

33 In this context, Hertzog (2024) notes that current global trends in education are moving toward a
34 holistic approach that emphasizes the early identification not only of academic giftedness, but also of
35 creative and leadership potential in the earliest years of life. Accordingly, preschool educators, as direct
36 practitioners in early childhood education and care, play a crucial role in recognizing early signs of
37 giftedness and in providing a stimulating, individualized, and differentiated educational environment.
38 Vygotsky (1978) highlights the importance of social interaction and adult guidance in child development,
39 while Tomlinson (2001) stresses that a differentiated approach enables each child to develop in
40 accordance with their abilities and individual needs.

41 Empirical studies show that educators' attitudes and perceptions directly influence their ability to
42 identify and effectively support gifted children (Callahan & Müller, 2023; Gubbins & Haeck, 2024).
43 Contemporary conceptions of giftedness also emphasize the need for an integrated and comprehensive
44 approach from the earliest stages of development (Subotnik et al., 2025). Similar challenges related to
45 educators' competencies have been identified in other international educational contexts, making this
46 topic relevant beyond national boundaries.

47 Professional development through structured training, mentoring support, and continuous learning
48 significantly increases educators' ability to recognize and support gifted children (Li & Wong, 2023).
49 However, empirical evidence indicates that insufficient systemic support and limited access to specialized
50 training often hinder effective practice.

51 Although international research highlights the role of educators in early identification, there is
52 still a lack of sufficient empirical data in the Republic of North Macedonia regarding educators' self-
53 perceived competence and readiness for differentiated practice. This paper contributes to the existing
54 body of scientific literature by presenting data on educators' attitudes and competencies in a context that
55 has so far been insufficiently explored. The aim of this study is to examine educators' attitudes toward
56 their competencies, their perceptions of professional support, and their need for continuous professional
57 development. The research questions addressed in this study are:

- 58 1. How do educators assess their own competence for working with gifted children?
- 59 2. What are their perceptions of available professional support and specialized training?
- 60 3. Which aspects of professional development are considered priority for improving support for
61 gifted children?

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63 **RESEARCH METHODOLOGY**

64 This study employs a mixed-methods approach, combining quantitative and qualitative research
65 in order to gain a comprehensive understanding of educators' attitudes and perceptions regarding work
66 with gifted children.

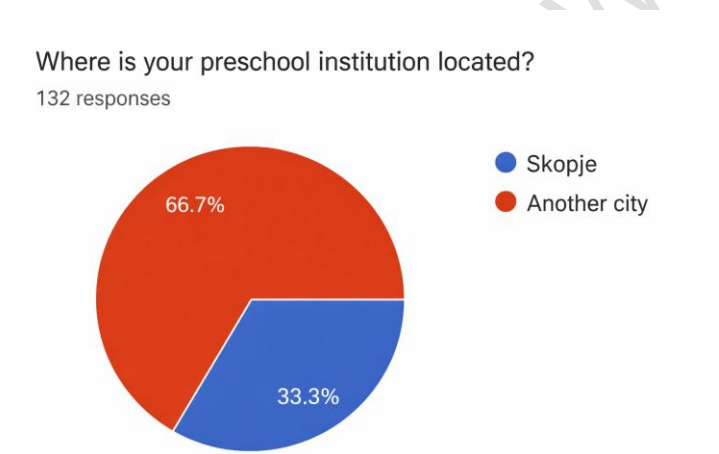
67 The quantitative component was conducted through a standardized survey involving 132
68 preschool educators and collected data on their self-perceived competence, the professional support
69 available to them, and their need for continuous training. The study was conducted in accordance with

70 ethical principles, and participation was voluntary and anonymous. The data show that 66% of the
71 surveyed educators work in preschool institutions in the city of Skopje, while 33.3% work in other cities
72 in the Republic of North Macedonia.

73 The qualitative component included semi-structured interviews with a subset of the surveyed
74 educators, with the aim of exploring their practical experiences, motivations, and the barriers they face
75 when supporting gifted children.

76 The combination of quantitative and qualitative methods makes it possible to identify general
77 trends and dominant attitudes through survey data, while also providing a deeper understanding of
78 individual experiences, perceptions, and challenges through interviews. This methodological approach
79 offers a comprehensive overview of the research problem and provides a solid basis for formulating
80 relevant educational policies and designing effective professional development and support programs for
81 educators working with gifted children.

