Motivational aspects of teachers’ intercultural competence: Development and psychometric evaluation of new scales for the assessment of motivational orientation

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This paper deals with the development of three scales for the assessment of motivational aspects of teachers’ intercultural competence – Teacher Cultural Diversity Enthusiasm Scale (TCDES), Teacher Cultural Diversity Self-Efficacy Scale (TCDSES) and Teacher Commitment to Social Justice Scale (TCSJS). The second goal of the study was to test the assumption that these three scales were indicators of a single latent concept – Motivational orientation related to diversity. The results have demonstrated strong reliability (αs> .80), one-factor structure (cross-validated with EFA and CFA) and satisfactory content and concurrent validity for each scale. Additionally, EFA has shown that three distinct factors explain item level variations. These results suggest that the three scales are reliable measures of three different motivational aspects. In the next step, CFA has confirmed the model of Motivational orientation, where a single latent construct explains variations at the level of the scales. The assessment of motivational orientation may better inform training and pedagogical interventions aiming to develop teachers’ competence to deal with diversity and measure the outcomes and efficacy of educational efforts such as pre-service and in-service intercultural training programs for teachers.

Keywords: teachers’ intercultural competence, motivational orientation, enthusiasm, self-efficacy, commitment to social justice

Modern societies are characterized by an increasing cultural and ethnic diversity. Therefore, Luciak’s claim that “finding adequate responses to diversity is among the most pressing concerns of our time” (2010, p. 57) seems to be more true than ever before. The increasing diversity challenges the entire society and requests, inter alia, a reconsideration of the role of education, schools,
and teachers. Against this background, acting in the context of diversity often remains a source of concern, anxiety, and stress for teachers at different stages of their professional development (e.g., Buchori & Dobinson, 2012; Simic, 2014; Tatar & Horenczyk, 2003; Wang, Hall, & Rahimi, 2015). This general discomfort might be related to what both teachers and scholars have claimed for a long time: that teachers are not adequately prepared for dealing with an increasing diversity (e.g., Cochran-Smith, Davis, & Fries 2004; Gay, 2002; Hollins & Guzman, 2005; OECD, 2010; OECD 2014; Pantić, Closs, & Ivošević, 2011; Silverman, 2010).

Cultural diversity in Serbia, especially in terms of ethnicity and religion, guarantees that practically all teachers will most likely work with students of differing cultural backgrounds. Given that interethnic and interreligious relationships have been significantly shaped by turbulent historical events (e.g., the dissolution of former Yugoslavia and ethnic war in the 1990s) and by the ongoing refugee crisis, dealing with cultural diversity for Serbian teachers is even more challenging. In the first place, the discussions on topics related to cultural and ethnic diversity often trigger strong emotions and traumatic memories (Kovač-Cerović, Popadić, Knežević, & Matković, 2004; Popović, Petrović, Ilić, & Krivačić, 2006). Further, a wide social distance between different ethnic and/or religious groups is evident (Biro, 2001; Biro, Mihić, Milin, & Logar, 2002). The youth used to be more tolerant in their attitudes to ethnic minorities than the elderly population (Kuzmanović, 1994; Pantić, 1991), but recent studies have pointed to worryingly high levels of ethnic distance in Serbian youth (Kandido-Jakšić, 2008; Pavasović-Trošt, 2013) and children (Mihić & Mihić, 2003). These social gaps could further be widened by strong family pressures towards conforming to group norms of exclusivity and distance towards the other perceived by the youth (“From inclusive identities to inclusive societies”, 2016), which is particularly worrying in the context of strong intergenerational and family relationships (Tomanović & Stanojević, 2015). Therefore, Serbian teachers need to gain intercultural awareness and sensitivity, knowledge and competence to teach their students effectively, promote social justice in the classroom, decrease students’ social distance, stereotypes, and intolerance towards other ethnic groups, and prepare their students to live and work in a culturally diverse and democratic society and world.

However, the importance of preparing future teachers to work with cultural diversity in Serbia has been insufficiently recognized by educational institutions dealing with initial teacher education (ITE). Only a few ITE providers offer

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1 There are up to twenty-one minority groups living in Serbia and the three largest groups are Hungarian (3.53%), Roma (2.05%) and Bosnian (2.02%) (Statistical Office of the Republic of Serbia, 2012).

2 The data on religious affiliation in Serbia (Statistical Office of the Republic of Serbia, 2012) show that the largest number of believers belong to Orthodox Christianity (84.59%) and a smaller number to other religions (e.g. 5% Roman Catholicism, 3.1% Islam and 1% Protestantism).
courses that would prepare future teachers to work with diversity (Zlatković & Petrović, 2016). Moreover, there is a lack of strategic orientation and legal framework that would support the development of intercultural competence of future teachers (Petrović, 2016). In general, teachers in Serbia neither have sufficient intercultural sensitivity (Jokić & Petrović, 2016; Petrović & Zlatković, 2009) nor are they equipped with the knowledge, strategies, and tools necessary for dealing with diversity in the classroom (Macura-Milovanović, Pantić, & Closs, 2012; Vranješević, 2014; Zlatković & Petrović, 2016).

