’ is undergoing continuous transformation. Existing literature documents the profound evolution of human communities broadly, while highlighting distinct structural variations among specific empirical groups. This transformation is widely attributed to global and local historical shifts, such as demographic expansion, or major lifestyle innovations, including the historical transition to agriculture and, more recently, urbanization and increased mobility. Currently, accelerated globalization and rapid technological advancement compel researchers to revisit, re-examine, and re-identify the underlying mechanisms driving how human communities form, adapt, dissolve, and reconstitute themselves.

While previous investigations offer valuable insights within the humanities and social sciences, this work expands upon them by examining the biological foundations of the human community through the lens of the natural sciences. Specifically, we aim to uncover the primary biological drivers undergirding both the emergence of human groups and the historical shifts observed in communities, irrespective of their geography, shared interests, or intellectual and spiritual alignment.

This paper does not claim to encapsulate the exhaustive expertise of all existing disciplinary research, however, it intends to synthesize selected interdisciplinary evidence to construct a novel theoretical framework to the study of community in the human world. While following this route, it emphasizes the importance of the ecological approach to the coevolution of human biology and culture. Our argument has implications for humanities and social sciences including cultural theory, and suggests that the method is potentially applicable to all human societies, even postindustrial ones.

Basic concepts and the theoretical framework

Bringing biological thought into social sciences and humanities in the study of human behavior is not new. Subsequent to the first attempt to integrate biological and social aspects in the study of the evolution of man (Wilson, 1975), the novel discipline of sociobiology gained ground with a publication on human nature discussing the evolutionary basis of human aggression, sexual behavior, altruism and some other crucial biological drivers of man (Wilson, 1978).

Our ‘community’ concept is also formulated by the integration of the biological and social perspectives, utilizing the cultural context as framework. We approach the concept of ‘community’ from the perspective of human innate traits, which biological framing anchors our conceptualization in the evolutionary theory of *Homo sapiens*. Within human

ethology, community refers to regularized individual interactions characterized by shared beliefs, shared actions, and shared constructions, while the members of these groups are defined by their group loyalty and the active expression of their group identity (Csányi, 2024). Distinct from non-human animal species, these defining characteristics of the human community also represent humanity's unique capacity for cultural formulation.

Our work is built on a definition of the human 'community' in accordance with the human ethology perspective. 'Community' is meant as a human group whose participants cooperate to maintain and formulate their group culture through regular transmission of knowledge among the individual members.

Although culture formulation is anchored in intracommunity dynamics, this interaction simultaneously alters the immediate environment, thereby shifting the community's ecological reality. Our work examines culture as the immediate environmental reality that human communities experience, respond to, and reformulate over time. Furthermore, this immediate environment is conceptualized as an external, complex system of components that shape communal reality. This system encompasses the natural, social, cultural, and technological circumstances within which a community acts to maintain and recreate its environment. Consequently, this study evaluates the external complex system of the communal environment through a distinct ecological lens.

To navigate the complexity of this ecological environment, this work relies on the systematic interpretation of reality formulated by Nikolai Hartmann, a twentieth-century German philosopher of critical realism. Hartmann categorizes reality into four interrelated levels, or strata: (1) the inorganic or inanimate level, (2) the organic level, (3) the psychic or emotional level, and (4) the spiritual or cultural level. Although each stratum possesses distinct phenomena, the transition between categories culminates in the higher level. For example, the organic level builds upon the inorganic level, yet it is simultaneously superseded by the psychic level. While the structure of reality is grounded in the lower strata—which recur within the higher domains—the higher levels display unique qualities fundamentally distinct from those below them (Peterson & Poli, 2022).

This theory—which has significantly influenced studies of human evolution and behavior (Lorenz, 1973, 1988)—is equally relevant to understanding the interaction between the human community and its environment. Accordingly, comprehending the cultural or spiritual environment at a specific stage of human evolution requires uncovering the dominant internal stratification features of that complex system, namely its psychic, organic, and inorganic strata.

In summary, this work operates on two fundamental principles. First, the discussion is grounded in the premise that human culture is a complex system of behavioral patterns developed as products of evolution (Csányi, 2010, 2024). Second, in accordance with human ethology, this paper emphasizes the critical interaction between the biological aspects of communal behavior and the immediate ecological environment—an interplay defined as culture within this framework.

To delineate this relationship, the text first outlines the primary driving forces behind the emergence of the human community, and identifies unique features of early hominids

and *Homo sapiens* that were stimulated by natural adaptation during evolution. Subsequently, it investigates how the ecological environment has shifted throughout history, focusing on the continuous interaction between the human community and its evolving culture. Finally, the study isolates specific agents within the current ecology of human evolution that may exert their power on the contemporary transformation of the community.

Early human adaptation

For hundreds of millions of years, the survival of the species on our planet relied primarily on genetic transmission of information. However, within the relatively stable baseline of the natural ecosystems even localized landscape transformations, such as the depletion of forestry, necessitated the biological adaptation among extant species. Similarly, natural environmental shifts triggered novel challenges for ancestral hominids, fostering the development of both innovative self-protection strategies and advanced individual competencies.

To start with, the interaction of rudimentary skills in the ancestral hominid minds contributed to the emergence of human conceptual thinking. This cognitive leap was made possible by the development of the ability to navigate space and time in the mind and to recognise structural patterns (Donald, 2001; Tomasello, 2016). This marked a key milestone in the evolution of the human brain.

Both physical fossil endocasts and their virtual counterparts yield vital morphological data regarding cranial volume and configuration, which would otherwise be impossible to obtain for extinct species. Considering the fact that the cultivation and maintenance of social skills demand substantial individual cognitive capacity, a significant expansion of the hominid nerve system became evolutionarily inevitable. Interdisciplinary research into the early phylogenetic stages of hominid evolution identifies several emergent biological features that facilitated critical survival strategies. Decreased intra-group aggression and heightened cooperation among group members likely constituted the initial steps toward cohesive collective action against environmental threats.

In what follows the above will be expanded on with further details considering morphological evidence, details of archeological findings, the emergence of sociability and human learning capacities, and furthermore, references to contemporary theories related to the social brain capacity and human cooperation.

Morphological adaptation

Beyond traditional archaeological methodologies, advanced non-invasive imaging techniques—such as computed tomography (CT) and magnetic resonance analysis—now facilitate the three-dimensional digital rendering of cranial models. These virtual reconstructions offer novel insights into the structural changes of the brain across the hominid lineage. Chronological divergence modeling places the emergence of the genus *Homo* within a window of 4.30 to 2.56 million years ago, reflecting a gradual yet compounding trajectory of encephalization. For instance, evolutionary ancestral state models utilizing time-scaled phylogenies indicate that early bipedal hominins

experienced a reduction in overall body mass, prior to the dawn of the Homo lineage, which was subsequently reversed by a distinct trend toward elevated body mass (Püschel et. al., 2021). Investigations targeting size-independent morphological features have revealed significant modifications in relative proportions, inclination, outline curvature, circularity, and spatiotemporal dimensions across the hominid lineage (Bisconti & Tartarelli, 2025). These findings corroborate prior scholarship positing a mosaic model of hominid cortical evolution, while simultaneously suggesting that these key structural reorganizations correlate directly with specific functional and behavioral outputs.

