

A large, light blue golden spiral graphic is drawn over a dark blue background. The spiral starts from the bottom left and winds outwards, passing through the text area. It is composed of a series of concentric squares and arcs, creating a sense of organic growth and harmony.

Letnik XXVII, številka 1–2, 2016

Revija za teorijo in raziskave vzgoje in izobraževanja

Šolsko polje

Social and Emotional
Aspects of Teaching
and Learning

ed. Maša Vidmar

Šolsko polje

Revija za teorijo in raziskave vzgoje in izobraževanja
Letnik XXVII, številka 1–2, 2016

Šolsko polje je mednarodna revija za teorijo ter raziskave vzgoje in izobraževanja z mednarodnim uredniškim odborom. Objavlja znanstvene in strokovne članke s širšega področja vzgoje in izobraževanja ter edukacijskih raziskav (filozofija vzgoje, sociologija izobraževanja, uporabna epistemologija, razvojna psihologija, pedagogika, andragogika, pedagoška metodologija itd.), pregledne članke z omenjenih področij ter recenzije tako domačih kot tujih monografij s področja vzgoje in izobraževanja. Revija izhaja trikrat letno. Izdaja jo *Slovensko društvo raziskovalcev šolskega polja*. Poglavitni namen revije je prispevati k razvoju edukacijskih ved in interdisciplinarnemu pristopu k teoretičnim in praktičnim vprašanjem vzgoje in izobraževanja. V tem okviru revija posebno pozornost namenja razvijanju slovenske znanstvene in strokovne terminologije ter konceptov na področju vzgoje in izobraževanja ter raziskovalnim paradigmam s področja edukacijskih raziskav v okviru družboslovno-humanističnih ved.

Uredništvo: Valerija Vendramin, Zdenko Kodolja, Darko Štrajn, Alenka Gril, Igor Ž. Žagar, Eva Klemenčič in Mitja Sardoč (vsi: Pedagoški inštitut, Ljubljana)

Glavni urednik: Marjan Šimenc (Pedagoški inštitut, Ljubljana)

Odgovorna urednica: Mojca Štraus (Pedagoški inštitut, Ljubljana)

Uredniški odbor: Michael W. Apple (University of Wisconsin, Madison, USA), Eva D. Bahovec (Filozofska fakulteta, Univerza v Ljubljani), Andreja Barle-Lakota (Urad za šolstvo, Ministrstvo za šolstvo in šport RS), Valentin Bucik (Filozofska fakulteta, Univerza v Ljubljani), Harry Brighouse (University of Wisconsin, Madison, USA), Randall Curren (University of Rochester, USA), Slavko Gaber (Pedagoška fakulteta, Univerza v Ljubljani), Milena Ivanuš-Grmek (Pedagoška fakulteta, Univerza v Mariboru), Russell Jacoby (University of California, Los Angeles), Janez Justin † (Pedagoški inštitut, Ljubljana), Stane Košir (Pedagoška fakulteta, Univerza v Ljubljani), Janez Kolenc † (Pedagoški inštitut, Ljubljana), Ljubica Marjanovič-Umek (Filozofska fakulteta, Univerza v Ljubljani), Rastko Močnik (Filozofska fakulteta, Univerza v Ljubljani), Zoran Pavlovič (Svetovalni center za otroke, mladostnike in starše, Ljubljana), Drago B. Rotar (Fakulteta za humanistične študije, Univerza na Primorskem), Harvey Siegel (University of Miami, USA), Marjan Šetinc (Slovensko društvo raziskovalcev šolskega polja, Ljubljana), Pavel Zgaga (Pedagoška fakulteta, Univerza v Ljubljani), Maja Zupančič (Filozofska fakulteta, Univerza v Ljubljani), Robi Kroflič (Filozofska fakulteta, Univerza v Ljubljani), Marie-Hélène Estéoule Exel (Université Stendhal Grenoble III)

Lektor (slovenski jezik), tehnični urednik, oblikovanje in prelom: Jonatan Vinkler

Lektor (angleški jezik): Jason Brendon Batson

Izdajatelj: Slovensko društvo raziskovalcev šolskega polja in Pedagoški inštitut

© Slovensko društvo raziskovalcev šolskega polja in Pedagoški inštitut

Tisk: Grafika 3000 d.o.o., Dob

Naklada: 400 izvodov

Revija *Šolsko polje* je vključena v naslednje indekse in baze podatkov: *Contents Pages in Education*; *EBSCO*; *Education Research Abstracts*; *International Bibliography of the Social Sciences (IBSS)*; *Linguistics and Language Behavior Abstracts (LLBA)*; *Multicultural Education Abstracts*; *Pais International*; *ProQuest Social Sciences Journal*; *Research into Higher Education Abstracts*; *Social Services Abstracts*; *Sociological Abstracts*; *Worldwide Political Science Abstracts*

Šolsko polje izhaja s finančno podporo Pedagoškega inštituta in Javne agencije za raziskovalno dejavnost Republike Slovenije.

Tiskana izdaja: ISSN 1581–6036

Izdaja na zgoščenki: ISSN 1581–6052

Spletna izdaja: ISSN 1581–6044

Letnik XXVII, številka 1–2, 2016

Revija za teorijo in raziskave vzgoje in izobraževanja

Šolsko polje

Social and Emotional
Aspects of Teaching
and Learning

ed. Maša Vidmar



Contents/Vsebina

1 EDITORIAL/UVODNIK	5
Maša Vidmar ■ <i>Social and Emotional Aspects of Teaching and Learning</i>	7
2 PAPERS/RAZPRAVE	11
Jennifer L. Hanson-Peterson, Kimberly A. Schonert-Reichl and Veronica Smith ■ <i>Teachers' Beliefs about Emotions: Relations to Teacher Characteristics and Social and Emotional Learning Program Implementation</i>	13
Maša Vidmar and Katja Kerman ■ <i>The Development of Teacher's Relational Competence Scale: Structural Validity and Reliability</i>	41
Ana Kozina and Ana Mlekuž ■ <i>Intrinsic Motivation as a Key to School Success: Predictive Power of Self-perceived Autonomy, Competence and Relatedness on the Achievement in International Comparative Studies</i>	63
Urška Aram, Nina Jurinec, Marina Horvat in Katja Košir ■ <i>Samopodoba in socialna sprejetost identificiranih nadarjenih in visoko učno uspešnih osnovnošolcev</i>	89
Klaudija Šterman Ivančič and Melita Puklek Levpušček ■ <i>Motivational Goals and Academic Performance from the Perspective of Students' Perceived Quality of Relationship with Their Class Teachers at the Start of the Upper Secondary Education Level</i>	113
Per F. Laursen and Anne Maj Nielsen ■ <i>Teachers' Relational Competencies: the Contribution from Teacher Education</i>	139
Jana Hafner and Maja Krajnc ■ <i>Comparison of Interpersonal Communication and Interpersonal Relationship Between Early Years Educators and Children in Selected English and Slovenian Nurseries</i>	163

3	REVIEW/RECENZIJ	185
	Ana Mladenović ■ <i>Wendy R. Kobl in Nicholas C. Burbules (2013), Feminisms and Educational Research</i>	187
4	ABSTRACTS/POVZETKI	193
5	AUTHORS/AVTORJI	207

I EDITORIAL
UVODNIK

Social and Emotional Aspects of Teaching and Learning

Maša Vidmar

The social and emotional competences of students and its role for students' achievement and other developmental outcomes have received a lot of scientific and policy interest in the last decade (e.g. Durlak et al., 2011; OECD, 2015). Recently, the focus has broadened to include also teachers' social and emotional competences (SEC; Schonert-Reichl, Hanson-Peterson, & Hymel, 2015). In the current thematic issue *Social and emotional aspects of teaching and learning* we aim to widen this perspective to include also other social and emotional aspects of teaching and learning and present state-of-the-art research in the field.

Social and emotional aspects of teaching and learning can be defined as the social and emotional competences and processes in the educational context within an individual (e.g. students' or teachers' emotions), between individuals (e.g. teacher-student relationship) or phenomena emerging as a result of these competences and processes at the classroom (e.g. class climate), school (e.g. school climate and culture) or community level. There are complex concurrent and longitudinal interrelations among these variables, as they contribute to successful learning and teaching as well as to academic achievement and other developmental outcomes. Some of the topics of social and emotional aspects of teaching and learning are well studied within the educational contexts (e.g. student motivation), while others are not well-studied (e.g. teachers' social and emotional competences). The aim of this issue is to elucidate some of the less-talked-about topics and feed into future research, practice, and policy.

This thematic issue brings together a wide range of topics, reflecting the diversity and heterogeneity of the field. We are particularly proud to have all

educational levels represented: from early childhood education and care (see Hafner & Kranjc), through primary, lower, and upper secondary education with a focus on students (see Šterman Ivančič & Puklek Levpušček; Kozina & Mlekuž; Aram, Jurinec, Horvat, & Košir) and teachers (see Hanson-Peterson, Schonert-Reichl, and Smith; Vidmar & Kerman) all the way to tertiary education (see Laursen & Nielsen). Articles are diverse also in the sense of geography; the majority include Slovenian samples (see Šterman Ivančič & Puklek Levpušček; Kozina & Mlekuž; Aram et al.; Vidmar & Kerman), while others include international samples (see Hanson-Peterson et al; Laursen & Nielsen) or focus on the international comparison (see Hafner & Krajnc).

The first article by Canadian researchers Hanson-Peterson and colleagues reports on the significant role of teachers' SEC (specifically teachers' emotion beliefs) in the implementation of SEC program as well the role of teachers' background characteristics for teachers' SEC. These findings demonstrate the need for teachers' SEC training in this respect. The following article by Vidmar and Kerman continues the topic of teachers' social and emotional competence by introducing the newly developed Teacher's Relational Competence Scale (TRCS), and examining its construct validity and reliability. It demonstrates that a teachers' respect for individuality and their responsibility for the teacher-student relationship (two dimensions of relational competence) can be reliably measured using the TRCS. In the next three articles, the focus shifts from teachers to students in primary and secondary education. Kozina and Mlekuž examine a series of international studies on student achievement; they find a significant effect of internal motivation (i.e. satisfied need for autonomy, competence, and relatedness) for student achievement; students' satisfied need for competence is the strongest and most consistent predictor of their achievement. In the article by Aram and colleagues the self-concept of gifted and high-achieving students in comparison to other students is examined. In general, they find no differences in academic, peer relations, or general self-concept between gifted and high-achieving students. However, gifted girls are identified as a possible high-risk subgroup of gifted students due to their lower peer relations self-concept. Šterman Ivančič and Puklek Levpušček focus their study on the sample from international study PISA. They focus on motivational goals and students' perceived quality of relationship with teachers (i.e. socio-emotional support and negative interactions). The results indicate that perceived support from teachers is especially important for students' motivational goals, while perceived negative interactions are detrimental for academic achievement. In the last two articles, the qualitative approach is used,

bringing a wealth of interesting information. Laursen and Nielsen from Denmark present us with their findings on a programme aiming to develop relational competence in initial teacher education. The programme contributed to student-teachers taking a more reflective and experimental approach to teaching. In the last article, Hafner and Krajnc compare English and Slovenian interpersonal communication and interpersonal relationships in early childhood education settings. They conclude that there are not many differences with regards to non-verbal communication (expect for more physical contact to express affection in Slovenian settings), but find more educator-child verbal interactions in Slovenian settings.

The future research should deepen our understanding about the interrelations of social and emotional aspects of teaching and learning with various student and teacher outcomes and the quality of the educational process. Implications for educational practice (e.g. how to consider social and emotional aspects of teaching and learning in everyday school interactions) and initial and continuous education of teachers in the field of social and emotional aspects of teaching and learning remain a challenge for future research and practice.

It has been an honour to be guest editor of this thematic issue promulgating important issues often overlooked in education practice and policy. I hope this issue, with international authorship, contributes to raising awareness in regard to social and emotional aspects of students and teachers in the educational process and spurs discussion in the field.

References

- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). Enhancing students' social and emotional development promotes success in school: Results of a meta-analysis. *Child Development*, 82, 474–501.
- OECD. (2015). *Skills for social progress: the power of social and emotional skills*. Paris: OECD Publishing.
- Schonert-Reichl, K. A., Hanson-Peterson, J. L., & Hymel, S. (2015). Social and emotional learning and pre-service teacher education. In J. A. Durlak, R. P. Weissberg, C. E. Domitrovich, and T. P. Gullotta (Eds.), *Handbook of social and emotional learning: Research and practice* (pp. 406–421). NY: Guilford.

2 PAPERS RAZPRAVE

Teachers' Beliefs about Emotions: Relations to Teacher Characteristics and Social and Emotional Learning Program Implementation

Jennifer L. Hanson-Peterson, Kimberly A. Schonert-Reichl
and Veronica Smith

Recent years have witnessed increased theoretical and empirical attention to the school-based promotion of children's social and emotional competence as educators, parents, policymakers, and other societal agencies contemplate solutions for contemporary problems such as declining academic motivation and achievement (Klem and Connell, 2004), increasing school bullying (Swearer et al. 2010), and rises in children's mental health problems (Institute of Medicine, 2009). Schools around the world are adopting social and emotional learning (SEL) programs aimed at preventing these issues and fostering social and emotional competencies (Ransford et al. 2009; Schonert-Reichl and Weissberg, 2014). Although a plethora of research suggests that SEL programs are largely effective, as evidenced in the meta-analysis of SEL programs by Durlak et al. (2011), other evaluations of SEL programs have yielded non-significant findings (see Ransford et al. 2009). As espoused by many SEL researchers, future studies should move beyond the "black box" approach to program evaluation and investigate the role of teachers in delivering SEL programs, specifically teachers' beliefs about emotional socialization practices and the extent to which they deliver the program with fidelity (Beets et al. 2008; Durlak and DuPre, 2008; Jennings and Greenberg, 2009; Zinsser et al. 2014).

Through their natural daily interactions, teachers play a critical role in the emotional life of the classroom, including student-teacher and student-student relationships. Teachers enter the classroom with their own levels of social-emotional competence (e.g. mindfulness, self-compassion), which has an impact on the quality of the learning environment, including the amount of emotional support offered to students (Jennings, 2014). Ad-

ditionally, whether conscious of it or not, teachers are constantly facilitating their students' social and emotional development through emotion socialization practices – modeling and communicating the extent to which students should reflect upon, control, and express their emotions in the classroom (Hargreaves, 2000). Several researchers have predicted and found a relationship between teachers' utilization of supportive emotion socialization practices (e.g. reacting to students' emotions in a supportive way) and their students' emotional competence (e.g. well-adjusted emotion regulation; Denham, Bassett and Zinsser, 2012; Horner and Wallace, 2013). Furthermore, evidence has suggested that students of emotionally sensitive and involved teachers are less likely to exhibit internalizing and externalizing problems (Murray and Greenberg, 2000; Zinsser et al. 2014), and show greater improvements in their social competence (Wilcox-Herzog and Ward, 2004; Zinsser et al. 2014). Despite the recognized influence of teachers on their students' social and emotional development, there remains a paucity of research examining a factor that may be associated with differences in teachers' emotion socialization practices and implementation of SEL programs: teachers' emotion beliefs (see Hyson and Lee, 1996). Teachers' emotion beliefs refer to beliefs that teachers hold about emotions in the classroom setting and their personal role in promoting the emotional development of their students (*ibid.*).

