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## The Child in the Musical Reality of the Family Environment

### Dziecko w umuzykalniającej rzeczywistości środowiska rodzinnego

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#### Abstract

**Introduction.** The article is a theoretical analysis of the findings from research on selected principles of Gordon’s Music Learning Theory in relation to early music education. The paper emphasizes the need to analyze the development of children’s audiation within the family environment. Consequently, the focus is placed on musical enculturation, with the family and its members serving as the primary environment for this process.

**Aim.** The article aims to focus attention on the specific attributes of shared audiation within the family context. This approach necessitates an interdisciplinary reflection on topics such as audiation, language, and social relationships. The focus of the analysis is audiation, explored in the context of parent’s enculturative actions. Musical enculturation, understood in this way as an “initial” method of fostering audiation, constitutes a crucial foundation for the musical development of children within the family setting.

**Methods and materials.** The study involves a review and critical analysis of the subject literature. The text attempts to address the question of the feasibility of a detailed and interdisciplinary explanation of the meanings of audiation in early childhood music

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education. Understanding audiation in the context of research on the family's role in musical development requires establishing theoretical parallels with pedagogy, family studies, cultural studies, and linguistics.

**Results and conclusion.** The article aligns with the ongoing debate on the quality of aesthetic education for children within the family environment. Focusing attention on the specifics of a young child's development in this context necessitates empirical verification of ideas centered on questions about the role of parents in shaping a conscious and autonomous aesthetic personality in the child. It also explores the socio-cultural potential of the family, which is entrusted with specific educational challenges.

**Keywords:** audiation, child, musical enculturation, family, parents, early music education

### **Abstrakt**

**Wprowadzenie.** Artykuł jest opracowaniem teoretycznym rezultatów studiów nad wybranymi założeniami teorii uczenia się muzyki Gordona w odniesieniu do wczesnej edukacji muzycznej. W artykule eksponuje się potrzebę analizy rozwijania dziecięcej audiacji w środowisku rodziny, stąd uwagę koncentruje się na procesie muzycznej inkulturacji, której głównym środowiskiem jest właśnie rodzina i jej podmioty.

**Cel.** Celem artykułu jest koncentracja uwagi na specyfice wielorakich atrybutów wspólnego audiowania dziecka w rodzinie. Takie ujęcie wymaga interdyscyplinarności w refleksji na temat takich zagadnień jak audiacja, język czy relacje społeczne. Przedmiotem uwagi jest zatem audiacja analizowana w świetle inkulturujących działań rodziców. Tak rozumiana muzyczna inkulturacja jako „startowy” typ rozwijania audiacji jest kluczową przestrzenią dziecięcego umuzykalnia w rodzinie.

**Metody i materiały.** Przegląd i krytyczna analiza literatury. Tekst jest próbą odpowiedzi na pytanie o możliwość szczegółowego i interdyscyplinarnego wyjaśniania znaczeń audiacji we wczesnej edukacji muzycznej dziecka. Ujęcie audiacji w kontekście badań nad rolą rodziny w umuzykalnianiu wymaga realizacji paraleli teoretycznych w odniesieniu do pedagogiki, nauki o rodzinie, nauk o kulturze i lingwistyki.

**Wyniki i wnioski.** Artykuł konsekwentnie wpisuje się w debatę o jakości wychowania estetycznego w rodzinie. Ukierunkowanie uwagi na specyfikę rozwoju małego dziecka w tym właśnie środowisku wymaga empirycznego weryfikowania inspiracji skoncentrowanych wokół pytań o rolę rodziców w konstruowaniu świadomej i autonomicznej osobowości estetycznej dziecka, a także wokół pytań o społeczno-kulturowy potencjał rodziny, której powierza się konkretne wyzwania edukacyjne.