With this in mind, it seems urgent to develop an appropriate support both for in-service teachers and for the preparation of pre-service teachers. This concern was the starting base of a project on which we report in the present paper. The project’s overall aim is to develop a tool which allows teacher educators to move their courses on Intercultural Education from a normatively imbued – and, hence, mostly ineffective – top-down training towards a needs-based approach (Leutwyler, Petrović, & Mantel, 2012). Such a tool should provide an empirically gained insight into pre-service and in-service teachers’ beliefs and dispositions regarding Intercultural Education and, therefore, enable an effective adaptation of Teacher Education contents and curricula. However, in order to develop such a tool, different theoretical and conceptual strands have to be considered. The following section provides an overview of this conceptual background.

**Conceptual Background**

The development of such a new tool requires a combination of two different approaches which are hardly ever brought together: the tradition of ‘interculturalists’, with its rich and manifold literature on *intercultural competencies*, and the conceptual approaches of Teacher Education, which focus on school-specific professional demands, i.e., on *teacher competencies*. Merging these two theoretical traditions would provide a stronger foundation for intercultural approaches in Teacher Education and for more effective development of (future) teachers’ *intercultural competencies*. In our view, this can be achieved by nesting the conceptual language of ‘interculturalists’ within the conceptual framework of Teacher Education, in specific the widely used theoretical model of teachers’ professional competencies developed by Baumert and Kunter (2013). This model defines teachers’ professional competence as an interplay of four main components, required to meet the manifold demands of this profession: (1) professional knowledge; (2) values, beliefs, and goals; (3) motivational orientation; and (4) self-regulation. *Professional knowledge* implies both declarative and procedural knowledge and may be seen as the core of professionalism. It covers different domains, such as content knowledge,

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pedagogical content knowledge, psychological knowledge, organizational knowledge, or counseling knowledge. However, the basic proposition of this theoretical model is that a teacher is competent only if this knowledge is related to productive values and beliefs, appropriate motivational orientations, and an adequate self-regulation. *Values, beliefs, and goals* refer to subjective theories about a specific subject or topic, as well as the subjective relevance of specific educational aims. *Self-regulation* entails an appropriate engagement, dealing with frustrations, or maintaining a healthy distance. *Motivational orientations*, finally, contain control beliefs and intrinsic motivational orientations. As this paper focuses on this specific component of teachers’ professional competencies, we will consider it in more detail below.

However, before doing so, we need to bring in the conceptual language of the ‘interculturalists’, as stated above. So far, no agreement has been achieved on the definition of intercultural competence (ICC) or the number and nature of its components. For example, Bennett (1986, 2004; Bennett & Bennett, 2004; Hammer, Benet, & Wiseman, 2003) views it from a developmental perspective, acknowledging personal orientations, reflexivity, and the socio-cultural context, among other dimensions, thus making ICC even more challenging to measure. Being aware that there is no consensus but rather a very diverse, multifaceted, and partly incoherent discourse on the definition of ICC, we draw on a very general and widely accepted understanding of the construct as developed by Deardorff (2009) and Perry and Southwell (2011). Against this background, we understand ICC as a bundle of abilities, beliefs, and dispositions which allow for an adequate and target-aimed behavior in intercultural situations, considering and balancing appropriately the interests of all involved parties.

Such an understanding of ICC involves a broad range of cognitive, social, emotional, and motivational/volitional dimensions. In order to achieve the intended representation of the conceptual language of ‘interculturalists’ within that of Teacher Education, we drew on relevant conceptualizations and operationalizations of ICC put forth by intercultural researchers (Bhawuk & Brislin, 1992; Deardorff, 2006; Fantini, 2009; Fuertes, Miville, Mohr, Sedlacek, & Gretchen, 2000; Kelley & Meyers, 1995; Koester & Olebe, 1988; Landis, Bennet, & Bennet, 2004; Munroe & Pearson, 2006; Olson & Kroeger, 2001; Perry & Southwell, 2011; Ruben, 1976; Ruben & Kealey, 1979; Van der Zee & Van Oudenhoven, 2000; Wang et al., 2003) and identified specific dimensions of ICC proposed in their contributions. We then placed these dimensions within Baumert and Kunter’s model of teachers’ professional competencies and translated them to a school-specific context. We thus arrived at a model of teaching-specific aspects of teachers’ *intercultural competence* (Petrović et al., 2016). In the present paper, we elaborate on the motivational aspects of teachers’ intercultural competence, as conceived in this model.

**Motivational orientation as a component of teachers’ ICC.** According to Baumert and Kunter (2013), motivational orientation is one aspect of professional competence that influences whether or not teachers function successfully in
their profession. Their model distinguishes between two aspects of motivational orientation – teachers’ enthusiasm and teachers’ self-efficacy beliefs.

