The structure of teacher-specific intercultural competence: Empirical evidence on the ‘Beliefs, Values, and Goals’ dimension

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The aim of this contribution is to identify the elements that are integral parts of a teacher-specific intercultural competence construct. In this paper, we focus on those facets of the construct that are considered to be rather value-laden and affectively tinged. Following the widely used theoretical model of teachers’ professional competencies developed by Baumert and Kunter (2013), we conceptually place these facets within the Beliefs, Values, & Goals dimension, and propose four core elements: (1) appreciation of cultural diversity; (2) ethno-relative worldview; (3) attitudes toward integration; and (4) identification with goals of intercultural education. In order to test the hypothesis that these four aspects represent one single overarching latent construct, we operationalized each with an appropriate scale and then scrutinized the instruments’ internal consistency, and convergent and factorial validity. The results suggest that our four scales have good internal consistencies (Cronbach’s alphas between .82 and .89), adhere to a one-factor structure (as demonstrated by Confirmatory Factor Analysis), and indicate one latent construct (RMSEA = 0.000; TLI = 1.004; CFI = 1.000; SRMR = .007). With these results, this paper presents a valid, contextually relevant new instrument to assess (pre-service) teachers’ beliefs, values and goals regarding intercultural education and contributes to resolving theoretical, methodological, and practical issues of research on intercultural competencies.

Keywords: intercultural competencies, teacher education, intercultural education, assessment

Highlights:

• A theoretically and empirically grounded conceptualization of the Beliefs, Values and Goals dimension of a teacher-specific intercultural competence construct is proposed

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Results support the structural and convergent validity of the scales developed to operationalize this dimension. The scales may be useful in designing more effective intercultural training programs for teachers.

The literature on teachers’ beliefs, values, and goals regarding intercultural education has become wide and varied, reflecting the crucial role ascribed to these ingredients of teachers’ intercultural competence (Klieme & Vieluf, 2009; Reusser, Pauli, & Elmer, 2011). In many contexts, however, teacher education still tends to focus much more on professional knowledge and on providing an appropriate knowledge base for student teachers. The studies we report in this paper were part of a project that aimed at developing a tool which encourages teacher education to take other relevant aspects (beside knowledge) more explicitly and more consciously into consideration.

In doing so, we rely on the conceptual approach of Baumert and Kunter (2013) and their widely used theoretical model of teachers’ professional competencies. The basic proposition of this theoretical model is that a teacher is competent only if he/she possesses a sound professional knowledge base, accompanied by productive values and beliefs, appropriate motivational orientations, and an adequate self-regulation. Therefore, the model of Baumert and Kunter defines teachers’ professional competence as an interplay of four main components, each of which is necessary to meet the manifold demands of the teaching profession: (1) Professional knowledge includes both declarative and procedural knowledge covering different domains (e.g., content knowledge, pedagogical content knowledge, psychological knowledge, organizational knowledge, or counselling knowledge) and is regarded as the core of professionalism; (2) Values, beliefs, and goals refer to subjective theories about a specific subject or topic, as well as to the subjective relevance of particular educational aims; (3) Self-regulation entails an appropriate engagement, dealing with frustrations, or maintaining a healthy distance; (4) Motivational orientations, finally, contain control beliefs and intrinsic motivational orientations.

Starting from here, the aim of our project was to develop a tool which covers these four aspects of teachers’ competencies specifically in the field of intercultural education. While a specification of motivational orientations as part of teachers’ intercultural competence is provided in Petrović, Jokić, and...
Leutwyler (2016), and a specification of the self-regulatory aspects is suggested by Zlatković, Petrović, Erić, Leutwyler, and Jokić (2017), the focus of this paper is on the value-laden and affectively tinged facets of a teacher-specific construct of intercultural competence. In other words, this paper presents a new instrument to assess (pre-service) teachers’ beliefs, values, and goals regarding intercultural education. Accordingly, we first present the challenges that teacher education for dealing with diversity face in Serbia, and then review the literature in intercultural field to show that existing approaches either lack a holistic view of intercultural competence or a contextualization with regard to teacher education. Based on this, we elaborate the rationale for the new scales. Finally, we present two studies which provide the first empirical evidence on the scales’ psychometric properties, in specific their internal consistency and structural and convergent validity.

Teacher Education and Challenges in Serbia

Initial teacher education (ITE) in Serbia is provided by universities (240 ECTS at bachelor level and 30 ECTS at master level). The ITE is organized in different ways for class and subject teachers (Kovač Cerović, Radišić, & Stanković, 2015). The main difference is that ITE for class teachers is organised by faculties of teacher education, and includes more school internship (mainly in the third and fourth year of BA studies) and pedagogical, psychological and methodical subjects than ITE for subject teachers. The ITE for future subject teaches is mainly organised at faculties of the respective academic disciplines (e.g., Chemistry, Biology, History, Philosophy, etc.), with a requirement to have at least 30 ECTS in the pedagogical-psychological-methodical subjects and 6 ECTS in practice (Kovač Cerović et al., 2015).