**Słowa kluczowe:** audiacja, dziecko, inkulturacja muzyczna, rodzina, rodzice, wczesna edukacja muzyczna

## **Introduction**

The family serves as a key entity in a child's education, operating within the modern public sphere with its educational, cultural, axiological, and socio-identity challenges. A persistent difficulty lies in examining the issue of the immersion of this natural environment for a child's development in a space characterized by numerous individualized educational and cultural factors (Lewicka, 2023). Among these are specific practices associated with the musical capital of the parents (and other family members). A developing child is thus immersed in a sphere of the family's musical influences, which manifest themselves on a continuum between the child's genetic endowment (on one side) and the socio-cultural offering of the family (on the other side).

This text is the result of extensive reflection by theorists and practitioners of music education on the socio-educational nature of the musical potential of the family (Bonna, 2006; Conkling, 2018; Jordan-Decarbo & Nelson, 2004; Kołodziejski & Trzos, 2013; Majzner, 2023; Zhang, 2023). This potential serves as the primary resource for musical activities undertaken by parents, which often become the sole source of musical and developmental experiences for the child. In this sense, the present reflection is deeply rooted in Gordon's theory of audiation development (Gordon, 1999). Consequently, the concept of audiation, as a cornerstone of Gordon's Theory of Music Learning, necessitates consideration of the social nature of a child's musical development within the family environment. This text is a repository of existing knowledge and does not contain new information. This study may constitute an important point of reference for researchers undertaking the indicated problems and a starting point for further reflections.

This reflection on the family leads to a broader contemplation of early music education based on audiation. The socio-cultural significance of fostering audiation is explained through the lens of Gordon's theoretical concepts (Gordon, 1997, 1999).

The analysis of shared experiences in music education (specifically audiation) among parents, siblings, and children continues to inspire reflection. Beyond the need for ongoing consideration of the conditions for a child's development within the characteristic dual-subject dynamic of music education (*e.g.*, parent-child, mother/father-child, adult/teacher-child, or child-sibling relationships), attention is focused on describing the educational roles of these primary participants in jointly fostering a child's musical potential. The natural and daily (*cf.* Trzos, 2012) involvement of family members in the early development of audiation, beginning from the first moments of a child's life, offers, according to Gordon (Zwolińska, 2004), the greatest opportunity to effectively harness the child's developmental potential in this area (even at the level of general musicality).

This shared effort, in the context of the concept of education, significantly underscores the determination of parents and other family members to nurture the child's musical thinking (*i.e.*, audiation). It also helps to elucidate the social significance of early music education within the family.

## **Audiation as a Theoretical Category in the Practice of Musical Development**

In Gordon's Music Learning Theory, the necessity of involving family members in stimulating a child's musical development is strongly emphasized (Bonna, 2006; Kołodziejski & Trzos, 2013; Zwolińska, 2014). Explaining the role of parents in the early musical development of a child requires highlighting the socio-cultural nature of these relationships, which are inherently educational (Kołodziejski & Trzos, 2013). Adding the aspect of community to the concept of this didactic music-making between parents and child reveals the need to define what Gordon terms *audiation* (Gordon, 1997). The idea of shared parental engagement in the music-making process with their child draws inspiration from the philosophy of Schütz (Schütz, 2008). While Schütz does not explicitly discuss audiation as a conceptual category of shared music creation, his ideas significantly influence reflections on the shared experience, interpretation, and music-making within a family context. In particular, Schütz's exploration of the inner understanding of music resonates with Gordon's definition of audiation (Gordon, 1999). The specific socio-cultural nature of family music-making relationships—among children, siblings, parents, and grandparents—relates to the face-to-face interactions and the inherently social [*sic*] character of what Schütz describes as a “community of space” (Schütz, 2008; Trzos, 2012; *cf.* Guzy-Steinke, 2021). From the perspective of Gordon's theory on the development of audiation skills, this community of space is epitomized by the family, enriched with its socio-cultural capital.