Early hominids and the emergent sociability

Evidence of cooperative construction in stone tool manufacture hints at the foundations of essential social capacities operating in early hominid groups millions of years ago (Shipton & Nielsen, 2015). Archeological sites of the Oldowan Industrial Complex – characterized primarily by sharp-edged flakes and the cores dating to about 2.6 million years ago – and the Acheulian Industry producing handaxes and cleavers across the planet from Africa to India and France roughly about 1,75 million years ago required a high level of human cooperation underpinned by advanced imitation abilities. Populations in these cultures effectively developed methodologies for organizing sequential labor stages, skill-based labor division, and coordinated resource transportation. Conversely, while craniac capacity expanded throughout the Homo lineage, the behavioral and material records do not demonstrate a tandem continuity of anatomical and behavioral development over time. Indeed, it is not until the appearance of the first anatomically modern humans in Africa that we see the rapid changes of technological innovations occurring alongside with the appearance of the first unambiguously symbolic artifacts. Archaeological evidence in the form of shell ornaments, pigment utilization, and particularly the geometric engravings recovered in Blombos Cave dating to about 77,000 years ago confirms the capacity to intentionally generate abstract and representational imagery (Henshilwood et al., 2002), signaling the establishment of modern human behavior.

While archeology seeks to uncover evidence of human brain development through observation, contemporary social neuroscience studies aim to explore the neurological processes underlying social actions, thereby offering valuable insights into the historical neurodevelopment of Homo sapiens. Recent results suggest that hominids achieved simple social interactions by observing and imitating others, a process by activation of the mirror neuron system (Rizzolatti & Craighero, 2004), a specific genetic feature of the human brain. The specialized network is claimed to enable one to comprehend the actions of others and to acquire those by imitation. Although ambiguities persist regarding the exact operational mechanics of mirror neuron systems, indirect evidence has documented their sparking conditions, brain localization and activation (Keysers, 2009).

A growing body of literature suggests that the major transformation of the hominid brain drove cognitive advancement, simultaneously improving adaptive capacities within ecological environments, and fostering highly developed individual sociability.

The archeological endocasts and neuroscientific indicators of human brain evolution are further contextualized by the social brain hypothesis (Dunbar, 1998). This theory demonstrates that hominid encephalization was fundamentally linked to the unique sociability of the lineage, establishing the biological architecture that continues to govern human social capacity today.

The theory posits direct correlation between social group size and neocortical volume, enabling humans to maintain exceptionally large social networks compared to other non-human animal species. Subsequent investigations (Dunbar, 2009, 2024) have further clarified this biological capacity, which has remained largely constant throughout human evolution. The theory claims that the average group size the human brain manages is around 150 members, which comprises the closest relations extending to more distant, yet active relations). This numerical boundary aligns with human ethological analyzes of early cultural evolution (Csányi, 2010, 2024). While these interpersonal layers reflect varying degrees of intimacy and familiarity, they rarely permit an expansion beyond this structural baseline.

The contemporary phase of human evolution continues to validate this model (Forgács, 2008), as the inherent limitations of human neuro-social capacity manifest across modern institutional structures, including the optimal size of military units, the operational ceilings of small businesses, and the structural cohesion of religious congregations

Cumulatively, this evolutionary trajectory was facilitated by the improvement of socio-cognitive abilities that drove the development of communities and communal cultures, which are examined in the following sections.

Knowledge transmission and the community culture

Among the higher level of competencies, the transmission of new knowledge was vital in early human culture development. However, transmission only became possible with the successful acquisition of new behavioral patterns by the imitation of the movements of other individuals, a strategy called emulation, which occurred among early humans at about two million and four hundred thousand years ago (Tomasello, 1999, 2016). The *Homo erectus* is believed to have possessed the skills for action metaphor, gesture, mime and imitation, which were applicable for transmitting information from one individual to the other (Tomasello, 2016), which provided the basic conditions for formulating dyads, groups, or later, community cultures. By practicing emulation-based knowledge acquisition, early *Homo* species exceeded the constraints of the biologically determined genetic transmission of information. At the same time, this shift developed the adaptability of our ancestors to environmental changes, a critical survival mechanism, which paved the way for the emergence of a new species, the *Homo sapiens*.

In addition to the capacity of observing and imitating others' movements, decoding others' intentions to achieve specific objectives was another milestone in human evolution. Although non-human apes can perceive conspecifics as intentional agents for competitive purposes, humans uniquely comprehend others as intentional agents while possessing the skills and motivations to share intentional states with them. Consequently, the primary distinction separating humans from other great apes is that humans operate

with skills and motivations of shared intentionality. To delineate human cooperation, Tomasello (2016) distinguishes between joint intentionality, and collective intentionality, positioning shared intentionality as the superordinate category. While joint intentionality characterizes early hominids, collective, or shared intentionality features modern humans operating in their complex cultural realities.

The emergence of shared intentionality marked a radical departure from the purely individual intentionality and thinking of other great apes, while simultaneously driving the evolutionary transition from emulation to conscious information transfer. The shift occurs because participation in shared intentionality activities requires mutual action, that is beyond powerful forms of intention reading and social learning, it also requires unique motivation to share psychological states with others and unique forms of cognitive representation for doing so (Tomasello et al., 2005). Shared intentionality, wherein individuals pursue a collective goal and coordinate their behaviors to achieve it, is the direct product of human evolution (Csányi, 2024; Tomasello, 1999, 2016; Tomasello et al., 2005). Engaging in these shared activities yielded species-unique forms of cognitive mechanisms and learning (Henrich, 2016). Cultural learning (Henrich, 2016), or cultural transmission (Boyd & Richerson, 1985) means that humans rely on socially transmitted knowledge, which allows generations to build upon innovations, which then drives the process of gene-culture coevolution. Cultural transmission is activated along a complex of three pathways, which are vertical, from parents to offsprings, oblique, from older generations to younger non-descendants, and horizontal, meaning learning within a given generation (Boyd & Richerson, 1985), which leads to a more intensive and fast cultural evolution (Henrich, 2004). This process of self-domestication even increased the level of cooperation and the development of prosocial attitudes and practices at an early stage of human evolution (Henrich, 2016).

In conclusion, the faculties of emulation and intentionality served as foundational social competencies that provided humanity with an effective means of adapting to early evolutionary ecological changes. As individuals began utilizing their capacity for social learning, this cognitive faculty established the ethological baseline for human culture, subsequently enabling cultural evolution through structured human cooperation. This developmental trajectory—spanning from sensory perception to conceptualization and basic communication—culminated in a framework where sustained social interaction and inter-individual knowledge transmission within the community became viable, thereby initiating the process of cultural evolution.

Sociability, cooperation and culture

With the 20th century emergence of the discipline of sociobiology the biological, social and evolutionary aspects of the human species development were integrated. The term was introduced by E. O. Wilson (1975), who intended to explain the evolutionary mechanics behind human social behavior through the study of competition, cooperation and nurturing of the young. Although initially the theory sparked heated debate among experts, it soon gained ground as a discipline studying the social-psychological and biological aspects of human behavior. While research grew and prospered, most

researchers of human evolution ignored culture or were actively hostile to it until the 80s, since they thought, culture had no independent causal role (Boyd & Richerson, 2024). A subsequent discussion of some human behavioral mechanics, such as aggression or altruism (Wilson, 1978) also inspired further research into the area of human cooperation. Since the topic attracted scholars of anthropology, economics, mathematics, political science, primatology and psychology the same way, an in-depth analysis of cooperation was called for in order to redefine and to model cooperative human behavior employing an evolutionary perspective to the subject. To respond the need, a collection of studies was edited (Hammerstein, 2003) which, among others, features an excellent assessment of the dynamic interdisciplinary field of the genetic and cultural evolution of cooperation.

