Self-Evaluation of Speech and Language Therapists on their Competence in Cooperation with Parents in Slovenia and North Macedonia

Jerneja Novšak Brce*, Ingrid Žolgar2 and Damjana Kogovšek2

Based on the analysis of the available literature, the competence of cooperation with parents can be defined as a construct of knowledge, skills, and attitudes that enables speech and language therapists to collaborate successfully with parents of children in therapy.

This study aims to examine how speech and language therapists from Slovenia and North Macedonia assess their knowledge and skills necessary for cooperation with parents and what their attitudes are in general regarding the involvement of parents in speech and language therapy.

For the purpose of the study, a questionnaire was developed to measure the competence of cooperation between speech and language therapists and parents in a sample of 110 speech and language therapists, including 62 speech and language therapists from Slovenia and 48 from North Macedonia.

The results show that there were differences between Slovenian and North Macedonian speech and language therapists in self-assessed attitudes towards parental involvement but no differences in the domain of knowledge and skills. The interaction of country and years of work experience is significant for the knowledge domain. Attitudes about cooperation with parents are not affected by years of work experience, area of work, or additional professional training; only the country where the SLTs work has an impact. The competence of collaboration between speech and language therapists and parents varies between the two countries, but there is space for improvement in each domain. The findings of this study may provide a starting point for further research on the competence of cooperation between speech and language therapists and parents.

Keywords: cooperation with parents, professional characteristics, speech and language therapists, knowledge, skills, attitudes

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Samoocena logopedov o lastni usposobljenosti za sodelovanje s starši v Sloveniji in Severni Makedoniji

Jerneja Novšak Brce, Ingrid Žolgar in Damjana Kogovšek

Na podlagi analize dostopne literature lahko kompetenco sodelovanja s starši opredelimo kot konstrukt znanja, spremnosti in stališč, ki logopedom omogoča uspešno sodelovanje s starši otrok v terapiji. Namen te študije je ugotoviti, kako logopedi iz Slovenije in Severne Makedonije ocenjujejo svoje znanje in spremnosti, potrebne za sodelovanje s starši, ter kakšna so njihova splošna stališča do vključevanja staršev v logopedsko terapijo. Za namen študije je bil razvit vprašalnik za merjenje kompetenc sodelovanja med logopedi in starši na vzorcu 110 logopedov, od tega 62 logopedov iz Slovenije in 48 iz Severne Makedonije. Izsledki kažejo, da so med slovenskimi in severnomakedonskimi logopedi obstajale razlike v samoocenjenih stališčih do sodelovanja staršev, ni pa bilo razlik na področjih znanja in spremnosti. Interakcija države in števila let delovnih izkušenj je pomembna za področje znanja. Na stališča o sodelovanju s starši ne vpliva število let delovnih izkušenj, področje dela ali dodatno strokovno usposabljanje; vpliva le država, v kateri logopedi delajo. Usposobljenost za sodelovanje med logopedi in starši se med državama razlikuje, vendar so na vsakem področju še možnosti za izboljšave. Ugotovitve te študije so lahko izhodišče za nadaljnje raziskave o kompetenci sodelovanja med logopedi in starši.

Ključne besede: sodelovanje s starši, poklicne značilnosti, logopedi, znanje, spremnosti, stališča
Introduction

In speech and language therapy and other professional fields, relationships between professionals and parents and families have changed in content and form over the previous five decades (Hanna & Rodger, 2002; Watts Pappas & McLeod, 2009). Various models of professional attitudes toward parents have evolved and been added to practice as parents have been assigned an increasingly important role in planning a therapeutic intervention (Hanna & Rodger, 2002). Most authors (Buckley, 2003; Dale, 1996; Hornby, 2000, 2011; Watts Pappas & McLeod, 2009) define the relationship between parents and professionals using several models that fall under the compensatory approach in which parents play a secondary role, the transitional approach in which knowledge and skills are transferred to parents, and the cooperative approach with the interaction between parents and professionals.

As Thomas Rauschenbach et al. (2004) argue, the family is the first place where children are educated and the most important place in their early childhood; children's educational processes are shaped and influenced by the family (see Loch, 2016). Therefore, the active participation of parents in the treatment of their children brings a number of positive effects. In treatment and learning processes, speech and language therapists use their knowledge and experience to help parents understand the child's behaviour and teach them various techniques that promote the child's development and make learning more effective (Ross, 2018; Watts Pappas and McLeod, 2009). Involving parents in treatment is a method that increases the effectiveness of treatments and reduces the amount of time a speech and language therapist spends with a child (Watts Pappas and McLeod, 2009). Infants and toddlers learn best through everyday experiences and interactions with familiar people and in familiar situations (Ross, 2018).

As Klatte, Hardling, and Roulstone (2019) note, speech and language therapists play an important role in supporting parents to engage in therapy and help their children. Speech and language therapists also have an important influence on how engaged and involved parents are, as they must have the appropriate knowledge on how to approach and encourage parents. Gibbard and Smith (2016) indicate that speech and language therapists report that they find parent involvement to be the most difficult aspect of speech and language therapy. Studies by Dale (1996), Hornby (2011), and Shartrand et al. (1997) confirm the importance of cooperation between parents and professionals and emphasise that the competence to collaborate with parents is very important for building this relationship. Based on the analysis of the available literature, competence in working with parents can be defined as a construct of knowledge.
(knowledge about strategies and techniques for engaging parents in therapy) (Buckley, 2003; Hornby, 2011; Shartrand et al., 1997), knowledge of barriers to participation (Hornby, 2011), knowledge of working with parents (Buckley, 2003; Warren et al., 2011), knowledge of family dynamics (Hanna & Rodger, 2002; Hornby, 2011; Watts Pappas & McLeod, 2009)), skills (communication and active listening skills (Buckley, 2003; Hornby, 2011; Shartrand et al., 1997; Warren et al., 2011; Wubbels et al., 2006)), cooperation skills (Buckley, 2003; Bayat, 2012; Robben, 2012)), attitudes toward parents (Hornby, 2011; Gestwicki, 2016) and attitudes toward working with parents (Hornby, 2011; Gestwicki, 2016)) that enable the speech and language therapist to successfully cooperate with children’s parents in therapy.