As Weiner (2010) pointed out, audiation processes are one of the clearly emphasized subjects of interest for contemporary music education researchers (Clarke *et al.*, 2009; Nudds & O'Callaghan, 2009, as cited in Weiner, 2010; Tymoczko, 2010; see also Bonna, 2016; Brodsky *et al.*, 2008; Kołodziejski, 2022; Zwolińska, 2015; and others). Although Gordon defines audiation as the ability to hear and understand music without the physical sound being present (Zwolińska, 2000), the essence of this interpretation leads to hearing and formally processing sounds mentally. It is a process far more demanding than the child merely imitating, differentiating, recognizing, or mechanically memorizing (Gordon & Woods, 1999). At the early stage of musical guidance in the family, the development of audiation takes on an unstructured and informal nature. This is natural. Nevertheless, it is a crucial moment in maintaining musical potential,

which—due to insufficient musical influences in the family—may (!) begin to decrease from the moment the child is born (Kołodziejski & Trzos, 2013). Therefore, the family and its musical influence have specific tasks in this area. These tasks are directly related to the development of the child’s audiation skills—before the child begins formal (pre)school education.

Due to the early stage of musical influences on the child’s audiation development until the age of 6, in the model of sequential audiation development, its integral concept referred to as “pre-audiation” has been distinguished. Special attention is primarily focused on the child’s family environment (Kołodziejski & Trzos, 2013). Hence, during this period, we speak of inculturation, imitation, and assimilation of music—as the three main types of the child’s audiation skills.

The role of the family is particularly emphasized in the tasks that form the basis for the child’s further (school) musical activity, while simultaneously constructing their musical (or more precisely: tonal-metric) capital. Therefore, the reflection is limited exclusively to musical inculturation as a specific (and first!) process of musical development in the family (Table 1).

**Table 1**

*Musical inculturation in the family environment*

Type of pre-audiation	Stage of musical development	Character of parental influences	Character of the child’s actions	Stage of the child’s musical development
Inculturation (the first type of musical development preceding imitation and assimilation)	Differentiation	Musical guidance in the family	Passive	Absorption
			Reactive	Random reactions
			Active	Intentional reactions

## **Musical Inculturation in the Family and the Issue of Language and Musical Thinking**

The naturalness of the process of musical inculturation (as well as later imitation and assimilation—Table 1) calls for reflection on the issue of language development within the context of musical guidance in the family. Inspiration in this regard comes from the concept advocated by Whorf, which reveals specific aspects of attention. The musical inculturation emphasized by Gordon takes place in the realities of everyday language development [here: musical] in the closest, *i.e.*, the familial environment. The role of natural idioms and linguistic patterns of the native language (as the so-called

mother tongue<sup>1</sup>) appears to be key to the development of the child's thinking in this particular, *i.e.*, native language. At the same time, adopting the viewpoint represented by Zwolińska (though not only by her), it should be noted that language is primarily a tool for thinking (Zwolińska, 2012).

It is necessary to deepen this specific (linguistic) aspect of reflection on early music education within the family. This primarily concerns thinking in the language of music. We perceive everyday reality through the lens of established cognitive forms of musical lexicon and syntax. Drawing inspiration from the thoughts of Whorf, one might argue, specifically in the context of developing audiation skills, that key linguistic determinants describe habitual commitments belonging to a given—natural—community (family). These are specifically codified in the patterns of that very native language. Although (it must be acknowledged) these are quite arbitrary agreements, we segment nature using the cues defined by our languages (Whorf, 2002). In this way, referring to Sapir's reflection and his intention to assign language the rank of a key to the analysis of everyday social reality, the immediate musical environment of the child, we can speak of the ability to think in the language of music in the context of already existing those silent assumptions, expectations, norms, and classifications that seem to be directly given and form the basis of everyday interactions (Hołówka, 1986). Although this language is not merely, as Whorf argued, a handy descriptor of reality, the worldview revealed in the language of a given family nevertheless conditions the personal ways of articulating statements, which prove the habitual internalization of the patterns of the given language by a member of that community (Hołówka, 1986). Similarly, Sapir noted that we see, hear, and generally experience things in a certain way because the linguistic habits of our community predispose us to make specific interpretive choices (Whorf, 2002). According to Hołówka, this nature of linguistic modeling is a consequence of the profound internalization of linguistic patterns, which Whorf also sought to demonstrate in his work. Language shapes our approach to the phenomena we experience at the level of detecting basic similarities and differences. This is also typical of the child's stage of differentiation, to which musical activities in the family should be adapted—specifically in relation to the goals of its musical enculturation (Table 1).