Although, a synthesis of the theory of cooperation was still not reached in the publication, some synergistic gains were offered. As a result, recent scientific debate on the evolution of human cooperation and culture has provided us with valuable results. Richerson et al. (2003) successfully analyzes the role of conformist decisions in shaping societies. Henrich (2004) explains how our evolved cultural learning capacities created the conditions for the cultural evolution of prosociality. On the other hand, cooperation is often studied in comparison with competition. While humanity evolved the ability to learn from each other to allow cultural evolution to commence, rapid cultural adaptation also leads to persistent differences between local social groups, facilitating competition between groups (Boyd & Richerson, 2009).

On the other hand, our species' extreme reliance on culture also facilitated human cooperation between genetically unrelated individuals. This idea has even paved the way for further studies based on group-level selection theory (Boyd & Richerson, 2010). The idea that culture facilitated human cooperation acting on culturally differentiated populations has even led to the recent development of Cultural Group Selection (CGS) hypothesis (Boyd & Richerson, 2010; Boyd et al., 2011; Richerson et al., 2016), which concludes that culture acts like a system of inheritance (Boyd & Richerson, 2024). Although rigorous testing and solid arguments are still to be presented in order to convince scholars about the details of CGS theory, the claim that culture is of key importance in human evolution is now widely accepted among the researchers of the field.

An ecological approach to human cultural evolution

Advancing from this interdisciplinary baseline our conceptualization of culture integrates the complementary biological and social drivers that catalyzed human evolution and continue to govern the behavioral and cultural dynamics of the existence of *Homo sapiens* today. Thus we identify culture at the intersection of the individual and the social group.

Human ethology delineates the defining components of human culture through five interrelated elements: (1) shared beliefs, (2) collective actions that facilitate cooperation, (3) the material and abstract creations of the group or community, (4) heightened group loyalty, the result of which is (5) the emergence of the community or group organization

as a distinct, novel entity (Csányi, 2024). Similarly, we define culture emphasizing the fundamental value of cooperation within the community.

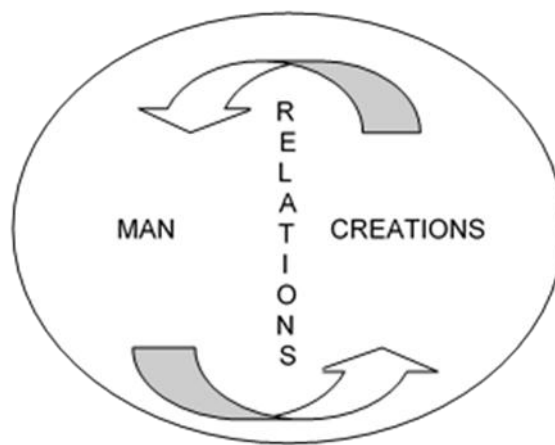
However, along human evolution, the capacity of cultural learning has also contributed to the creation of a broad spectrum of human developments ranging from cultural practices, linguistic symbols through the construction of social norms and rules, and the establishment of social institutions and technical developments (Tomasello et al., 2005; Csányi, 2024; Henrich, 2016; Boyd & Richerson, 2024).

In accordance with the aforementioned taxonomic framework of human ethology, and following an interdisciplinary approach, our functional model of culture is introduced in the following section.

The functional model of culture

Our functional model of culture (Figure 1) synthesizes the primary components of human communal behavior from an evolutionary perspective. Within this framework, human culture is conceptualized as a complex system driven by three core components: (1) the community, designated as MAN within the model; (2) human relational dynamics, which encompass shared beliefs, actions, and collective belonging, designated as RELATIONS and (3) communal products, manifesting both material artifacts or technology, and abstract concepts, designated as CREATIONS.

Figure 1. The functional model of culture



Source: Author's own construction

As indicated by the directional arrows in the model, culture is never static; rather, it operates as an active, dynamic process of continuous self-reformulation. This process is driven by constant intracommunity interaction, wherein members develop and share ideas, actions, and collective identity while simultaneously generating material and abstract entities as products. These communal outputs are progressively integrated into the immediate environment—or community culture—subsequently exerting a reciprocal impact on the population itself. Consequently, community culture is understood as a continuous trajectory sustained by human agency through evaluating, maintaining, and recreating communal reality. This reality encompasses behavioral patterns, internal and

external relational systems, and the immediate ecological context, the elements of which cyclically reinforce the process over time.

The first phase of cultural evolution

During the first period, cultural knowledge was validated and disseminated within small bands of between thirty and fifty adults and some more juveniles (Csányi, 2010, 2024). Based on the aforementioned scientific evidence we hypothesize that the intensity and pace of cultural transformation was exceptionally slow. The primarily experiential knowledge and the foundational elements of cultural reality were systematically adapted to and shared within the local group. For instance, the construction of communal beliefs occurred through individual-level emotional and cognitive processing, and subsequently, these personal perceptions were synthesized into the group's shared belief system through validation. While these collective convictions established the moral foundations of the community, the belief-based shared actions facilitated group cooperation. Furthermore, loyalty manifested as a capacity for adaptive altruism—characterized by a willingness to self-sacrifice for the collective good—which was sustained by the primacy of prosocial traits within the individual personality to ensure group survival.

From an ecological perspective, we assume that the foundational period of cultural evolution was heavily dominated by sociability and group cohesion, resulting in an exceptionally gradual rate of change within the stable cultural reality preserved through shared narratives. The individual functioned both as the agent of the cultural reality and as the subject of that reality. Individuals participated in cultural formulation by driving knowledge transfer across both the psychic and spiritual strata of their immediate social environment.

As far as cultural transmission is concerned, we can also draw some conclusions. This strategy of knowledge transfer yielded beneficial consequences both horizontally within the cultural group and vertically across generations, benefiting both human culture broadly and specific cultural groups in particular. Horizontally, knowledge accumulation facilitated the dissemination of innovative ideas among the intracultural population, thereby securing the collaborative advancement of new insights. Vertically, knowledge developed by preceding cohorts was transmitted and integrated into the cognitive repertoire of successive generations within the community. Through this intergenerational mechanism, cultural elements—including belief systems, traditions, technological innovations, and social practices—were transferred in a highly stable manner, thereby preserving cultural continuity over time.

The progress of the cultural evolution

Demographic expansion within the human population eventually challenged the sustainability of traditional group structures, necessitating the development of novel knowledge transmission strategies through the integration of innovative technologies. This technological shift subsequently initiated a new, significantly more dynamic phase of human cultural evolution.

The comprehensive historical works of Yuval Noah Harari (2014, 2024) expand upon how information networks and technological innovations have driven the gradual transformation of human societies, which we will use as reference here.

Approximately seventy thousand years ago, the highly constrained, localized networks of early human groups expanded into cooperative, inter-band networks. This inter-band commerce and cultural synthesis were significantly accelerated by emerging linguistic capabilities. Crucially, individuals no longer required direct, face-to-face contact to cooperate; instead, alignment was facilitated through adherence to shared narratives that codified the core principles of community survival. This cognitive shift enabled the large-scale organization and flexible cooperation of thousands of strangers, laying the groundwork for complex socio-cultural entities and nations.

Nevertheless, ideological narratives, shared beliefs, and religious frameworks alone proved insufficient for maintaining the administrative cohesion of large populations. This organizational constraint was overcome by the advent of documenting technologies. The written document did not merely preserve social order; it actively institutionalized ownership, state authority, and bureaucracy across all societal domains, ranging from legal systems and public health to systematic knowledge transmission. Consequently, narratives and documents emerged as the primary instruments for constructing a novel iteration of cultural reality. Crucially, this dynamic change often generated artificial or distorted institutional realities, which were validated and enforced by centralized, distant authorities.

Subsequently, another profound institutional innovation emerged, introducing a novel paradigm for validating and sharing knowledge. Through science this intellectual development, the dissemination of factual realities became grounded in robust self-correction mechanisms underpinned by empirical evidence, institutional accountability, the rejection of dogma, and the necessity of collective professional consensus.