The cultural and ethnical diversity of Serbia and ongoing refugee crisis in Europe guarantee that practically all teachers will most likely work with students from differing cultural backgrounds in their classroom. However, the importance of preparing future teachers to work with a culturally diverse student body has been insufficiently recognized by both policy makers and ITE providers in Serbia. For example, teachers’ preparation for diversity is not listed as an education policy goal (Petrović, 2017), and competency standards for the teaching profession and teachers’ professional development do not prioritize intercultural competencies as an area of professional development (Gošović & Petrović, 2016). Additionally, intercultural education in Serbia is offered only as an optional course at three out of six faculties of teacher education, while bachelor programmes for subject teachers do not contain any courses aiming to prepare prospective teacher for cultural diversity in the classroom (Zlatković & Petrović, 2016).

In sum, teachers in Serbia are not equipped with the knowledge, strategies, and tools necessary for dealing with diversity in the classroom because this issue is insufficiently addressed in teacher education (Macura-Milovanović, Pantić & Closs, 2012; Zlatković & Petrović, 2016) thus making teachers’ practice mostly

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indifferent towards students’ cultural diversity (Jokić & Petrović, 2016). Dealing with cultural diversity through education is also challenged by the increasing social distance between different ethnic and/or religious groups (Frenčesko, Mihić & Kajon, 2005; Kandido-Jakšić, 2008; Miladinović, 2008; Pavasović-Trošt, 2013) in this region. Consequently, the quality of education for a culturally diverse student body is compromised, and even more so in the case of Roma students (Baucal, 2006), who are also facing severe poverty and discrimination more often than any other minority group.

**Literature Review**

An overview of the literature (see Leutwyler & Mantel, 2015) on teachers’ beliefs, values, and goals regarding intercultural education reveals a number of different foci. *Firstly*, many studies adopt a general approach to intercultural belief orientations among teachers, drawing attention to an overall “deficit-orientation” in the sense of cultural ethnocentrism, readiness to marginalise students and parents with ‘foreign’ or minority backgrounds, or a narrow understanding of intercultural education (for the Australian context: Buchori & Dobinson, 2012; Kratzmann & Pohlmann-Rother, 2012; for the Serbian context: Macura-Milovanović et al., 2012; for the USA: Nelson & Guerra, 2014; Silverman, 2010; for the German context: Sterzenbach & Moosmüller, 1999; Weber, 2003).

*Secondly*, some empirical contributions seek a more differentiated understanding by developing typologies of different belief orientations among teachers: Bender-Szymanski (2001), for instance, differentiated a ‘synergy oriented’ way of dealing with intercultural situations (based on an appreciation of cultural differences and an awareness of one’s own participation in an intercultural situation) from an ‘ethno-oriented’ way (based on a deficit view of students who appear to be culturally different and on the expectation that culturally different students and their families should adapt to the norms and regulations of the teacher’s own culture). Akkari, Loomis, and Bauer (2011) distinguish between teachers who support practices of indifference towards cultural diversity, and those who have a critical stance towards the ‘monocultural school system’ (ib., p. 9). Furthermore, Edelmann (2006) scrutinised how teachers think about cultural heterogeneity in their classes and organized their interpretations and attitudes into a six-type-typology. Lanfranchi (2008) asked about teachers’ strategies in dealing with cultural differences and described five different types. And Stier, Tryggvason, Sandström, and Sandberg (2012) explored teachers’ understanding of and practical approaches to ethnic and cultural diversity. Their typology defined four different approaches which are seen as increasingly productive: an ‘instrumental,’ a ‘co-productive,’ a ‘facilitative proactive’, and an ‘agitative proactive’ approach, each characterised by a particular ‘interaction mode’, ‘reflection mode’, and an underlying conception of culture.

A *third* focus is on relating teachers’ beliefs to classroom management, i.e., asking how different beliefs are related to teachers’ actions: Makarova
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and Herzog (2013) distinguished between an ‘integration’, ‘assimilation’ and ‘separation’ attitude, and showed how these different attitudes towards immigrant students’ acculturation had different effects on the teaching practice. A fourth focus examines the coherence or incoherence between teachers’ beliefs and the prevailing policy discourse, and often reveals a mismatch in this regard (e.g., for Spain: Bereményi, 2011; for Israel: Mizrachi, 2012). And lastly, a fifth focus relates teachers’ beliefs about intercultural education to socio-cultural categories such as ethnicity, gender, or class. Generally speaking, teachers with a minority background and female teachers tend to show more favourable beliefs and dispositions towards minority pupils in school (Cochran-Smith, Davis, & Fries, 2004; Cunningham & Hargreaves, 2007; Ford & Quinn, 2010; Quirocho & Rios, 2000).