**Teachers’ enthusiasm regarding cultural diversity.** Teachers’ enthusiasm is seen as a relatively stable disposition and conceptualized as an affective factor of motivation. In other words, teachers’ enthusiasm reflects the degree of positive emotion experienced during teaching (Baumert & Kunter, 2013; Kunter et al., 2008). The findings of several studies demonstrate that teachers who perform their job enthusiastically invest greater effort and perseverance in their work, perform higher quality instruction, find ways to reach out to and motivate their students, and achieve better results in terms of students’ learning outcomes (e.g., Kunter, 2013; Kunter, Frenzel, Nagy, Baumert, & Pekrun, 2011; Kunter et al., 2008; Moè, Pazzaglia, & Ronconi, 2010; Roth, Assor, Kanat-Maymon, & Kaplan, 2007).

However, there is a difference between enthusiasm for teaching and interacting with students, and enthusiasm for the subject (Kunter et al., 2011). While it was found that the latter is more stable and independent of student characteristics, Kunter (2013, p. 283) argues that the crucial factor for teacher effectiveness is not the “love of the subject”, but rather teachers’ enjoyment of interacting with students. From the perspective of teachers’ ICC, we consider teacher enjoyment of interacting with students as an essential component of teachers’ enthusiasm. Based on this, we define teachers’ enthusiasm to deal with cultural diversity as willingness to teach in multicultural classroom and enjoyment in interacting with minority students and parents. The underlying assumption is that teachers who express enthusiasm regarding cultural diversity are ready for active engagement in challenging intercultural situations and should perceive working in a multicultural classroom as rewarding. For such teachers, interactions with minority students are a source of positive emotions and satisfaction.

**Teachers’ self-efficacy regarding cultural diversity.** Teachers’ self-efficacy beliefs form the second aspect of motivational orientation in Baumert and Kunter’s (2013) model. Based on Bandura’s (1997) construct of self-efficacy, teachers’ self-efficacy is defined as “belief in her or his capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context” (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998, p. 233). The findings of a number of studies prove that self-efficacy is an important aspect of teachers’ profession. It was established that teachers with high self-efficacy beliefs were more successful in motivating students and supporting their learning – they planned and prepared instructions more carefully, spent more time monitoring, checking seatwork, and providing whole-group instruction, used innovative and effective teaching methods to a greater extent, were more open to cooperation with local communities, and were less subjected to stress (e.g., Ashton & Webb, 1986; Brouwers & Tomic, 2000; Caprara, Barbaranelli, Steca, & Malone, 2006; Gibson & Dembo, 1984; Skaalvik & Skaalvik, 2007; Tschannen-Moran & McMaster, 2009; Tucker et al., 2005).
With regard to teachers’ intercultural competence, we define teachers’ self-efficacy in dealing with cultural diversity in the classroom as their own perceived competence in supporting learning and achievement of students from minority cultures. This is teachers’ own assessment of how efficient she or he is, for example, in responding to various learning needs of minority students, motivating minority pupils who are not interested in school work, supporting minority students when they face school problems, etc.

**Teachers’ commitment to social justice.** Baumert and Kunter’s (2013) model does not recognize teachers’ commitment to social justice as an integral part of their professional competence. However, this is an important component of ICC (e.g., Torres-Harding, Siers, & Olson, 2012). According to Garmon (2004), “a sense of social justice is a commitment to equity and equality for all people in society” (p. 206) and is intertwined with emotionality (Boylan, 2009). In the school setting, social justice means a disposition towards recognizing and combating all forms of oppression and discrimination existing in institutional practices and policies (Murrell, 2006); a common perspective in the social justice discourse is that teachers should become agents of and activists for social change (Grant & Agosto, 2008). For that reason, intercultural competence in teachers’ profession additionally involves commitment to social justice (Murrell, 2006). Based on this rationale, we include commitment to social justice as a third component of the motivational domain of teachers’ intercultural competence. In this study, teachers’ commitment to social justice is defined as the readiness to act in favor of students facing social injustice based on cultural background, in the classroom or at school-level. We postulate that teachers who are committed to social justice will react, for example, in situations when a minority student is excluded from social activities at school or when students show prejudice towards other cultures.

In sum, we define the motivational aspects of teachers’ ICC or the *motivational orientation related to diversity* as teachers’ inclination to enjoy, deal with, and act in favor of the cultural diversity in the classroom. Its three components are defined as follows: (1) *Teacher Cultural Diversity Enthusiasm* – willingness to teach in a multicultural classroom and enjoyment in interacting with minority students and parents; (2) *Teacher Cultural Diversity Self-Efficacy* – self-perceived competence to deal with cultural diversity in the classroom; (3) *Teacher Commitment to Social Justice* – readiness to act in favor of students facing social injustice in the classroom or school based on their cultural background.