82 **Graph 1: Location of the preschool institution (Skopje and other cities in North Macedonia)**



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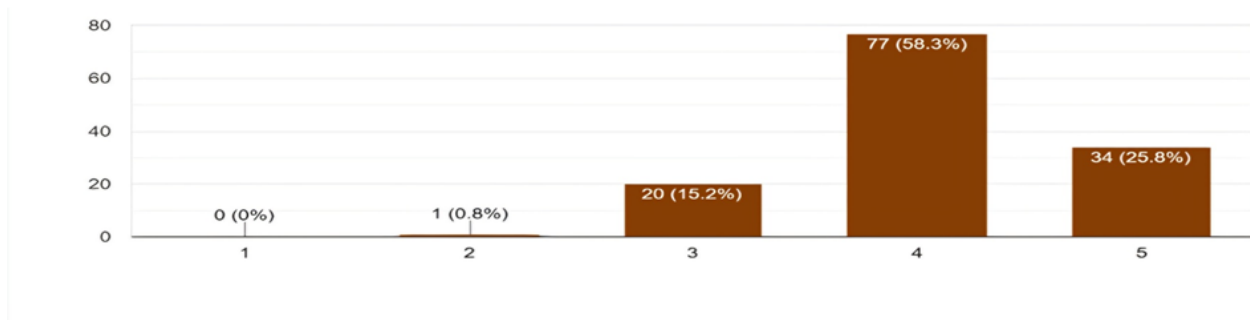
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88 **RESULTS AND DISCUSSION**

89 **Graph 2: Recognition of characteristics of gifted children within the educational group**

I am able to recognize the characteristics of gifted children in my group

132 responses



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91 The analysis of the data on educators' ability to identify giftedness reveals a notable gap between
92 professional awareness and practical confidence. The results show that 25.8% of respondents are fully
93 confident in their ability to recognize the characteristics of gifted children, while the largest proportion,
94 58.3%, report being only partially confident. These findings suggest a relatively high level of self-
95 perceived competence, but they also indicate that most educators experience some degree of uncertainty
96 in everyday practice.

97 This partial confidence is consistent with recent research by Pfeiffer & Shaughnessy (2024),
98 which emphasizes that, in the absence of clearly defined national protocols and access to modern
99 diagnostic tools, practitioners often have to rely on intuition rather than on scientifically grounded
100 identification criteria. Such an approach increases the risk of overlooking specific forms of giftedness,
101 especially in children whose talents are expressed not through traditional academic achievement, but
102 through creativity or leadership.

103 Furthermore, the fact that 15.2% of respondents are unsure of their ability, and that 0.8% are
104 unable to assess it, confirms the need for the systematic development of professional competencies. These
105 results are consistent with international findings reported by Callahan & Müller (2023), who note that
106 early childhood educators face distinctive challenges when applying differentiated approaches to the
107 developmental characteristics and talents of gifted children.

108 Uncertainty in self-perception directly affects the quality of early identification and,
109 consequently, the possibility of timely individualization of the educational process. These findings
110 highlight the need for specialized training, continuous mentoring support, and access to professional
111 literature in order to transform partial confidence into stable professional competence and enable every
112 gifted child to reach their full potential.

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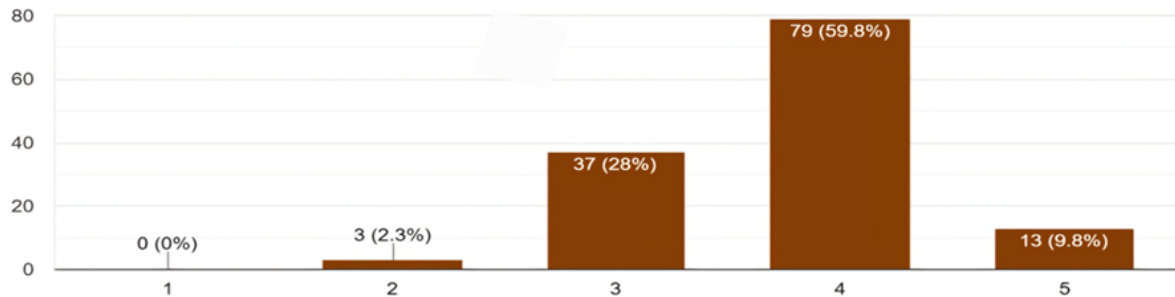
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117 **Graph 3: Educators' self-assessment of knowledge regarding models and theories of giftedness**

I am able to adapt existing activities to meet the specific needs of gifted children (differentiation)