From our perspective, it means that simultaneous processes determined the conditions of knowledge transmission. Besides the emerging role of science, communal belief systems continued to exert significant influence, resulting in a duplication of truth-seeking strategies that are likely to have generated socio-cultural and intellectual conflict.

Regarding cultural evolution, based on our functional model of culture, we can claim that a substantial portion of communal knowledge transmission gradually transitioned into a highly regulated process dictated by externally validated information. This phase of cultural evolution was profoundly shaped by the escalating complexity of information transmission technologies. Crucially, this period was characterized by a growing stratification between the roles of cultural innovation and cultural contribution, as well as between information validation and information reception within the social reality. The advent of writing enabled a small elite to monopolize knowledge production and dissemination. Consequently, this monopolization widened the disparity between the select few who actively reconstructed cultural reality and the vast masses who merely existed as its subjects.

Harari (2014, 2024) further analyzes the role of technology in maintaining large population cultures. He claims that technology facilitated the maintenance of social order

through narratives, religious frameworks, and administrative documentation, while simultaneously enabling mass socialization through the dissemination of cultural norms, legal rules, ideologies, and shared beliefs. Despite the advent of the printing press, control over knowledge production remained highly centralized.

We can support the above idea. Although public education became institutionalized, and written communication intensified information transmission at the cultural level, we believe that the social ecology of learning remained stable. Crucially, because this information transfer operated primarily as a unidirectional process, the authority to construct and disseminate novel cultural realities remained the exclusive privilege of a select elite.

In addition, based on the above claims, we can assume that the horizontal and vertical transmission of cultural information, societal norms, and behavioral patterns within groups significantly enhanced cooperative success and adaptive capacity to the environment. The expansion of social groups, the emergence of distinct cultures, and the formation of complex societies catalyzed the reinforcement of specialized rules, methods, and instruments designed to sustain knowledge transmission through formal institutions, such as standardized education systems.

Besides our related remarks above, the former presentation of about two and a half million years of the development of human culture based on Harari (2014, 2024) also allows us some general concluding remarks concerning the ecology of the cultural evolution process, the focal topic our current work.

Throughout the earliest phases of cultural evolution, the transmission of knowledge remained largely constrained by biological determinants. The cognitive capacities critical for learning and social adaptation, such as the neurological architecture underlying information processing, were naturally inherited through genetic transmission.

Over the past few centuries, however, technological advancements have significantly expanded the spatiotemporal boundaries of the social environment of cultural transmission. This expansion introduced a distinct spatial and temporal decoupling among the human creator, the transmitter, and the receiver. Nevertheless, the social dimension of the learning environment remained dominant. Consequently, the biological drivers of human sociability continued to exert a profound influence on learning mechanisms and social adaptation. This stage of cultural evolution occurred predominantly within an organic reality governed by an individual or a collective group within either the immediate or distant environment of the subject.

Currently, however, the rapid acceleration of technological development has established the foundations an alteration of the ecological environment of cultural evolution, the primary characteristics of which are examined in the subsequent section.

The altering ecology of cultural evolution

Most researchers contend that the co-evolutionary dynamics of biology and culture persisting since the early history of humanity has by now lost balance between the two, while an intensive cultural evolution along with the evolution of ideas has commenced. This technologically mediated acceleration in generating, constructing, and disseminating

an information-driven cultural reality has facilitated the rapid evolution of ideas within both organic (social) and non-organic (technological) environments (Figure 2).

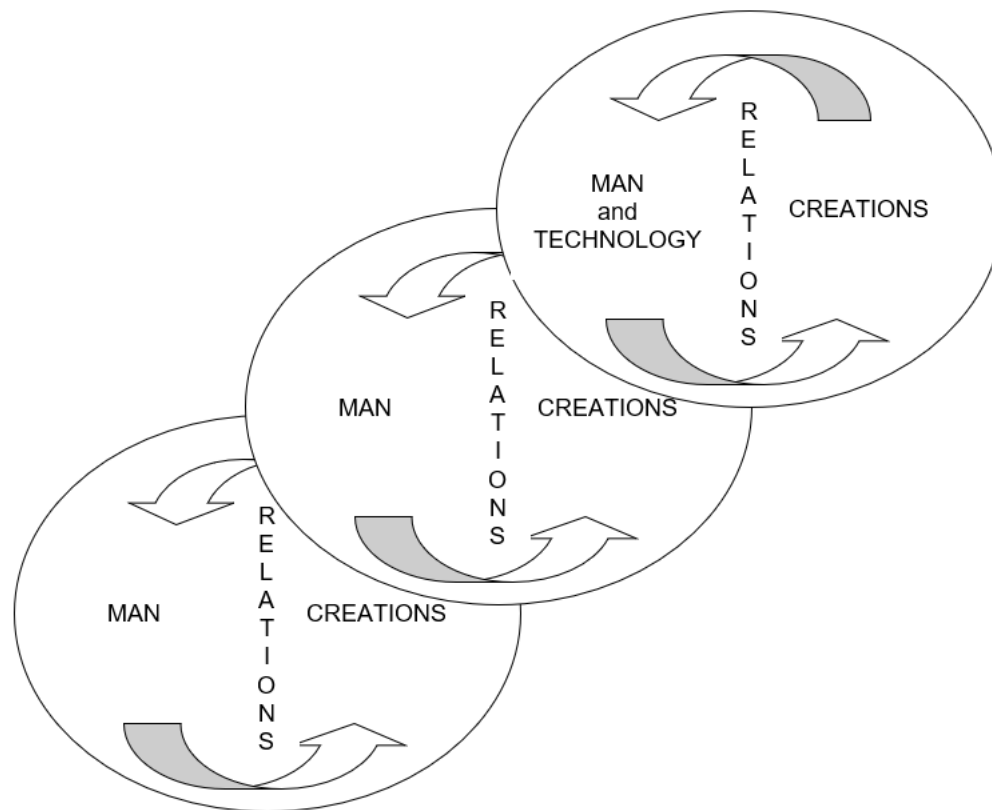
The genesis of this evolutionary shift was first conceptualized by Richard Dawkins (1976), who coined the term 'meme' for a unit of cultural information, claiming that the replication of these units in the modern world follows the model of human cultural evolution. It is based on the notion that culture, like genes, could evolve through replication, that is intergenerational transmission, mutation and selection. It observed that natural selection acts on any pattern of heritable variation, and cultural evolution can lead to cases in which specific traits end up closer to a cultural fitness optimum than the genetic one, even when the general capacity for culture is at the genetic optimum.

Dawkins (1976) promoted a biological approach to culture, which soon triggered positive reaction by researchers of sociobiology (Boyd & Richerson, 1985). As a result, since its inception, the field of memetics has developed into a structured domain focused on how, why and when memes appear, split, reformulate, reappear in different variants, compete with each other, regenerate, maintain themselves, modify, disappear and die, while dissipate in public consciousness. Evolution of ideas today has by and large been detached from adaptation, and has become self-organizing and self-maintaining (Csányi, 2010). In addition, generalized self-replicating ideas are also claimed to give rise to the phenomenon of thought contagion (Lynch, 1991). During a thought contagion process, it is observed that the transition of an idea, or meme, from individual level considerations to population level can act to cancel individual variations and may result in altering population behaviors (Lynch, 2008).

Empirical evidence also suggests that this process has been vastly compounded by recent technological milestones—including distributed computing, global networks, and generative artificial intelligence architectures—which have exponentially accelerated informational drift. Crucially, this technological integration has transformed not only the velocity of informational dissemination but also the systemic mechanics of idea evolution.