Most of the research to date examining teachers' emotion beliefs has assessed the beliefs of early childhood educators (Ahn, 2005; Gosney, 2006; Huemer, 2010; Hyson and Lee, 1996; Jaramillo, 2006; Jumper 2005; for an exception, see Bellas, 2009). Furthermore, only one known study comprised of only early childhood educators has established a link between teachers' emotion beliefs and their implementation of an SEL program (Jaramillo, 2006). Therefore, to our knowledge, the current study is the first of its kind to examine elementary school teachers' emotion beliefs in relation to both their background characteristics and their implementation of an SEL program designed to promote children's emotional competence.

Teachers' Background Characteristics and Emotion Beliefs

It has been widely suggested that the beliefs people hold are shaped by their backgrounds and personal experiences (Pajares, 1992). A significant body of research has established a link between teachers' background characteristics and a variety of beliefs they hold. For instance, years of teaching experience has been found to be positively and significantly correlated with both teachers' self-efficacy beliefs regarding their ability to manage disruptive behavior and motivate learning in the classroom (Tschannen-Mo-

ran and Wolfolk Hoy, 2007). A handful of studies exist that have found no relation between years of teaching and emotion beliefs (Bellas, 2009; Hyson and Lee, 1996; Jumper, 2005). Nonetheless, the samples in these previous studies were either fully or partially comprised of early childhood teachers – a population with different educational training and attrition rates than elementary school teachers (Whitebook, 2014). Indeed, little is known about the relation between years of teaching experience and teachers' beliefs about emotions in the elementary school context.

Prior research indicates that early childhood teachers' level of education is positively and significantly associated with the developmental appropriateness of their emotion beliefs (i.e. the congruency of these beliefs with their students' age-related social-emotional needs; Hyson and Lee, 1996; Jumper, 2005). The level of teacher preparation, however, can be quite different between elementary school teachers (who are required to have a bachelor's degree, at a minimum) and early childhood educators (with only about 50% holding a bachelor's degree or higher; Whitebook, 2014). Similarly, teachers' emotion socialization practices may depend on the grade level they teach, owing to the age-related differences in the social and emotional competence of children in elementary school compared to early childhood (e.g. advanced reasoning about emotions; Brackett and Rivers, 2008). Some evidence suggests as the grade level that teachers instruct increases, their willingness to engage the children in their classrooms in direct emotion socialization practices decreases. Ahn and Stifter (2006) found, for example, differences in the emotion socialization practices of toddler caregivers versus preschool teachers – with the former teacher group being more willing to physically comfort and verbalize emotions with their children compared to the latter. Taken together, understanding the beliefs elementary school teachers hold about emotions in the classroom can provide insight into whether accredited teacher training programs adequately prepare these teachers to engage in developmentally appropriate emotion socialization practices.

Teachers' Emotion Beliefs and Emotion Socialization Practices

Although teachers' beliefs about using particular emotion socialization practices and their execution of those emotional socialization practices are two independent processes, a body of empirical evidence indicates a link between these two factors (e.g. Ahn, 2005; Bellas, 2009). Some research has been conducted on teachers' emotion beliefs and their emotion socialization practices in classrooms not hosting a specific SEL program. In one study, it was found that the teachers' beliefs regarding the

importance of particular emotion socialization practices were relatively consistent with their actual emotion socialization practices via classroom observations (Ahn, 2005). In another study, teachers high in emotion support for students, compared to those who were moderately supportive as determined via quantitative assessments of their classroom interactions, were more likely to express in focus groups that they (i) held the beliefs that SEL was an integral part of interacting with their students and were equally as accountable as parents to foster children's emotional development, and (ii) purposefully used explicit emotion socialization practices with their students (e.g. drawing attention to and labelling emotions; Zinsser et al. 2014). Moreover, teachers with less developmentally appropriate emotion beliefs have been found to be more likely to react negatively (e.g. use punitive practices, minimize students' emotions) to their students' negative emotion expressions (Gosney, 2006). Gosney (2006), however, found that more developmentally appropriate emotion beliefs did not predict teachers' positive reactions to students' negative emotion expressions.

Collectively, these findings highlight the importance of gaining more knowledge about teachers' emotion beliefs and emotion socialization practices. Research in this area is particularly important in classrooms hosting emotion-focused SEL programs, as the programs' structured activities may support teachers' sense of efficacy and motivation to deliberately carry out direct emotion socialization practices aimed at promoting their students' emotional competence.

Teachers' Emotion Beliefs and SEL Program Implementation

Burgeoning evidence indicates that the extent to which teachers implement preventive intervention programs with fidelity (quality and degree of implementation) is associated with the effectiveness of these programs (Durlak, 2015; Durlak and DuPre, 2008; Ransford et al. 2009). Although it is beyond the scope of the present study to examine program effectiveness, it is valuable to attempt to extend the understanding of underlying mechanisms that impact implementation fidelity. It has been suggested that future studies examine teacher-related factors that impact variations in the implementation of evidence-based preventive intervention programs as these variations affect the quality of the program and may undermine its success (Durlak and DuPre, 2008; Wanless and Domitrovich, 2015). Further, Wanless and Domitrovich (2015) highlight that examining teacher-related factors that are present *before* the delivery of the program – such as beliefs, knowledge, and skills – expands the scant lit-

erature on “indicators of readiness” to implement the program (p. 1038). Research has found that teachers’ implementation fidelity of SEL program lessons and practices is associated with a number of teacher beliefs: beliefs about whether the SEL program activities are aligned with their teaching approach (ibid.); beliefs about behavior management practices (Rimm-Kaufman and Sawyer, 2004); self-efficacy beliefs about teaching (Ransford et al. 2009; Reyes, et al. 2012); the level of comfort delivering the SEL curriculum (Brackett et al. 2012); dedication to developing their SEL skills (ibid.); perceptions of whether the school culture supports SEL instruction (ibid.); and perceptions of whether the school leader supports an SEL program (Brown et al. 2010). Nonetheless, these previous studies did not examine the teachers’ beliefs that are specifically relevant to an underlying philosophy of emotion-focused SEL programs, that is, emotional competence can be enhanced through direct instruction and is not an innate or fixed characteristic (Gordon, 2000; Kress and Elias, 2006). Therefore, for teachers hosting an SEL program in their classrooms that aims to enhance students’ emotional competence, the emotion beliefs of those teachers may be associated with differences in their emotion socialization practices as evidenced by the extent to which they implement SEL program activities.

Only one study to date has examined teachers’ emotion beliefs in relation to frequency of implementation of SEL program activities. Jaramillo (2006) found that early childhood teachers’ *expressiveness* beliefs (beliefs about teachers’ candid expression of emotions around their students) were significantly and negatively correlated with the amount of SEL program activities they implemented. That is, teachers who reported being uncomfortable or unwilling to be emotionally expressive with their students were less likely to engage their students in emotion-focused activities in an SEL program, in contrast to teachers who reported being emotionally expressive in their interactions with students (ibid.). Clearly, additional research is needed to better understand the association between *elementary school* teachers’ emotion beliefs and their implementation of SEL programs, particularly with regard to SEL programs that are emotion-focused in their intent.

The Roots of Empathy: An Emotion-Focused SEL Program

For the current study, teachers’ emotion beliefs and their implementation of extension activities were examined in the context of one SEL program – the Roots of Empathy (ROE). ROE is a classroom-based SEL program for children from Kindergarten to 8th grade. The goal of the ROE pro-

gram is to increase students' emotional competence (i.e. emotional understanding, perspective-taking) and prosocial behaviors, and to decrease students' aggressive behaviors (Gordon, 2000).

To date, there have been several outcome studies examining the efficacy of ROE (see Schonert-Reichl and Scott, 2009 for a review). Overall, research on the effectiveness of ROE has yielded consistent and highly promising findings regarding the impact of the program across age and gender. For instance, Schonert-Reichl et al. (2012) found that 4th to 7th grade children who participated in ROE, compared to those who did not, demonstrated advanced emotional and social understanding, as well as reduced aggressive behavior and increased prosocial behavior. Moreover, Santos et al. (2011), in their cluster randomized controlled field study and longitudinal follow-up of the ROE program, found that the positive effects of the program in decreasing aggression and increasing prosocial behavior were either maintained or improved, even after the program had ended.

A trained and certified ROE instructor facilitates the ROE program over the course of nine months, and visits the classroom three times each month – a pre-family visit, a family visit, and a post-family visit. The cornerstone of the ROE program is the monthly ROE family visits, involving an infant and his/her parent(s) who visit the classroom to serve as a springboard for lessons on emotion knowledge, perspective-taking, and infant development. During these monthly visits, the ROE instructor encourages the students to observe the baby's emotional, social, and physical development, and reflect on the parent-infant bond and the ways in which the infant "relies on the parent to understand the world, to feel safe to explore and to learn how to regulate his/her emotions" (Roots of Empathy, 2013, para. 8). During the pre- and post-family visits, the ROE instructor draws on the students' observations of the infant via a series of sequenced ROE lessons. These lessons are age-appropriate to the students and progress with the baby's natural development. The 27 ROE lessons consist of nine different themes: Meeting the Baby, Crying, Caring and Planning for the Baby, Emotions, Sleep, Safety, Communication, Who am I?, Goodbye and Good Wishes. All of the lessons are designed to help children understand and reflect on their own feelings and the feelings of others.

Each ROE lesson aims to develop students' emotional competence by providing them with rich opportunities to identify, explain, and react to the emotions of the ROE infant, and discuss the emotions experienced by the infant, themselves, and others. For instance, during a structured ROE lesson, students are directed to recognize the nonverbal cues

and facial expressions of the infant (e.g. sadness, fear) and label the emotion, and are encouraged to engage in perspective-taking to identify possible reasons why the infant may be experiencing that emotion (e.g. having had a toy taken away, hearing a loud noise). Then, through a variety of additional activities (e.g. book discussions, art projects), the students are encouraged to reflect on their own and others' experiences with the emotion the infant was feeling (e.g. feeling sad or afraid). For the Caring and Planning for the Baby theme, for example, the instructor reads a story to the students about a young girl losing her first tooth. After the story, the instructor asks the students about the various emotions that can be experienced from losing a tooth (e.g. worry that others will laugh about the missing tooth). The group discussion gives students the opportunity not only to discuss their emotions, but to practice empathy through learning about and respecting their classmates' emotions as well. In the family visit, the students are encouraged to engage in perspective-taking by asking the infant's parent questions about the infant's experiences with teething (e.g. "How does it make you feel to see your baby in pain?" "What do you try to do to make your baby's pain go away?"). As posited by Schonert-Reichl et al. (2012), ROE draws on the *functionalist* approach to emotions, wherein emotion understanding and expressivity are seen as playing central roles in the establishment and maintenance of children's interpersonal relationships (Saarni, 2011).

Learning to reflect upon, label, discuss, and express emotions helps students learn to regulate and exhibit their emotions in socially acceptable ways. Therefore, students are better equipped to demonstrate greater empathy, and accordingly more prosocial behavior and less aggression towards others (Schonert-Reichl et al. 2012).

Although the ROE instructor facilitates the lessons and thus is the primary implementer of the program, in the ROE model the classroom teacher is encouraged to reinforce the valued concepts promoted by the ROE program by integrating extension activities into the existing academic curriculum (e.g. language arts lessons; Gordon, 2000). The instructor provides the teacher with several resources that can aid in the design of extension activities, including the ROE curriculum manual that outlines the goals and activities of the program, the lesson plans for each visit, and references to additional resources (ibid.). Despite their role as secondary implementers, no research to date has examined the ways in which teachers' beliefs about emotions may influence their implementation of ROE extension activities. Hence, examining elementary school teachers' emotion beliefs in association with their implementation of the ROE program extension activities can be highly informative. This information can

fill several gaps in the knowledge about teachers' emotion beliefs and the manner in which they deliver an emotion-focused SEL program.

The Current Study

The objectives of the current study were twofold: (a) to examine relations of teachers' background characteristics (i.e. elementary grade level taught, years of teaching experience) to their emotion beliefs, and (b) to examine relations of teachers' emotion beliefs to the implementation of extension activities in the context of one emotion-focused SEL program – the ROE program. Data for this study were drawn from two studies investigating the effectiveness of the ROE program – one of which was a randomized controlled trial (RCT) and the other a quasi-experimental study.

To investigate the first research question, given the question is not concerned with teachers' implementation of a specific SEL program, pre-test data for the intervention group and control group were combined in order to yield a larger sample size. To investigate the second research question, only the intervention group teacher data were analyzed since the control group did not implement the SEL program.

Method

For the present investigation, as noted above, data were derived from two studies of ROE – an RCT and a quasi-experimental design study. The former ROE study took place in a large urban public school district serving approximately 55,000 students located in a Western Canadian city. The latter ROE study was conducted in public elementary schools on the Isle of Man. The Isle of Man is located within the British Isles between Ireland and the islands of Great Britain, has a population of approximately 82,000 people, and has approximately 35 primary schools. Nearly half of the primary schools on the Isle of Man were part of the present study.

Participants

The participants included 58 elementary school teachers: 20 teachers from the Isle of Man and 38 teachers from Canada. The Isle of Man sample included primary grade teachers (Kindergarten to 3rd grade) recruited from 18 schools who were assigned to either host the ROE program ($n = 10$) or serve as controls by delivering standard academic instruction ($n = 10$). The Canadian sample included primary grade (Kindergarten to 3rd grade; $n = 20$) and intermediate grade teachers (4th to 7th grade; $n = 18$) recruited from 16 schools who were randomly assigned to either host the ROE program ($n = 19$; 53% instructing primary grades and 47% instructing intermediate grades) or serve as controls by delivering standard academic in-

struction ($n = 19$; 53% instructing primary grades and 47% instructing intermediate grades). For both samples, informed consent was obtained from participants. Each consent form explained that the purpose of the study was to assess the effectiveness of a classroom-based program aimed at enhancing children's social and emotional understanding.

In the current sample, analyses of background characteristics of the intervention and control teachers revealed no significant differences. The teacher participants were primarily female (86.2% program and 89.7% control), and were of Western European descent (82.8% program and 82.8% control). They predominantly instructed primary grades (69% program and 69% control), had 11 or more years of teaching experience (41.4% program and 48.3% control), and held an undergraduate-level degree (86.2% program and 89.7% control). Approximately half of the participants reported participating in SEL-related training and/or professional development (program 55.2% and 48.3% control). As the present analysis sought to examine only the subset of primary grade teachers, analyses of demographics reported by the Isle of Man and Canadian teachers instructing primary grades were also conducted and revealed no significant differences.

Procedure

For the ROE study on the Isle of Man (quasi-experimental design study), school leaders interested in participating in the study were invited to a meeting, at which time the study was explained and schools were assigned to the ROE program intervention group or the control group. After the groups were assigned, teachers were sent packages containing information about the study and the measures to be completed. It was explained that they could directly contact the research team at any time with questions.

For the ROE study in Canada (RCT study), principals demonstrating an interest in implementing the program at their school were contacted and asked to invite their teachers to participate in the study. Participating classrooms were randomly assigned to the ROE group or the control group. After the groups were randomly assigned, the Principal Investigator of the research project delivered a short presentation about the study to each participating classroom and answered teachers' and students' questions.

For both evaluations, baseline data collection occurred a few weeks prior to the commencement of the ROE program implementation in late autumn. Post-test data collection occurred a few weeks after the completion of the ROE program implementation in late spring, approximately 8 months after baseline data collection. Teachers completed a series of

self-report measures at baseline and post-test within a two-week time period. For their participation in the study, teachers received an honorarium (£25 honorarium for the Isle of Man teachers; \$150.00 for the Canadian teachers).