132 responses



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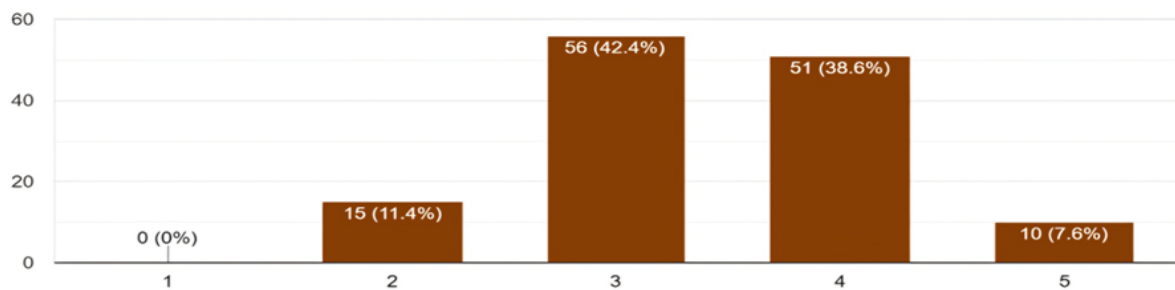
119 The data were obtained through a self-assessment scale on which educators evaluated their level
120 of theoretical knowledge of different models and theories of giftedness. The analysis shows that only a
121 small proportion of respondents, 6.8%, are fully confident in their knowledge, while the largest share,
122 42.4%, report partial confidence. At the same time, a substantial number of educators adopt a neutral
123 position (27%) or believe that they do not possess sufficient theoretical knowledge (6%).

124 These results indicate the need for the systematic improvement of educators' theoretical
125 preparedness through continuous professional education. Limited understanding of different models and
126 theories may negatively affect educators' ability to translate theory into practice and to develop
127 individualized strategies for supporting gifted children (Gubbins & Haeck, 2024; Subotnik et al., 2025).
128 These findings underline the importance of continuous training and professional development, with a
129 particular focus on strengthening theoretical foundations in the field of giftedness.

130 **Graph 4: Educators' preparedness for working with gifted children based on their pedagogical**
131 **education**

My pedagogical education adequately prepared me to work with gifted children

132 responses



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133 The graph presents educators' self-perceptions of whether their pedagogical education adequately
134 prepared them to work with gifted children, based on 132 responses. The data show that the largest
135 proportion of respondents, 42.4% or 56 educators, assessed their preparation as moderate. This finding
136 points to the presence of basic theoretical preparation, but also to a lack of full confidence in addressing
137 the specific challenges associated with working with gifted children in practice.

138 Additionally, 38.6% of respondents, or 51 educators, believe that their education provided good
139 preparation, reflecting a positive, though not maximal, level of professional confidence. In contrast,
140 11.4% or 15 educators assessed their preparation as insufficient, while only 7.6% or 10 educators feel
141 fully prepared. Importantly, none of the respondents rated their preparation as 'very insufficient,'
142 suggesting that educators do not perceive themselves as completely unprepared, but rather as only
143 partially qualified.

144 These empirical data directly support the argument of Sánchez-Escobedo & Hollingworth (2025),
145 who maintain that competencies for working with gifted children should become an integral part of
146 mandatory coursework in teacher education programs. The authors emphasize that such content should
147 not be optional or elective, but should instead be included in core study programs. The absence of this
148 specific preparation during formal studies creates a long-term competency gap and forces practitioners to
149 rely on additional training that often serves only as an ad hoc solution.

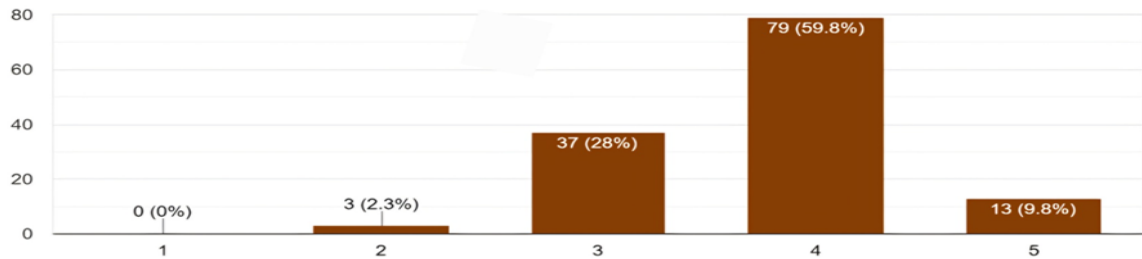
150 The findings are fully consistent with previous international research (Gubbins & Haeck, 2024;
151 Callahan & Müller, 2023), which shows that educators often possess basic, but insufficient, knowledge
152 and skills for providing effective support to gifted children. Studies by Li & Wong (2023) indicate that
153 limited theoretical and practical preparation contributes to educators' feelings of inadequacy when
154 responding to specific needs, which corresponds to the very low percentage of fully prepared respondents
155 in this study, 7.6%.