More importantly, contemporary dynamics of cultural transmission diverge drastically from the historical frameworks detailed earlier. Rather than human communities actively filtering, evaluating, or validating the epistemic reliability of incoming concepts, autonomous informational units now proliferate across socio-cultural boundaries at unprecedented scales. Consequently, these digital constructs directly engage individual cognitive faculties, entirely bypassing the traditional scaffolding of communal mediation.

Figure 2. Changing agents of cultural evolution



Source: Author's own construction

We contend that a profound shift is occurring within the ecological architecture of the human community for two distinct reasons. (1) A substantial portion of the traditional organic, social environment is transitioning in combination with a technologically driven, non-organic communal landscape. (2) Within this environment in alteration, a major part of the human population is increasingly positioned as passive consumers, receivers, and targets, rather than active agents or co-creators of cultural formulation. This process is driven by the exponential proliferation of digital channels, media platforms, and communication technologies. Crucially, the operational control of these sophisticated systems is increasingly consolidated within a highly restricted elite of technical experts and institutional gatekeepers.

Currently, conventional communal strategies for maintaining social cohesion—namely, the sharing of beliefs, collective actions, and cultural constructions—appear increasingly ineffective. Driven by the escalating complexity and pervasiveness of the technological landscape, individual cultural realities have become saturated with non-human-validated, competing memes distributed across a multitude of variants via multimodal information channels. These discrete information units are subsequently received, perceived, and interpreted through highly diverse cognitive frameworks. Consequently, individuals analyze this incoming data both within and outside traditional community structures at varying velocities, depths, and levels of efficacy. The impact and the role of the organic, offline social environment in sustaining community culture appear

to be diminishing within individual lives, frequently being supplanted by expansive online networks across nearly all societal domains.

Our firm belief is that our biologically derived sociability is increasingly decoupled from the process of cultural knowledge transmission, while technologically mediated cultural intervention becomes prevalent. While science—as a human-operated, organic cultural technology—appears to be losing its monopoly over the validation and mass dissemination of knowledge, it has conversely begun to function as an alternative apparatus for analyzing and evaluating the epistemic truth value of information, operating alongside the profound non-organic technological restructuring of digital realities.

This shift raises a pivotal question regarding whether the biological foundations of human sociability are fundamentally threatened, or if the traditional community faces eventual dissolution under the escalating pressure of this powerful non-organic environment.

'Community' at the nexus of organic and non-organic environments

While some claim the social faculty of man will still be active during the following phases of evolution, however, in new rather than the traditional ways, others believe the individual will further develop their own social capacities facilitated by the adaptable genetic coding they possess.

McLuhan (1964, 1994) advocates the idea that the new environment will stimulate the emergence of new principles of sociability in human communities. He explains how traditional principles fail and illustrates how conventional cultural, civic, state, national or social groups are destroyed and successfully transformed into psychic, social, economic, and political parochialism in the global village through shaping human perception, thought processes, and social interactions.

Boesch and Tomasello (1998) points out how qualitatively different social constraints affect the diffusion and transformation of cultural variants. It concludes that cultural variants available for individuals within the group may exert their effect on the group selection of memes, while it also explains that the success of the process depends on specific features of the group itself. Some examples of influencing group qualities are also mentioned, such as the structure of the social group, the conditions of the social environment, the criticality of norms in the group through free choice, convention or imposition. Considering the dissemination of cultural variants at the level of the individual, five social models of cultural distribution are distinguished, which are the family, the association, the majority and prestige. It is found that the more rigid the social constraints, the more homogeneous the population in a cultural community is.

A positive view proposes that the biology-based evolutionary features have provided a solid foundation for us to tackle the environmental situations until recent times, and this will continue in the future. Csányi (2024), for instance, argues that our biologically stable social capacity has not changed through evolution, which means, it determines individuals' responses to the environment independent of the types of changes in this

environment. That said, the individual will activate their biological sociability in themselves during the interaction with the environment, which means that they will act as group organizations comprising a single member during formulating and structuring their belief systems. Their individual belief systems will then coordinate their actions, and furthermore, they will be loyal to themselves, thus providing a solid ground for maintaining their own single-person social community.

In line with the individual responsibility and autonomy in community maintenance strategies, such as truth seeking and belief formation, education specialists, institutions, and international organizations tend to emphasize the necessity of acquiring and improving novel individual skills of human survival. Among the twenty-first century skills, knowledge and attitudes, critical thinking is often considered to be a key. Consequently, intense research has been carried out to pin down the core meaning of the concept reviewing the philosophical, psychological and educational perspectives (Lai, 2011). While observing the educational principles of Bloom (1956, 1984), the essential elements of critical thinking are also extended in a comprehensive multilevel model of critical thinking (Fábián, 2015, 2017, 2018). The proliferation of individual interactions with the non-organic environmental agents of our cultural ecology has become a significant reason why researchers and educators now focus on identifying, assessing and developing the strategies, competencies and the attributes of critical thinkers internationally.

Conclusion: future prospects

At present it is impossible to make clear claims about what the future holds for human communities. The interaction between the relatively slow biological evolution of humanity on one hand and the immense velocity of the change of the technology immersed complex ecological environment on the other appears to set human groups an incredible challenge. All levels of the reality, comprising inorganic, organic, psychic and cultural levels are under the impact of the altering ecology, while urgent questions related to the interaction between communities and their environment are raised both in scientific research, between humans, individuals and within communities alike.

A leading driver in the alteration of the ecology of communities is the evolution of ideas. Currently we face an intense competition among information units generated by individuals, groups and technology across the globe, which puts human communities into the difficult situation of being surrounded by multiple meanings, beliefs, cultural traditions, scientific claims, ideologies, individual thoughts and other cultural units. Accordingly, communities seem to operate under novel, unexpected conditions. They are influenced by the growing impact of the evolution of memes, mostly outside the control of the individual and the social group, and the growing complexity of the ecological environment surrounding the individual and the community simultaneously.

While the future possibility of cultural evolution demolishing human communities appears to be of improbable, scientific evidence suggests that the fundamentally biological motive of *Homo sapiens* to survive through relying on their social faculty should allow us some optimistic future expectations.

At the same time, a growing body of scientific evidence seems to cumulate to provide responses to fundamental related questions and delineate significant conditions of cultural evolution. To illustrate, the theory of multilevel selection offers an alternative to individualism in biology and the human sciences alike, while providing a firm scientific foundation for the concept of groups as organisms (Wilson et al., 2007). It also posits that natural selection in evolution acts at the level of the group rather than the individual (Hammerstein, 2003). While maintaining that natural selection operates on a hierarchy of units from genetic elements to multi-species communities, it treats social networks as functionally integrated entities (Wilson, 2007). Although axiomatic statements related to the area of community evolution are still at a distance, multilevel selection thinking seems to act as a possibility that is realized when certain conditions are met.

The current situation and the potential consequences of cultural evolution in the life of human communities is under discussion within the framework of a variety of disciplines, such as human ethology, anthropology, history, social psychology and psychology alike. However, we agree saying that the integration of studies of cultural evolution crossing disciplinary boundaries might produce new insights by bringing ideas and methods from historically disparate fields (Kolodny et al., 2018), and furthermore, might demonstrate synergies on some crucial issues related to our topic.