The above inspirations allow for a deeper rooting of this reflection in theory and an understanding of the essence of the development of musical thinking in children within the family. It turns out that the term “musical education” is not exhaustive. It is not even unambiguous. However, it refers to thinking, where the tool for this thinking would be the musical language developed by the child and their competencies based on accumulating, differentiating, and transforming musical lexicon and syntax

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<sup>1</sup> Reference to the views of Suzuki and the term “mother tongue” emphasized by him in music education (Suzuki, 2003).

(cf. Bonna, 2016; Gordon, 1999; Miklaszewski, 1990; Sloboda, 2002; Zwolińska, 2011, 2013).

Although Whorf, when using the concept of language, does not refer to the context of music, his analysis provides many inspirations for reflecting on the linguistic dimension of developing preliminary audiation within the family. By using the concept of language, he properly refers to the traditionally identified components of language (and the knowledge built from it): vocabulary, syntax, and semantics (Gordon, 1999; Kurcz, 2000; Milewski, 1969; Trzos, 2018; Zwolińska, 2010). Thus, these three components—vocabulary, syntax, and semantics—should focus the attention of parents and educators in the organization and evaluation of musical education tasks, but tasks understood as developmental.

Vocabulary consists of musical motifs and their tonal-metric resolutions. These are used daily by family members. Such musical vocabulary is crucial and is connected with the development of the ability to differentiate phonemic phenomena in music (Sloboda, 2002; Trzos, 2018). Musical vocabulary is the subject of the development of so-called alphabetization and then literalization. This very important aspect of a child's musical education pertains to the lexical dimension. It is a dynamic resource of concepts, meanings, and musical senses, also referring to the qualities of harmony perception, tonality, as well as the perception of sound and time (Sloboda, 2002; see also Kamińska, 1997; Konaszkiewicz *et al.*, 2008; Zwolińska, 2010). The specificity of describing the development of this language component is linked to family influence, its specific members, their experiences, and everyday situations (see also Marody, 1987). At the same time, the existence, and the need to develop so-called musical dictionaries are also clearly emphasized by Gordon. These are the “dictionaries” of listening, performance, reading, writing, and improvisation. The development of each of them is inherent in the essence of the auditory model of early music education—starting from the early stages of musical acculturation in the family (Gordon, 1999).

The second component of language is its grammar, with its aspects of grammatical rules, inflection, and syntax. Although music does not have grammar in the *strict* sense (Zwolińska, 2012), the concept of *syntax*, as musical syntax, contains the logic of ordering musical content. The child undergoes acculturation in a specific musical syntax, and within it: *tonal syntax* (the organization of pitch) and *rhythmic syntax* (the organization of their rhythmic progression). This directed acculturation has consequences for the understanding of music and its tonality, whether major, minor, or otherwise, in accordance with the classification of modes<sup>2</sup> or meter (Sloboda, 2002). The need

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<sup>2</sup> The discussion of modes in the diatonic context, specifying the other types of tonality: Dorian, Phrygian, Lydian, Mixolydian, Aeolian, and Locrian. Gordon places key importance on highlighting the diverse tonalities in the teaching of tonal syntax.

to draw parents' attention to this syntactic component of the developing musical language has been repeatedly emphasized and subjected to research analysis (Sloboda, 2002). This aspect is linked to the capital of natural language, in which quasi-grammatical rules function daily and automatically. Their modeling does not always occur in preschool, but much earlier, precisely within the family.