Watts Pappas, McAllister, and McLeod (2016) record various levels of parental involvement (from informing through cooperation to support to control). Knowledge of the diverse ways to involve parents in therapy, combined with knowledge about families, provides professionals with the opportunity to engage parents in activities that are most appropriate for them. Knowledge about families and how families function (Hanna & Rodger, 2002; Iversen et al., 2003; Hornby, 2011; Ross, 2018; Watts Pappas & McLeod, 2009) and knowledge about strategies and techniques for effectively engaging family members in therapy (Hornby, 2011; Watts Pappas & McLeod, 2009) are most frequently cited in the review of the literature on the knowledge needed for effective cooperation.

In addition to defining knowledge that promotes cooperation with parents, Hornby (2011), Watts Pappas et al. (2008), and Watts Pappas and McLeod (2009) emphasise understanding the barriers to collaborating with parents. This understanding can help professionals overcome barriers and build successful cooperation. Building a cooperative, respectful partnership between the professional and parents (one that assumes parents know their child best) also requires knowledge of collaborating with parents that can strengthen parent involvement skills (Buckley, 2003; Warren et al., 2011). It is critical that parents recognise their own role in promoting the development of their child’s language skills and develop a sense of competence and self-worth in the process of treatment (Buckley, 2003).

Even when professionals have the knowledge necessary to collaborate with parents, it does not necessarily lead to cooperation, let alone successful cooperation. Skills are important for putting knowledge into action, that is, knowing how to do something.

The skills that professionals need to perform their tasks successfully represent the implementation part of their professional qualifications. Hornby
(2011), Shartrand et al. (1997), and Warren et al. (2011) addressed the competence to collaborate with parents emphasising communication as the most important skill for working effectively with parents. Hornby (2011) emphasises that the quality of a relationship depends on the quality of communication, as it can also be a prerequisite for the quality of relationships during cooperation. Wilson (2016) confirms that parents value communication skills and active listening skills as a starting point for building and achieving successful cooperation between parents and professionals.

Hornby (2011), Ross (2018), and Wubbels et al. (2006) have identified communication skills that should be mastered by all educational professionals. They should be proactive and able to create a communicative partnership when communicating with parents. Wubbels et al. (2006) focus on the emotional part of communication skills, specifically empathy and patience, confidence and trust, active listening, and knowledge of cooperative strategies. Buckley (2003), Hornby (2011), and Watts Pappas and McLeod (2009) also emphasise active listening and conversational techniques as key elements of communication skills.

The influence of speech and language therapists’ attitudes should also be included in the discussion of competence in working with parents, as they are a significant factor in this competence. Hornby (2011) and Gestwicki (2016) considered attitudes from two perspectives: attitudes toward parents and attitudes toward cooperation with parents. Attitudes toward parents are further divided into those that hinder cooperation and those that strengthen cooperation. Hornby (2011) points out that parents are most often treated as a problem, which is especially highlighted when parents have different attitudes than professionals. The most common attitudes of professionals that are also barriers to cooperation are: ‘parents who need help are too sensitive’, ‘parents are less competent than a professional’, ‘parents are to blame for their children’s problems’, and ‘parents need to be treated professionally’.

As Hornby (2000) points out, it is important to note that both professionals and parents are experts: teachers in relation to education and parents in relation to their own children (see Šteh & Kalin, 2018). Based on attitudes that parents are less valuable, it is understandable that there is no room for joint planning of goals and actions. If professionals consider themselves more important in this relationship, it is unlikely that they will attempt to build a relationship that leads to cooperation. It is also unlikely that sharing of responsibilities will occur, which is a prerequisite for cooperation (Hornby, 2011).

Attitudes that contribute to interaction in everyday situations may also help to improve cooperation between speech and language therapists and parents. The tendencies of professionals that contribute to this relationship are
flexibility, willingness to accept other ideas, empathy, and sincerity (Garmon, 2004; Hornby, 2011). The formation of professionals’ attitudes is influenced by several factors, such as level of education and lack of continuous professional training in working with parents (Strgar, 2004). Training of professionals should help develop sensitivity to attitudes that strengthen cooperation with parents, but Garmon (2004) notes that training benefits only those individuals who have a good disposition toward such a relationship.

The research and theoretical background emphasises the importance of cooperation with parents of children in speech and language therapy, as a discrepancy has been found between the desired and actual situation in the area of cooperation between speech and language therapists and parents (Dehnhardt & Ritterfeld, 1998; Watts Pappas et al., 2008; Watts Pappas & McLeod, 2009). The reason for this discrepancy is primarily due to the lack of competencies of speech and language therapists in this area (Dehnhardt & Ritterfeld, 1998). Therefore, examining speech and language therapists’ self-assessment of their competence in working with parents is necessary.