This brief literature review serves as a fundament for developing the key indicators to consider in developing a new instrument. Although many of the reviewed studies adopted qualitative and initially rather open approaches, they contribute to identifying key aspects that matter for a teacher-specific intercultural competence: ethnocentric vs. ethno-relative worldviews, appreciation of cultural diversity; attitudes towards integration, assimilation, or acculturation of minority pupils; and identification with the official goals of intercultural education curricula. As this paper focuses on the Beliefs-Values-Goals dimension of teachers’ professional competencies, we will consider these aspects in more detail in the following section.

Elements of the Beliefs-Values-Goals Dimension

The theoretical model we rely on does not differ explicitly between ‘beliefs’, ‘values’ and ‘goals’. As the boundaries between these constructs are blurred (Baumert & Kunter, 2013), we take them together to refer to those elements of professionalism which determine one’s subjective understanding of a topic (‘worldview’), and which may have a normative status and be affectively loaded. In this sense, the Beliefs-Values-Goals dimension largely corresponds with the definition of beliefs as “psychologically held understandings, premises, propositions about the world that are felt to be true” (Richardson, 1996, p. 103), but also includes the subjective commitment to and identification with educational goals.

This understanding also guides our search for the corresponding (i.e., value-laden and affectively tinged) elements of a teacher-specific intercultural competence. When we examine the rich discourse on intercultural competencies (e.g., Deardorff, 2009; Perry & Southwell, 2011) identifying those elements that fit the above definition of the Beliefs-Values-Goals dimension, the following four appear as relevant:

‘Appreciation of cultural diversity’ defined as an attitude that considers cultural diversity as enriching (Hachfeld et al., 2011) and not as a burden or restriction (Buchori & Dobinson, 2012): Teachers with a high appreciation for cultural diversity typically tend to incorporate the pupils’
different backgrounds in the school context, are interested in understanding different cultural backgrounds, and are generally open to diverse experiences (Bhawuk & Brislin, 1992; Leutwyler & Meierhans, 2016; van der Zee & van Oudenhoven, 2000).

‘Ethno-relative worldview’ defined as the degree of preparedness to shift perspectives (Bennett, 2004; Hammer, Bennett, & Wiseman, 2003). Teachers with a high degree of ethno-relative worldview typically acknowledge that the pupils’ perceptions may be imbued by different cultural backgrounds (Leutwyler & Petrović, 2011), they show ‘cultural empathy’ (van der Zee & van Oudenhoven, 2000; Wang et al., 2003), and have a relativistic appreciation of oneself and others (Fuertes, Miville, Mohr, Sedlacek, & Gretchen, 2000).

‘Attitudes towards integration’ defined as the expectation that minority groups shall maintain their cultural backgrounds while participating in the larger society (Berry, 2003, 2011): Teachers with highly developed attitudes towards integration tend to endorse pupils to maintain their diverse backgrounds, show less assimilationist beliefs (Makarova & Herzog, 2013), and are less preoccupied with achieving student conformity into the dominant culture (Buchori & Dobinson, 2012).

‘Goals of intercultural education’ defined as teachers’ identification with the aims of intercultural education as conveyed by the official curricula: This aspect does not appear in the classical discourse on intercultural competence, however it may be derived from the concept of teachers’ professional competence according to Baumert and Kunter (see above). Teachers with a high commitment to ‘goals of intercultural education’ typically care about intercultural issues and discrimination (Munroe & Pearson, 2006) and engage in the preparation of all pupils – regardless whether they have a minority background or not – to live successfully in a pluralistic and globalized society (UNESCO, 2006).

The Present Studies

These four aspects represent what we consider as the core beliefs, values and goals within a teacher-specific intercultural competence. According to the above described conceptualization of the Beliefs-Values-Goals dimension of teachers’ intercultural competence, which encompasses four facets, we developed four scales to operationalize each of them. In doing so, we relied on existing instruments (see references above), but had to amend for the fact that these usually do not consider the context of schooling or a more holistic view of intercultural competencies. We therefore used the existing instruments as inspiration, ‘translated’ general approaches or statements into school-specific items, and developed novel items where appropriate. Our aim was to establish an instrument that would reliably assess each of the four proposed aspects. At the same time, we wanted to test the hypothesis that these four aspects represent one single overarching latent construct that may be referred to as the Beliefs, Values and Goals Dimension of teacher-specific intercultural competence. The following parts describe step by step how we tested the scales.
and the hypothesis. Following the general requirements for the construction and revision of scales (DeVellis, 2016; Reise, Waller, & Comrey, 2000), in Study 1 we developed the scales, and tested their internal consistency and factor structure. The aim of Study 2 was threefold: Firstly, we re-evaluated the internal consistency and factor structure in a different sample. Secondly, we tested the convergent validity of the four scales by examining their correlations with already available instruments. And thirdly, we tested the hypothesis that these four aspects represent one single overarching latent construct by performing Confirmatory Factor Analyses (CFA).