References

- Bisconti, M. & Tartarelli, G. (2025). Morphological evolution of the hominid brain. *Academia Biology*, 3(2), <https://doi.org/10.20935/AcadBiol7710>
- Bloom, S. B. (1956, 1984). *Taxonomy of educational objectives: the classification of educational goals; Handbook I: Cognitive Domain*. Longman.
- Boesch, C. & Tomasello, M. (1998). Chimpanzee and human cultures. *Current Anthropology*, 39(5), 591-614.
- Boyd, R. & Richerson, P. J. (1985). *Culture and the evolutionary process*. University of Chicago Press.
- Boyd, R. & Richerson, P. J. (2009). Culture and the evolution of human cooperation. *Phypos. Trans R. Soc. Lond. B. Biol. Sci.*, 364(1533), 3281-3288.
- Boyd, R. & Richerson, P. J. (2010). Transmission coupling mechanisms: cultural group selection. *Philos. Trans. R. Soc. B.*, 365, 3787-3795.
- Boyd, R., Richerson, P. J. & Henrich, J. (2011) Rapid cultural adaptation can facilitate the evolution of large-scale cooperation. *Behavioral Ecology and Sociobiology*, 65, 431-444. DOI: 10.1007/s00265-010-1100-3
- Boyd, R. & Richerson, P. J. (2024). Cultural evolution: Where we have been and where we are going (maybe). *Proceedings of the National Academy of Sciences*, 121(48). DOI: 10.1073/pnas.232287912
- Csányi, V. (2010). The shift from group to idea cohesion is a major step in cultural evolution. *World Futures The Journal of General Evolution*, 30(1-2), 75-82. DOI: 10.1080/02604027.1990.9972198
- Csányi, V. (2024). *Teremtő képzelet. A kreativitás evolúciója*. Open Books.
- Csányi, V. (2024). *Creative imagination. The evolution of human inventiveness*. E-Book: <https://www.amazon.co.uk/Creative-Imagination-Evolution-Human-Inventiveness-ebook/dp/B0H1CM8RBS>
- Dawkins, R. (1976). *The selfish gene*. Oxford University Press.
- Donald, M. (2001). *A Mind So Rare: The Evolution of Human Consciousness*. W.W. Norton & Co.
- Dunbar, R.I.M. (1998). The social brain hypothesis. *Evolutionary Anthropology: Issues, News and Reviews*, 6, 178-190.

- Dunbar, R.I.M. (2008). A társas agy hipotézise és annak szociálpszichológiai jelentősége. In J.P. Forgas, M.G. Haselton & W.V. Hippiel (Eds.) *Az evolúció és a társas megismerés*. (pp. 33-45). Kairosz Kiadó.
- Dunbar, R.I.M. (2009). The social brain hypothesis and its implications for social evolution. *Annals of Human Biology*, 36(5), 562-572.
- Dunbar, R.I.M (2024). The social brain hypothesis – thirty years on. *Annals of Human Biology*, 51(1).
- Fábián, Gy. (2015). Non-critical thinking. What if not thinking? *Procedia – Social and behavioral Sciences*, 186(13), 699-703.
- Fábián, Gy. (2017). Analytic framework of the critical classroom. Language and beyond. In S.E. Pfenninger & J. Navracsics (Eds) *Future Research Directions for Applied Linguistics*. Multilingual Matters. 172–191.
- Fábián, Gy. (2018). Reasons for non-critical thinking. *New trends and issues. Proceedings on humanities and social sciences*, 5(3), 77–83.
- Hammerstein, P. (2003). Understanding cooperation: An interdisciplinary challenge. In P. Hammerstein (ed), *Genetic and cultural evolution of cooperation*. MIT Press. DOI: [10.7551/mitpress/3232.003.0003](https://doi.org/10.7551/mitpress/3232.003.0003)
- Harari, Y.N. (2014). *Sapiens. A brief history of humankind*. Random House.
- Harari, Y.N. (2024). *A brief history of information networks from the stone age to AI*. Random House.
- Henrich, J. (2004) Cultural group selection, coevolutionary processes and large-scale cooperation. *J. Econ. Behav. Organ.*, 53(1), 3–35.
- Henrich, J. (2016). *The Secret of Our Success: How Culture Is Driving Human Evolution, Domesticating Our Species, and Making Us Smarter*. Princeton University Press. DOI: 10.1515/9781400873296
- Henshilwood, C., D’Errico, F., Yates, R., Jacobs, Z., Tribolo, C., Duller, G.A.T. & Mercier, N. (2002). Emergence of modern human behavior: Middle Stone Age engravings from South Africa. *Science*, 295, 1278 – 1280.
- Keysers, C. (2009). Mirror neurons. *Current Biology*, (19)21, 971-973.
- Lai, E. (2011). Critical thinking: A literature review. *Pearson report series*. <http://images.pearsonassessments.com/images/tmrs/CriticalThinkingReviewFINAL>.
- Kolodny, O., Feldman, M.W., Creanza, N. (2018). Integrative studies of cultural evolution: crossing disciplinary boundaries to produce new insights. *Philos. Trans. R. Soc. Lond. B. Biol. Sci.*, 373(1743). DOI: [10.1098/rstb.2017.0048](https://doi.org/10.1098/rstb.2017.0048)
- Lorenz, K. (1973, 2000). *A tükör hátoldala*. Cartaphilus Kiadó. (*Die Rückseite des Spiegels*. München: R. Piper GMBH and Co.)
- Lorenz, K. (1988, 2002). *Ember voltunk hanyatlása*. Cartaphilus Kiadó. (*Der Abbau Des Menschlichen*. München: R. Piper GMBH and Co.)
- Lynch, A. (1991). Thought contagion as abstract evolution. *Journal of ideas*, 2(1), 3-10.
- Lynch, A (2008). *Thought contagion. How belief spreads through society. The new science of memes*. Basic Books.
- McLuhan, M. (1964, 1994). Chapter 1. The medium is the message. In M. McLuhan. *Understanding Media. The Extensions of Man*. MIT Press. 7-24.
- Peterson, K. & Poli, R. (2022). Nicolai Hartmann. In *The Stanford Encyclopedia of Philosophy*. E. N. Zalta (Ed.), <https://plato.stanford.edu/archives/spr2022/entries/nicolai-hartmann>
- Püschel, H.P., Bertrand, O.C., O’Reilly, J.E., Bobe, R. & Püschel T.A. (2021) Divergence-time estimates for hominins provide insight into encephalization and body mass trends in human evolution. *Nature Ecology and Evolution*, 5, 808–819. DOI: 10.1038/s41559-021-01431-1
- Richerson, P. J., Boyd, R., & Henrich, J. (2003). Cultural evolution in human cooperation. In: Hammerstein P. (ed), *Genetic and cultural evolution of cooperation*. MIT Press. DOI: [10.7551/mitpress/3232.003.0021](https://doi.org/10.7551/mitpress/3232.003.0021)
- Richerson, P. J. & Boyd, R. (2008). *Not by genes alone: How culture transformed human evolution*. University of Chicago Press.

- Richerson P.J., Baldini R., Bell A.V. et al. (2016). Cultural group selection plays an essential role in explaining human cooperation: a sketch of the evidence. *Behavioral and Brain Sciences*, 39, e30. DOI:10.1017/S0140525X1400106X
- Rizzolatti, G. & Craighero, L. (2004). The mirror-neuron system. *Annual Review of Neuroscience*, 27(1), 169-192. DOI: 10.1146/annurev.neuro.27.070203.144230
- Shipton, C. & Nielsen, M. (2015). Before cumulative culture. The evolutionary origins of overimitation and shared intentionality. *Human Nature*, 26, 331-345. DOI: 10.1007/s12110-015-9233-8
- Tomasello, M. (1999). *The cultural origins of human cognition*. Harvard University Press.
- Tomasello, M. (2016). Précis of A Natural History of Human Thinking. *Journal of Social Ontology*, 2(1), 59-64. De Gruyter.
- Tomasello M., Carpenter M., Call J., Behne T. & Moll H. (2005). Understanding and sharing intentions: the origins of cultural cognition. *Behavioral Brain Sciences*, 28(5), 691-735. DOI: 10.1017/S0140525X05000129. PMID: 16262930.
- Wilson, D.S. (1989). Levels of selection: An alternative to individualism in biology and the human sciences. *Social Networks*, 11, 257-272.
- Wilson, D.S., Van Vugt, M. & O'Gorman, R. (2007). Multilevel Selection Theory and Major Evolutionary Transitions. Implications for Psychological Science. *Current Directions in Psychological Science*, 17(1), 6-9.
- Wilson, E.O. (1978). *On human nature*. Harvard University Press.
- Wilson, E.O. (1975). *Sociobiology: The new synthesis*. Harvard University Press.