Program Implementation

Beginning in late autumn and ending in late spring, the ROE program was implemented in the intervention-group classrooms over the course of the school year. All 27 structured lessons across the nine themes (i.e. Meeting the Baby, Crying, Caring and Planning for the Baby, Emotions, Safety, Sleep, Communication, Who Am I?, Goodbye, and Good Wishes) were facilitated by a trained and certified ROE instructor. For each of the nine themes, the ROE instructor facilitated three lessons: (1) the pre-family visit to introduce the students to the theme, (2) the ROE family visit in which the instructor directed the students to observe the family's interactions and the baby's development, and (3) the post-family visit to reflect on the ROE family visit and complete the theme.

The intervention group teachers in the current study acted as secondary implementers and, therefore, they did not facilitate the structured ROE lessons. However, the teachers could support the ROE curriculum by integrating ROE extension activities into the academic curriculum. As stated earlier, the intervention group teachers did not receive ROE training, but were provided with resources to aid in the development of ROE extension activities.

Measures

Participating teachers completed three self-report measures that assessed (a) their background characteristics, (b) their implementation of ROE extension activities (this latter measure was completed by ROE program teachers only), and (c) their emotion beliefs.

Assessment of Teachers' Background Characteristics

At baseline, teachers completed a self-report measure that asked them to provide information on demographics (gender, race/ethnicity), level of education, grade level currently teaching, and years of teaching experience. For grade level, teachers were categorized into one of two levels: primary grades (K – 3rd) or intermediate grades (4th – 7th).

Assessment of Teachers' Emotion Beliefs

At baseline, all participants completed the *Teachers' Beliefs about Emotions* (TBAE; Hyson and Lee, 1996) questionnaire – one of the only known measures to assess teachers' emotion beliefs. The TBAE is a 23-

item self-report measure of the beliefs that teachers hold about emotions in the classroom and the role the teacher plays in their students' emotional development. Teachers indicated the extent to which they agreed with each statement on a Likert-type scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). The rating scale was modified from Hyson and Lee's (1996) 6-point Likert scale in order to align with other teacher report measures used in the current study. The TBAE comprise six subscales: (1) *Bonds* - beliefs about the importance of teacher-student connections (4 items: e.g. "Children need to feel emotionally close to their teachers;" $\alpha = .60$); (2) *Expressiveness* - beliefs about teachers' candid expression of emotions around students (4 items: e.g. "Teachers should 'let their feelings out' in the classroom;" $\alpha = .54$); (3) *Instruction/Modeling* - beliefs about using direct instruction and demonstration to help illustrate to students appropriate emotion expression (4 items: e.g. "When a child is angry because another child won't share a toy, I often tell the child exactly what words she could use to express her feelings;" $\alpha = .66$); (4) *Talk/Label* - beliefs about helping children identify and discuss their current emotion states (6 items: e.g. "When one of my children is upset about something, I usually try to put into words how he or she is feeling;" $\alpha = .45$); (5) *Protect* - beliefs about shielding students from upsetting emotions (3 items: e.g. "Teachers should not read children stories that might make them sad or worried;" $\alpha = .55$); and (6) *Display/Control* - beliefs about students' ability to regulate and exhibit emotions in a socially acceptable manner (3 items: "As a teacher, it's important for me to teach children socially acceptable ways of expressing their feelings;" $\alpha = .79$). Cronbach's alphas for the TBAE in the current study were low to moderate, ranging from .45 (*Talk/Label*) to .79 (*Display/Control*). A decision was made to exclude subscales with alphas falling below .50 due to their low internal consistency; hence the *Talk/Label* subscale was discarded from further analyses. The five remaining subscales of the TBAE were retained for further analyses. Although an alpha level of .70 is customarily considered acceptable for research purposes, Ransford et al. (2009) suggest that .60 is acceptable when research is exploratory in nature, such as in the present study. Therefore, subscales with alphas close to or above .60 were retained as acceptable – two subscales with alphas slightly below .60 (i.e. .54 and .55) and three subscales at or above .60 (i.e. .60, .66, and .79). It should also be noted that the alphas found in the present study were higher than those found by Hyson and Lee (1996) in their research on the development of the TBAE. Hyson and Lee's alphas ranged from .41 (*Protect* subscale) to .62 (*Bonds* subscale).

Assessment of Teachers' Implementation of ROE Extension Activities

At post-test, only ROE program teachers completed a measure assessing the extent to which they delivered ROE extension activities across the general academic curriculum. The dimensions assessed included: (a) the number of subject areas in which the teacher implemented the ROE extension activities (Language Arts, Math, Science, Social Studies, Art, and Other), and (b) the overall frequency with which the teacher implemented the ROE extension activities across all subject areas. More specifically, teachers were provided with a list of curricular subject areas and were asked to indicate with a "yes" or "no" whether or not they had implemented ROE extension activities in each subject area. If the teacher participants reported "yes", they were prompted to indicate the frequency with which they delivered extension activities in that subject area. In the Isle of Man sample, teacher participants were provided a field to write in the frequency of implementation. In the Canadian sample, teacher participants were asked to indicate the frequency with which they implemented the extension activities on a 5-point Likert-type scale (*Never, Once or twice, Monthly, Weekly, Daily*). To merge the data sets, the qualitative data from the Isle of Man sample were re-coded to match the Canadian study's quantitative response options (e.g. "every day" was re-coded to the numeric value assigned to the Daily option).

Results

Preliminary Analyses

Preliminary analyses were conducted to examine emotion beliefs in the Isle of Man and Canadian teachers to determine whether the two samples could be merged for further analyses (see Table 1). The results indicated that the means for emotion beliefs were comparable between the two groups (i.e. scores falling within one standard deviation range of each other) for four of the five subscales of the TBAE: *Bonds, Expressiveness, Instruction/Modeling*, and *Protect* beliefs. For the *Display/Control* beliefs, however, there was no overlap between the groups' scores. On average, the Canadian primary grade teachers reported stronger agreement that their students were developmentally ready to be taught how to express their feelings in socially acceptable ways than the Isle of Man teachers. The difference in the means for this particular dimension may be related to the cultural context in which these two teacher groups are instructing. Nevertheless, given the demographic and emotion belief similarities between these teacher groups overall, as well as the interest in increasing the statistical power of this study's analyses by having a larger sample size, the data for the two primary grade teacher groups were combined.

Table 1. Means and Standard Deviations of Emotion Beliefs by Study and Grade Level Taught (N = 58)

Emotion Beliefs	Isle of Man, Grade K-3 Teachers (n = 20)		Canadian, Grade K-3 Teachers (n = 20+)		Canadian, Grade 4-7 Teachers (n = 18)	
	M	SD	M	SD	M	SD
Bonds	3.45	.59	3.91	.57	3.68	.56
Expressiveness	3.35	.59	3.54	.45	3.46	.53
Instruction /Modeling	3.40	.72	3.98	.69	3.95	.72
Protect	2.28	.54	2.00	.35	1.76	.39
Display/Control	3.97	.42	4.68	.46	4.70	.44

Note. + n = 19 for the Protect and Display/Control beliefs, due to missing data.

Analytic Strategy

To examine the first research question regarding the extent to which grade level taught and years of teaching experience are associated with teachers' emotion beliefs, the combined pre-test data from teachers in both the control and intervention groups were analyzed. Specifically, a series of 2 (grade level taught: primary grades, intermediate grades) x 3 (years of teaching experience: 0-5 years, 6-10 years, 11+ years) analyses of variance (ANOVAs) were conducted – one for each subscale on the TBAE. Huberty and Morris (1989) posit that when multiple outcome variables are of interest, some statisticians suggest conducting a multivariate analysis of variance (MANOVA) prior to performing multiple ANOVAs to help decrease the probability of committing a Type I error. However, Huberty and Morris argued that the results of a MANOVA, versus those of multiple ANOVAs, answer different research questions and thus suggested using both or only the latter depending on the purpose of the research. If the researcher is not “seeking any linear composite of the outcome variables” and “an underlying construct is of no concern” (ibid. p. 303), then performing multiple ANOVAs alone is viewed as appropriate. Therefore, it was deemed acceptable for two reasons to conduct a series of ANOVAs for the present study instead of one MANOVA. Firstly, Hyson and Lee (1996) perceived each emotion belief dimension to be conceptually independent from the others. Secondly, as previously noted, the present study aimed to be descriptive in nature due to the dearth of extant research on teachers' emotion beliefs.

The steps for performing ANOVAs described by Pallant (2007) were followed, in which a dependent variable (i.e. composite score on a TBAE

subscale) and the fixed factors (i.e. teacher background characteristic variables) were entered into the model to examine main and interaction effects. Moreover, when a statistically significant difference was found with a fixed factor with more than two levels, post-hoc Tukey's HSD tests were conducted to identify which group means significantly differed from each other. Finally, to examine effect sizes, eta squared was calculated using Brown's (2008) formula: $SSEffect/SST$. The results were interpreted according to Cohen's (1988) effect size index: small effect size = .01; medium effect size = .06; and large effect size = .14.

To examine the second research question regarding the relation of teachers' emotion beliefs related to both the amount of subject areas in which they implement ROE extension activities and the frequency of their implementation across all subject areas, the data of the intervention group teachers were examined. Specifically, correlational analyses were conducted. In these analyses, the teacher participant scores on the TBAE subscales were assessed in relation to the number of subject areas in which the teacher implemented the ROE extension activities and the overall frequency with which the teacher implemented the ROE extension activities across all subject areas. The effect sizes were examined for the significant correlations by squaring the correlation coefficients (Hoyt, Leierer and Millington, 2006). The effect sizes of the correlational analyses were also interpreted according to the aforementioned effect size index (Cohen, 1988).

Descriptive Analyses

Table 2. Means, Standard Deviations, Minimum and Maximum Values of Teachers' Emotion Beliefs (N = 58)

Emotion beliefs	M	SD	Min	Max
Bonds	3.68	.60	2.25	5.00
Expressiveness	3.45	.53	2.25	5.00
Instruction/Modeling	3.77	.75	2.33	5.00
Protect	2.02	.48	1.00	3.33
Display/Control	4.44	.56	3.00	5.00

Note. Ns range from 57 to 58 due to missing emotion beliefs data. The response scale for each emotion belief item ranged from 1 "Strongly disagree" to 5 "Strongly agree." Each teacher's composite score for each subscale was the average of their responses to the items comprising the given subscale.

Table 2 presents the profiles of the teacher participants' emotion beliefs, regardless of intervention or control group. This includes the means,

standard deviations, and ranges of the emotion beliefs of all teacher participants. As can be seen, on average the teachers reported moderately agreeing with the *Expressiveness* beliefs and agreeing with the *Display/Control* beliefs. They also reported disagreeing with the *Protect* beliefs. Moreover, teachers reported moderately agreeing with both the *Bonds* beliefs and *Instruction/Modeling* beliefs; although, there was more variability in teachers' responses for these two belief areas compared to the others.

Relations Between Teachers' Background Characteristics and Emotion Beliefs

ANOVAs were performed to examine the relationship between teachers' background characteristics and emotion beliefs. More specifically, differences in each of the emotion beliefs (*Bonds*, *Expressiveness*, *Instruction/Modeling*, *Protect*, *Display/Control*) were assessed in relation to their background characteristics using a series of two-way 2 (grade level taught) \times 3 (years of teaching experience) ANOVAs – one for each emotion belief. Table 3 provides a summary of the analyses for the relationship between teachers' grade level taught and emotion beliefs. Table 4 provides a summary of the analyses for the relationship between teachers' years of experience and emotion beliefs. The results of these analyses indicated that there were no interaction effects. Several significant main effects were found and are discussed below. No main effects were found for *Bonds* or *Expressiveness* beliefs in relation to either background characteristic.

As can be seen in Table 3, no main effect emerged for *Instruction/Modeling* beliefs and grade level taught. However, as illustrated in Table 4, *Instruction/Modeling* beliefs (i.e. beliefs in using direct instruction and demonstration to help illustrate to students appropriate emotion expression) were significantly higher for experienced teachers than novice teachers. Post-hoc Tukey's HSD test revealed teachers with either 6-10 years ($M = 4.14$, $SD = .58$) or 11+ years ($M = 3.89$, $SD = .75$) of teaching experience had higher beliefs on this dimension than novice teachers with 0-5 years of experience ($M = 3.31$, $SD = .69$). Regarding the effect size, 1% of the between-subject variance in *Instruction/Modeling* beliefs was explained by years of teaching experience, which is a small effect.

Table 3 indicates that *Protect* beliefs (i.e. beliefs in shielding students from strong emotions) were significantly higher for primary grade teachers ($M = 2.15$, $SD = .48$) than intermediate grade teachers ($M = 1.76$, $SD = .39$). The effect size was 1%, which is a small effect. Main effects did not emerge for *Protect* beliefs and years of teaching experience, as seen in Table 4.

Table 3 also reveals that *Display/Control* beliefs (i.e. beliefs in students' abilities to regulate and exhibit emotions in a socially acceptable manner) were significantly higher for intermediate grade teachers ($M = 4.73$, $SD = .44$) than primary grade teachers ($M = 4.29$, $SD = .57$). The effect size was 0%, which is a non-significant effect. Main effects did not emerge for *Display/Control* beliefs and years of teaching experience, as seen in Table 4.

Table 3. Results of ANOVAs for Emotion Beliefs by Grade Level Taught ($N = 58$)

Emotion Beliefs	Group		SS	df	MS	F	p	η^2
	Primary	Intermediate						
1. Bonds	3.69 (.62)	3.68 (.56)	.01	1	.00	.00	.95	.00
2. Expressiveness	3.42 (.53)	3.47 (.53)	.04	1	.04	.14	.72	.00
3. Inst./Modeling	3.70 (.76)	3.87 (.72)	.33	1	.33	.68	.42	.00
4. Protect	2.15 (.48)	1.76 (.39)	1.47	1	1.47	7.22*	.01	.01
5. Display/Control	4.29 (.57)	4.73 (.44)	2.23	1	2.23	8.04*	.01	.00

Note. Ns range from 57 to 58 due to missing emotion belief data. Standard deviations appear in parentheses. For grade level taught, primary grades = grades K-3, intermediate grades = grades 4-7. Inst./Modeling = Instruction/Modeling.

* $p < .05$.

Table 4. Results of ANOVAs for Emotion Beliefs by Years of Experience ($N = 58$)

Emotion Beliefs	Group			SS	df	MS	F	p	η^2
	0-5 years	6-10 years	11+ years						
1. Bonds	3.58 (.65)	3.76 (.52)	3.70 (.61)	.23	2	.11	.30	.74	.00
2. Expressiveness	3.43 (.47)	3.48 (.62)	3.43 (.51)	.03	2	.02	.05	.95	.00
3. Inst./Modeling	3.31 (.69)	4.14 (.58)	3.89 (.75)	4.92	2	2.46	5.00*	.01	.01
4. Protect	1.99 (.28)	2.01 (.51)	1.93 (.48)	.06	2	.03	.15	.86	.00
5. Display/Control	4.67 (.54)	4.48 (.65)	4.39 (.51)	.58	2	.29	1.04	.36	.00

Note. Ns range from 57 to 58 due to missing emotion belief data. Standard deviations appear in parentheses.

* $p < .05$.

Correlational Analyses

To examine teachers' emotion beliefs in relation to the amount of academic subject areas in which they implemented ROE program activities and the frequency of their implementation of ROE extension activities across all subject areas, correlational analyses were conducted. As can be

seen in Table 5, particular emotion beliefs' dimensions were significantly and positively related to the implementation of ROE extension activities. Teachers' *Expressiveness* beliefs (i.e. beliefs in teachers' candid expression of emotions around their students) were significantly and positively correlated with the overall frequency with which they implemented the ROE extension activities across the academic subject areas. The variance-accounted-for effect size was 23%, a moderate effect.