**The Present Study**

Working from the above conception, we aimed at developing a threepartite instrument that would reliably assess each of the proposed three motivational components of teachers’ ICC, and at the same time conform to the assumption of an overarching latent construct which may be referred to as *Motivational orientation related to diversity* and which encompasses all three components.
Method

Participants

A total of 330 respondents participated in the study. Respondents were students from the Teacher Education Faculty in Jagodina (53.9%) and Belgrade (46.1%). Most of the respondents were female (91%). The average age of the respondents was 22.1. Almost all students had parents of the same nationality (97.5%) and almost all (98.1%) expressed their nationality as Serbian. The majority of participants (61.5%) had travelled abroad more than three times, and 3.7% reported never having travelled to another country. Only 24.2% attended at least one course related to multicultural or intercultural education and 81.7% conducted their internship in classes including some students with non-Serbian cultural background. Finally, 73.4% participants considered themselves to have extensive experience with cultural diversity.

Measures

The Motivational Orientation Scales. Given the aim of this study, we use this section to detail the development of the main instrument, i.e., three scales for the assessment of motivational aspects of teachers’ ICC.

Item generation. Mapping instruments designed by interculturalists to assess ICC onto the conceptual landscape of teacher education and competencies was the main input for item development. A pool of selected items from the analyzed instruments were adjusted so as to fit the content of the three components of Motivational orientation related to diversity, described in the Introduction. Where adjusted items were not sufficient to fully operationalize these components, we developed completely new items. All items were in the form of declarative statements for which varying degrees of agreement can be expressed, and were thus accompanied by a 4-point Likert-type scale to indicate level of agreement. A total of thirty items were developed: 12 for the Teacher Cultural Diversity Enthusiasm Scale (TCDES), 9 for the Teacher Cultural Diversity Self-Efficacy Scale (TCDSES), and 9 for the Teacher Commitment to Social Justice Scale (TCSJS).

Pilot study. A pilot study including reliability analysis and exploratory factor analysis demonstrated dissatisfying characteristics for 18 items (6 in TCDES, 5 in TCDSES, and 7 in TCSJS), which either lowered the reliability of the scales or were loading on a different factor than expected. These items were left out from subsequent testing and analysis, whereas 11 new ones (5 in TCDSES and 6 in TCSJS) were included, with the aim to improve the operationalization of the concepts and metric features of the scales. The final versions of the TCDES, TCDSES, and TCSJS, which were tested in the present study, comprised 6, 9, and 8 items, respectively.

As there is no unique procedure for instrument revision (see Hinkin, Tracey, Enz, 1997), the steps taken in order to assess the developed instruments were chosen based on a review of the literature on item selection procedures and usage of various analyses for the assessment and improvement of a scale’s psychometric properties (e.g., Clark & Watson, 1995; Raubenheimer, 2004; Reise, Waller, & Comrey, 2000; Suhr & Shay, 2009). Besides the new instruments, four other instruments were administered in order to test for convergent validity.

The Diversity of Contact Subscale (from MGUDS, Miville et al., 1999). This instrument contains five items which address both previous and intended behaviors relevant to interpersonal contact with people of different cultural backgrounds (e.g., “I would like to
join an organization that emphasizes getting to know people from different countries”). In this study, Cronbach’s alpha for the subscale was .72. This scale has been chosen for validation since a significant positive correlation would confirm that the three new scales measure constructs related to awareness and acceptance of both similarities and differences that exist among people as well as willingness for contact with diverse social and cultural groups.

**Teachers’ Sense of Efficacy Scale** (Tschannen-Moran & Woolfolk Hoy, 2001). This twelve-item instrument assesses how well teachers think they can cope with challenges and difficulties in their daily professional activities (e.g., “I can motivate students who show low interest in school”). According to previous studies, the scale’s internal consistency is .93 (Fives & Buehl, 2010), but was somewhat lower (yet still good) in the present research .84. A positive significant correlation of the three newly developed scales with this one would suggest that they are related to teachers’ persistence, enthusiasm, commitment, and instructional behavior, in light of a variety of obstacles arising from the diversity of the student body.

**Behavioral Intentions Subscale** (from the Social Justice Scale, Torres-Harding et al., 2012). This subscale comprises four items which examine behavioral intentions to engage in social action or social justice-related activities (e.g., “In the future, I intend to talk with others about social power inequalities, social injustices, and the impact of social forces on health and well-being”). In this study, Cronbach’s alpha for the subscale was .83. A positive significant correlation with this scale would support the validity of the newly developed scales as measures of an individual’s attitudes, values, and behaviors revolving around social justice, a particularly important value linked to the quality and equity of education.

**Autonomous Motivation for Teaching** (Roth et al., 2007). This instrument examines four types of teachers’ motivation: external (e.g., “When I try to find interesting subjects and new ways of teaching, I do so because I want the parents to be satisfied so they won’t complain”), introjected (e.g., “When I try to find interesting subjects and new ways of teaching, I do so because I think it is a shame to keep on teaching in the same way all the time”), identified (e.g., “When I try to find interesting subjects and new ways of teaching, I do so because it is important for me to keep up with innovations in teaching”), and intrinsic (e.g., “When I try to find interesting subjects and new ways of teaching, I do so because it is fun to create new things”), each represented with four items. Previously reported alphas for the four subscales ranged from .68 to .76 (Roth et al., 2007), and the ones established in this study were .86 for external, .75 for introjected, .77 for identified, and .76 for intrinsic motivation. These scales have been chosen for validation of the three newly developed scales so as to confirm their position on the extrinsic-intrinsic motivation continuum. A significant positive correlation with identified and intrinsic motivation, and lack of associations with introjected and external motivation would suggest that our scales measure the type of teacher’s motivation that is accompanied by the experience of choice (in contrast to pressure), sense of self-determination, enthusiasm, joy, etc.