Absztraktok

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A gyermekek mentális egészsége mint kihívás a szociális munka jövője számára: a szociális munka és oktatás szakértői felkészültsége

A tanulmány a gyermekek mentális egészségének egyik kulcsfontosságú kihívását tárgyalja a kortárs szociális munka és oktatás szempontjából. Elméleti nézőpontokra épít, hangsúlyozva az interdiszciplináris együttműködés és a rendszerszintű szakmai támogatás szükségességét. A cél a szakmai felkészültség fogalmának bevezetése a szociális munkások és tanárok körében, amely nemcsak tudást és készségeket, hanem a szakmai identitást, empátiát, etikai megértést és az együttműködés képességének kialakítását is magában foglalja. A tanulmány másodlagos kvalitatív elemzésen alapul, a szociális szolgáltatások, oktatás és egészségügy területén dolgozó szakemberekkel készült interjúkat tartalmazza, amelyet mentális betegségekkel küzdő gyermekek szüleivel készített interjúk egészítenek ki. Az eredmények azt mutatják, hogy a szakmai felkészülés egy hosszú folyamat, amely ötvözi a formális oktatást, az élethosszig tartó tanulást, a gyakorlati tapasztalatot és a felügyeletet. Az oktatási programokban és gyakorlatban azonosított hiányosságok kiemelik a világosan meghatározott kompetenciakeretrendszer, a szakmai fejlődés rendszerszintű támogatásának, valamint a szociális munkások, tanárok, családok és az egészségügyi szektor közötti erősebb együttműködés szükségességét.

Kulcsszavak: gyermekek mentális egészsége; szociális munka; szakmai felkészültség

Celetková, Lenka

A hosszú ideje munkanélküliekkel hibrid munkarendben dolgozó szakemberek támogatása az egyéni bánásmód új értelmezésével

A tanulmány azt vizsgálja, hogyan értelmezik a hosszú ideje munkanélküliekkel dolgozó szakmai tanácsadók és szociális munkások szubjektíven az egyéni bánásmód jelentését az ügyfelek számára különböző típusú együttműködő szervezetekben. Az egyéni megközelítés alkalmazása és a különböző szolgáltatások integrált teljesítménye fontos eleme annak a szakmai logikának, amely segíti az embereket a munkaerőpiaci részvételben és a társadalmi befogadásban. Az aktivációs munka szervezése hibriditással szembesül. Ez a kutatás a szakmai tanácsadók szerepére fókuszál, akik közvetlen kapcsolatban állnak az ügyfelekkel. A csehországi szervezetek kétféle egyéni bánásmódra vonatkozó szabályrendszerrel dolgoznak, egyrészt a közfoglalkoztatási szolgáltatásokban, másrészt pedig a nonprofit szervezetekben. A két szervezeti környezetben végzett értelmezések összehasonlításának eredményei azt mutatják, hogy (1) mindkét szervezetben a frontvonalban dolgozók eltérő egyéni megközelítési koncepciókat alkalmaznak az ügyfelekkel. Módosított megközelítéseik és gyakorlataik aktív válasznak tűnnek arra, hogy az ilyen típusú szervezetekben a tevékenységek

stabilizálása szükséges. (2) Bizonyos esetekben úgy tűnik, hogy a szakmai tanácsadónak lehetőségük van arra, hogy megfogalmazzák és gyakorolják az egyéni bánásmódot az ügyfelekkel szemben a munkaügyi irodákban is. (3) Úgy tűnik, hogy ezek közül csak néhány hasznos a hosszú ideje munkanélküliek problémáinak megoldásában, míg mások nem alkalmasak az ügyfél aktivációjára.

Kulcsszavak: hosszú távú munkanélküliek; egyéni megközelítés; szervezeti kontextusok

Fekete Adrienn

Angoltanárjelöltek attitűdjei és tapasztalatai a kultúra és az interkulturális kommunikáció tanításával kapcsolatban: Vegyes módszertanú esettanulmány egy magyar egyetemről

A kulturális tudatosság (Moran, 2001) és az interkulturális kommunikáció (IKK) (Byram, 2008) kutatása az elmúlt évtizedekben egyre nagyobb figyelmet kapott, azonban szerepük a tanárképzési programokban továbbra is kevésbé feltárt terület. Jelen vegyes módszertanú kutatás azt vizsgálja, hogy a kultúra és az IKK milyen mértékben jelennek meg az X Egyetem (XE) angoltanárképzésében, valamint feltárja a tanárjelöltek e területek tanításával kapcsolatos attitűdjeit és tapasztalatait. Az adatgyűjtés öt angoltanárképzési program tantervének elemzésével, valamint egy saját fejlesztésű online kérdőív segítségével történt, amelyet 153 angoltanár szakos hallgató töltött ki. A kvantitatív adatokat leíró statisztikai módszerekkel, míg a kvalitatív válaszokat tematikus elemzéssel vizsgáltam.

Az eredmények azt mutatják, hogy a kultúrát a résztvevők általában az angol nyelv tanításának fontos elemének tekintik, bár a tanórai időnek rendszerint csak korlátozott részét szánják rá. A válaszadók a kultúrát leggyakrabban kulturális termékekkel és gyakorlatokkal, például irodalommal, hagyományokkal, ünnepekkel, ételekkel és a mindennapi élettel kapcsolták össze, míg a mélyebb kulturális perspektívák lényegesen kevesebb figyelmet kaptak. A kultúra tanítását leginkább audiovizuális eszközökhöz és kommunikatív tevékenységekhez kötötték. Ezzel szemben az IKK kevésbé ismert és ritkábban tanított területként jelent meg. Több résztvevő bizonytalanságról számolt be annak jelentésével és gyakorlati megvalósításával kapcsolatban, ami összefügghet azzal, hogy az interkulturális képzés a jelenlegi tantervekben korlátozott mértékben és formában van jelen. A kutatás rámutat arra, hogy szükség van a kultúra, az interkulturális kommunikáció és az interkulturális kompetencia (Deardorff, 2006) fejlesztésének szisztematikusabb integrálására az angoltanárképzésben.