In this perspective, the development of the semantic (as the third) component of musical language can occur as a level of interpretation and logical listening to music: sound (phoneme), motif (expression), or musical phrase (sentence). Although the sound itself and its associated meaning are primarily interpreted by the child mentally (often also emotionally), their description does not necessarily have to be enigmatic and inaccessible to scientific research. This is pointed out not only by Gordon, but also by many researchers (see also Chomsky, 1977, as cited in Filipiak, 2002; Gruhn, 2002; Hausner *et al.*, 2002; Kurcz, 2000; Langacker, 2000; Sloboda, 2002; Zwolińska, 2012).

The extensive connections between the musical culture of the child's family environment and the quality of its musical upbringing in the family take on immense importance starting from the tasks of acculturation. At this stage, the child's individual musicality (as an innate potential for learning music) is connected with the musicality of the family, and its subject is precisely the musical language (Zwolińska, 2011). The desired balance (both at this stage and in the later period) of influences from active experience with musical idioms in the family environment and native culture shapes a harmonious whole of interactions, in which musical thinking (audiation) depends on the acquired language competencies of family members (in the areas of musical lexicon and syntax). Although these competencies refer to various cognitive schemes and "linguistic abilities" (of parents, grandparents, siblings), the musical language itself remains, as mentioned earlier, a very dynamic and natural tool for musical thinking (Zwolińska, 2012).

Despite the fact that music and language differ from each other<sup>3</sup>—according to Gordon, the process of children's listening in the family is similar to the process of thinking according to linguistic suggestions: where there is language, there is thinking; where there is music, there is audiation (Gordon, 1997; see also Zwolińska, 2012). Therefore, the competencies arising from the development of audiation in an enculturating family allow the child to intersubjectively experience music as a specific code, which can be used and is something that everyone carries within themselves.

Of course, the issue of musicality in family members and the child themselves remains, but significant (developmental) changes occur precisely based on and through

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<sup>3</sup> It is worth noting the defined distinction between the concepts of language and speech, which is strongly articulated in the analyses of contemporary researchers on child development (see also Filipiak, 2002).

audiation. While audiation encompasses much more than the mere perception of music, it must be acknowledged that the analysis of the process of early musicalization within the family must primarily consider the systematic accumulation of various musical experiences: simple and complex sound structures (pitch, harmonic, rhythmic, or timbral) (*cf.* Sloboda, 2002; Zwolińska, 2010). This opens up the space for describing the educational capital of the family, which is also worth emphasizing.

## Summary

There is much evidence pointing to the role of the family in the process of musicalizing a child (Gordon, 2013; Zhang, 2023). The specific challenges faced by parents often require them to possess specific competencies. According to Gordon, parental influence on the musical personality of the child should involve actions tailored to the developmental order of audiation. In this process, the quality and dynamics of musical enculturation emerge. Its special character emphasizes something beyond merely surrounding the child with music. It refers to enculturation through shared audiation with the child. It concerns the socio-cultural context in the process of not only growing into the native culture of the family environment (Zwolińska, 2013), but also, as Zwolińska points out, in assimilating the music of different cultures and their integration (Zwolińska, 2011). The musicalizing actions discussed in this text stimulate:

- Specific mechanisms of cultural transmission,
- Internalization of new social roles within the environment or in connection with changes in the cultural environment,
- The degree of conscious acceptance of musical culture by the audiating individual,
- The musical thinking of the child in a mutually attuned relationship with the parents.

And on the didactic level, they stimulate:

- The child's tonal-rhythmic activity,
- The development of the ability to differentiate tonal-rhythmic order in mutual performances and musical gestures,
- The initiation of new, imitative musical skills in the child, and finally,
- Interactions between the child and family members through the cultivated musical language (including symbols of musical expression) (Zwolińska, 2013).