For all instruments, responses were given on a 4-point scale ranging from 1 (strongly disagree) to 4 (strongly agree).

**Procedure**

The newly developed scales (TCDES, TCDSES, and TCSJS) were administered to the above described sample of students with their informed consent. Participation in the study was completely voluntary, and anonymity was guaranteed to all participants. The instruments

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4 Due to technical issues, this scale was not administered in its entirety. The last item of the scale was not printed out, which resulted in participants filling in only 3 out of 4 items of this scale but with high reliability (.84).
were administered by researchers in the project, who described the general goal of the study and gave the necessary instructions to students. In specific, participants were encouraged to imagine that they taught a multicultural classroom, and to give their answers based on the anticipation of their own behavior in such a situation. The remaining measures were administered to the Belgrade sub-sample only, along with the three newly constructed scales.

Results

Internal Consistency

Reliability analysis was chosen as the start-off analysis to test the internal consistency of the scales (Wille, 1996, in Raubenheimer, 2004) and identify items that might be lowering Cronbach’s alpha values (Cronbach, 1951) and exhibiting small correlations (<.40) with the total score. No items were eliminated in this step. All three alpha coefficients were in the .80 – .90 range, i.e., internal consistency for all three scales was good (see Table 1).

Table 1
*Cronbach’s alpha and number of items for the newly constructed scales*

<table>
<thead>
<tr>
<th>Scales</th>
<th>Alpha (No. of items)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher cultural diversity enthusiasm scale (TCDES)</td>
<td>.868 (6)</td>
</tr>
<tr>
<td>Teacher cultural diversity self-efficacy scale (TCDSES)</td>
<td>.872 (9)</td>
</tr>
<tr>
<td>Teacher commitment to social justice scale (TCSJS)</td>
<td>.891 (8)</td>
</tr>
</tbody>
</table>

Exploratory Factor Analyses

The factor structure of each scale was assessed by a separate exploratory factor analysis (Principal Axis Factoring with Promax rotation), with the idea to eliminate items with low extraction communalities (<.45), i.e., those which are not well represented in the common factor space. The results pointed to a single-factor solution for each of the scales; therefore, no items were excluded. This step ensured that each of the three scales was composed of items that measure the same concept (Hinkin et al., 1997).

Since factor-analytic-based scale revision should be an iterative process where data inform construct definition and refinement (e.g., Comrey 1978, in Reubenheimer, 2004; Reise et al., 2000), an additional exploratory factor analysis (EFA) was performed with items from the three scales pooled together, to test whether they actually load on the theoretically expected factors. The results indeed demonstrated a three-factor solution, explaining 50.49% of total variance. The loadings of all items on each factor are shown in Table 2.
Table 2  
*Pattern matrix of three 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>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher Cultural Diversity Enthusiasm Scale (TCDES)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would like to teach students from different cultural backgrounds</td>
<td>.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For me, teaching in multicultural classes is a challenge, not an obstacle</td>
<td>.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoy interacting with parents from different cultures</td>
<td>.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It’s a pleasure to work in a culturally diverse classroom, although it’s not always easy</td>
<td>.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoy the teachers’ privilege to deal with a great variety of culturally diverse students</td>
<td>.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I’m looking forward to take over a class with great cultural variety</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Teacher Cultural Diversity Self-Efficacy Scale (TCDSES)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am sure that I can make a good contact with minority students if I try.</td>
<td>.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Even if I teach a class with a large cultural diversity, I am able to respond to different individual needs.</td>
<td>.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think that I am able to recognize the learning requirements of the individual pupils even in classes with a large cultural diversity.</td>
<td>.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am ready to work in a multicultural environment.</td>
<td>.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel confident about motivating minority pupils who are uninterested in school work.</td>
<td>.61</td>
<td></td>
<td></td>
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<tr>
<td>It’s easy for me to cope with educational needs of minority students.</td>
<td>.76</td>
<td></td>
<td></td>
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<tr>
<td>I trust myself to support minority students when they face school problems.</td>
<td>.45</td>
<td></td>
<td></td>
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<tr>
<td>I know that I can do a lot to support learning process of minority students.</td>
<td>.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am competent to create learning conditions in which minority students will feel successful.</td>
<td>.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Teacher Commitment to Social Justice Scale (TCSJS)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not allow jokes in the classroom that undermine students of other cultures.</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I encourage students to help each other in order to achieve equal chances.</td>
<td>.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I always try to resolve a conflict of my students caused by cultural differences.</td>
<td>.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I always make sure that assignments I give to students do not discriminate against minority students.</td>
<td>.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I react immediately if students show prejudice towards other cultures.</td>
<td>.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I immediately react when I have the impression that a minority student is excluded from social activities.</td>
<td>.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I immediately react when I have the impression that a minority student is rejected.</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do everything I can to compensate if minority students face bad conditions for learning at home.</td>
<td>.50</td>
<td></td>
<td></td>
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</tbody>
</table>