Kulcsszavak: oktatási kultúra; interkulturális kommunikáció; tanárképzés

Kígyós Borbála

A gyermekkori szabadidős tevékenységek hatása az egyetemi hallgatók rezilienciájára és tanulmányi eredményeire

Jelen tanulmány egy kvantitatív empirikus kutatás eredményeit mutatja be, amely a gyermekkori szabadidős tevékenységek – zene, képzőművészet és sport – valamint az egyetemi hallgatók rezilienciája és tanulmányi teljesítménye közötti összefüggéseket vizsgálja. Az elméleti keret a pszichológiai transzferhatások elméletére és a reziliencia többdimenziós modelljére épül. Az adatgyűjtés a Pécsi Tudományegyetem Műszaki és Informatikai Karának 197 építészhallgatója körében, a Connor–Davidson Reziliencia Skálát (CD-RISC 25) is magában foglaló strukturált adatfelvételi kérdőív segítségével történt. A résztvevőket nyolc tevékenységkombinációs csoport szerint elemeztük. Az eredmények szerint a mindhárom tevékenységben részt vevő hallgatók reziliencia pontszáma szignifikánsan magasabb ($M = 77,31$; $SD = 14,61$), mint a kontrollcsoporté ($M = 64,46$; $SD = 18,61$; $t(40) = 2,42$; $p = 0,020$; $d = 0,81$). A középiskolai tanulmányi átlag szintén szignifikánsan magasabb volt ($t(40) = 2,77$; $p = 0,009$; $d = 0,92$), ugyanakkor az aktuális szemeszter átlaga nem különbözött szignifikánsan ($p = 0,207$). Szignifikáns pozitív Pearson-korreláció igazolódott a tevékenységek száma és a reziliencia között ($r = 0,149$; $p = 0,037$), amelyet a dózis-válasz elemzés is megerősített ($\chi^2(3) = 7,861$; $p = 0,049$; $V = 0,200$). A sportolás erős reziliencia-prediktornak bizonyult ($d = 0,61$; $p = 0,001$), míg a képzőművészeti tevékenység szignifikánsan összefügg a jobb tanulmányi teljesítménnyel ($d = 0,44$; $p = 0,006$), de nincs szignifikáns főhatása a rezilienciára ($p = 0,856$). A kutatás megerősíti a kombinált tevékenységek szinergikus transzferhatásait, és rámutat az integrált pedagógiai modellek fejlesztésének szükségességére a felsőoktatásban.

Kulcsszavak: reziliencia; transzferhatások; építészhallgatók

Hüber Gabriella Margit

Tréneri vélemények a középiskolás tanulók számára legfontosabb soft skillekről

A globalizáció, a digitalizáció és a technológiai fejlődés következtében átalakuló munkaerőpiaci elvárások egyre nagyobb jelentőséget tulajdonítanak a puha készségek fejlesztésének. Jelen tanulmány a magyar középiskolások számára szervezett soft skill tréningeket helyezi vizsgálat alá, és arra keresi a választ, hogy a területen dolgozó szakemberek mely kompetenciákat tartják a legfontosabb fejlesztési területeknek. A kutatás abból a feltételezésből indult ki, hogy a munkaerőpiaci és oktatási elvárások egyre inkább megkövetelik a nem kognitív kompetenciák tudatos fejlesztését. A vizsgálat kvalitatív módszertannal valósult meg. Az adatgyűjtés során 18, középiskolások számára tréningeket tartó szakemberrel készült félig strukturált interjú. Az interjúk elemzése kvalitatív tartalomelemzés segítségével, a MAXQDA szoftver alkalmazásával történt. Az

eredmények szerint a kommunikáció fejlesztése a legfontosabb, amelyet az önismeret, az együttműködés, az időgazdálkodás, a stresszkezelés és az érzelmi intelligencia követ. A résztvevők hangsúlyozták, hogy a kommunikáció és az önismeret számos más kompetencia alapját képezi, valamint jelentős hatással van a tanulmányi eredményességre, a pályaválasztásra, a motivációra és a munkaerőpiaci sikerességre. A kutatás rámutatott továbbá a reziliencia és a kreatív gondolkodás növekvő jelentőségére is. A kutatás elméleti szempontból hozzájárul a serdülőkori soft skill fejlesztés jobb megértéséhez, gyakorlati szempontból pedig alátámasztja az interaktív, tréningalapú fejlesztési programok oktatási szerepének erősítését.

Kulcsszavak: szociális készségek; középiskolás diákok; képzési programok

Tamás Lilla – Csehné Papp Imola

Az egyéni fenntarthatósági tudás szervezeti tudássá válásának mechanizmusai és befolyásoló tényezői

A tanulmány célja annak bemutatása, hogy milyen mechanizmusok és szervezeti feltételek segítik az egyéni szinten megszerzett fenntarthatósági tudás integrációját a vállalati tudásmenedzsment rendszerekben. A tanulmány elméleti áttekintésen alapul, amely a fenntarthatóság, a tudásmenedzsment és az egyéni tényezők kapcsolatát vizsgálja. A szakirodalom feldolgozása alapján bemutatja a fenntarthatósági tudás sokdimenziós, cselekvésorientált és gyakran tacit jellegét, valamint áttekinti azokat a tudásmenedzsment-modelleket, amelyek értelmezési keretet adnak a tudás szervezeti hasznosulásához.

Az elemzés rámutat, hogy a fenntarthatósági tudás integrációja összetett folyamat, amely nem értelmezhető egyszerű információátadásként. A szervezeti beépülés interakciókon, tanulási helyzeteken és tudatosan kialakított mechanizmusokon keresztül valósul meg. Ebben a kommunikáció, a bizalom, a szervezeti kultúra, az ösztönzők, valamint a tudás megosztását és formalizálását segítő eszközök jelentős szerepet játszanak.

A tanulmány a szakirodalmakból kiindulva megállapítja, hogy a fenntarthatósági tudás szervezeti alkalmazása függ attól, hogy a szervezet képes-e olyan feltételeket kialakítani, amelyek támogatják a tudás megosztását, formalizálását és gyakorlati felhasználását. Ennek hiányában az egyéni tapasztalatok korlátozottan épülnek be a szervezeti működésbe. Az eredmények hozzájárulnak a fenntarthatóság és a tudásmenedzsment kapcsolatának mélyebb megértéséhez, valamint alapot teremtenek a további empirikus vizsgálatok számára.

Keywords: fenntarthatósági tudás; tudásmenedzsment; szervezeti tudásintegráció

Fábián Gyöngyi

Az emberi "közösség" evolúciójáról: ökológiai nézőpont

Mivel a közelmúltbeli interdiszciplináris kutatások a humán tudományok területén kiterjedten dokumentáltak egy jelentős átalakulást az emberi közösségekben – különösen az egyén közvetlen társadalmi környezetét illetően –, munkánk célja, hogy feltárja ennek a jelenségnek az alapvető okait, hogy tájékoztassuk a kulturális elméleteket, kutatásokat, és új aspektust kínáljunk a jövőbeli tudományterületi tanulmányoknak. Az emberi etológiára támaszkodva ez a tanulmány arra az alapfeltevésre épít, hogy az emberi közösség alapvetően biológiai eredetű, és így közvetlen evolúció terméke. Ennek következtében elsődleges fókuszunk az emberi faj alapvető társasági képességére irányul, amely a nagy majmok ősi viselkedési jellemzőiből fejlődött ki. A környezet, a közösség és az emberi kultúra közötti kölcsönhatás megfelelő elemzéséhez egy funkcionális modellt vezetünk be, amely bemutatja, hogyan hajtotta az emberi evolúciót a Homo sapiens megjelenésétől napjainkig. Modellünk a közösségi kultúra – amely a biológiánk viszonylag stabil eleme – és a gyorsan változó ökológiai környezet közötti kölcsönhatás közelmúltbeli változásait sugallja. Elméleti vizsgálatunk szerint a mai közösségi ökológiát a nem organikus környezeti valóságok gyors megjelenése jellemzi az emberi faj hagyományos organikus valósága mellett. Végül soron ez az új, párhuzamos organikus és nem organikus valóságokból álló ökológiai rendszer kihívásokat okozhat az emberi társasági életben, amelyre a Homo sapiens ebben a szakaszban még felkészületlennek tűnik.

Kulcsszavak: közösség; kultúra; ökológia; evolúció

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