This text explains why monitoring the musical competencies of parents themselves is so important. Parents, as the child's first natural teachers, have a real impact on the quality of early music education. Musical enculturation is, in fact, the first educational space for organizing specific practices of musical education within the family. Therefore, the efforts of parents to shape their competencies in this area are also

crucial. The role of external educational institutions (cultural centers, cultural initiatives) proves to be invaluable. In addition to many instrumental and technical skills, the support that can be offered to parents in assessing the child's potential, already at the level of early music education, becomes invaluable. This often explains the social significance of education and the social-cultural-educational support for initiating daily practices of creative child education within the family (Conkling, 2018; Gruhn, 2002; Kołodziejski, 2020; Majzner, 2023; Trzos, 2012; Zhang, 2023; Zwolińska, 2014).

## References

- Bonna, B. (2006). *Rodzina i przedszkole w kształtowaniu umiejętności muzycznych dzieci: Zastosowanie koncepcji Edwina E. Gordona* [Family and kindergarten in the development of children's musical skills: Application of Edwin E. Gordon's concept]. Wydawnictwo Uniwersytetu Kazimierza Wielkiego.
- Bonna, B. (2016). *Zdolności i kompetencje muzyczne uczniów w młodszym wieku szkolnym* [Musical abilities and competences of pupils at a younger school age]. Wydawnictwo Uniwersytetu Kazimierza Wielkiego.
- Brodsky, W., Kessler, Y., Rubinstein, B. S., Ginsborg, J., & Henik, A. (2008). The mental representation of music notation: Notational audiation. *Journal of Experimental Psychology: Human Perception and Performance*, 34(2), 427–443. <https://doi.org/10.1037/0096-1523.34.2.427>
- Chomsky, N. (1977). Nowy przyczynek do teorii idei wrodzonych [A new contribution to the theory of innate ideas]. In B. Stanosz (Ed.), *Lingwistyka i filozofia: Współczesny spór o filozoficzne założenia teorii języka* (pp. 100–170). Państwowe Wydawnictwo Naukowe.
- Clarke, E., Dibben, N., & Pitts, S. (2009). *Music and mind in everyday life*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780198525578.001.0001>
- Conkling, S. W. (2018). Socialization in the family: Implications for music education. *Update: Applications of Research in Music Education*, 36(3), 29–37. <https://doi.org/10.1177/8755123317732969>
- Filipiak, E. (2002). *Konteksty rozwoju aktywności językowej dzieci w wieku wczesnoszkolnym* [Contexts of the development of language activity in children of early school age]. Wydawnictwo Akademii Bydgoskiej im. Kazimierza Wielkiego.
- Gordon, E. E. (1997). *Umuzycznianie niemowląt i małych dzieci: Teoria i wskazówki praktyczne* [Musical education in infants and toddlers: Theory and practical tips]. Wydawnictwo „Zamiast Korepetycji”.