Teachers' *Protect* beliefs significantly and negatively correlated with both the number of subject areas in and frequency with which ROE extension activities were implemented. The effect sizes were 27% and 20%, respectively, which are fairly moderate effects. Finally, teachers' *Display/Control* beliefs were significantly and positively correlated with both the number of subject areas in and frequency with which ROE extension activities were implemented. Respectively, the effect sizes were 41%, a moderate to strong effect, and 21%, a moderate effect.

Table 5. Correlations and Descriptive Statistics for Emotion Beliefs and Implementation of ROE Extension Activities (N = 29)

Variables	1	2	3	4	5	6	7
Emotion beliefs:							
(1) Bonds	--	.35**	.09	-.09	.09	.03	.20
(2) Expressiveness		--	-.07	.04	.37**	.30	.48*
(3) Instruction/Modeling			--	.03	.19	-.03	-.25
(4) Protect				--	-.44**	-.52**	-.45*
(5) Display/Control					--	.64**	.46*
Extension activity implementation:							
(6) Number of subject areas						--	.91**
(7) Frequency							--
M	3.68	3.44	3.72	2.00	4.49	2.65	5.32
SD	.57	.62	.73	.45	.57	2.30	5.47

Note. Ns range from 25 to 29 due to missing data. For the number of subject areas in which extension activities were implemented, there were six subject areas in total: Language Arts, Math, Science, Social Studies, Art, and Other. For Frequency of implementation across all subject areas, the scores for all six subject areas (0 = Never, 1 = Once or twice, 2 = Monthly, 3 = Weekly, 4 = Daily) were totalled.

* $p < .05$. ** $p < .01$.

Discussion

The current literature on the emotion beliefs of important adults in the lives of children, who influence their social and emotional development, focuses almost solely on parents and on early childhood teachers instruct-

ing in preschool settings (see Bellas, 2009; Hyson and Lee, 1996; Jaramillo, 2006; Jumper, 2005). Additionally, most research studies concerned with the implementation of evidence-based preventive intervention programs “focus on identifying concurrent factors that explain variation in fidelity during the implementation phase as opposed to examining factors that are in place before an intervention is selected or that emerge early on when an intervention starts” (Wanless and Domitrovich, 2015, p. 1038).

The current study was designed to address these gaps in the research. This study is unique as it is one of the first to investigate the emotion beliefs of elementary school teachers, and is the only known study to include in its sample intermediate grade teachers who instruct students in middle childhood (Grades 4–7). Additionally, this study is unique as it is one of the first to investigate teacher-related factors *before* program implementation, particularly emotion beliefs, with the findings indicating that these factors are related to program implementation. These findings add to the emerging literature on ‘indicators of readiness’ to implement SEL programs (ibid.) and further open the black box of SEL program implementation to understand the role of the teacher in its implementation (Jennings and Greenberg, 2009). Understanding the factors that impact teachers’ readiness to implement SEL programs is beneficial as it can guide the knowledge, training, and support offered by SEL program developers, coaches, school leaders, and even pre-service teaching programs; this can help enhance the social-emotional competence of teachers, ensure their needs are met, and that they have the capacity to implement the evidence-based program with fidelity and thus increase the likelihood that positive student outcomes will be achieved (Wanless and Domitrovich, 2015; Domitrovich et al. 2015; Jennings, 2014).

Teachers’ Background Characteristics and Emotion Beliefs

The results of the current study indicate that teachers’ background characteristics are significantly related to particular emotion beliefs dimensions, indicating the need to address these issues in pre-service and/or in-service teacher training. The finding that experienced teachers had higher *Instruction/Modeling* beliefs compared to novice teachers may indicate that novice teachers felt uncertain or less prepared to take responsibility for showing their students how to express their emotions appropriately; whereas experienced teachers may have acquired strategies through first-hand experience that enhanced their sense of efficacy to explicitly guide their students in this way (see Tschannen-Moran and Woolfolk Hoy, 2007).

Primary grade teachers had higher *Protect* beliefs and lower *Display/Control* beliefs compared to intermediate grade teachers. These beliefs for

both groups may be developmentally appropriate – that primary grade children are not developmentally ready to be exposed to stories or circumstances that could upset them and are unable to control the way they express their emotions, whereas intermediate-aged children tend to cope on their own by using problem-solving strategies when upset (Saarni, 2011). The lower *Display/Control* beliefs also indicate that primary grade teachers are less likely to believe it is their role to help children in their classrooms learn to control their emotions in socially appropriate ways compared to intermediate grade teachers. Regardless of the possibility that primary grade children are not developmentally ready to regulate their emotions on their own, they would still benefit from receiving support from their teachers to develop their emotion regulation skills.

Together these findings suggest the importance of providing teachers, particularly novice and primary grade teachers, with knowledge about social-emotional development and the important role that teachers play in socializing this development in their students. Additionally, the findings suggest that if these teachers are expected to implement an emotion-focused SEL program, it may be beneficial to provide them with ongoing SEL coaching to build their self-efficacy and motivation to engage their students in the emotion socialization practices called for by the program (Tschannen-Moran and Woolfolk Hoy, 2007).

It should be reiterated that the effect sizes were minimal. Nonetheless, Trusty, Thompson and Petrocelli (2004) have cautioned researchers not to interpret minimal effect sizes as an indication that the significant relationships among the variables are not important. They noted that whether the findings are comparable to the findings of other similar studies may be of greater importance (ibid.). At this stage, however, minimal research has been conducted using an elementary school sample to explore similar links. Thus, the implications of the minimal effect sizes for the present study are indeterminate.

Teachers' Emotion Beliefs and Implementation of ROE Extension Activities

The findings indicating that differences in teachers' implementation dosage of an emotion-focused SEL program are associated with their emotion beliefs support the notion that SEL program implementation does not occur in a vacuum. Rather, a variety of factors present before the implementation of a program begins, such as emotion beliefs, can influence the implementer's readiness to implement the program (Wanless and Domitrovich, 2015), their perceptions of the importance of the program, and/or

their motivation and sense of efficacy to implement the program activities (see Durlak and DuPre, 2008).

A central finding of the present study was that teachers with lower Expressiveness beliefs implemented ROE extension activities less frequently, compared to those with higher beliefs on this dimension. Similar to Jaramillo's (2006) study, these findings suggest that teachers with higher *Expressiveness* beliefs may be more comfortable, willing, and/or motivated to engage in activities that can involve communicating their own emotions to their students.

Another key finding of the current study was that teachers with higher *Protect* beliefs or lower *Display/Control* beliefs implemented ROE program activities in fewer subject areas and with less frequency. These findings may indicate that teachers' perceptions of their students' developmental readiness to cope with and learn to regulate strong emotions are associated with teachers' motivation and willingness to engage their students in activities that can provoke strong emotions in their students. That is, despite the fact that the ROE program is tailored to the developmental level of the participating students, these teachers may not want to take responsibility or do not feel well-equipped to provide emotional support and guidance to students who become upset during the emotion-laden activities. Such reasoning builds on the research literature on implementer-related factors that influence the readiness to implement and thus the implementation fidelity of preventive intervention programs (e.g. Durlak and DuPre, 2008; Wanless and Domitrovich, 2015).

Limitations and Implications

A few limitations of the current study must be acknowledged to consider their impact on this research and provide direction for future research in this area. Although the findings of the current study add to the knowledge base on the links among elementary school teachers' background characteristics, emotion beliefs, and SEL program implementation, the lack of prior research in this area meant there was little empirical direction in which to forecast our results. Furthermore, the study's sample size was relatively small, hence limiting the statistical power to discern effects. For instance, this may explain the lack of interaction effects for the ANOVAs and the few sizeable, almost-significant results ($\pm .20$ and above) found for the correlational analyses (e.g. a strong positive correlation between *Bonds* beliefs and implementation frequency; a strong positive correlation between *Expressiveness* beliefs and implementation in total subject areas). Moreover, the sample was rather homogenous regarding gender and ethnicity, with the teachers being predominantly female and of Western Eu-

ropean descent. On the other hand, teachers of Western countries typically fit these demographics.

As previously noted, the data for the Grades K-3 Canadian and Isle of Man teachers were merged to form one group. Although the current study ensured that there were no statistically significant differences concerning the demographics between these teacher groups, cultural and contextual differences were not controlled for. Owing to the recent emphasis the British Columbia Ministry of Education has placed on social responsibility (e.g. ethical and democratic behavior, peaceful problem-solving) in its schools (British Columbia Ministry of Education, 2001), the Canadian teachers, compared to the Isle of Man teachers, could have been more familiar and comfortable with fostering the student outcomes that the ROE program aims to promote. Merging the data may have tempered some of the findings related to the primary grade teachers. It is suggested that future research consider cultural and contextual differences in relation to emotion beliefs.

An additional limitation is the internal consistencies of the subscales of the TBAE (Hyson and Lee, 1996) questionnaire, which were weak to moderate. It is suggested that future research perform a content validation of the questionnaire to assess whether all items should be retained. For instance, the framing of the items is not consistent throughout the questionnaire, as some items ask teacher participants to reflect on their own emotion socialization practices (e.g. "When a child is angry because another child won't share a toy, *I often tell the child exactly what words she could use to express her feelings*" [italics added]), whereas other items are concerned with their perceptions of social norms (e.g. "*Teachers should avoid showing children how to express their feelings*" [italics added]).

Another limitation is the reliance on self-report data. Specifically, we relied solely on teachers' reports of their implementation of SEL program activities. As we did not obtain reports from other informants or observational data, we cannot be certain about the degree to which teachers' reports are accurate representations of what they did in practice. As noted by Durlak and DuPre (2008), "[t]here are some indications that observational data are more likely to be linked to outcomes than self-report data ... but few studies have directly compared these two strategies" (p. 331). Therefore, our findings on SEL program implementation fidelity should be interpreted with some caution. We suggest future research on SEL program implementation fidelity include multiple informants and/or observations in addition to self-reports.

As noted, the teacher participants in the ROE intervention were secondary implementers of the program. Although this did not interfere

with our efforts to assess teachers' emotion beliefs in relation to their implementation of ROE activities, it is suggested that future research include in its sample teacher participants who are primary implementers. This can be valuable for comparing primary versus secondary implementers and to consider the benefit of receiving training directly related to the SEL program being implemented.

The findings of the current study revealed that particular emotion beliefs held by teachers were associated with their implementation dosage of the ROE program. Due to the fact that the research has indicated that SEL program implementation fidelity is linked to student SEL outcomes (Durlak and DuPre, 2008), it would be valuable for future researchers to examine whether teachers' emotion beliefs are positively correlated with students' emotional development in a classroom hosting an emotion-focused SEL program.

In conclusion, this study has the potential to inform SEL program design, teacher training, and future SEL research. The findings can inform the design of SEL programs as they provide insight into what teachers might think about the suitability of the programs in relation to (a) their current belief systems, competencies, and methods of operating emotionally in their classrooms, and (b) their students' current level of development and whether they are ready for emotion-laden activities, even if the program is said to be tailored to the particular age group of the participating students. These findings may also inform the training with which teachers are provided, whether in pre-service teacher training or in-service professional development, to potentially guide their emotion beliefs. This might include providing teachers with information about the emotional development of children and about teachers' role in socializing their students' emotional development, and encouraging engagement in meaningful experiences (e.g. a student teaching practicum that involves observing experienced teachers implement SEL programs, on-going support from a trained SEL coach) that can enhance their sense of self-efficacy and motivation to implement SEL program activities (see Larsen and Samdal, 2012).

The findings of this study also support and extend an area of research in the SEL field that is receiving increased attention: the social-emotional competence (SEC) of teachers (Brown et al. 2010; Jennings and Greenberg, 2009). In fact, teachers' emotion beliefs may provide insight into particular dimensions of their social-emotional competence (e.g. emotion understanding, emotion regulation skills). Therefore, this research may support the importance of promoting the SEC of teachers, such as through coursework or workshops that help teachers express and man-

age their emotions properly. This study may also act as a platform for future research investigating whether teachers' emotion beliefs can be guided and the most effective methods for guiding these beliefs.

References

- Ahn, H. J. (2005) Child care teachers' beliefs and practices regarding socialization of emotion in young children. *Journal of Early Childhood Teacher Education* 26 (3), pp. 283–295.
- Ahn, H. J., Stifter, C. (2006) Child care teachers' response to children's emotional expression. *Early Education and Development* 17 (2), pp. 253–270.
- Beets, M. W., Flay, B. R., Vuchinich, S., Acock, A. C., Li, K. K., Allred, C. (2008) School climate and teachers' beliefs and attitudes associated with implementation of the positive action program: A diffusion of innovations model. *Prevention Science* 9 (4), pp. 264–275.
- Bellas, V. M. (2009) *Emotion in the classroom: A theory-based exploration of teachers' emotion socialization beliefs and behaviors*. PhD thesis, Clark University. [Online] ProQuest Dissertations and Theses Database. <http://www.proquest.com> (12.6.2012).
- Brackett, M. A., Reyes, M. R., Rivers, S. E., Elbertson, N. A., Salovey, P. (2012) Assessing teachers' beliefs about social and emotional learning. *Journal of Psychoeducational Assessment* 30 (3), pp. 219–236.
- Brackett, M. A., Rivers S. E. (2008) What is emotional literacy? In Brackett, M. A., Kremenitzer, J. P. with Maurer, M., Carpenter, M., Rivers, S.E., Katulak, N. (eds.). *Emotional literacy in the classroom: Upper elementary*. Portchester, NY: National Professional Resources, Inc.
- British Columbia Ministry of Education (October, 2001) *BC performance standards. Social responsibility: A framework*. Victoria, British Columbia: Ministry of Education, Student Assessment and Program Evaluation Branch. http://www.bced.gov.bc.ca/perf_stands/sintro.pdf (10.6.2012).
- Brown, J. D. (2008) Statistics corner: Questions and answers about language testing statistics: Effect size and eta squared. *Shiken: JALT Testing Evaluation SIG Newsletter* 12 (2), pp. 38–43. <http://jalt.org/test/PDF/Brown28.pdf> (23.4.2016).
- Brown, J. L., Jones, S. M., LaRusso, M. D., Aber, J. L. (2010) Improving classroom quality: Teacher influences and experimental impacts of the 4Rs program. *Journal of Educational Psychology* 102 (1), pp. 153–167.
- Cohen, J. (1988) *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillside, NJ: Lawrence Erlbaum Associates, Publishers.

- Denham, S. A., Bassett, H. H., Zinsser, K. (2012) Early childhood teachers as socializers of young children's emotional competence. *Early Childhood Education Journal* 40 (3), pp. 137-143.
- Domitrovich, C. E., Pas, E. T., Bradshaw, C. P., Becker, K. D., Keperling, J. P., Embry, D. D., Ialongo, N. (2015) Individual and school organizational factors that influence implementation of the PAX Good Behavior Game intervention. *Prevention Science* 16, pp. 1064-1074.
- Durlak, J. A. (2015) What everyone should know about implementation. In Durlak, J. A., Domitrovich, C. E., Weissberg, R. P., Gullotta, T. P. (eds.). *Handbook of social and emotional learning: Research and practice*. New York: Guilford, pp. 395-405.
- Durlak, J. A., DuPre, E. P. (2008) Implementation matters: A review of research of the influence of Implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology* 41 (1), pp. 327-350.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., Schellinger, K. B. (2011) The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development* 82 (1), pp. 405-432.
- Gordon, M. (2000) *The Roots of Empathy: Curriculum manual*. Toronto, Canada: Roots of Empathy.
- Gosney, S. L. (2006) *Child care providers' beliefs about and reactions to children's negative emotions*. Master's thesis, Oklahoma State University. [Online] ProQuest Dissertations and Theses Database. <http://www.proquest.com> (10.6.2012).
- Hargreaves, A. (2000) Mixed emotions: Teachers' perceptions of their interactions with students. *Teaching and Teacher Education* 16 (8), pp. 811-826.
- Horner, C. G., Wallace, T. L. (2013) Measuring emotion socialization in schools. *Journal of School Health* 83 (10), pp. 697-703.
- Hoyt, W. T., Leierer, S., Millington, M. J. (2006) Analysis and interpretation of findings using multiple regression techniques. *Rehabilitation Counseling Bulletin* 49 (4), pp. 223-233.
- Huberty, C. J., Morris, J. D. (1989) Multivariate analysis versus multiple univariate analyses. *Psychological Bulletin* 105 (2), pp. 302-308.
- Huemer, K. M. (2010) *Infant/toddler teachers' emotion beliefs and children's emotional Competence*. Master's thesis, Sacramento State University. [Online] Sacramento State Scholarworks Database. <http://csusdspace.calstate.edu/handle/10211.9/1016> (23.4.2016).