Study 1

Method

Participants. Students from the Teacher Education Faculty in Vranje participated in Study 1. A total of 202 respondents were recruited, mainly female students (87%). Respondents’ age ranged from 19 to 37 years, with a mean of 21.6. The students who attended the first year were not included in this sample due to lack of practical experience in the classroom.

Measures. We used our 4 newly developed scales which operationalize the four core aspects of the Beliefs, Values and Goals part of teacher-specific intercultural competence. The constructs that these scales are supposed to assess are defined above; the scales themselves, including all the items, will be presented in detail in the Results section. The first scale ‘Appreciation of Cultural Diversity’ (ACD) initially consisted of 10 items. The second scale, ‘Ethno-Relative Worldview’ (ERW), initially comprised 12 items. The third scale ‘Attitudes towards Integration’ (ATI) initially included 9 items. And the fourth scale, ‘Goals of Intercultural Education’ (GIE), initially contained 10 items. All items were presented as statements to be rated on a 4-point Likert-type scale (from 1 – strongly disagree to 4 – strongly agree).

Procedure. In Study 1, the newly developed instruments (ACD, ERW, ATI, GIE) were administered to students after their consent was obtained. The instruments were administered by the researchers. Instructions given to the students also included a description of the goals of the study. Additionally, the students were encouraged to imagine that they performed teaching in a multicultural classroom, and to give their answer based on an anticipation of their own behaviour in such a situation.

Data analysis. Firstly, we conducted a reliability analysis for each scale. The aim of this step was to test the scales’ internal consistency and identify items that have a negative impact on reliability (as indicated by the increase in Cronbach’s alpha when deleting the item and by low item-total correlations), so as to possibly exclude them. While acknowledging the varying standards of reliability required for different applications, several authors have recommended .80 as an appropriate level of reliability for research instruments (e.g., Cortina, 1993), which we adopted as a threshold in the present study.

Secondly, we conducted four scale-level exploratory factor analyses (extraction method: Principal Axis Factoring; Promax rotation), each analyzing the items belonging to a single scale. The aim of this step was to identify items that most clearly represent the content domain of the underlying construct. We aimed to retain only those items that clearly load on a single factor. We used the following three criteria for retaining items (Field, 2013): (1) communality in the extraction column of .4 and above; (2) a factor loading above .50; and (3) in the case of one item loading on more than one factor, a loading twice as strong on the
appropriate (first) factor than on any other. With this procedure, we ensured that only those items remain that measure the same concept and that we can eliminate the items that do not correspond sufficiently to the extracted factors.

Thirdly, we conducted a joint exploratory factor analysis including items of all four scales. The aim of this step was to test the factor structure of the assumed Beliefs-Values-Goals dimension. By factorizing all items together, we were able to determine whether the items of the operationalized constructs indeed belong to four separate factors.

Finally, we repeated the reliability analysis in order to check the internal consistencies of the adjusted/revised versions of the four scales.

Results

Reliability analyses. According to our analyses, all items had good item-total correlations, and the four scales satisfied the recommended reliability criterion for Cronbach’s alpha to be at least .80 ($\alpha_{ACD} = .91; \alpha_{ERW} = .89; \alpha_{ATI} = .89; \alpha_{GIE} = .92$). Thus, after this first step, the number of items remained the same.

Scale-level exploratory factor analyses. Based on the results of exploratory factor analyses, we excluded 1 item from the ACD scale, 1 item from the ATI scale, 6 items from the ERW scale, and 2 items from the GIE scale (ten items in total). Therefore, we moved on to the next analyses with a reduced number of items (31 instead of the initial 41).

Joint exploratory factor analysis. In order to obtain a clearly interpretable four-factor structure, we eliminated all items that did not primarily load on the factor that they conceptually belong to. Specifically, we eliminated further 2 items from the ACD scale, 3 items from the ATI scale, 1 item from ERW, and 2 items from GIE (eight items in total).

The extracted factors accounted for 57.1% of the variance. Table 1 shows the obtained factor structure and item loadings, after eliminating eighteen items.
Table 1