- Gordon, E. E. (1999). *Sekwencje uczenia się w muzyce: Umiejętności, zawartość i motywy: Teoria uczenia się muzyki* [Learning sequences in music: Skills, content and motives: Music learning theory]. Wydawnictwo Uczelniane WSP.
- Gordon, E. E. (2013). *Music learning theory for newborn and young children*. GIA Publications.
- Gordon, E. E., & Woods, D. G. (1999). *Zanurz się w program nauczania muzyki: Działania w kolejności uczenia się: Podręcznik dla nauczycieli* [Dive into the music curriculum: Activities in learning order: A handbook for teachers]. Wydawnictwo Uczelniane WSP.
- Gruhn, W. (2002). Phases and stages in early music learning: A longitudinal study on the development of young children's musical potential. *Music Education Research*, 4(1), 51–71. <https://doi.org/10.1080/14613800220119778>
- Guzy-Steinke, H. (2021). Norma wzajemności w środowisku rodzinnym: Relacje dzieci z rodzicami w kontekście wzajemności [The norm of reciprocity in the family environment: Children's relationships with their parents in the context of reciprocity]. *Wychowanie w Rodzinie*, 25(2), 127–138. <https://doi.org/10.34616/www.2021.2.127.138>
- Hausner, M. D., Chomsky, N., & Fitch, W. T. (2002). The faculty of language: What is it, who has it, and how did it evolve? *Science*, 298(5598), 1569–1579. <https://doi.org/10.1126/science.298.5598.1569>
- Hołówka, T. (1986). *Myślenie potoczne: Heterogeniczność zdrowego rozsądku* [Colloquial thinking: The heterogeneity of common sense]. Państwowy Instytut Wydawniczy.
- Jordan-Decarbo, J., & Nelson, J. A. (2004). Music and early childhood education. In R. Colwell, C. Richardson (Eds.), *The new handbook of research on music teaching and learning: A project of the Music Educators National Conference* (pp. 210–242). Oxford University Press. <https://doi.org/10.1093/oso/9780195138849.003.0016>
- Kamińska, B. (1997). Co wnosi E. E. Gordon do teorii rozwoju muzycznego? [What does E. E. Gordon contribute to the theory of musical development?]. In E. Zwolińska (Ed.), *Sposoby kierowania rozwojem muzycznym dziecka w wieku przedszkolnym i wczesnoszkolnym* (pp. 65–81). Wydawnictwo Uczelniane WSP.
- Kołodziejski, M. (2020). Heterogeniczność myślenia o audiacji w świetle eksploracji naukowego statusu teorii uczenia się muzyki według Edwina Eliasa Gordona [Heterogeneity of thinking about audiation in the light of Edwin Elias Gordon's exploration of the scientific status of music learning theory]. *Edukacja Muzyczna*, 15, 191–218. <https://doi.org/10.16926/em.2020.15.03>
- Kołodziejski, M. (2022). Wybrane refleksje nad audiacją gordonowską [Selected reflections on the Gordon audiation]. *Roczniki Humanistyczne*, 70(12), 278–290. <https://doi.org/10.18290/rh227012.18>

- Kołodziejski, M., & Trzos, P. A. (2013). Środowiskowy wymiar uczenia się muzyki w kontekście rozwoju audiacji [The environmental dimension of music teaching in the context of audiology development]. *Studia Pedagogiczne: Problemy Społeczne, Edukacyjne i Artystyczne*, 22, 163–178.
- Konaszkiewicz, Z., Ławrowska, R., Nowak, B., Sacher, W., Smoleńska-Zielińska, B. (2008). *Standardy edukacji muzycznej* [Music Education Standards]. In A. Białkowski (Ed.), *Standardy edukacji kulturalnej: Materiały do konsultacji środowiskowych* (pp. 101–125). Fundacja Polskiej Rady Muzycznej.
- Kurcz, I. (2000). *Psychologia języka i komunikacji* [Psychology of language and communication]. „Scholar”.
- Langacker, R. (2000). Why a mind is necessary: Conceptualization, grammar and linguistic semantic. In L. Albertazzi (Ed.), *Meaning and cognition: A multidisciplinary approach* (pp. 25–28). J. Benjamins.
- Lewicka, M. (2023). Difficulties of contemporary motherhood. Methodological aspects of maternal research. *Wychowanie w Rodzinie*, 30(2), 57–78. <https://doi.org/10.61905/wwr/176373>
- Majzner, R. (2023). Rodzina jako przestrzeń rozpoznawania i rozwijania uzdolnień muzycznych dzieci [Family as a space for recognizing and developing children's musical talents]. *Wychowanie w Rodzinie*, 30(3), 237–252. <https://doi.org/10.61905/wwr/176970>
- Marody, M. (1987). *Technologie intelektu: Językowe determinanty wiedzy potocznej i ludzkiego działania* [Technologies of the intellect: Linguistic determinants of common knowledge and human action]. Państwowe Wydawnictwo Naukowe.
- Miklaszewski, K. (1990). Uczenie się muzyki [Learning music]. In M. Manturzevska & H. Kotarska (Eds.), *Wybrane zagadnienia z psychologii muzyki* (pp. 189–216). Wydawnictwa Szkolne i Pedagogiczne.
- Milewski, T. (1969). *Językoznawstwo* [Linguistics]. Państwowe Wydawnictwo Naukowe.
- Nudds, M., & O'Callaghan, C. (Eds.). (2009). *Sounds and perception: New philosophical essays*. Oxford University Press.
- Schütz, A. (2008). *O wielości światów: Szkice z socjologii fenomenologicznej* [On the multiplicity of worlds: Sketches in phenomenological sociology]. Nomos.
- Sloboda, J. A. (2002). *Umysł muzyczny: Poznawcza psychologia muzyki* [The musical mind: The cognitive psychology of music]. Akademia Muzyczna im. F. Chopina.
- Suzuki, S. (2003). *Karmieni miłością: Podstawy kształcenia talentu* [Nourished by love: The foundations of talent development]. Centrum Rozwoju Uzdolnień.
- Trzos, P. A. (2012). *Codzienność we wczesnej edukacji muzycznej* [Everyday life in early music education]. Wydawnictwo Uniwersytetu Kazimierza Wielkiego.