- Hyson, M. C., Lee, K. (1996) Assessing early childhood teachers' beliefs about emotions: Content, contexts, and implications for practice. *Early Education and Development* 7 (1), pp. 59–78.
- Institute of Medicine (2009) *Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities*. The National Academies Press, Washington, DC.
- Jaramillo, A. M. (2006) *Early childhood educators' experiences implementing a social competence promotion program for preschool-aged children: The "Safe Spaces" program*. Master's thesis, University of British Columbia. [Online] UBC Theses and Dissertations Database. <https://open.library.ubc.ca/cIRcle/collections/ubctheses/831/items/1.0054469> (23.4.2016).
- Jennings, P. A. (2014) Early childhood teachers' well-being, mindfulness, and self-compassion in relation to classroom quality and attitudes towards challenging students. *Mindfulness*. <http://link.springer.com/article/10.1007%2F512671-014-0312-4> (25.6.2016).
- Jennings, P. A., Greenberg, M. T. (2009) The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research* 79, pp. 491–525.
- Jumper, R. L. (2005) *Teacher reports of children's emotion regulation: Is there concordance with trained observers?* Master's thesis, Auburn University. [Online] Auburn University Theses and Dissertation Database. https://etd.auburn.edu/bitstream/handle/10415/752/JUMPER_RACHEL_21.pdf?sequence=1 (23.4.2016).
- Klem, A. M., Connell, J. P. (2004) Relationships matter: Linking teacher support to student engagement and achievement. *Journal of School Health* 74 (7), pp. 262–273.
- Kress, J. S., Elias, M. J. (2006) School-based social and emotional learning programs. In Renninger, K. A., Sigel, I. E. (Series eds.). *Handbook of Child Psychology: Vol. 4. Child psychology in practice*. Hoboken, NJ: John Wiley, pp. 592–618.
- Larsen, T., Samdal, O. (2012) The importance of teachers' feelings of self efficacy in developing their pupils' social and emotional learning: A Norwegian study of teachers' reactions to the Second Step program. *School Psychology International* 33 (6), pp. 631–645.
- Murray, C., Greenberg, M. T. (2000) Children's relationship with teachers and bonds with school: An investigation of patterns and correlates in middle childhood. *Journal of School Psychology* 38 (5), pp. 423–445.
- Pajares, M. F. (1992) Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research* 62 (3), pp. 307–332.

- Pallant, J. (2007) *SPSS survival manual* (3rd ed.). New York, NY: McGraw-Hill.
- Ransford, C. R., Greenberg, M. T., Domitrovich, C. E., Small, M., Jacobson, L. (2009) The role of teachers' psychological experiences and perceptions of curriculum supports on the implementation of a social and emotional learning curriculum. *School Psychology Review* 38 (4), pp. 510–532.
- Reyes, M. R., Brackett, M. A., Rivers, S. E., Elbertson, N. A., Salovey, P. (2012) The interaction effects of program training, dosage, and implementation quality on targeted student outcomes for the RULER approach to social and emotional learning. *School Psychology Review* 41 (1), pp. 82–99.
- Rimm-Kaufman, S. E., Sawyer, B. E. (2004) Primary-grade teachers' self-efficacy beliefs, attitudes toward teaching, and discipline and teaching practice priorities in relation to the Responsive Classroom approach. *Elementary School Journal* 104 (4), pp. 321–341.
- Roots of Empathy. (2013) *What we do: Program pillars*. <http://www.rootsofempathy.org/en/what-we-do/program-pillars.html> (11.10.2013)
- Saarni, C. (2011) Emotional development in childhood. In Tremblay, R. E., Barr, R. G., Peters, R. DeV., Boivin, M. (eds.). *Encyclopedia on early childhood development: Emotions*. Montreal, Quebec: Centre of Excellence for Early Childhood Development and Strategic Knowledge Cluster on Early Child Development, pp. 1–7.
- Santos, R. G., Chartier, M. J., Whalen, J. C., Chateau, D., Boyd, L. (2011) Effectiveness of school-based violence prevention for children and youth: Cluster randomized controlled field trial of the Roots of Empathy program with replication and three-year follow up. *Healthcare Quarterly* 14 (2), pp. 80–91.
- Schonert-Reichl, K. A., Scott, F. (2009) Effectiveness of the “Roots of Empathy” program in promoting children's emotional and social competence: A summary of research findings. In Gordon, M. (ed.). *Roots of empathy: Changing the world child by child*. Toronto, Ontario: Thomas Allen Publishers, pp. 239–262.
- Schonert-Reichl, K. A., Smith, V., Zaidman-Zait, A., Hertzman, C. (2012) Promoting children's prosocial behaviors in school: Impact of the “Roots of Empathy” program on the social and emotional competence of school-aged children. *School Mental Health* 4 (1), pp. 1–21.
- Schonert-Reichl, K. A., Weissberg, R. P. (2014) Social and emotional learning: Children. In Gullotta, T. P., Bloom, M. (eds.). *Encyclopedia of Primary Prevention and Health Promotion Part II*. (2nd ed.), New York: Springer.

- Swearer, S. M., Espelage, D. L., Vaillancourt, T., Hymel, S. (2010) What can be done about school bullying? Linking research to educational practice. *Educational Researcher* 39 (1), pp. 38–47.
- Tschannen-Moran, M., Woolfolk Hoy, A. (2007) The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education* 23 (6), pp. 944–956.
- Trusty, J., Thompson, B., Petrocelli, J. V. (2004) Practical guide for reporting effect size in the Journal of Counseling and Development. *Journal of Counseling and Development* 82 (1), pp. 107–110.
- Wanless, S. B., Domitrovich, C. E. (2015) Readiness to implement school-based social-emotional learning interventions: Using research on factors related to implementation to maximize quality. *Prevention Science* 16, pp. 1037–1043.
- Whitebook, M. (2014) *Building a skilled teacher workforce*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. http://www.irle.berkeley.edu/cscce/wp-content/uploads/2014/09/Building-a-Skilled-Teacher-Workforce_September-2014_9-25.pdf (10.2.2016).
- Wilcox-Herzog, A., Ward, S. (2004) Measuring teachers' perceived interactions with children: A tool for assessing beliefs and intentions. *Early Childhood Research and Practice* 6 (2). <http://ecrp.uiuc.edu/v6n2/herzog.html> (23.4.2016).
- Zinsser, K. M., Shewark, E. A., Denham, S. A., Curby, T. W. (2014) A mixed-method examination of preschool teacher beliefs about social-emotional learning and relations to observed emotional support. *Infant and Child Development* 23 (5), 471–493.

The Development of Teacher's Relational Competence Scale: Structural Validity and Reliability

Maša Vidmar and Katja Kerman

Social and emotional competences have often been an umbrella term for a wide range of competences, from emotional intelligence, interpersonal skills to cognitive regulation (Jones, Bouffard, & Weissbourd, 2013). Collaborative for Academic, Social, and Emotional Learning (CASEL, 2013) outlines five dimensions of social and emotional learning in students that have also been applied to teachers (Schonert-Reichl, Hanson-Peterson, & Hymel, 2015): self-awareness, self-regulation, social awareness, relationship skills and responsible decision-making. In the recent years, it has been suggested that teachers' social and emotional competence (SEC) are vital not only for the development of social and emotional competences in students (Schonert-Reichl, Roeser et al., 2015), but also for students' learning and development in general (Jennings & Greenberg, 2009; Jensen, Bengaard Skibsted, & Veds-gaard Christensen, 2015; Jones et al., 2013). Currently, in theoretical discourses, empirical research, teacher education programs, and policy debates little attention is paid to the cultivation and promotion of socio-emotional competences of teachers. Scientific evidence is scarce in this respect, thus much of the theoretical and empirical work is ahead. This study addresses the gap by developing a measure of teacher's SEC, specifically their relational competence, to advance the science and research in the field.

What is Relational Competence?

The topic of relational competence (also referred to as interpersonal competence) has been mostly examined in the context of relationships with peers and/or romantic partners (e.g. Adamczyk & Pilarska, 2012; Engels, Finkenauer, Meeus, & Deković, 2001; Niederberger, 2013; Ngu & Florsheim, 2011), al-

though some studies have also been done with teachers in education context (e.g. Jensen et al., 2015; Pantić & Wubbels, 2012).

Teachers' relational competence can be placed in the general framework of teachers' SEC. Several definitions exist, but establishing/sustaining quality (positive, supportive, encouraging) relationships with students lies in the core. In our work, the relational competence refers to a concept proposed by Juul and Jensen (2010) and is defined as teacher's ability *to see* a student as a unique being and to consequently adapt their own actions (behaviour) without abandoning the *leadership* role and their *authenticity*, as well taking full *responsibility* for teacher-student relationship.

Looking at this definition we can extract specific components of relational competence, such as seeing the student, leadership (of the educational process), teachers' authenticity and teachers' responsibility for the relationship. Authors (Juul & Jensen, 2010) provide an explanation of each of these components; however, they do not provide very explicit definitions or descriptions. In their work they refer to the ability and willingness to take full responsibility for the relationships as pedagogic ethics (stance), whereas other components are referred to as pedagogic skill (craft) (ibid.).

According to Juul and Jensen (2010) the teachers' ability *to see a student* refers to the fact that teachers sees beyond the most obvious apparent behaviour or words of a student (e.g. see worry or fear behind hyperactivity, see non-verbal resistance in student's body even if a student verbally says 'yes') – an adult collects all this information and shapes their own view of a student and is able to give a student full recognition and acknowledgement. As stated by Juul and Jensen (2011), the basis for high-quality relationships is that students/children are understood and treated as individuals – as autonomous people who play an active role in building and maintaining relationships. This means that the teacher does things *with* the student and not *to* the student. This also means that a student, with their reactions within this relationship, provides information about who the student is and which parts of relationship make them feel good (or less good). Students' reactions are therefore not interpreted as an expression of what a student is, but who they are in this particular relationship. The key is to observe and identify students' reactions and signals.

Leadership implies teachers' ability to plan and realize educational processes without damaging student's sense of personal integrity (i.e. students feel secure and relaxed). It means that a teacher is able to lead (guide) towards the (educational) goal and have this goal all the time in mind, but at the same time being able to see students as individuals and acknowledge them.

Authenticity refers to teachers' ability and willingness to be personal (i.e. to be present and to share own thoughts, values, boundaries) in the relationship and to develop a subject-subject relationship (i.e. two individuals engaged in educational process), rather than a subject-object relationship (i.e. teachers as the one doing teaching, transferring knowledge to the student). It also refers to the match between professional and personal values (i.e. is the teacher able to act in accordance with their own values and beliefs – about teaching, learning, education etc). The quality of relationship depends on how authentic adults (teachers) are in communication and how included children (students) feel.

Responsibility for the quality of the student-teacher relationship includes the ability to establish and maintain the relationship as well as to take an important position in students' life; it is solely on the side of the teacher. The adult has to consider both, his inner reality and the understanding of the child. The concept of teachers' responsibility for the student-teacher relationship refers to the fact that student-teachers relationships are asymmetrical (Pianta, Hamre, & Stuhlam, 2003) and that teachers are responsible for creating contact and the quality (reciprocity, dynamics) of the relationship. Thus when positive, supportive, and accepting relationship with a student or a group of students does not develop, the teacher asks themselves what are they doing that this positive relationship is not being built (and adapts their behaviour accordingly). The teacher holds the responsibility for creating good interactions and a good learning environment, and for engaging in development-supporting relations (Jensen et al., 2015). Teachers are models of how to communicate. Thus, teachers need to know how to form, maintain, improve and strengthen the quality of the relationships: how to work consciously and systematically with the relation as a space for development and learning.

All of these components are related with each other. However, we view the two components – namely teacher's ability to see a student and teacher's leadership in educational process in accordance with the 'seen' – so interrelated that we propose to merge them in a single component called *respect for individuality*. We bring these two components together because teacher's (exclusive) focus on seeing a student as an individual may imply overshadowing of the process of teaching and learning that is to take place in the classroom; when in fact the opposite is true – taking students psychological needs into account does not mean that learning is no longer important, rather that it is a prerequisite for learning. Thus 'seeing' the student is inextricably linked with leadership role in teaching and learning. It is proposed that relational competence is composed of three components (dimensions): respect for individuality, authenticity, and responsibility for the relationship.

It is important to note that relational competence is not only about communication techniques, but also about the dialogue which is based on the sincere wish and the competence of the adults to react openly and with sensitivity; it is 'an ability to meet students with openness and respect, to show empathy and be able to take responsibility for one's own part of the relation' (Jensen et al., 2015).

In a recent work, Jensen and colleagues (2015) proposed the model of relational competence (also using Juul and Jensen's definition), that is composed of five sub-elements: (1) context (relational competence includes the ability to reflect on the influence of the context for interaction and learning); (2) appreciation (respect for other people's worlds of experience – this can be understood as fundamental attitude and also as more specific relational skills, such as listening, understanding, tolerating, confirming); (3) change of perspective (taking other people's viewpoint); (4) empathy (ability to recognize and understand others' feelings); and (5) attention and presence of mind (being present in relation to yourself). The link between this sub-elements and the definition of relational competence remains unclear.

Why is Relational Competence Important?

The idea of developing teachers' relational competence is based on the centrality of relationships in human development, which has been demonstrated in many theories and studies (e.g. attachment theory, Bowlby, 1969; zone of proximal development, Vygotsky, 1978). This formed a foundation for understanding the teacher-student relationship and led to hypothesis that teacher-student relationship has an important impact on students.

Indeed, several longitudinal studies provide evidence that a teacher's report of a supportive relationship with a student has positive effects on elementary students' behavioural and academic adjustment (e.g. Curby, Rimm-Kaufman, & Ponitz, 2009; Hamre & Pianta, 2001; Hughes, Cavell, & Jackson, 1999; Ladd, Birch, & Buhs, 1999; Meehan, Hughes, & Cavell, 2003; O'Connor & McCartney, 2007; Valiente, Lemery-Chalfant, Swanson, & Reiser, 2008). Similarly, PISA 2012 (OECD, 2013) demonstrated that in all countries and economies, among students with equal performance and similar socio-economic status, those who attend schools with better teacher-student relations reported a stronger sense of belonging to school. Sense of belonging is linked to academic achievement (Anderman 2002; Pittman & Richmond, 2007). Moreover, in a seven-year study of 400 elementary schools, Bryk and Schneider (2004) found that the quality of social relationships among the school community (principals, teach-

ers, students, and parents) is central to student's functioning, and strongly predicts positive student outcomes. Hattie (2012) listed the teacher-student relationships as highly influential for student achievement in his review. Moreover, teacher-student relations have an exceptionally powerful influence over teachers' job satisfaction (OECD, 2014) and are also related to teachers' sense of efficacy (Yoon, 2002). These studies indicate the importance of relationship skills for teachers – teachers need to know how to develop quality relationships, how to improve and strengthen the relationships, i.e. they need to possess relational, interpersonal competences. Two questions emerge immediately: how can we measure teachers' relational competence and how can relational competence be developed (taught) in teachers? The present paper aims to develop an instrument to measure teachers' relational competence, whereas developing teachers relational competences is in the focus of another article in this issue (Laursen & Nielsen, this issue).