Present study

Nowadays, parents are increasingly considered to be an invaluable source of information about their children since they spend most of their time with them. They are one of the sources of information that speech and language therapists use in the treatment process, along with information they gather through their own observation of the child’s development (Buckley, 2003). In the treatment process, speech and language therapists use their knowledge and experience to help parents understand their child’s behaviour and teach them various techniques and activities to help them act in ways that promote the child’s development and make learning more effective (Ross, 2018; Watts Pappas & McLeod, 2009).

Speech and language therapy education in Europe is diverse and constantly evolving and is at different stages of development in different countries. The two countries, Slovenia and Macedonia, which are the focus of this paper, are interesting to study because they share some common historical, cultural, and linguistic characteristics and have a strong mutual influence on various aspects of speech and language therapy education.

The beginning of organised speech and language therapy services in Slovenia dates back to 1942 and in Macedonia to 1950 (Panova, 2012; Novšak Brce & Kogovšek, 2019). During this period, the first speech and language therapy departments and clinics were opened in both countries. The need for treatment
of children with communication, speech, language, and hearing problems grew. From the mid-1980s, study programmes were established in both countries to train future speech and language therapists. Because of the common past, some similarities and differences in the education of speech and language therapists can be identified. Both Slovenian and Macedonian speech and language therapists work in health care institutions, educational institutions, specialised hearing and speech rehabilitation centres, and in private practice (DlogS, 2021a; Georgieva, 2010).

Although speech and language therapy education in Macedonia started a few years later (Georgieva, 2010) than in Slovenia (Omerza, 2002), the formalisation of speech and language therapists’ education and the common past have ensured that there is continuous cooperation between the two countries. In addition to the implementation of various projects, students from Macedonia are also enrolled at the Slovenian university, where speech and language therapists are trained. This led us to investigate the importance of collaboration between parents and speech and language therapists in both countries. The present study can increase knowledge about the importance of collaboration between parents and speech and language therapists (SLTs) in Slovenia and Macedonia and fill a gap in the literature on this topic.

Therefore, the aim of this study is to examine how SLTs assess their knowledge and the skills that they need for cooperation with parents and what their attitudes are in general regarding the involvement of parents in speech and language therapy. The specific research questions are as follows: (a) to determine whether the self-assessment of competence of cooperation with parents differs between speech and language therapists from Slovenia and North Macedonia, (b) to examine the influence of variables of professional characteristics of SLTs (i.e., years of work experience, area of work and additional professional training on three composites scores of cooperation with parents (knowledge, skills, attitudes)) separately for each country.

**Methods**

**Participants**

One hundred and ten speech and language therapists participated in the study, of which 62 (56.4%) were SLTs practising in Slovenia and 48 (43.6%) in North Macedonia. Among SLTs from both countries, 61 (98.4%) females predominated from Slovenia and 46 (95.8%) from North Macedonia. Only three
female SLTs participated in the study: one (1.6%) from Slovenia and two (4.2%) from North Macedonia.

SLTs from representative institutions (health centres, kindergartens, schools, specialised centres or centres for people with special needs) from both countries participated in the study.

Table 1 shows the data on the age of the participants, the years of work experience, the field of work or employment sector, and the frequency of participation in additional professional training events on working with parents in the last three years for SLTs from Slovenia and North Macedonia. In both countries, the sample included SLTs with fewer years of work experience ($Mdn = 5.0$, $IQR = 2.6$ to 17.0). Respondents did not differ significantly by years of work experience ($U = 1168.5$, $Z = -1.931$, $p = .053$), by the number of additional professional training sessions for working with parents ($\chi^2(2) = 0.613$, $p = .736$) and by employment system ($\chi^2(1) = 0.188$, $p = .664$). Since there are no differences in the independent variables between these two samples, this indicates that these two samples are relatively homogeneous.

Table 1
Participants’ demographic characteristics

<table>
<thead>
<tr>
<th></th>
<th>Slovenia ($n = 62$)</th>
<th>North Macedonia ($n = 48$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>38.3 (11.7)</td>
<td>32.4 (9.1)</td>
</tr>
<tr>
<td>Median (Q1-Q3)</td>
<td>34 (28.0-48.3)</td>
<td>29.5 (26.0-38.0)</td>
</tr>
<tr>
<td>Range (in years; min-max)</td>
<td>25-61</td>
<td>22-54</td>
</tr>
<tr>
<td>Years of work experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fewer ($\leq 5$;11 years), n (%)</td>
<td>29 (46.8)</td>
<td>29 (60.4)</td>
</tr>
<tr>
<td>More ($\geq 6$;0 years), n (%)</td>
<td>33 (53.2)</td>
<td>19 (39.6)</td>
</tr>
<tr>
<td>System of employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education, n (%)</td>
<td>31 (50.0)</td>
<td>22 (45.8)</td>
</tr>
<tr>
<td>Health care, n (%)</td>
<td>31 (50.0)</td>
<td>26 (52.2)</td>
</tr>
<tr>
<td>Additional professional training sessions on cooperation with parents in the last three years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None, n (%)</td>
<td>39 (62.9)</td>
<td>32 (66.7)</td>
</tr>
<tr>
<td>One or more, n (%)</td>
<td>23 (37.1)</td>
<td>16 (33.3)</td>
</tr>
</tbody>
</table>
Instrument