Pattern matrix of four scales with factor loadings after Promax rotation

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appreciation of Cultural Diversity (ACD)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ACD-0) I believe that presence of minority students in the classroom contribute to enrichment of the experience of all pupils.</td>
<td>.753</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(ACD-02) I find that all students can benefit from encountering minority students in the classroom.</td>
<td>.889</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ACD-03) I consider presence of minority students in the classroom as a possibility for personal growth of all pupils.</td>
<td>.704</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(ACD-04) I am convinced that minority and majority students can learn a lot from each other.</td>
<td>.635</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(ACD-06) I see a benefit for school culture when students from majority and minority cultures learn together.</td>
<td>.475</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ACD-07) I see a benefit for class cohesion when students from majority and minority cultures learn together.</td>
<td>.497</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(ACD-09) I believe that by encouraging students to understand minority students, I support their social development.</td>
<td>.357</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards Integration (ATI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(ATI-12) It is important to support minority students to use also their mother tongue.</td>
<td>.501</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ATI-13) Minority students should be encouraged to maintain also values of their own culture.</td>
<td>.873</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(ATI-14) It is important to encourage minority students to relate new knowledge with their own cultural experience.</td>
<td>.546</td>
<td></td>
<td></td>
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<tr>
<td>(ATI-15) School regulations should respect also needs of the minority students.</td>
<td>.349</td>
<td></td>
<td></td>
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<tr>
<td>(ATI-16) It is necessary to establish good cooperation with parents of minority students in order to better understand their needs.</td>
<td>.792</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethno-Relative Worldview (ERW)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ERW-24) It is important to consider how school values affect minority students’ approaches to learning.</td>
<td>.651</td>
<td></td>
<td></td>
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<tr>
<td>(ERW-25) It is important for my teaching practice to understand minority students’ cultural background.</td>
<td>.427</td>
<td></td>
<td></td>
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<tr>
<td>(ERW-27) In order to support minority students’ inclusion, it is important for me to know about their values and customs.</td>
<td>.391</td>
<td></td>
<td></td>
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<tr>
<td>(ERW-30) For me it is essential to understand minority student parents’ views regarding the education of their children.</td>
<td>.665</td>
<td></td>
<td></td>
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<tr>
<td>(ERW-31) In counseling parents of minority students, I think it is important to be considerate of cultural particularities.</td>
<td>.834</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goals of Intercultural Education (GIE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(GIE-33) My goal as a teacher is to enable pupils to recognize and fight against discrimination toward students from minority groups.</td>
<td>.849</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(GIE-34) My goal is to teach students that minority group students have same rights as majority group students.</td>
<td>.813</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(GIE-35) It’s one of my priorities to do everything I can in order to enable equal opportunities for minority students.</td>
<td>.840</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(GIE-36) One of my goals is to develop mutual respect and understanding among minority and majority students.</td>
<td>.496</td>
<td>.387</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(GIE-37) It’s one of my priorities to teach students not to have prejudice towards members of minority groups.</td>
<td>.672</td>
<td>.333</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(GIE-41) It’s important that my students will learn to treat members of minority groups with respect.</td>
<td>.367</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. All items were administered in Serbian and the table represents a translation of the original items.
The results show that the aforementioned steps resulted in 4 scales, each of them exhibiting a clear one-factor structure, and – when factorized together – yielding 4 distinct, interpretable factors. Considering also the results of the repeated reliability analysis, presented in Table 2, Study 1 yielded a promising outlook regarding the psychometric properties of the four scales.

Table 2

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach's alpha</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appreciation of Cultural Diversity (ACD)</td>
<td>.883</td>
<td>7</td>
</tr>
<tr>
<td>Ethno-Relative Worldview (ERW)</td>
<td>.818</td>
<td>5</td>
</tr>
<tr>
<td>Attitudes towards Integration (ATI)</td>
<td>.831</td>
<td>5</td>
</tr>
<tr>
<td>Goals of Intercultural Education (GIE)</td>
<td>.897</td>
<td>6</td>
</tr>
</tbody>
</table>

Study 2

Method

Participants. A total of 330 respondents participated in Study 2. Respondents were students from the Teacher Education Faculties in Jagodina (53.9%) and Belgrade (46.1%). Most of the respondents were female (91%). Their age ranged from 20 to 55 years, with a mean of 22.1.

Measures. In order to test the convergent validity of the 4 scales that were examined and revised in Study 1, we administered them along with two other instruments:

The Multicultural Beliefs Subscale (MBS) of the Teachers’ Cultural Beliefs Scale (TCBS; Hachfeld et al., 2011). This is another instrument developed specifically for assessing teachers’ beliefs, whereby these are not further distinguished from values, and goals (as is the case in our approach). Teachers with multicultural beliefs are more likely to use students’ cultural backgrounds as an asset in everyday work. The Subscale contains 6 items (e.g., “In the classroom, it is important to be responsive to differences between cultures”) and had satisfactory alphas in previous research (α = .75 in Hachfeld et al., 2011) as well as in the present study (α = .71). Regarding convergent validity, we expected to find large positive correlations between the MBS and our four scales.