Measures of Relational Competence

Wubbels and colleagues (Wubbels, Brekelmans, den Brook, & Van Tartwijk, 2006; Wubbels et al., 2012) developed a student-report and self-report measure of interpersonal competence (Questionnaire for Teacher Interactions, QTI) based on their theoretical Model for Interpersonal Teacher Behaviour. In their model, teachers' behaviour is described along two independent dimensions: control (dominance-submission) and affiliation (cooperation-opposition). These dimensions define eight types of teacher interpersonal relations: Leadership (e.g. This teacher is sure about what they want in the classroom), Helpful/friendly (e.g. This teacher is friendly), Understanding (e.g. This teacher is willing to explain again if we don't understand), Student responsibility/ freedom (e.g. We can decide some things in this teacher's class), Uncertain (e.g. This teacher does not seem sure), Dissatisfied (e.g. This teacher is bad-tempered), Admonishing (e.g. This teacher gets angry quickly) and Strict (e.g. This teacher is strict) (examples from Kokkinos, Charalambous, & Davazoglou, 2009). The authors (Wubbels et al., 2012) also list the following five teacher competences as comprising interpersonal competence: (1) providing guidance (e.g. is able to make pupils active learners), (2) setting norms and standard (e.g. acts as a role model), (3) correcting undesirable pupil behaviour (e.g. checks whether pupils respond to their corrections), (4) paying attention to pupils (e.g. shows personal interest in pupils), and (5) giving pupils responsibility and freedom (e.g. gives the pupils an appropriate level of responsibility). The model proposed by Wubbels and colleagues (2006,

2012) resembles the work on teacher styles that are based on Baumrind's parenting dimensions – control and responsiveness (see Wentzel, 2002).

Although the focus in Wubbels' (and colleagues, 2006, 2012) and Juul and Jensen's work is similar – teachers' relationship skills – and the terms used imply substantial overlap (relational versus interpersonal competence), a closer look shows that the Juul and Jensen's conceptualization focuses much more on the relationship between teacher and student *per se*. In this context, correcting students' undesirable behaviour (one of the competences in Wubbels et al., 2012 model) is irrelevant, because students' behaviour is viewed and understood as a signal of who and how the student is within the relationship. We decided to develop a measure of relational competence based on the work of Juul and Jensen (2010). When constructing the scale we focused on the main three components of relational competence – respect for individuality (i.e. seeing student and leadership), authenticity and responsibility for the relationship (see Method for details on scale development).

The Present Study

The need for a measure of relational competence is practice-based on one hand (e.g. to demonstrate the need for teachers' professional development on the topic), but also research-based on the other hand (e.g. to evaluate effects of initial or in-service training for teachers, see e.g. Laursen & Nielsen, this issue; to examine links with student and teacher outcomes). Thus, in the present study, we aimed to develop and verify a new measure of relational competence ('Teachers' Relational Competence Scale, TRCS) that is grounded in the conceptual work of Juul and Jensen (2010). The overall aim was to develop a self-report questionnaire for teachers and to investigate the reliability and structural validity of the new instrument. The three-factor structure assessing respect for individuality, authenticity and responsibility has been presupposed. The specific aims of the study were to: (1) identify the items that are reflected by the underlying factors in the expected manner; (2) examine whether the presupposed three factors indeed emerge and have satisfactory reliabilities, item loadings and model fit indices; (3) propose suggestions for further development of the instrument (e.g. alternative factor structure, new items).

Method

Participants

Teachers, who participated in the present study, also participated in main TIMSS 2015 study (Trends in Mathematics and Science Study). The TIMSS study is an international study of student achievement that is con-

ducted every four years at the 4th and 8th grades; students, teachers and school heads participate in the study. Out of all TIMSS 2015 teachers ($n = 257$ for the 4th grade and $n = 882$ for the 8th grade) 562 teachers responded to our invitation; 127 were 4th grade teachers (49% response rate) and 478 were 8th grade teachers (54% response rate). Teachers came from 136 Slovenian schools; most participants were females (85%).

Instruments

Teachers' Relational Competence Scale (TRCS – pilot II¹, Vidmar, Rutar Leban, & Niederberger, 2015) is a newly developed instrument for measuring teachers' relational competence as defined in the work of Juul and Jensen (2010). The development of the TRCS is described below, followed by a description of the instrument.

An expert team of three psychologists (two researchers and one psychotherapeutic counsellor) studied the original work of Juul and Jensen (Juul & Jensen, 2010, 2011; Jensen & Jensen, 2011). We followed explanations and descriptions of the relational competence dimensions – respect for individuality (i.e. seeing student and leadership), authenticity and responsibility for the relationship. For each component we constructed items that would reflect its content as much as possible. The items content was reviewed also by a Danish expert for relational competence. This resulted in the scale, comprised of 33 self-report items (TRCS-pilot II, Vidmar et al., 2015, see Table 1; only two items remained from the pilot I version). The items were assessed on a 5-point Likert scale (from *Very rarely or never*, to *Always or very often*). The items presumably described teachers' relational competence along the three dimensions – individuality (9 items, e.g. *I take into consideration that each student's thoughts, feelings and understanding of a given situation may differ from mine*), authenticity (12 items; e.g. *I am authentic in my relationships with students*) and responsibility (12 items; e.g. *When I can't build a good relationship with a student, I ask them for help*). The respect for individuality refers to a teacher's abil-

1 The first version of the TRCS (TRSC-pilot I, Vidmar & Niederberger, 2014) was developed based on the work of Niederberger (2013) that measured relational competence within parent-child and romantic relationships. The TRSC-pilot I, comprising of 26 items was tested in preliminary study on the sample of over 100 Slovenian teachers ($n = 121$) of the 4th and 8th grade, who participated in the TIMSS 2015 field study. Teachers completed the TRSC on-line. Using exploratory factor analyses (EFA) 1-, 2-, 3-, and 4-factor models were tested. Fit indices were low (CFI, RMSEA, SRMR) and there were several non-significant loadings and several cross-loadings. After removing the non-significant items, fit indices remained low. The items did not load onto the factors in the expected manner; the items that had reverse coding loaded on one factor (in the 2-, 3-, and 4-factor solution), whereas the 'positive' items loaded together on another factor (in the 3- and 4-factor solution, the remaining factors were weak with only one or two items loading). The results indicated that comprehensive revision of the TRSC was needed.

ity to recognize and acknowledge students as individuals (with their own (psychological) needs, goals, values) and teacher's ability to take this into account when leading the teaching and learning. The authenticity refers to teacher's ability to be personal in the relationship with students and to be able to act in accordance with their own values and beliefs (about teaching, learning, education) in their professional life. The responsibility refers to a teacher's ability to take exclusive responsibility for the quality of the relationship with students (i.e. for what is happening in the relationship between the teacher and the student). The presupposed factor structure (Table 1) as well as final factor structure (Tables 2 and 3) and scale reliability are presented in the results.

Procedure

Teachers who participated in the TIMSS 2015 were invited via e-mail to complete the on-line TRCS – pilot II (using on-line survey tool Ika (<https://www.ika.si/>)). The participation was voluntary.

Statistical Analyses

Using statistical package IBM SPSS Statistics 23, we computed descriptive statistics, correlations and alpha coefficients. Using the “random” function in SPSS, we split the sample into two equal groups. We conducted exploratory factor analysis (EFA) on the first sample half and exploratory structural equation modelling (ESEM) on the other sample half, using Mplus Version 6.12. Full information maximum likelihood (FIML) algorithm was used to assess the parameters in the model. The ESEM approach is similar to confirmatory factor analyses (CFA), because it allows the pre-specification of target and non-target loadings in a confirmatory manner; in the ESEM all factor loadings are estimated with the cross-loadings targeted to be close to zero (but not fixed at 0 as is the case in the CFA) and main (target) loadings are estimated freely (Morin, Arens, & Marsh, 2016).

Item loadings were interpreted according to Thabachnick and Fidell (2006) who suggest cut-off values going from 0.32 (poor), 0.45 (fair), 0.55 (good), 0.63 (very good) or 0.71 (excellent); following this rule of thumb all items with loadings smaller than 0.30 were excluded from further analysis. Model fit was interpreted following the recommendations by Hu and Bentler (1998): the comparative fit index, CFI > 0.95, the root mean square error of approximation, RMSEA < 0.06 and the Standardized Root Mean Square Residual SRMR < 0.08.

Results

In the first section, descriptives for all items are presented (see Table 1). This is followed by presentation of EFA for the first random half of the sample and ESEM results for the second half of the sample. For the items in the ESEM model, inter-item correlations are also presented as well as mean differences according to grade taught and teachers' sex.

Table 1. Item descriptive statistics

Item/ factor		Mean	Std. dev.	Skew.	Kurt.
1/R	When a student doesn't agree with a certain decision I've made, I consider his/her opinion.	4,25	0,75	-0,78	0,42
2/I	I take into consideration that each student's thoughts, feelings and understanding of a given situation may differ from mine.	4,38	0,63	-0,60	-0,16
3/A	As a teacher I am able to act in accordance with my values and beliefs.	4,35	0,63	-0,50	-0,44
4*/A	Respecting the teacher authority is a prerequisite for effective teaching.	4,41	0,72	-1,29	2,28
5/R	When I find myself in disagreement with a certain student, I actively seek for new opportunities to (re)establish a harmonic relationship.	4,57	0,59	-1,17	1,15
6/A	I make sure, I don't expect (such) behaviours from students, that I don't express myself.	4,23	0,83	-1,10	1,45
7/R	When a student behaves or expresses in an inappropriate or unsuitable way, I try to understand what lies under his/her behaviour or words.	4,04	0,72	-0,40	0,18
8/I	I am aware of values, feelings, thoughts and goals of each student.	3,61	0,74	-0,54	0,60
9/A	In my demands/expectations I refer to my personal boundaries (e.g. "I do not allow this behaviour.").	4,07	0,72	-0,64	0,93
10/I	I am open to student ideas and suggestions and I consider them when teaching.	4,29	0,60	-0,24	-0,61
11/I	I take into consideration that each student experiences a given situation from a different perspective.	4,17	0,68	-0,44	0,15
12/R	As a teacher, I take full responsibility for the quality of the student-teacher relationship.	4,08	0,83	-0,75	0,48
13/R	When I realise I made a mistake, I apologise to the student.	4,81	0,48	-3,08	12,11
14/I	When I talk to a student, I encourage him/her to express his/her thoughts.	4,66	0,50	-1,00	-0,32
15/I	Feelings, emotions and thoughts of my students are important to me.	4,41	0,62	-0,87	1,54

Item/ factor		Mean	Std. dev.	Skew.	Kurt.
16/A	When I am with students, I focus on the present moment; I don't think about past situations nor think about the future ones.	4,11	0,76	-0,75	0,68
17/R	I can effectively collaborate with every student or class.	4,06	0,68	-0,38	0,17
18/R	I am not insulted by students' inappropriate/offensive behaviour or statements; I think of them as expression of imbalances between the student and myself/environment.	3,85	0,81	-0,52	0,46
19/A	Building a personal teacher-student relationship is a prerequisite for effective teaching.	4,18	0,82	-0,84	0,50
20/A	I am authentic in my relationships with students.	4,66	0,52	-1,17	0,77
21/A	I share my personal experiences with students when their content is appropriate and they deepen our relationship.	3,88	0,93	-0,51	-0,17
22 */I	As a teacher I try to treat all students in the same way.	4,74	0,51	-2,19	5,76
23/A	I develop a personal relationship with each student.	3,98	0,87	-0,86	0,91
24/R	When I can't build a good relationship with a student, I ask him/her for help.	3,39	0,93	-0,22	-0,15
25/A	I am aware my behaviour sets an example for the students.	4,77	0,46	-1,90	3,53
26/R	After a disagreement with a student, I make sure we talk about it.	4,60	0,56	-1,02	0,04
27/I	A sense of mutuality and equality in my relation with students is important to me.	4,56	0,64	-1,69	4,55
28/I	I am aware that each student has his/her own way of thinking and functioning, so I try to adjust my behaviour accordingly.	4,33	0,62	-0,36	-0,66
29 */A	In my demands/expectations I refer to the commonly accepted rules of behaviour (e.g. "This is no behaviour.").	3,90	0,80	-0,42	-0,07
30/R	If I find myself in repeated conflicts with a certain student or a group of students, I consider my behaviour and usually modify it accordingly.	3,87	0,77	-0,35	0,20
31/R	I see relationship with each student as an opportunity for my personal and professional growth.	4,18	0,75	-0,59	-0,16
32 */R	Difficult classes/students are the cause of teacher burnout.	3,88	0,85	-0,39	-0,28
33 */A	As a teacher I don't show my weaknesses to the students.	3,51	0,88	-0,20	0,07

* Reverse coding. N = 562. I = respect for individuality, A = authenticity, R = responsibility for the relationship.

As indicated in Table 1, only item 13 had excessive skew and kurtosis that violates the recommendations on assuring multivariate normality (for all other items, univariate skewness is below 2.0 and kurtosis is below 7.0; Curran, West, and Finch, 1996).

Exploratory Factor Analyses (EFA)

A series of EFAs was conducted on the first random half of the sample ($N = 281$) to examine the factor structure and item loadings of the newly developed Teachers' Relational Competence Scale (TRCS – pilot II, Vidmar et al., 2015). Firstly, we conducted 1-, 2-, 3- and 4-factor EFA including all 33 items². Based on fit indices (RMSEA, CFI, χ^2 and SRMR), all models showed a poor fit (values ranged from .05 to .07 for RMSEA; .71 - .87 for CFI; 1205.173 ($df = 495$), $p = .000$ - 713.889 ($df = 402$), $p = .000$ for χ^2 and .07 - .05 for SRMR). Across all factor solutions, two items loaded on none of the factors (items 3, 32; e.g. *As a teacher I am able to act in accordance with my values and beliefs*) and reversely coded items loaded positively rather than negatively on the factors (items 4, 22, 29, 33; e.g. *As a teacher I don't show my weaknesses to the students*). Generally, reversely coded items also correlated positively rather than negatively with other items. These six items were dropped from further analyses. Looking at the item content of these items reveals that four of the dropped items presumably tap authenticity, one individuality and one responsibility.

Secondly, after dropping inadequate items (specifically items 3, 4, 22, 29, 32 and 33) 1-, 2-, 3- and 4-factor analyses were conducted again. This did not result in improved fit indices, particularly the CFI remained low ($CFI < .81$). In the next step we continued with exploratory factor analysis (EFA), including only items, that showed appropriate factor loadings (i.e. loaded together with other items designed to load the same factor; loading $> .30$), specifically items 2, 7, 10, 11, 12, 17, 18, 24, 28, 30, 31, and tested the 2- and 3-factor models. The models show appropriate fit ($\chi^2(25) = 38.947$, $p < .05$; $CFI = .98$; $SRMR = .03$; $RMSEA = .05$ and $\chi^2(34) = 66.68$; $p < .001$; $CFI = .95$; $SRMR = .04$; $RMSEA = .06$) for the 3- and 2-factor model, respectively. Even though fit indices generally meet the recommended values (Hu and Bentler, 1998) for both models, the 3-factor solution shows one dominant factor with two weaker factors (see appendix, table A1 for item loadings). In light of model parsimony, we opted for the 2-factor solution. In Table 2, we can see that all item loadings are above .35, with more items loading into factor 2 than factor 1. Factor 1 is comprised of four items (items 2, 10, 11 and 28), with item 28 cross-loading into both factors, whereas factor 2 is comprised of seven items 7, 12, 17, 18, 24, 30, 31).