*Note. All items were administered in Serbian and the table represents a translation of the original items.*
Confirmatory Factor Analyses

In addition, confirmatory factor analysis (CFA) was conducted to test the assumption that a single latent construct accounts for item-level variations. Since the distribution of scores included in CFA violated normality assumptions, Maximum Likelihood with Satora-Bentler adjustments for non-normal distribution was used (Brown, 2006; Curran, West, & Finch, 1996). The results indicated a single latent construct at the base of item-level variations for each scale. The models that were tested had one latent variable and as many indicators as there were items within a scale. Three models were tested: Teacher Enthusiasm, Teacher self-efficacy and Commitment to social justice. Fit indices show that all the models are acceptable (see Table 3). This allowed for calculating an average score on each scale, and for using them in further analysis.

| Factor structure of TCDES, TCDSES and TCSJS: CFA fit indices |
|-----------------|-----------------|---------------|-----------------|-----------------|
|                  | $\chi^2$ (df)   | Root mean squared error of approximation (RMSEA) | Comparative fit index (CFI) | Tucker-Lewis Index (TLI) | Standardized mean square residual (SRMR) |
| Enthusiasm       | 15.623(9), $p < .075$ | .048 | .983 | .972 | .023 |
| Teacher self-efficacy | 64.791(27), $p < .000$ | .066 | .956 | .941 | .039 |
| Commitment to social justice | 44.362(20), $p < .001$ | .061 | .960 | .945 | .036 |

CFA was also used to test the assumption that the three scales (TCDES, TCDSES, and TCSJS) were indicators of the same latent construct that we labeled Motivational orientation related to diversity. The model that was assumed had one latent variable (Motivational orientation) and three indicators (TCDES, TCDSES, and TCSJS). Since the model based on this hypothesis was a just identified model, with zero degrees of freedom, it was not possible to test it. Therefore, with the aim to increase the number of freely estimated parameters, the model had to include more indicators. For this purpose, item parceling was used (Brown, 2006; Kline, 2015), i.e., items of each scale were divided into two subscales (per item number), which resulted in a model with one latent variable and 6 indicators. The correlations between the subscales that were included in CFA are given in Table 4.

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5 Various authors report different cut off values as reasonable (see Lazarević, 2008; Schreiber, Nora, Stage, Barlow, & King, 2006; Sivo, Fan, Witta, & Willse, 2006). The following cut-off values were applied in this study: RMSEA < .08, TLI > .95, CFI > .95, SRMR < .08.
Table 4
Correlations between sub-scales included in CFA

<table>
<thead>
<tr>
<th>Sub-scale 1</th>
<th>Sub-scale 2</th>
<th>Sub-scale 1</th>
<th>Sub-scale 2</th>
<th>Sub-scale 1</th>
<th>Sub-scale 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCDES 1</td>
<td>1</td>
<td>.74**</td>
<td>.57**</td>
<td>.57**</td>
<td>.36**</td>
</tr>
<tr>
<td>TCDES 2</td>
<td>1</td>
<td>.55**</td>
<td>.53**</td>
<td>.29**</td>
<td>.33**</td>
</tr>
<tr>
<td>TCDES 1</td>
<td>1</td>
<td>.70**</td>
<td>.35**</td>
<td>.43**</td>
<td></td>
</tr>
<tr>
<td>TCDES 2</td>
<td>1</td>
<td>.43**</td>
<td>.47**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCSJS 1</td>
<td>1</td>
<td>.77**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCSJS 2</td>
<td>1</td>
<td>.77**</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** $p<.01$

Given that our three scales were represented by three pairs of indicators, we allowed for correlations between errors of the indicators coming from the same scale, i.e., we allowed for a total of three error correlations. Additionally, for the same reason, we also made loadings on pairs of subscales to be fixed (e.g., latent variable has the same loading on TCDES 1 and TCDES 2). Maximum Likelihood with Satora-Bentler estimator was used as the estimation method. The model that was tested is shown in Figure 1, together with the standardized estimates.

The loadings of the latent variable on indicators are high for TCDES and TCDSES, and moderate for TCSJS. Also, Motivational orientation has the highest loadings on the Teacher Cultural Diversity Self-Efficacy Scale. All fit indices demonstrate an excellent model fit. Chi square (15.47(8), $p <.051$) and SRMR (.054) show perfect fit to the data. The values of CFI (.99) and TLI (.99) also imply a good model fit, meaning that we can reject the null hypothesis that there are no relationships among variables. Additionally, the value of RMSEA (.026) suggests that the model fits reasonably well to the population and hence should be accepted.
Correlations

Finally, Pearson correlations between scores on all measures were calculated. According to this analysis, TCDES scores correlate significantly with both TCDSES and TCSJS, $r = .64$ and $r = .39$ respectively. The correlation between TCDSES and TCSJS is $r = .49$.