156 Similarly, Subotnik, Olszewski-Kubilius, & Worrell (2025) emphasize that high-quality support
157 for gifted children requires continuous and specialized professional development that enables the
158 application of advanced models and theories. The importance of systemic support and mentoring,
159 highlighted in international literature, further underscores the need for ongoing professional development.
160 The conclusions of this study confirm recommendations that only through the integration of theoretical
161 preparation, practical training, and mentoring support can educators effectively identify, stimulate, and
162 support gifted children from the earliest stages of preschool education.

163 **Graph 5: Educators' ability to differentiate activities for gifted children**

I am able to adapt existing activities to meet the specific needs of gifted children (differentiation)

132 responses



164

165 The data show that educators are generally confident in their ability to adapt existing activities to
166 the specific needs of gifted children. Specifically, 10% of respondents fully agree with this statement,
167 while 60% agree, indicating that the majority of educators, 70%, perceive themselves as having this
168 competence.

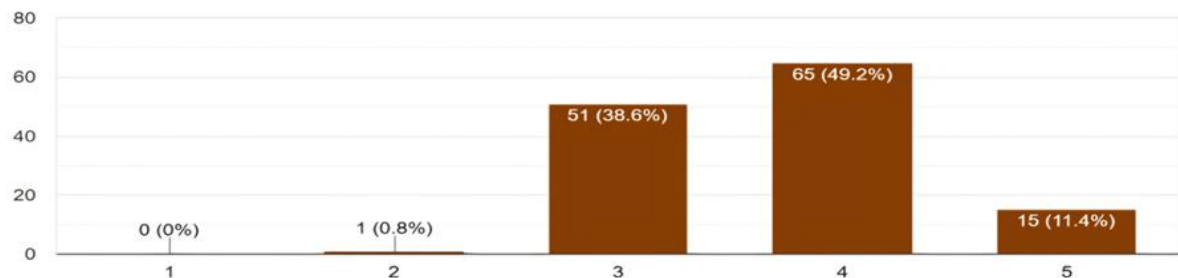
169 At the same time, 28% of educators adopt a neutral stance, suggesting uncertainty or a need for
170 additional clarification and practical experience in applying differentiation. A small percentage, 3%,
171 disagree that they can adapt activities, pointing to individual weaknesses or to a lack of support and
172 knowledge.

173 These results suggest a relatively good level of practical differentiation skills, while at the same
174 time highlighting the need for additional training, professional seminars, and practical examples that
175 would strengthen the implementation of differentiation in everyday educational work. Aligning
176 theoretical knowledge with practical application is essential for effectively supporting gifted children and
177 for developing individualized strategies.

178 **Graph 6: Educators' self-perception of competence in creating a stimulating and inclusive**
179 **environment for gifted children**

I feel competent to create a stimulating and inclusive environment for gifted children

132 responses



180

181 The majority of educators, 60%, are confident that they can create a stimulating and inclusive
182 environment for gifted children, while 39% remain neutral and 1% disagree. The results indicate a certain
183 level of competence, but they also demonstrate the need for additional support and practical strengthening
184 of these skills.

185 The analysis of data from Graphs 5 and 6 reveals an interesting discrepancy: although educators
186 previously assessed their preparation as moderate, they report relatively high confidence in practical
187 work. As many as 70% of respondents state that they can successfully adapt activities, while 60%
188 consider themselves capable of creating a stimulating environment for gifted children.

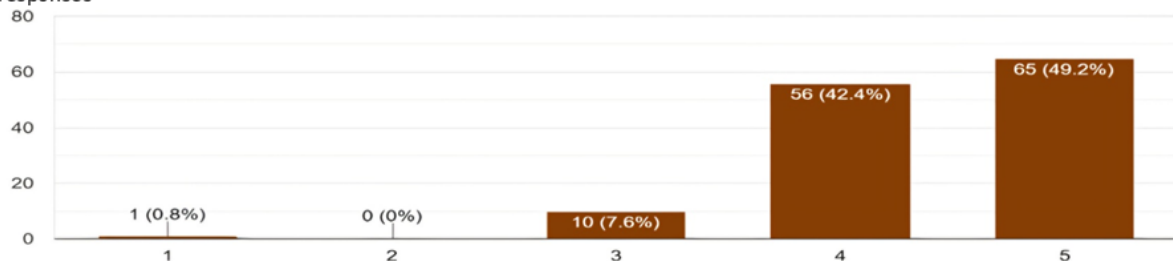
189 This high level of self-perception is important because it reflects educators' willingness to
190 experiment in the classroom. It also aligns with the recent concept of 'inclusive excellence' (Kwan & Lau,
191 2025), which redefines differentiation not merely as extra work for a small number of talented children,
192 but as a tool for raising the quality of learning for the entire group. By introducing higher-level cognitive
193 challenges, educators create an environment in which every child can develop their potential to the fullest.