2 Factor loadings for the 1-, 2-, 3, and 4-factor solution are available from the first author.

Based on item content, we named the first factor Individuality and the second factor was named Responsibility.

Table 2. Item loadings for EFA

	Factor 1	Factor 2
Item 2: I take into consideration that each student's thoughts, feelings and understanding of a given situation may differ from mine.	0.62	-0.09
Item 7: When a student behaves or expresses in an inappropriate or unsuitable way, I try to understand what lies under his/her behaviour or words.	0.24	0.44
Item 10: I am open to student ideas and suggestions and I consider them when teaching.	0.41	0.24
Item 11: I take into consideration that each student experiences a given situation from a different perspective.	0.78	0.01
Item 12: As a teacher, I take full responsibility for the quality of the student-teacher relationship.	0.20	0.38
Item 17: I can effectively collaborate with every student or class.	0.03	0.44
Item 18: I am not insulted by students' inappropriate/offensive behaviour or statements; I think of them as expression of imbalances between the student and myself/environment.	0.03	0.48
Item 24: When I can't build a good relationship with a student, I ask him/her for help.	-0.01	0.61
Item 28: I am aware that each student has his/her own way of thinking and functioning, so I try to adjust my behaviour accordingly.	0.35	0.35
Item 30: If I find myself in repeated conflicts with a certain student or a group of students, I consider my behaviour and usually modify it accordingly.	<0.01	0.59
Item 31: I see relationship with each student as an opportunity for my personal and professional growth.	-0.05	0.75

Note. The highest loading is marked in bold.

Cross-validation with Exploratory Structural Equation Modeling (ESEM)

In the next set of analyses, we attempted to cross-validate the 2-factor structure obtained in the first sample half with EFA, using ESEM on the second half of the sample ($N = 281$). We specified the model based on EFA 2-factor model, assigning items 2, 10, 11 and 28 to factor 1 and items 7, 12, 17, 18, 24, 30 and 31 to factor 2. In the EFA, item 28 loaded on both factors; we decided to keep item 28 in presupposed target factor 1 based on: (1) item content, (2) higher correlation with other factor items (mean correlation with other items of the factor was .33 and .29 for factor 1 and factor 2, respectively) and (3) the higher loadings on the factor 1 compared to factor 2 in the 3-factor EFA solution (see appendix, table A1). ESEM fit indices

were within the recommended range (RMSEA = .04, CFI = .98; $\chi^2(34) = 50.259$, $p < .05$ and SRMR = .03). Factor loadings are presented in Table 3.

Table 3. Item loadings to target factors (ESEM)

	Individuality	p-value	Responsibility	p-value
Item 2	0.60	0.00	0.03	0.79
Item 10	0.55	0.00	0.17	0.08
Item 11	0.74	0.00	0.08	0.46
Item 28	0.14	0.15	0.54	0.00
Item 7	0.48	0.00	0.29	0.00
Item 12	0.17	0.12	0.43	0.00
Item 17	0.09	0.54	0.40	0.00
Item 18	-0.00	0.99	0.44	0.00
Item 24	0.19	0.13	0.43	0.00
Item 30	0.11	0.33	0.53	0.00
Item 31	-0.16	0.12	0.87	0.00

Note. The loadings on target factors are marked in bold.

Table 3 shows satisfactory loadings for all items (above .30, except for items 7 and 28). Item 28 loads more strongly on Responsibility factor, with loading on Individuality being statistically non-significant. We repeated the above described ESEM, using the complete data set, due to the cross-loading. In the full data ESEM, item 28 loads statistically significant onto to the target Individuality factor; however, it still loads more strongly onto Responsibility factor (.40) than onto Individuality factor (.27). In light of these results, further revision of item 28 (*I am aware that each student has his/her own way of thinking and functioning, so I try to adjust my behaviour accordingly*) is needed.

Based on the final EFA and ESEM results (presented in Table 2 and 3) and item content, we named the first factor Individuality and the second factor was named Responsibility. Items 2, 10, 11 and 28 comprise the Individuality factor, with item correlations ranging from .28 to .45 (see Table 4) and Cronbach's alpha coefficient of .70. Responsibility factor is comprised of items 7, 12, 17, 18, 24, 30 and 31, with inter-item correlations ranging from .18 to .49 (see Table 4), and Cronbach's alpha coefficient of .76. Although some correlations are low, all correlations are statistically significant. The latent factors correlate moderately ($r = .73$, $p < .001$).

Table 4. Inter-item correlation matrix for the final set of items

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Item 2											
2. Item 10	.28**										
3. Item 11	.45**	.42**									
4. Item 28	.29**	.36**	.44**								
5. Item 7	.30**	.33**	.37**	.32**							
6. Item 12	.16**	.36**	.33**	.28**	.33**						
7. Item 17	.07	.21**	.23**	.27**	.22**	.36**					
8. Item 18	.22**	.15*	.23**	.28**	.33**	.23**	.32**				
9. Item 24	.13*	.30**	.25**	.33**	.42**	.37**	.26**	.24**			
10. Item 30	.18**	.21**	.29**	.30**	.32**	.22**	.18**	.32**	.37**		
11. Item 31	.15*	.35**	.29**	.41**	.38**	.29**	.31**	.36**	.39**	.49**	

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Sex and Grade Differences

As this study was conducted in an exploratory manner, we also wanted to test differences in the two factors of relational competence based on teacher's gender and the grade they teach (4th and 8th) using Mann-Whitney U test³. The results showed that there are statistically significant differences (or come close to statistical significance) for both dimensions, based on sex ($U = 4540,000$ and $p = .055$; $U = 4137,500$ and $p = .007$; for Individuality and Responsibility, respectively) and based on grade taught ($U = 5411,000$ and $p = .002$; $U = 5194,000$ and $p = .001$ for Individuality and Responsibility, respectively). More specifically, for both Individuality and Responsibility, the higher average was found for females compared to males ($\mu = 17,23$; $\sigma = 1,82$ for Individuality and $\mu = 32,39$, $\sigma = 3,84$ for Responsibility) and for 4th grade teachers compared to 8th grade teachers ($\mu = 17,72$; $\sigma = 1,73$ for Individuality and $\mu = 33,40$ $\sigma = 3,31$ for Responsibility).

Discussion

In the present study, we investigated the reliability and structural validity of the newly developed TRCS questionnaire for measuring teachers' relational competence, using exploratory factor analysis (EFA) and exploratory structural equation modelling (ESEM). EFAs were conducted on the

3 Mann-Whitney U test was used due to non-normal distribution of latent factors, computed with Shapiro-Wilk test ($W = .95$, $p < .001$ and $W = .987$, $p < .001$ for Individuality and Responsibility, respectively).

first half of the teacher sample and then cross-validated with ESEM on the other half of the teacher sample.

Exploratory Factor Analyses (EFA)

A series of EFAs led us to the construction of 11-items model with 2 factors. The model showed adequate fit and appropriate item loadings to respective factors (only item 28 cross-loaded into two factors). Items loadings ranged from fair to excellent. Item 28 was kept in further analysis on factor 1, based on its content, higher correlation with other items on factor 1 (compared to factor 2) and higher loading on factor 1 (compared to factor 2) in 3-factor EFA solution.

The two obtained factors were named Individuality and Responsibility. Individuality consists of 4 items and taps items that reflect a teacher's ability to respect and consider each student on an equal-footing – as an individual with their own experiences, perspectives and ways of functioning. This also means that teachers are able to see beyond the most apparent behaviour or words of a student, take this into consideration in the interactions and yet remain in their leadership (guidance) role in the context of learning and teaching. Responsibility consists of 7 items and taps items that reflect a teacher's ability and willingness to take responsibility for what is happening in the teacher-student relationship – to take responsibility for the relationship in general as well as in conflicting/challenging situation (e.g. bad relationship with a student, inappropriate students' behaviour). It includes the ability to establish and maintain relationship.

The two obtained factors are consistent with two components of relational competence as defined by Juul and Jensen (2010); however, the third components emphasized in their definition – teachers' authenticity – did not emerge as a cohesive factor. Thus, even though the three-factor structure (individuality, responsibility, authenticity) was presupposed, our study did not support this.

Items tapping authenticity loaded on different factors and did often not correlate with each other significantly ($.004 < r < .52$, $.00 < p < .98$). Looking closely at items presumably tapping authenticity, we can see that four items have already been dropped from analyses after the first set of EFAs, due to low loadings or loadings in the wrong direction (e.g. *As a teacher I don't show my weaknesses to the students*; *As a teacher I am able to act in accordance with my values and beliefs*). These items were conceptually based, but empirically do not seem to measure authenticity. Moreover, looking at content of other items presumably tapping authenticity, they seem to also cover concepts like mindfulness (e.g. *When I am with students, I focus on the present moment*; *I don't think about past situations*

nor think about the future ones) and self-disclosure (*I share my personal experiences with the students when their content is appropriate and they deepen our relationship*). This heterogeneity of item content could result in the fact that authenticity did not emerge as an independent factor or did not emerge with more items on one of the other two factors. This indicates that in the future studies, the construct of authenticity should be revisited and re-examined with several newly developed items.

Given that this is pioneering work in the field, and that items for the scale were newly constructed based on the conceptual work of Juul and Jensen (2010), there are not many referential studies to which we could compare our findings. Similar to Wubbels and colleagues (2006, 2012), our study supports the notion that teacher's relational competence (or more general social and emotional competences) can be reliably measured using self-report. The dimensions examined in this study differ from Wubbels' work; Juul and Jensen's (2010) concept includes components such as respect for individuality, authenticity and responsibility for the relationship, while Wubbels concept includes components such as providing guidance, setting norms and standards, correcting undesirable pupil behaviour, paying attention to pupils and giving pupils responsibility and freedom (Wubbels et al., 2012). The first and the last two of Wubbels' components could be seen as taping respect for individuality, while authenticity and responsibility for the relationship are not captured in his conceptualization.

As indicated in the results, the 3-factor EFA solution with 11 items also showed adequate fit (2-factor was chosen because it is more parsimonious). Comparing the 2- and 3-factor solutions that emerged in the EFA shows that two items from the second factor emerged as a third factor in 3-factor solution. In the 3-factor solution, factor Responsibility from the 2-factor solution was decomposed in such a way, that two distinct types of responsibility occurred: on one hand responsibility for restoring relationship in time of conflict or lack of good relationship (e.g. item 30: *If I find myself in repeated conflicts with a certain student or a group of students, I consider my behaviour and usually modify it accordingly*) and on the other hand responsibility for the relationship in general (item 12: *As a teacher, I take full responsibility for the quality of the student-teacher relationship*). Future studies should bear in mind this possible distinction of the two types of responsibility when investigating the dimensions of relational competence.

Cross-validation using exploratory structural equation modelling

The final 2-factor model was then cross-validated on the second data half, using exploratory structural equation modelling (ESEM). Fit indices were within the recommended range, confirming that the 2-factor structure with presumed item loadings fits the data well and most item loadings were found to be statistically significant (when repeating the ESEM on the complete dataset, all loadings proved to be statistically significant). Item 28 cross-loaded into both factors; but loaded more strongly and statistically significant onto the non-target Responsibility factor. Looking at the item content, cross-loading is not surprising. It seems that the first part of the items indeed taps respect for individuality (*I am aware that each student has his/her own way of thinking and functioning...*), however the second part also describes behaviour that is indicative of a teacher's responsibility for the relationship (*...so I try to adjust my behaviour accordingly*). The item was kept in the final version, because the behaviour describes relational competence of teachers; the item was designated to measure factor 1 (Individuality). We suggest a revision of item 28, specifically the second part (e.g. *...so I try to take it into account when teaching or otherwise interacting with students*). Overall, with the ESEM results, we were able to find support for the 2-factor structure of the newly developed TRCS questionnaire (as indicated by the EFA results).

Sex and Grade Differences

Finally, we tested whether dimension scores differ based on the teacher's sex and grade taught. Results showed statistically significant differences on both dimensions, for both categories (results for sex differences on Individuality are marginally significant). These findings indicate that female teachers (compared to male counterparts) and 4th grade teachers (compared to 8th grade teachers) report that they are better at respecting students' individuality and taking responsibility for the relationship with students. Additionally, these results, at least to some extent, demonstrate the discriminant validity of the instrument.

Limitations and Strengths

One of the strengths of this study is a large initial sample size, which enabled us to cross-validate the factor structure of the TRCS questionnaire. Additionally, advanced statistical tools, such as FIML and ESEM were used. The limitation is that no other aspects of validity, except structural (i.e. external, Messick, 1995) were investigated within this study; however further studies of validity will be possible after TIMSS 2015 data becomes available and will be merged with our data on relational competence. Fi-

nally, we have doubts about the generalizability of our findings. As our initial sample was representative (of Slovenian school teachers), only 50% of teachers completed the TRCS. The low response rate may also indicate a response bias, possibly related to the teachers' relational competence.

Conclusion

In accordance with the aims of our study we have: (1) identified items that are adequately reflected by the underlying factors using EFAs – 11 items were kept and 22 items of the initial 33 were dropped due to low or non-target loadings; (2) not found support for the presupposed three-factor structure of TRCS (individuality, responsibility, authenticity), because authenticity did not emerge as a cohesive factor; and (3) suggested to develop new authenticity items.

Nevertheless, our study shows that teachers' relational competence (its two dimensions – individuality and responsibility) can now be reliably measured, using the newly developed TRCS. The scale was tested on a large sample size using advanced statistical procedures. We found that a 2-factor model, consisting of 11 items fits the data best; the first factor represents Individuality (items 2, 10, 11 and 28; $\alpha = .70$) and the second factor represents Responsibility (items 7, 12, 17, 18, 24, 30, 31; $\alpha = .76$). These results were confirmed with ESEM, but a modification of item 28 (that cross-loaded on both factors) was suggested. The third presumed factor, authenticity, proved to be the weakest (it did not emerge), with items usually loading onto other factors and items correlating poorly. To appropriately address the authenticity aspect of the relational competence, the construct needs to be revised and new items need to be developed and examined in future studies whether they load on a separate factor or load together with any of the other two factors. Future studies on validity of the instrument are needed.

References

- Adamczyk, K., Pilarska, A. (2012) Attachment style, relationship status, gender and relational competences among young adults. *Polish Psychological Bulletin* 43 (2), pp. 59–69.
- Anderman, L. H. (2003) Academic and social perception as predictors of change in middle school students' sense of school belonging. *Journal of Experimental Education* 72 (1), pp. 5–22.
- Bryk, A. S., Schneider, B. (2004) Trust in schools: A core resource for improvement. *Contemporary Sociology* 33 (3), pp. 368–369.
- Bowlby, J. (1969) *Attachment and loss: Vol 1. Attachment*. New York: Basic Books.