For research purposes, a questionnaire was developed for self-assessment of the competence of cooperation between parents and SLTs. Based on the literature, the competence of cooperation was first defined as a construct of knowledge, skills, and attitudes that enable or hinder SLTs’ effective cooperation with parents of children involved in treatment. Key behaviours (e.g., active listening) and representative examples (e.g., making eye contact when talking to parents) were then designed. The instrument was developed in both languages, Slovenian for Slovenian speech and language therapists and Macedonian for speech and language therapists from North Macedonia. The questionnaire contains 32 items related to the following domains: knowledge (6 items): knowledge of strategies and techniques for effective involvement of parents in treatment, knowledge of barriers to cooperation, and knowledge of family dynamics (e.g., I can assess whether the parents are able to do the exercises with the child independently at home); skills (10 items): communication and active listening skills, and cooperation skills (e.g., I can communicate well with parents, even if they have a different opinion than I do); attitudes (16 items): attitudes toward cooperation with parents, attitudes that hinder cooperation with parents, and attitudes that lead to successful cooperation with parents (e.g., I think that parents are to blame for most of a child’s problems).

The SLTs responded to each item using a five-point rating scale (1 - not applicable to me at all, 2 - not applicable to me, 3 - neither applicable nor invalid, 4 – applicable to me, 5 - completely applicable to me).

To determine reliability as the internal consistency of the questionnaire, Cronbach’s α-reliability coefficient was calculated. The internal consistency of the individual areas was tested with Cronbach’s alpha: Knowledge (α = .651), Skills (α = .728), and Attitudes (α = .688). All coefficients were above the threshold of .60, which is still an acceptable level of reliability (Garson, 2012).

Prior to completing the instrument, the SLTs also completed a brief questionnaire that included information on gender, age, professional experience, professional position, and additional professional training on working with parents.

Data collection and analysis

In early May 2021, an invitation to collaborate was emailed to SLTs and/or facility leadership in both countries, which included a link to an online questionnaire for self-assessment of cooperation competencies between SLTs and
parents. SLTs were informed of the purpose and objectives of the study. All study participants were asked to participate on a voluntary basis and provide informed consent. They were assured that their responses would remain anonymous and confidential.

Informed consent was obtained from all respondents before the survey began. An invitation to collect data with a link to the online questionnaire was sent by email to SLTs in both countries. The questionnaire was sent in Slovenian to SLTs and in Macedonian to SLTs from North Macedonia, so both questionnaires contained the same questions in different languages. The questionnaire was anonymous, was completed individually, and the SLTs were informed about the purpose and aim of the study. The online questionnaire was active for one month.

Variables were analysed using descriptive statistical methods and normality tests (Shapiro-Wilk test). Internal consistency for each domain was examined using Cronbach’s alpha coefficients (α). The Mann-Whitney U test, a non-parametric test, was used to assess possible differences between groups. The effect size $r$ was calculated for pairwise comparisons of groups using the $z$-statistics of the Mann-Whitney U test. To examine the influence of variables of professional characteristics of SLTs (professional work, the area of work and additional professional training) on three variables of cooperation with parents (knowledge, skills and attitudes), a series of ANOVAs were conducted with $2 \times 2$ factorial design (country $\times$ years of work experience ($\leq 5; 11$ years, $\geq 6; 0$ years), and country $\times$ area of work (education, health care), and country $\times$ additional professional training (none, one or more)). The collected data were analysed using SPSS 22.0 (for Windows), and the selected statistical significance level for hypothesis tests was $p < .05$.

**Results**

First, we calculated the descriptive statistics for each domain by country (Table 2). The Shapiro-Wilk test showed that the variables were not normally distributed. Therefore, we used nonparametric tests in further analyses.

The results for the knowledge and skills domain tend to be higher, indicating that speech and language therapists from Slovenia and North Macedonia positively rated their knowledge needed to work effectively with parents. The results for the domain of attitudes about cooperation with parents tend to be lower.
Table 2
Descriptive statistics for each domain by country

<table>
<thead>
<tr>
<th>Domain</th>
<th>Mean</th>
<th>SD</th>
<th>Median</th>
<th>IQR: Q₁-Q₃</th>
<th>Min</th>
<th>Max</th>
<th>W</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slovenia (n = 62)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge as part of the competence of cooperation with parents.</td>
<td>4.37</td>
<td>0.41</td>
<td>4.42</td>
<td>4.17-4.67</td>
<td>3.33</td>
<td>5.00</td>
<td>.954</td>
<td>.020</td>
</tr>
<tr>
<td>Skills as part of the competence of cooperation with parents.</td>
<td>4.19</td>
<td>0.39</td>
<td>4.30</td>
<td>3.80-4.50</td>
<td>3.60</td>
<td>4.90</td>
<td>.935</td>
<td>.003</td>
</tr>
<tr>
<td>SLTs’ attitudes about cooperation with parents.</td>
<td>3.72</td>
<td>0.26</td>
<td>3.75</td>
<td>3.56-3.88</td>
<td>3.13</td>
<td>4.31</td>
<td>.987</td>
<td>.766</td>
</tr>
<tr>
<td>N. Macedonia (n = 48)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge as part of the competence of cooperation with parents.</td>
<td>4.38</td>
<td>0.45</td>
<td>4.33</td>
<td>4.17-4.67</td>
<td>2.67</td>
<td>5.00</td>
<td>.860</td>
<td>.000</td>
</tr>
<tr>
<td>Skills as part of the competence of cooperation with parents.</td>
<td>4.14</td>
<td>0.47</td>
<td>4.10</td>
<td>3.80-4.50</td>
<td>3.20</td>
<td>5.00</td>
<td>.976</td>
<td>.429</td>
</tr>
<tr>
<td>SLTs’ attitudes about cooperation with parents.</td>
<td>3.11</td>
<td>0.21</td>
<td>3.16</td>
<td>2.95-3.23</td>
<td>2.56</td>
<td>3.63</td>
<td>.974</td>
<td>.371</td>
</tr>
</tbody>
</table>

We used the Mann-Whitney U test to determine whether the self-assessment of competence of cooperation with parents differs between SLTs from Slovenia and North Macedonia (Table 3).