194 However, the data also require careful interpretation. The fact that a substantial proportion of
195 educators, between 28% and 39%, remain neutral suggests a level of uncertainty that should not be
196 overlooked. This gray zone indicates that many practitioners lack concrete tools and mentoring guidance.
197 Rather than only general training, educators need clear examples and strategies that can be applied
198 immediately in daily practice. Without such practical support, there is a risk that differentiation will
199 remain largely theoretical, without a real impact on the development of gifted children.

200 **Graph 7: Need for additional training and knowledge for more effective work with gifted children**

I need additional training and knowledge to work more effectively with
gifted children

132 responses



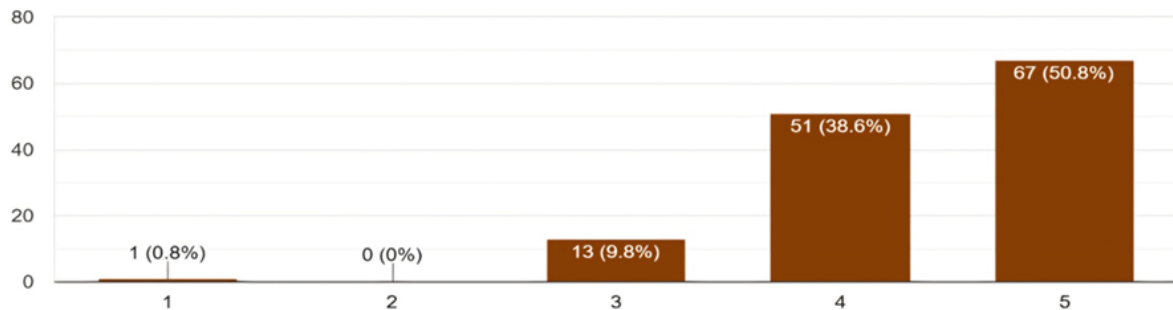
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202 The results show that a large proportion of educators recognize the need for additional training
203 and knowledge in order to work more effectively with gifted children. Specifically, 49% fully agree and
204 42% agree with this statement, meaning that 91% of respondents express this need. Only 8% are neutral,
205 while 1% believe that additional knowledge is unnecessary. These data clearly indicate a high level of
206 awareness among educators of the importance of continuous professional education and competency
207 development for work with gifted children.

208

209 **Graph 8: Educators' perception of the importance of special support and attention for gifted**
210 **children**

I believe it is important for gifted children to receive special attention
and support in preschool institutions

132 responses



211

212 The results indicate that most educators recognize the importance of providing special support
213 and attention to gifted children in preschool institutions. Specifically, 51% fully agree and 39% agree
214 with this statement, meaning that 90% of respondents consider such support important. Only 10% adopt a
215 neutral stance, while just 1% believe it is unimportant. These data highlight educators' awareness of the
216 need for an individualized approach and sustained support for the development of gifted children.

217 These findings are consistent with the theoretical concepts of Renzulli (1978) and Gagné (2009),
218 which emphasize that transforming natural abilities into developed competencies requires specific
219 educational strategies and a stimulating environment. Contemporary research also confirms that
220 pedagogical approaches involving focused attention to gifted children directly enhance their motivation,
221 creativity, and social skills (Kwan & Lau, 2025; Hertzog, 2024).

222 CONCLUSION

223 The study showed that preschool educators in the Republic of North Macedonia recognize the
224 importance of their role in identifying and supporting gifted children, but that most perceive their
225 competence as moderate or insufficient. Despite their experience and strong motivation to contribute to
226 children's development, additional training, practical experience, and mentoring support are needed to
227 strengthen self-confidence and improve effectiveness in practice.

228 The findings highlight the need for systemic interventions, including specialized and practice-
229 oriented training, continuous mentoring, access to resources, and structured programs for working with
230 gifted children. The use of individualized strategies, differentiated activities, and stimulating and
231 inclusive environments is essential for developing the potential of gifted children. Overall, investment in
232 professional development and systemic support will strengthen educators' competencies and enable the
233 comprehensive and effective development of all children, including those with pronounced giftedness

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