- Trzos, P. A. (2018). *Umiejętności audiacyjne uczniów na etapie edukacji wczesnoszkolnej* [Students' audiation skills at the early childhood education stage]. Wydawnictwo Uniwersytetu Kazimierza Wielkiego.
- Tymoczko, D. (2010). *A geometry of music: Harmony and counterpoint in the extended common practice*. Oxford University Press.
- Weiner, A. (2010). *Kompetencje muzyczne dzieci w młodszym wieku szkolnym: Determinanty, zależności, perspektywy rozwoju* [Musical competences of children at a younger school age: Determinants, dependencies, development prospects]. Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej.
- Whorf, B. L. (2002). *Język, myśl i rzeczywistość* [Language, thought, and reality]. Wydawnictwo KR.
- Zhang, M. (2023). Analysis and research on the role of family music education in children's music education. *Journal of Intelligence and Knowledge Engineering*, 1(4), 32–35. <https://doi.org/10.62517/jike.202304408>
- Zwolińska, E. A. (Ed.). (2000). *Podstawy teorii uczenia się muzyki według Edwina E. Gordona: Materiały z III Seminarium Gordonowskiego, Zamość 2–12 sierpnia 1998 r.* [Fundamentals of the theory of music learning according to Edwin E. Gordon: Materials from the III Gordon Seminar, Zamość 2–12 August 1998]. Wydawnictwo Uczelniane WSP.
- Zwolińska, E. A. (2004). *Naucz swoje dziecko audiować* [Teach your child to audio]. Kreska.
- Zwolińska, E. A. (2010). *Efektywność dydaktyczna zajęć korekcyjno-wyrównawczych* [Didactic effectiveness of corrective and compensatory classes]. Wydawnictwo Uniwersytetu Kazimierza Wielkiego.
- Zwolińska, E. A. (2011). *Audiacja: Studium teorii uczenia się muzyki Edwina E. Gordona* [Audition: A study of Edwin E. Gordon's theory of music learning]. Wydawnictwo Uniwersytetu Kazimierza Wielkiego.
- Zwolińska, E. A. (2012). *Pomiar i wartościowanie w muzyce* [Measurement and evaluation in music]. Wydawnictwo Uniwersytetu Kazimierza Wielkiego.
- Zwolińska, E. A. (2013). *Strategia rozwoju audiacji w muzycznej edukacji* [The strategy for developing audiation in music education]. Wydawnictwo Uniwersytetu Kazimierza Wielkiego.
- Zwolińska, E. A. (2014). *Sposoby audiacji. O myśleniu muzycznym* [Methods of audiation. On musical thinking]. Bydgoszcz: Wydawnictwo Uniwersytetu Kazimierza Wielkiego.
- Zwolińska, E. A. (2015). *Spoleczne znaczenie muzyki* [The social significance of music]. Wydawnictwo Uniwersytetu Kazimierza Wielkiego.