Table 3
Differences between self-assessments of SLTs on the competence of cooperation with parents according to the country of practice

<table>
<thead>
<tr>
<th></th>
<th>Slovenia (n = 62)</th>
<th>N. Macedonia (n = 48)</th>
<th>U</th>
<th>Z</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>IQR: Q₁-Q₃</td>
<td>Median</td>
<td>IQR: Q₁-Q₃</td>
<td></td>
</tr>
<tr>
<td>Knowledge as part of the competence of cooperation with parents.</td>
<td>4.42</td>
<td>4.17-4.67</td>
<td>4.33</td>
<td>4.17-4.67</td>
<td>1454.5</td>
</tr>
<tr>
<td>Skills as part of the competence of cooperation with parents.</td>
<td>4.30</td>
<td>3.80-4.50</td>
<td>4.10</td>
<td>3.80-4.40</td>
<td>1387.5</td>
</tr>
<tr>
<td>SLTs’ attitudes about cooperation with parents.</td>
<td>3.75</td>
<td>3.56-3.88</td>
<td>3.16</td>
<td>2.95-3.23</td>
<td>88.0</td>
</tr>
</tbody>
</table>

Note. * p < .001

A comparison of the competencies in cooperation with parents between countries showed that differences in knowledge and skills between SLTs were
not statistically significant (Table 3). A Mann-Whitney test revealed that speech and language therapist’s attitudes about cooperation with parents were significantly greater in Slovenia (Mdn = 3.75) than in North Macedonia (Mdn = 3.16), (U = 88.0, p < .001, r = .81). A large effect was detected. Positive attitudes indicate greater recognition of the importance of working with parents and contribute to the formation of a cooperative partnership (Figure 1).

**Figure 1**
SLTs’ attitudes about cooperation with parents

Additionally, our goal was to examine the influence of variables of professional characteristics of SLTs (i.e., years of work experience, area of work and additional professional training on three composite scores of cooperation with parents (knowledge, skills, attitudes)) separately for each country.

**Knowledge**

We conducted three ANOVAs with a 2×2 factorial design (country × years of work experience, country × area of work, and country × additional professional training) on the knowledge domain. Means and standard deviations for the knowledge domain are provided in Table 4.
Table 4
Means and standard deviation for scores on knowledge domain for each country by years of work experience, area of work, and additional professional training

<table>
<thead>
<tr>
<th>Professional characteristics of SLTs</th>
<th>Country</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Slovenia (n = 62)</td>
<td>N. Macedonia (n = 48)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Years of work experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>less (≤ 5 years)</td>
<td>4.28</td>
<td>0.43</td>
<td>4.45</td>
</tr>
<tr>
<td>more (≥ 6 years)</td>
<td>4.45</td>
<td>0.37</td>
<td>4.25</td>
</tr>
<tr>
<td>Area of work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>education</td>
<td>4.38</td>
<td>0.50</td>
<td>4.48</td>
</tr>
<tr>
<td>health care</td>
<td>4.36</td>
<td>0.30</td>
<td>4.29</td>
</tr>
<tr>
<td>Additional professional training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>none</td>
<td>4.36</td>
<td>0.42</td>
<td>4.32</td>
</tr>
<tr>
<td>one or more</td>
<td>4.39</td>
<td>0.39</td>
<td>4.48</td>
</tr>
</tbody>
</table>

The first factorial ANOVA was conducted that examined the effect of two independent variables (country, years of experience) on the knowledge domain. Country consisted of two levels (Slovenia, North Macedonia), and years of work experience included two levels (less experienced (≤ 5 years of work experience) and more experienced (≥ 6 years of work experience). The results of the 2 × 2 ANOVA revealed a significant interaction between the effects of country and years of work experience on the knowledge domain (F (1,106) = 5.32, p = .02, partial η² = 0.05), indicating that any differences between countries on knowledge were dependent upon years of work experience (Table 4). In Slovenia, knowledge about working with parents increases with years of work experience (see Figure 2). There was a non-significant main effect for the country (p = .89) and a non-significant main effect for years of work experience (p = .90).
As for the second factorial ANOVA analysis, there was no interaction between country and area of work ($F(1,106) = 1.04, p = .31$), no main effect for country ($p = .88$), and no main effect for the area of work ($p = .20$). As for the third factorial ANOVA analysis, there was no interaction between country and additional professional training ($F(1,106) = 0.51, p = .48$), and no main effect for country ($p = .77$), and no main effect for additional professional training ($p = .28$).