Table 5 shows correlations between the three new scales and instruments used to establish their convergent validity. TCDES, TCDSES, and TCSJS scores showed the expected pattern of correlations with all validation scales, the only exception being a nonexistent correlation between the TCSJS and the Behavioral Intention subscale.

Table 5

<table>
<thead>
<tr>
<th></th>
<th>Teacher Cultural Diversity Enthusiasm Scale (TCDES)</th>
<th>Teacher cultural diversity self-efficacy scale (TCDSES)</th>
<th>Teacher Commitment to Social Justice Scale (TCSJS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversity of Contact</td>
<td>.446**</td>
<td>.298**</td>
<td>.315**</td>
</tr>
<tr>
<td>Teachers’ Sense of Efficacy</td>
<td>.471**</td>
<td>.561**</td>
<td>.596**</td>
</tr>
<tr>
<td>Behavioral Intentions</td>
<td>.259**</td>
<td>.164*</td>
<td>.086</td>
</tr>
<tr>
<td>External Motivation</td>
<td>.147</td>
<td>.070</td>
<td>-.058</td>
</tr>
<tr>
<td>Introjected Motivation</td>
<td>-.008</td>
<td>-.014</td>
<td>.077</td>
</tr>
<tr>
<td>Identified Motivation</td>
<td>.265**</td>
<td>.306**</td>
<td>.485**</td>
</tr>
<tr>
<td>Intrinsic Motivation</td>
<td>.424**</td>
<td>.466**</td>
<td>.429**</td>
</tr>
</tbody>
</table>

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

Discussion and conclusions

The purpose of the study presented in this paper was to develop three scales which would reliably and validly assess the motivational components of teachers’ intercultural competence – Teacher Cultural Diversity Enthusiasm Scale (TCDES), Teacher Cultural Diversity Self-Efficacy Scale (TCDSES) and Teacher Commitment to Social Justice Scale (TCSJS) – as well as the overarching latent construct dubbed Motivational orientation related to diversity.

The obtained results suggest that the TCDES, TCDSES and TCSJS have good psychometric properties. Cronbach’s alphas are higher than .80, which fits the requirements put forth by different authors (e.g., Cortina, 1993, Peterson, 1993, and Steiner, 2003, in Raubenheimer, 2004), and both EFA and CFA have confirmed that each of the three scales has a one-factor structure. Significant but moderate inter-correlations among the three scales indicate that they measure three related, but somewhat distinct constructs.

Convergent validity of the newly developed scales was assessed through correlations with the instruments that have been shown to be good measures of the constructs (Westen & Rosenthal, 2003) theoretically related to enthusiasm for dealing with cultural diversity, teacher self-efficacy, and commitment to
social justice. Additionally, correlations with measures of theoretically dissimilar constructs were tested, however, with the expectation that these correlations would be nonsignificant. Convergent validity for the Teacher Cultural Diversity Enthusiasm Scale (TCDES) and the Teacher Cultural Diversity Self-Efficacy Scale (TCDSES) has been confirmed by significant correlations with the Diversity of Contact Subscale (.45 for TCDES and .30 for TCDSES), the Teachers’ Sense of Efficacy Scale (.47 for TCDES and .56 for TCDSES), the Identified Motivation Subscale (.27 for TCDES and .31 for TCDSES), and with the Intrinsic Motivation Subscale (.42 for TCDS and .47 for TCDSES). Nonexistent correlations with the External and Introjected Motivation Scales are also in favor of the convergent validity of the scales in question, because they confirm that the TCDES and TCDSES capture motivational aspects that are internally regulated, i.e., that the impetus for an activity is not perceived as external to the person (deCharms, 1968, in Roth et al., 2007). This reflects previous findings that enthusiasm for teaching (regardless of the intercultural context) describes intrinsic orientations (Baumert & Kunter, 2013) which are also linked to teachers’ self-efficacy beliefs (Guskey, 1984; Tschannen-Moran et al., 1998), but it also puts them in a new intercultural context.

However, the pattern of correlations between the Commitment to Social Justice Scale (TCSJS) and the validation measures does not consistently support construct validity of the newly developed scale. More specifically, TCSJS scores did not correlate significantly with the Behavioral Intentions Subscale from the Social Justice Scale (Torres-Harding et al., 2012), which puts a question mark over the convergent validity of the TCSJS. Unfortunately, technical issues concerning the administration of the Behavioral Intentions Subscale might have been a cause, as well as different temporal orientations in the items of our scale (referring to the present) and the validation scale (referring to the future). On the other hand, significant correlations with all the other relevant scales – the Diversity of Contact Subscale (.31), the Teachers’ Sense of Efficacy Scale (.60), the Identified (.48) and the Intrinsic Motivation Subscale (.43) also signify that TCSJS scores represent a teacher specific motivational aspect arising from personal values. This is in line with previous findings that the concept of teacher commitment is related to teachers’ self-efficacy (Chan, Lau, Nie, Lim, & Hogan, 2008; Coladarci, 1992) as well as to self-efficacy and agency among social justice educators (Quartz, 2003). Additionally, nonexistent correlations with External and Introjected Motivation confirm that the TCSJS assesses an internal “source of initiation and regulation of goal-directed activities” (deCharms, 1968, in Roth et al., 2007, p. 761), which should certainly be true of a scale attempting to measure commitment to an important goal such as social justice. Nevertheless, it would be advisable to check the validity of all three scales on