The Intercultural Sensitivity Scale (ISS) (Chen & Starosta, 2000). This is a well-established, but not teaching– or school-specific measure. Intercultural sensitivity is defined here as “an individual’s ability to develop a positive emotion towards understanding and appreciating cultural differences in order to promote appropriate and effective behavior in intercultural communication” (Chen & Starosta, 2000, p. 408). The original scale counts 24 items, with reliability coefficients ranging between .79 and .89 (Chen & Starosta, 2000; Graf & Harland, 2005; Petrović & Zlatković, 2009). In this study, a Modified Serbian Version of the scale (MSv-ISS) was administered (Petrović, Starčević, Chen, & Komnenić, 2015), which consists of 15 items (e.g., ‘I often show nonverbal and verbal sings of understanding to a

2 Since one item from our ACD scale is almost identically worded as an item from Multicultural Beliefs Subscale (“In counseling parents who have a different cultural background than I do, I try to be considerate of cultural particularities”), we removed this item from the MBS and tested convergent validity by correlating our scales with this 5-item version of the MBS. Cronbach’s alpha for the shortened MBS was .67.
member of a different culture’) and has good reliability (Cronbach’s alpha in the present study was .81). As in the case of the MBS, we expected to find large positive correlations between the ISS and all our scales, especially with scale “Ethno-Relative Worldview”.3

Procedure. The same procedure as in Study 1 was used in Study 2, the only difference being that two additional instruments (the MBS and ISS) were administered to participants. In both studies anonymity was guaranteed to all respondents, and their participation was completely voluntary.

Data analysis. We started with re-evaluating the internal consistencies of our four scales on a different sample. As a second step, we performed correlation analyses in order to test the scales’ convergent validity. In specific, we tested for correlations between the four newly developed scales, on the one side, and the two scales chosen for validation purposes (the MBS and MSv-ISS), on the other. We also performed Confirmatory Factor Analyses (CFA) at two levels: first, to test whether each of the four scales represents a single construct, and second, to test the assumption that the four scales are indicators of one overarching latent construct (labeled BVG for ‘Beliefs, Values, and Goals’). Since the distribution of scores violated normality assumptions, we used Maximum Likelihood with Satora-Bentler adjustments for non-normal distributions (Brown, 2006; Curran, West, & Finch, 1996).

Results

Reliability analysis. The newly developed scales proved to be robust with regard to internal consistencies, which were good in this second sample as well: Cronbach’s alphas were .89 for ACD, .84 for ERW, .83 for ATI, and .88 for GIE.

Correlation analyses. Table 3 shows the correlation coefficients between the four new scales and the two validation instruments.

Table 3

<table>
<thead>
<tr>
<th></th>
<th>Appreciation of Cultural Diversity (ACD)</th>
<th>Ethno-Relative Worldview (ERW)</th>
<th>Attitudes towards Integration (ATI)</th>
<th>Goals of Intercultural Education (GIE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multicultural Beliefs Subscale (MBS) (Hachfeld et al., 2011)</td>
<td>.44**</td>
<td>.50**</td>
<td>.40**</td>
<td>.28**</td>
</tr>
<tr>
<td>Modified Serbian version of Intercultural Sensitivity Scale (MSv-ISS) (Petrović, Starčević, Chen, &amp; Komnenić, 2015)</td>
<td>.42**</td>
<td>.25**</td>
<td>.48**</td>
<td>.48**</td>
</tr>
</tbody>
</table>

Note. ** p < .01

3 For the GIE scale, we performed and additional expert validation with three independent experts in the field. They rated all items of our scale regarding different criteria on a 10-point Likert scale: (1) compliance of the items with their understanding of goals of intercultural education; (2) clarity and understandability of the items; and (3) compliance of the items with teaching practices (whether the goals indicated by items fit their perception of the teacher’s role). Items which were rated with a 7 or less on any of these criteria by at least one expert were removed.
The results of these analyses support the convergent validity of all four scales. The significant correlations with the MBS and the ISS suggest that the new scales examine both teachers’ intercultural practices, as well as the affective dimension of understanding and appreciating cultural differences.

**Confirmatory Factor Analyses 1.** Each model that we tested had one latent variable and as many indicators as there were items within a scale. Additionally, we examined the residual covariance and discovered a few high values. According to Brown (2006), correlated errors may arise from items that are very similarly worded, reverse-worded, or differentially prone to social desirability. In this study, items with high residual covariance were very similarly worded. Hence, we added three error correlations to the ACD model, two error correlations for the ATI model, one error correlation for the GIE model, and one error correlation for the ERW model. The fit indices are shown in Table 4.

<table>
<thead>
<tr>
<th></th>
<th>χ² (df)</th>
<th>Root mean squared error of approximation (RMSEA)</th>
<th>Comparative fit index (CFI)</th>
<th>Tucker-Lewis Index (TLI)</th>
<th>Standardized mean square residual (SRMR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACD</td>
<td>10.105(11)</td>
<td>0.000</td>
<td>1.000</td>
<td>1.002</td>
<td>0.018</td>
</tr>
<tr>
<td>ATI</td>
<td>6.803(3)</td>
<td>0.062</td>
<td>0.989</td>
<td>0.965</td>
<td>0.020</td>
</tr>
<tr>
<td>ERW</td>
<td>8.327(4)</td>
<td>0.057</td>
<td>0.989</td>
<td>0.971</td>
<td>0.023</td>
</tr>
<tr>
<td>GIE</td>
<td>17.334(8)</td>
<td>0.059</td>
<td>0.978</td>
<td>0.959</td>
<td>0.030</td>
</tr>
</tbody>
</table>

Bearing in mind that different authors suggest different cut-off values as reasonable (e.g., Lazarević, 2008; Schreiber, Nora, Stage, Barlow, & King, 2006; Sivo, Fan, Witta, & Willse, 2006), we applied the following in our study: \( RMSEA < .08, TLI > .95, CFI > .95, SRMR < .08 \). The fit indices given in Table 4 show that all the models are acceptable. This allowed for calculating an average score on each scale and using them in further analyses.