**Skills**

We conducted three ANOVAs with a $2 \times 2$ factorial design (country $\times$ years of work experience, country $\times$ area of work, and country $\times$ additional professional training) on the skills domain. Means and standard deviations for the skills domain are provided in Table 5.
Table 5

Means and standard deviation for scores on skills domain for each country by years of work experience, area of work, and additional professional training

<table>
<thead>
<tr>
<th>Professional characteristics of SLTs</th>
<th>Country</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Slovenia</td>
<td>N. Macedon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(n = 62)</td>
<td>(n = 48)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Years of work experience</td>
<td>less (≤ 5 years)</td>
<td>4.20</td>
<td>0.39</td>
</tr>
<tr>
<td></td>
<td>more (≥ 6 years)</td>
<td>4.18</td>
<td>0.40</td>
</tr>
<tr>
<td>Area of work</td>
<td>education</td>
<td>4.20</td>
<td>0.41</td>
</tr>
<tr>
<td></td>
<td>health care</td>
<td>4.18</td>
<td>0.38</td>
</tr>
<tr>
<td>Additional professional training</td>
<td>none</td>
<td>4.19</td>
<td>0.39</td>
</tr>
<tr>
<td></td>
<td>one or more</td>
<td>4.20</td>
<td>0.41</td>
</tr>
</tbody>
</table>

The first factorial ANOVA was conducted that examined the effect of two independent variables (country, years of experience) on the skills domain. The analysis revealed no interaction between the effects of country and years of work experience on the skills domain ($F(1,106) = 0.40, p = .53$), no main effect for country ($p = .45$), and no main effect for the area of work ($p = .42$). As for the second factorial ANOVA analysis, there was no interaction between country and area of work ($F(1,106) = 0.65, p = .42$), no main effect for country ($p = .60$), and no main effect for the area of work ($p = .32$). As for the third factorial ANOVA analysis, there was no interaction between country and additional professional training ($F(1,106) = 0.72, p = .40$), no main effect for country ($p = .77$), and no main effect for additional professional training ($p = .36$).

Attitudes

We conducted three ANOVAs with $2 \times 2$ factorial design (country $\times$ years of work experience, country $\times$ area of work, and country $\times$ additional professional training) on the attitudes domain. Means and standard deviations for the attitudes domain are provided in Table 6.
Table 6
*Means and standard deviation for scores on attitudes domain for each country by years of work experience, area of work, and additional professional training*

<table>
<thead>
<tr>
<th>Professional characteristics of SLTs</th>
<th>Country</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Slovenia</td>
<td>N. Macedonia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(n = 62)</td>
<td>(n = 48)</td>
<td></td>
</tr>
<tr>
<td>Years of work experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>less (≤ 5 years)</td>
<td>3.75</td>
<td>3.13</td>
<td></td>
</tr>
<tr>
<td>more (≥ 6 years)</td>
<td>3.69</td>
<td>3.07</td>
<td></td>
</tr>
<tr>
<td>Area of work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>education</td>
<td>3.72</td>
<td>3.07</td>
<td></td>
</tr>
<tr>
<td>health care</td>
<td>3.71</td>
<td>3.14</td>
<td></td>
</tr>
<tr>
<td>Additional professional training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>none</td>
<td>3.69</td>
<td>3.12</td>
<td></td>
</tr>
<tr>
<td>one or more</td>
<td>3.77</td>
<td>3.09</td>
<td></td>
</tr>
</tbody>
</table>

The first factorial ANOVA was conducted that examined the effect of two independent variables (country, years of experience) on the attitudes domain. The analysis revealed no interaction between the effects of country and years of work experience on the skills domain (\(F(1,106) = 0.00, p = .98\)). A simple main effect analysis showed that countries differ significantly in attitudes (\(p < .00\), partial \(\eta^2 = 0.623\)), in favour of Slovenia. There was a non-significant main effect for years of work experience (\(p = .22\)) (Table 6).

As for the second factorial ANOVA analysis, there was no interaction between country and area of work (\(F(1,106) = 0.78, p = .35\)). A simple main effect analysis showed that countries differ significantly on attitudes (\(p < .00\), partial \(\eta^2 = 0.624\)), in favour of Slovenia. There was a non-significant main effect for the area of work (\(p = .48\)) on attitudes (Table 6).

As for the third factorial ANOVA analysis, there was no interaction between countries and additional professional training (\(F(1,106) = 1.28, p = .26\)). Simple main effects analysis showed that country differs significantly in attitudes (\(p < .00\), partial \(\eta^2 = 0.613\)) in favour of Slovenia. There was a non-significant main effect for additional professional training (\(p = .55\)) (Table 6).

**Discussion**

This study examines the collaboration with parents of SLTs in Slovenia and North Macedonia measured by the knowledge that SLTs have and which is a prerequisite for this cooperation, the skills needed to interact with parents, and the attitude towards speech and language therapy. A number of studies
Dale, 1996; Hornby, 2000, 2011; Hanna & Rodger, 2002; Buckley, 2003; Watts Pappas & McLeod, 2009) have shown that there is a significant relationship between parental engagement and the SLTs’ knowledge and skills required for it. Accordingly, the motivation to conduct this study was to deeper explore the relationship between SLTs and parents, examining the role of three profession-specific variables (i.e., years of work experience, area of work, and additional professional training) in the success of the collaboration between SLTs and parents in a cross-linguistic context.

**Differences between countries**

The first question of this study was to compare SLTs’ self-assessments of competence of cooperation with parents in relation to the country in which they practice due to the possible specifics in the professional development of SLTs in Slovenia and in North Macedonia. It should be emphasised that it cannot be assumed that the differences between the SLTs from Slovenia and North Macedonia are due to differences in the training programmes for SLTs, as it is possible that some SLTs from the study completed their training outside the country of their practice.