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6 This scale was not administered in its entirety due to technical issues - the last item of the scale was not printed out, which resulted in participants filling in only 3 out of 4 items of this scale. Three items of the Behavioral Intentions Subscale from the Social Justice Scale (Torres-Harding et al., 2012) in this research had high reliability (.83).
a larger and more representative sample because the current study included a sample of rather small size for validation purposes (152 students) and from one teacher education faculty only (University of Belgrade).

The results of CFA have corroborated that the motivation for dealing with cultural diversity in the school context may be conceived a higher order construct, which encompasses enthusiasm, self-efficacy, and commitment to social justice – three distinct, but interrelated constructs. This is in line with our definition of Motivational orientation related to diversity, which states that the motivational aspects of teachers’ intercultural competence entail their inclination to enjoy, deal with, and act in favor of the cultural diversity in the classroom. However, further validation and retesting of the model on a bigger sample of in-service teachers of different cultural backgrounds and varying degrees of intercultural and professional experience are recommended, as carefully chosen samples would allow for testing the invariance of CFA model across samples when cross-group constraints are imposed on the measurement model.

Baumert and Kunter (2013) demonstrated the importance of motivational orientation as a distinct area of teacher competence, as it is related to higher-quality instruction and higher learning outcomes for students. The present study builds on these findings by demonstrating that motivational orientation is also a core aspect of teacher-specific intercultural competence, which entails several components. Consequently, teachers who are motivated to teach in culturally diverse classrooms would engage in working with a sort of spontaneity, enthusiasm, and joy – they would identify teaching in such a classroom with their own personal values, they would be ready to enact socially fair behavior in the classroom, and therefore would strive to provide equal learning opportunities for all students regardless of their cultural background. As stated by Baumert and Kunter, “it can be expected that motivational variables do not affect instructional practice directly” (2013, p. 285) but rather as moderator variables. Thus, the relationships between other teacher variables as well as the variables related to student learning outcomes and our scales remain to be explored in further research.

Taking into account the specific requirements that cultural and ethnic diversity places before teachers in Serbia and all over the world, it seems urgent to develop an appropriate support to enhance intercultural competence both for in-service teachers and for the preparation of pre-service teachers. In this respect, the development of this tool for assessing intercultural competence in the school context is multiply significant.

In the preparation of pre-service teachers, the tool can help those who educate future teachers to shift their own practice towards a needs-based training approach, and enable them to develop prospective teachers’ motivation to deal with cultural diversity in the classroom by providing incentives that suit their current needs. For example, an assessment based on the Motivational orientation Scales could support future teachers’ educators in creating a meaningful curriculum and selecting the content, teaching methods and activities in accordance with their students’ needs and readiness for intercultural learning.
This is important because it is only through a balance between support provided by educators and challenges imposed by teaching content and methods that the basis for effective teaching of intercultural competences is created (Bennett, 2003; Bennett & Bennett, 2004; Bennett, Bennett, & Allen, 2003).

Furthermore, assessment and self-assessment based on the Motivational orientation scales could help in gaining a clearer view of the current state of in-service teachers’ intercultural competences, which are known to have an effect on both students’ well-being and on closing the achievement gap arising from cultural differences. This is particularly important for educational inclusion of migrant/minority/refugee students, given that teachers who are motivated to teach for diversity are more likely to provide students with learning opportunities respective of their differences as well as to enact principles of social justice in the classroom, both of which are related to equitable access to educational outcomes (Boylan & Woolsey, 2015). The results of such assessment could therefore contribute to designing the necessary educational interventions and especially to recognizing what kind of support teachers need for adequate implementation of such an intervention.

In sum, the three scales – the Teacher Cultural Diversity Enthusiasm Scale (TCDES), the Teacher Cultural Diversity Self-Efficacy Scale (TCDSES), and the Teacher Commitment to Social Justice Scale (TCSJS) – developed to measure the motivational aspect of teachers’ intercultural competence, have demonstrated good reliability and adequate content and concurrent validity. In this respect, the present study has made a contribution to the methodological arena of intercultural competence research (ICC), by proposing a tool which assesses ICC in a specific context, i.e., education (instead ICC in general), and with regard to a particular professional activity – teaching culturally heterogeneous classrooms. Additionally, by bridging the gap between the language of interculturalists and the language of teacher education, this study has also contributed to the validation of intercultural approaches in Teacher Education and a more effective development of (prospective) teachers’ intercultural competences. We expect that the assessment of motivational orientation as a dimension of teachers’ intercultural competence may better inform training and pedagogical interventions aiming to develop this competence, and measure the outcomes and efficacy of educational efforts, such as pre-service and in-service training programs.

References