**Confirmatory Factor Analysis 2.** Correlations between the four scales were as follows: \( r = .63 \) for ACD and ERW, \( r = .61 \) for ACD and ATI, \( r = .57 \) for ACD and GIE, \( r = .71 \) for ERW and ATI, \( r = .65 \) for ERW and GIE, and \( r = .69 \) for ATI and GIE. All correlations were significant at the .01 level. The model that we assumed had one latent variable (BVG) and four indicators (ACD, ATI, ERW, and GIE). As estimation method, we used the Maximum Likelihood with Satora-Bentler adjustment. The standardized estimates of the tested models are shown in Figure 1.
According to this analysis, all fit indices demonstrate a good model fit (Table 5). The Chi square (1.316) and the SRMR (0.007) show a perfect fit to the data. The values of CFI (1.000) and TLI (1.004) also imply a good model fit. We can therefore reject the null hypothesis that there are no significant relationships among the variables. The value of the RMSEA (0.000) even suggests that the model fits reasonably well to the population and hence can be accepted.

Discussion and Conclusions

The aim of this contribution was to identify the elements that are integral parts of a teacher-specific intercultural competence construct, focusing on those facets that are considered to be rather value-laden and affectively tinged. Following the widely used theoretical model of teachers’ professional competencies developed by Baumert and Kunter (2013), we conceptualized these facets as the Beliefs, Values, and Goals Dimension of teacher-specific intercultural competence and identified four core elements: (1) appreciation of cultural diversity; (2) ethno-relative worldview; (3) attitudes toward integration; and (4) identification with goals of intercultural education.

In order to test the hypothesis that these four elements build one single overarching construct, we developed four scales operationalizing each of these aspects and then subjected them to rigorous psychometric tests and Confirmatory
Factor Analyses. The results as presented above suggest that our four scales have good psychometric properties: Cronbach’s alphas were consistently above .80, which is very respectable in line with general recommendations for intercultural competence test Matsumoto & Hwang, 2013). Furthermore, Exploratory Factor Analyses have shown that each of the four scales has a one-factor structure, and that individual items load primarily on (four) different factors as predicted by the model.

With regard to the test of convergent validity, we expected to find large positive correlations between the “Multicultural Beliefs Subscale” (MBS) (Hachfeld et al., 2011) – as one validation measure – and all our scales. The results indeed show these correlations (with ACD .44, \( p < .001 \); with ERW.50, \( p < .001 \); with ATI .40, \( p < .001 \); with GIE .29, \( p < .001 \)) which confirms that our new scales measure teachers’ beliefs, values, and goals related to intercultural education. The second validation measure, the “Modified Serbian version of the Intercultural Sensitivity Scale” (MSv-ISS; Petrović et al., 2015), was expected to correlate especially with our ERW scale. The obtained correlation was only .25 (\( p < .001 \)), but correlations between the MSv-ISS and our other scales were consistently higher (between .42 and .49; \( p < .001 \)). This result is counter-intuitive, especially if we consider that the MSv-ISS and our “Ethno-Relative Worldview” scale measure very similarly defined constructs: The MSv-ISS measures the ability of a person to distinguish how their partners in communication differ in behaviour, perceptions, or feelings, and our “Ethno-Relative Worldview” scale attempts to assess the degree of preparedness to shift perspectives and of showing cultural empathy (see above). However, if we go further into details, we may reveal possible reasons for the present result: The MSv-ISS assesses strongly affective parts (such as interaction enjoyment or interaction engagement: e.g., ‘I enjoy interacting with people from different cultures’). Our “Ethno-Relative Worldview” scale, however, focuses rather on the awareness about different perspectives in the school context and how this awareness is a prerequisite for teaching practices (e.g., ‘It is important to consider how school values affect minority students’ approaches to learning’). In this sense, the present result may indicate that the “Ethno-Relative Worldview” scale is not as affectively loaded as intended for a facet of the Beliefs, Values, Goals dimension. This could be checked with further analyses, including more cognitively oriented scales of perspective taking (such as the Normality Reflection Scale, see Leutwyler & Petrović, 2011). The fact that the MSv-ISS correlates more strongly with the other three scales might indicate how much these scales are affectively loaded. From this perspective, the results suggest that we succeeded in developing school-specific and affectively loaded scales for the Beliefs, Values, Goals Dimension, though slightly less so in the case of the “Ethno-Relative Worldview” scale. Nevertheless, the latter can also be considered as an integral part of the assumed overarching construct, as indicated by the results of the Confirmatory Factor Analyses.