The differences in self-assessment of knowledge and skills necessary for successful cooperation with parents between SLTs from both countries were found not to be statistically significant. Table 3 shows that SLTs from Slovenia and North Macedonia differ in their self-assessment of attitudes only in a way that the Slovenian SLTs rate their attitudes significantly higher.

In Slovenia, some studies (Plohl, 2016; Schmidt, 2019; Vidovic & Tomc Šavora, 2015) indicate the importance of cooperation between parents and SLTs. The authors of this study are not aware of any work on cooperation with parents in North Macedonia that is directly comparable to the present paper.

The professional display of cooperation with parents certainly has implications for the results obtained in this work. Slovenian SLTs have more positive attitudes toward parental involvement in speech and language therapy, which could be one of the influences of the speech and language therapy profession in this country, advocating and raising awareness of the importance of SLTs’ collaboration with parents. The results also showed that SLTs from North Macedonia scored average on the attitude domain, possibly indicating a lack of professional consensus on the importance of involving parents in speech and language therapy.

The differences in self-assessment of attitudes between SLTs from Slovenia and North Macedonia may be due to training and lack of continuous
professional training in cooperation with parents (Garmon, 2004) but also due to experiences and influences of the immediate and wider environment (Boštjančič, 2011) or other factors. However, in the absence of literature examining these differences, no comparison can be made with other researchers; consequently, there is no way to place this study among others. Therefore, it can only be concluded that there are differences in the sample of the present study between SLTs from Slovenia and from North Macedonia in terms of self-assessment of attitudes as part of the competence of cooperation with parents. Further research should investigate these differences in more detail.

This study also aimed to examine the influence of variables of professional characteristics of SLTs (of professional work, the area of work and additional professional training) on three variables of cooperation with parents (knowledge, skills and attitudes).

**Knowledge**

Knowledge of the family and family functioning (Hanna & Rodger, 2002; Iversen et al., 2003; Hornby, 2011; Ross, 2018; Watts Pappas & McLeod, 2009) and knowledge of strategies and techniques for effectively engaging parents and family members in SLT therapy (Hornby, 2011; Watts Pappas & McLeod, 2009) are most frequently cited in the review of literature on the knowledge needed for effective engagement.

Our data show that individual main effects (i.e., years of work experience, area of work, and additional professional training) do not influence the construction of knowledge needed for cooperation with parents. SLTs from Slovenia and North Macedonia have the necessary knowledge to work with parents. Regardless of professional experience, the interaction of country and years of work experience is important for the knowledge domain. This means that in Slovenia, more years of work experience affects the knowledge that SLT has, and that is necessary for cooperation with parents. It can be said that the knowledge Slovenian SLTs acquire during their studies is built with experience. In North Macedonia, this is not the case. SLTs with fewer years of work experience have a greater impact on their knowledge. Data obtained in North Macedonia are in agreement with Hoy and Speros’ study (2005) which found that professionals rated themselves as more successful in establishing a cooperative relationship with parents immediately after completing formal training and that ratings of performance decreased after five years of practice. The results obtained could be due to the fact that more experienced professionals are more critical of themselves. Moreover, some authors (Keilmann et al., 2004;
Watts Pappas et al., 2008) found that more experienced SLTs involved parents less in therapy, while others (Law et al., 2019) found no differences in parental involvement in treatment when comparing less experienced SLTs with more experienced ones. The assumption that professionals gain various new experiences, build new knowledge, and become more competent with years of practice (King, 1998) is not consistent with the findings of the present study.

It makes no difference in which system of employment (education or health care) SLTs work. Both sectors provide (non)opportunities to work with parents and promote the opportunity to develop and offer knowledge on an equal basis. This means that all SLTs, regardless of their country and area of work, have the same opportunities to develop their knowledge in working with parents. Considering the results obtained, it is somewhat surprising that additional education does not affect knowledge of working with parents. This can be explained as follows: (a) in the question about additional professional training in working with parents, we limited the answer to the last three years. For example, someone may have attended excellent training on working with parents five years ago and not been able to answer the question. This is a limitation of our study; (b) at the same time, this does not mean that SLTs (do not) attend training; it may simply be a lack of continuous professional training addressing the knowledge and skills for working with parents.

Skills

Watts Pappas and McLeod (2009) emphasise that parents value communication skills as a starting point for establishing and achieving successful parent-professional collaboration. Other authors (Hornby, 2011; Ross, 2018; Watts Pappas & McLeod, 2009; Warren et al., 2011) who have studied the competency of working with parents specifically highlight communication skills as the most important skills for working effectively with parents. Hornby (2011) points out that the quality of the relationship depends on the quality of communication, as this can also be a prerequisite for good collaborative relationships.