The results of the confirmatory factor analyses have clearly substantiated the assumption that the Beliefs, Values, Goals Dimension may be conceived
as a higher order construct, which encompasses (a) appreciation of cultural diversity; (b) an ethno-relative worldview; (c) attitudes toward integration; and (d) identification with the goals of intercultural education. We have thereby provided evidence that it is necessary to discriminate between these four aspects of beliefs, values, and goals in order to give a full picture of this affective dimension of teacher-specific intercultural competence. This has clear implications, both for theory (with regard to conceptualizing teacher-specific intercultural competencies) and for practice (with regard to teacher education and its curricula for preparing teachers for working in diverse contexts).

However, the evidence that these four aspects can be conceived as elements of one higher order construct does not exclude the possibility that further facets might be included in this Beliefs, Values, Goals Dimension as well. Our review of the literature led us to cast aside other facets or to include them as parts of other dimensions of Baumert and Kunter’s model (e.g., as parts of the Motivational dimension or the Self-Regulation dimension). At present, we have strong evidence that the selected four facets are part of what we call the Beliefs, Values, Goals Dimension, but only a Confirmatory Factor Analysis including scales which operationalize the remaining three dimensions could clearly demonstrate whether the four facets best fit the Beliefs, Values, Goals or one of the other dimensions. For such an analysis, we would need good instruments to assess the other dimensions and a much bigger sample.

In general, to support the present conceptualization of teacher-specific intercultural competence, we suggest validating our findings in samples which are diverse with regard to the contexts of the samples and with regard to the intercultural and professional experiences of individual participants. Such validation studies would allow us to test the invariance and the stability of the suggested CFA model.

With the present studies, we have identified four important facets that we consider to be the core of the Beliefs, Values and Goals dimension within a teacher-specific intercultural competence construct. Furthermore, we have provided psychometrically sound instruments, which explicitly consider the context of schooling and, at the same time, are embedded in a more holistic view of intercultural competencies. Proposing an empirically supported conceptualization and instruments which fit a specific professional context (where general approaches are not appropriate), this paper contributes to resolving theoretical, methodological, and practical issues in research on intercultural competencies.

However, we have yet no evidence that teachers with high scores on the four proposed facets actually teach better in culturally diverse classrooms. When we assume a positive relation between teaching quality in diverse settings, on the one hand, and a high appreciation of cultural diversity, a pronounced ethno-relative worldview, favourable attitudes toward integration and strong identification with the goals of intercultural education, on the other, we do so only by relying on Baumert and Kunter’s theoretical model. We do not have any empirical evidence that this relation truly exists. Moreover, we do
not expect that this relation would be a simple, unidirectional one. We rather expect configurational effects in interaction with the other dimensions of teachers’ professional competencies (i.e., professional knowledge, motivational orientations, and self-regulation; see above). We are looking forward to seeing these relations addressed by further research.

References


Структура интеркултурних компетенција специфичних за наставнике: емпиријски докази за димензију „Веровања, вредности и циљева“

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Циљ овог истраживања је да идентификује елементе који чине интегрални део конструкта интеркултурне компетенције специфичне за наставнике. У овом раду фокусирамо се на фацете конструката за које се сматра да су прилично засићене вредностима и афективно обојене. Пратећи широко коришћени теоријски модел професионалних компетенција наставника који су развили Бамерт и Кунтер (2013), концептуално смо сместили ове фацете унутар димензије „Веровања, Вредности и Циљева“ и предлажемо четири централна елемента: (1) уважавање културне разноликости; (2) етнорелативан поглед на свет; (3) ставове према интеркултурном образовању. За бисмо тестирали хипотезу да ова четири аспекта представљају један једнинадређени латентни констракт, операционализовали смо сваки одговарајући скалама и онда проверили интерну конзистенцију инструмента, конвергентну и факторску валидност. Резултати указују да наше четири скале имају добре интерне конзистенције (Кронбахове алфе између 0,82 и 0,89), да се укапају у једнофакторску структуру (како што је демонстрирано конфирмативном факторском анализом) и указују на један латентни констракт (RMSEA=0,000; TLI = 1,004; CFI = 1,000; SRMR = .007). Са овим резултатима, овај рад представља валидни, контекстуално релевантни нов инструмент за процену веровања, вредности и циљева наставника у вези са интеркултурним образовањем и допринос у разрешењу теријских, методолошких и практичних проблема истраживања интеркултурних компетенција.

Кључне речи: интеркултурна компетенција, образовање наставника, интеркултурно образовање, процена.

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