Our data (see Table 5) showed that none of the SLTs’ professional characteristics (years of work experience, area of work and additional professional training) affected their skills for working with parents. That is, in no area of work (education, health care) were skills for working with parents promoted or not. Although some researchers (Watts Pappas et al., 2008) have reported differences in cooperation between SLTs and parents regarding to the therapist’s area of work, it should be emphasised that parental involvement in treatment is partially the responsibility of SLTs (Hornby, 2011). SLTs working in education
have fewer opportunities to work with parents than therapists working in health care. The system is set up so that treatment occurs while the child is in school or in kindergarten. The SLT meets only with teachers or educators and not with the children's parents. Thus, the information about the work with the children is shared with the teachers or educators, who then pass it on to the parents (Watts Pappas et al., 2008). However, it should be noted that in some educational institutions (e.g., VVZ Kekec, Grosuplje), the SLT works with parents and involves them in all treatments, although the treatments take place when the child is in kindergarten (Vidmar, 2016). Years of work experience have no impact on developing the skills to work with parents. This means that SLPs change the skills for working with parents very little in a planned but intentional way. Additional professional training also has no effect on it. The reasons for this are the same as mentioned above. The lack of differences between the self-assessments of SLTs from Slovenia and North Macedonia regarding the competence of cooperation with parents in relation to their professional experience can also be interpreted with the family-centred and family-friendly models (Watts Pappas & McLeod, 2009). SLTs need to know how family function and how to work with parents, to have skills and techniques to guide parents, and interpersonal skills to build a successful relationship between professionals and parents. Watts Pappas and McLeod (2009) say that parents value communication skills as a starting point for building and achieving successful collaboration between parents and professionals. Based on parents’ expectations of communication with SLTs, Watts Pappas and McLeod (2009) indicate that parents expect SLTs to take the time to answer their questions and explain aspects of the child's treatment and progress in a way that parents can understand. Empathy in understanding parents’ answers is critical. In this way, parents gain more confidence that someone understands and supports them, which is essential to building successful mutual understanding and collaboration (Hornby, 2011). Consistent with the above findings, communication skills that contribute to competence in working with parents include conversational techniques (setting the topic, conveying information, summarising, paraphrasing, concluding), active listening, and awareness of the importance of nonverbal communication. Despite the undisputed importance of communication skills for effective collaboration with parents, Bartels and Eskow (2010) note that good communication skills do not always lead to successful collaboration but that a lack of them almost always leads to barriers to collaboration.
Attitudes

The influence of SLTs’ views has a significant impact on the competence of working with parents. Hornby (2011) discusses attitudes from two perspectives: attitudes toward parents and attitudes toward working with parents. Attitudes toward parents are further divided into attitudes that hinder collaboration and attitudes that promote collaboration. Attitudes that contribute to interaction in everyday situations can also enhance collaboration between SLTs and parents. Ross (2018) cites family orientation, respect for family diversity, and respect for the individuality and uniqueness of each family as attitudes that strengthen the relationship between SLTs and parents. Such views help support parents, their expectations, and their goals (Watts Pappas & McLeod, 2009).

Our research showed that attitudes about cooperation with parents are not affected by years of work experience, area of work, or additional professional training. The country where the SLTs work has an impact. SLTs in Slovenia involve parents more in their work. This means that Slovenian society is more inclusive, appreciates and respects partnerships with parents, and similar socially valuable information that is acquired unconsciously and through indirect learning.

The differences between SLTs in the self-assessment of the attitudes that lead to successful cooperation regarding the frequency of participation in professional training on cooperation with parents may be due to the fact that SLTs have not received sufficient continuous training in this area (Garmon, 2004). Professional training should help develop sensitivity to the attitudes that reinforce cooperation with parents, but Garmon (2004) adds that training is useful only for those individuals who have a good predisposition to adopt such attitudes. The predisposition is based on past experiences and the ability to process them in real-life situations (Garmon, 2004). The part of competencies related to personality traits and abilities is mainly the result of genetic factors, while attitudes and values are the results of experiences and influences of the immediate and wider environment (Boštjančič, 2011). The results of the study also indicate the importance of continuous training in cooperation with parents, as only repeated training and professional learning can lead to lasting changes in a professional’s own practice, as active learning helps professionals focus on specific situations in their work (Steward, 2004).

Several factors influence the formation of professionals’ views, such as level of education and lack of additional professional training to work with parents. Training professionals should help develop sensitivity to attitudes that enhance engagement with parents, but Garmon (2004) notes that training is
useful only for those individuals who have a good disposition to adopt such attitudes. Similarly, the results of several studies have shown that professionals who have experience working in a multicultural setting are more likely to develop positive attitudes toward diversity. Respect for parents as equal partners is the foundation for developing positive attitudes toward parental involvement (Hornby, 2011).

Limitations and further directions

The findings of this study have to be seen in light of some limitations. The first limitation of the present study relates to sample size. Therefore, in order for the data to be generalizable, it is important to include a representative sample of professionals/SLTs in future research, controlling for their years of experience, as well as involvement in other sectors such as private and social care. The measurement of constructs (knowledge, skills, attitudes) is complex, and with a small sample and a small number of items, there is a high probability that the selected items did not describe the full scope of each construct. The second limitation relates to the refinement of the items in the questionnaire: a statement related to the additional professional training should not be time-bound. The results obtained indicate that a more comprehensive questionnaire needs to be developed to more clearly define the role of knowledge, skills, and attitudes.

Conclusion

According to the results of this study and the theoretical concepts on which the study is based, the responsibility of speech and language therapists to build cooperative relationships with the parents of children in treatment is one of the important imperatives of professional activity. The competence to cooperate with parents is part of the professional qualification of a speech and language therapist, which must be constantly developed.

The results of this study contribute to the theoretical knowledge and better understanding of the competence that speech and language therapists need to work effectively with parents. With the knowledge and understanding of this competence, we can help to promote a cooperative relationship between parents and speech and language therapists, achieve successful collaboration between them, and consequently increase the effectiveness of speech and language therapy treatments. The results of the study on the self-assessment of the competence of cooperation between speech and language therapists and
parents can also be a good starting point for the continuous development of this competence through non-formal education.

**Acknowledgement**

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