- CASEL, Collaborative for academic, social, and emotional learning (2013) *2013 CASEL guide: Effective social and emotional learning programs—preschool and elementary school edition*. Chicago: Author.
- Curran, P. J., West, S. G., Finch, J. F. (1996) The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological Methods* 1, pp. 16–29.
- Curby, T. W., Rimm-Kaufman, S. E., Ponitz, C. C. (2009) Teacher–child interactions and children's achievement trajectories across kindergarten and first grade. *Journal of Educational Psychology* 101, pp. 912–925.
- Engels, R. C. M. E., Finkenauer, C., Meeus, W., Deković, M. (2001) Parental attachment and adolescents' emotional adjustment: The associations with social skills and relational competence. *Journal of Counseling Psychology* 48 (4), pp. 428–439.
- Hamre, B., Pianta, R. (2001) Early teacher–child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development* 72, pp. 625–638.
- Hattie, J. (2012) *Visible learning for teachers. Maximizing impact on learning*. Routledge.
- Hu, L., Bentler, P. M. (1998) Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods* 3 (4), pp. 424–453.
- Hughes, J. N., Cavell, T. A., Jackson, T. (1999) Influence of teacher–student relationships on aggressive children's development: A prospective study. *Journal of Clinical Child Psychology* 28, pp. 173–184.
- Jennings, P. A., Greenberg, M. T. (2009) The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research* 79, pp. 491–525.
- Jensen, E., Jensen, H. (2011) *Dialog s starši* [Dialogue with parents]. Ljubljana: Inštitut za sodobno družino Manami.
- Jensen, E., Bengaard Skibsted, E., Vedsgaard Christensen, M. (2015) Educating teachers focusing on the development of reflective and relational competences. *Educational Research for Policy and Practice*, 14 (3), pp. 201–212.
- Jones, S. M., Bouffard, S. M., Weissbourd, R. (2013) Educators' social and emotional skills vital to learning. *Phi Delta Kappan*, 94, pp. 62–65.
- Juul, J., Jensen, H. (2010) *Od poslušnosti do odgovornosti*. [From obedience to responsibility] Radovljica: Didakta.
- Juul, J., Jensen, H. (2011) Vzgojno delovanje v vrtcu in šoli [Up-bringing acting in kindergarten and school]. *Šolsko svetovalno delo* 3-4, pp. 61–74.

- Kokkinos, C. M., Charalambous, K., Davazoglou, A. (2009) Interpersonal teacher behaviour in primary school classrooms: A cross-cultural validation of a greek translation of the questionnaire on teacher interaction. *Learning Environments Research* 12 (2), pp. 101-114.
- Ladd, G. W., Birch, S. H., Buhs, E. S. (1999) Children's social and scholastic lives in kindergarten: Related spheres of influence? *Child Development* 70, pp. 1373-1400.
- Laursen, P. Nielsen, A. M. (this issue) Teachers' relational competencies: the contribution from teacher education. *Šolsko polje* 27 (1-2), pp. 139-161.
- Meehan, B. T., Hughes, J. N., Cavell, T. A. (2003) Teacher-student relationships as compensatory resources for aggressive children. *Child Development* 74, pp. 1145-1157.
- Messick, S. (1995) Validity of Psychological Assessment: Validation of Inferences From Persons' Responses and Performances as Scientific Inquiry Into Score Meaning. *American Psychologist* 50 (9), pp. 741-749.
- Morin, A. J., Arens, A. K., Marsh, H. W. (2016) A bifactor exploratory structural equation modeling framework for the identification of distinct sources of construct-relevant psychometric multidimensionality. *Structural Equation Modeling: A Multidisciplinary Journal* 1, pp. 116-139.
- Ngu, L., Florsheim, P. (2011) The development of relational competence among young High-Risk fathers across the transition to parenthood. *Family Process*, 50 (2), pp. 184-202.
- Niederberger, U. (2013) *Relational Competence Theory: Can Respect, Authenticity, and Re-sponsibility for the Relationship Predict Relationship Quality?* Bachelor thesis, Kristianstad University, Sweden. <http://hkr.diva-portal.org/smash/record.jsf?pid=diva2%3A635406d-swid=OATDFullTextWindow> (1.3.2013).
- O'Connor, E., McCartney, K. (2007) Examining teacher-child relationships and achievement as part of an ecological model of development. *American Educational Research Journal* 44, pp. 240-269.
- OECD (2013) *PISA 2012 results: ready to learn: students' engagement, drive and self-beliefs (volume iII)*. Paris: OECD Publishing.
- OECD (2014) *A Teachers' guide to talis 2013: teaching and learning international survey*. Paris: OECD Publishing.
- Pantić, N., Wubbels, T. (2012) Teachers' moral values and their interpersonal relationships with students and cultural competence. *Teaching and Teacher Education* 28 (3), pp. 451-460.
- Pianta, R. C., Hamre, B. K., Stuhlman, M. (2003) Relationships between teachers and children. In Reynolds, W., Miller, G. (eds.). *Comprehen-*

- sive handbook of psychology (vol. 7) educational psychology*. New York: John Wiley Sons, pp. 199–234.
- Pittman, L. D., Richmond, A. (2007) Academic and psychological functioning in late adolescence: The importance of school belonging. *Journal of Experimental Education* 75 (4), pp. 270–290.
- Schonert-Reichl, K. A., Hanson-Peterson, J. L., Hymel, S. (2015) Social and emotional learning and pre-service teacher education. In Durlak, J. A., Weissberg, R. P., Domitrovich, C. E., Gullotta, T. P. (eds.). *Handbook of social and emotional learning: Research and practice*. New York: Guilford, pp. 406–421.
- Schonert-Reichl, K. A., Roeser, R. W., Oberle, E., Whitehead, J., Kitil, M. J., Lawlor, M. S. (2015, April) Singular and combined effects of mindfulness-based education programs on teacher and student well-being and classroom context. In R. W. Roeser (Chair), *Systematic Approaches to mindfulness-based interventions for teachers and students: Early childhood and elementary school settings*. Symposium presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Tabachnick, B. G., Fidell, L. S. (2006) *Using multivariate statistics (5th edition)*. Needham Heights, MA, USA: Allyn Bacon, Inc.
- Valiente C., Lemery-Chalfant K., Swanson J., Reiser M. (2008) Prediction of children's academic competence from their effortful control, relationships, and classroom participation. *Journal of Educational Psychology* 100, pp. 67–77.
- Vidmar, M., Niederberger, U. (2014) *Lestvice odnosne kompetentnosti učiteljev-pilotna I* [Teacher relational competence scale – pilot I], unpublished.
- Vidmar, M., Rutar Leban, T., Niederberger, U. (2015) *Lestvice odnosne kompetentnosti učiteljev-pilotna II* [Teacher relational competence scale – pilot II], unpublished.
- Vygotski, L. S. (1978) *Mind and society: The development of higher psychological processes*. Cambridge: Harvard University Press.
- Wentzel, K. R. (2002) Are effective teachers like good parents? Teaching styles and student adjustment in early adolescence. *Child Development* 73 (1), pp. 287–301.
- Wubbels, T., Brekelmans, M., den Brok, P., Van Tartwijk, J. (2006) An interpersonal perspective on classroom management in secondary classrooms in the Netherlands. In Evertson, C. M., Weinstein, C. S. (eds.). *Handbook of classroom management: Research, practice, and contemporary issues*. New York: Lawrence Erlbaum Associates, pp. 1161–1191.

- Wubbels, T., Brekelmans, M., den Brok, P., Levy, J., Mainhard, T. Van Tartwijk, J. (2012) Let's make things better. In Wubbels, T., den Brok, P., van Tartwijk, J., Levy, J. (eds.). *Interpersonal Relationships in Education. An Overview of Contemporary Research*. Rotterdam, the Netherlands: Sense Publishers, pp. 225–249.
- Yoon, J. S. (2002) Teacher characteristics as predictors of teacher-student relationships: Stress, negative affect, and self-efficacy. *Social Behavior and Personality* 30 (5), pp. 485–493.

Appendix

Item Loadings for the Final 3-factor EFA model

Table A1. Item loadings for the final 3-factor model EFA model

	F ₁	F ₂	F ₃
Item 2	0.666	-0.016	-0.164
Item 7	0.256	0.344	0.118
Item 10	0.398	0.120	0.187
Item 11	0.752	0.034	-0.013
Item 12	0.164	-0.004	0.666
Item 17	-0.002	0.234	0.351
Item 18	0.051	0.457	0.025
Item 24	-0.003	0.438	0.252
Item 28	0.353	0.345	0.006
Item 30	0.012	0.682	-0.116
Item 31	-0.064	0.797	-0.012

Note. The highest loading is marked in bold.

Intrinsic Motivation as a Key to School Success: Predictive Power of Self-perceived Autonomy, Competence and Relatedness on the Achievement in International Comparative Studies

Ana Kozina and Ana Mlekuž

When addressing the possible predictors of academic achievement in various domains, one firstly comes across the concept of motivation. For instance, one of the frequently asked questions is: How to motivate students to learn more, to achieve more and to have higher conceptual knowledge. One of the most empirically supported theories of contemporary psychology of motivation is Self-Determination Theory (SDT) (Ryan & Deci, 2002). SDT was chosen as a framework of present paper due to its in-depth model of intrinsic and extrinsic motivation with practical implications also for the field of education.

SDT Theory

SDT focuses on the quality of motivation and not so much on the quantity of motivation. SDT theory differentiates amotivation, controlled (extrinsic) motivation and autonomous (intrinsic) motivation. Amotivation is defined as a total lack of motivation. Intrinsic motivation is the inherent propensity to seek out novelty and challenge, to extend and exercise ones capacities, to explore and to learn (Reeve, 2015). On the other side, extrinsic motivation arises from environmental incentives (rewards, consequences, punishments) that are separate from activity itself (Reeve, 2015). All three types of motivation can be placed on the continuum of perceived locus of control or self-determination. The type of motivation is closely linked to the perceptions that individuals have on the origins of their behaviour (whether they are inside or outside of their control). On one end of the continuum is amotivation (a total lack of intentionality and motivation). In the continuum, amotivation is followed by four types of extrinsic motivation that can be distinguished be-

tween one another depending on the degree of autonomy: external regulation (not at all autonomous), introjected regulation (somewhat autonomous), identified regulation (mostly autonomous) and integrated regulation (fully autonomous). On the other end of the continuum is intrinsic motivation as the highest level of self-determination (Ryan & Deci, 2000). One of the many advantages and practical implications of SDT is that it explains how amotivation can be changed to extrinsic motivation (in the process of internalization) first using external regulation (the task is done in order to obtain rewards or avoid negative consequences), then introjected regulation (the task is done in order to improve self-esteem and avoid shame, guilt and anxiety) to identified regulation (the task is done because students feel it is important and related to their personal goals - they consciously apply value to it) and finally to integrated regulation (the task is done because it represents an integral part of values and needs of student). The level of self-determination, perceived autonomy, increases as we move on through the continuum. The building stone of the change from external to internal motivations is fulfilment of three basic psychological needs: autonomy, competence and relatedness.

SDT in Educational Setting

Two decades of research in the educational setting provided empirical support for this conclusion: intrinsically (autonomously) motivated students thrive in educational setting (Reeve, 2002; Miserandino, 1996; Flink et al., 1992). Students who have high levels of intrinsic motivation have higher academic achievement and more conceptual knowledge (Guay & Valle- rand, 1997; Hardre and Reeve, 2003). Research showed that low achieving students typically have lower levels of intrinsic motivation and identified regulation and higher levels of amotivation (Legault, Green-Demers, & Pelletier, 2006). The mechanisms linking intrinsic motivation and academic achievement are: engagement and effort. When students are intrinsically motivated they experience engagement. The higher a person's intrinsic motivation the greater will be his or her engagement in task (e.g. school tasks in school setting), effort to pursue their goals (Sheldon & Elliot, 1999) and focused attention in class (Hardre & Reeve, 2003; Skinner & Belmont, 1993) which is all related to higher academic achievement. Students that are intrinsically motivated perceive their school-related tasks as decided by themselves (self-determined) and based on their personal values and interests (Alivernini & Lucidi, 2011). On the other side, the problem with extrinsic motivations is that when these environmental incentives are withdrawn the behavior stops as well – for instance if student is externally motivated to be in school (e.g. grades, parental pressure)

and if these external rewards or punishers are gone (or student no longer finds them relevant), the student will become less engaged which leads to lower academic achievement and perhaps even early school leaving. All this support the notion that it is crucial to support students' intrinsic motivation in order to see students succeed in school and in later life.

According to the SDT framework, the type of motivation depends on the fulfilment of three basic psychological needs: need for autonomy, need for competence and need for relatedness. People are naturally intrinsically motivated to learn and in a supporting environment all three basic needs are met and learning is intrinsically motivated and of a higher quality. The need for autonomy refers to being the perceived origin or source of one's own behaviour (Deci & Ryan, 2002). The need for competence refers to feeling effective in one's ongoing interactions with the social environment and experiencing opportunities to exercise and express ones capacities (Deci & Ryan, 2002). The need for relatedness refers to feeling connected to others, to caring for and being cared for by others, to having a sense of belonging both with other individuals and with one's community (Ryan, 1995). Students become more intrinsically motivated when their basic psychological needs of autonomy, competence and relatedness are fulfilled. The need for competence and autonomy are the most important ones in the development of intrinsic motivation whereas the need to relatedness is crucial when transforming external regulation to autonomous regulation and supporting the process of internalization (Deci & Ryan, 2002). Legault and colleagues (Legault et al., 2006) found that the lack of support for the three needs contributed to amotivation (a total lack of motivation or the lowest level of self-determination). Students that are amotivated do not want to study and they feel they cannot change their academic outcomes and the most likely consequence of those feelings is that these students would leave their schooling as soon as they can. Experimental work shows when students are tested or given rewards for activities that for them are intrinsically motivated, their intrinsic motivation decreases due to lowering their sense of autonomy. In contrast, providing students with choice (thus supporting autonomy) and positive feedback (thus supporting competence) typically increases intrinsic motivation. The satisfaction of all three needs results in strong intrinsic goals (e.g. personal growth, affiliation, community) that is linked to greater psychological well-being and better academic and non-academic outcomes (Ryan & Deci, 2009).

An educational setting can promote all three psychological needs. For instance Vallerand and colleagues (Vallerand, et al., 1997) introduced the model in which low levels of autonomy supportive behaviours from

critical social agents (teachers, parents, school administration) undermine students' perceptions of their own autonomy and competence which in turn decreases self-determined motivation. They (*ibid.*) studied lower educational achievement in the light of early school leaving. They revealed the contextual and motivational predictors of early school leaving by assessing students for their perception of their autonomy and the autonomy support and investigating which students would be more likely to still be in school a year after. They found that the students that felt more autonomous and had more autonomy support felt more competent and were more likely to stay in school a year after. In the classrooms where teachers are more autonomy supportive (e.g. letting students choose from various alternatives, listening to them and asking them for their point of view), students tend to become more intrinsically motivated, perceive themselves as more competent, and feel better about themselves, whereas in a classroom where teachers were more controlling (e.g. giving rigid directions or orders, supervising and monitoring too closely or not giving students the opportunity to propose choices and opinions that differ from those expressed by adults), students tended to lose intrinsic motivation, perceived competence and self-esteem (Ryan & Grolnick, 1986; Tsai et al., 2008), have lower educational achievement and are more prone to early school leaving (Vallerand, et al., 1997).

Intrinsic motivation is not only related to a higher quantity of knowledge but also to higher quality knowledge. In an experiment (Benware & Deci, 1984) students were given three hours to read a text. The first group was told they are going to be tested afterwards (low intrinsic motivation is expected) and the other that they will be given a chance to use their knowledge in practice by teaching others (higher intrinsic motivation is expected). The two groups did not differ significantly in the information memorized but did differ in conceptual knowledge. The findings were replicated in numerous studies around the world (Grolnick & Ryan, 1987; Kage & Namiki; 1990; Fortier, Vallerand & Guay, 1995).

Aim of the Study

Based on the rich empirical support and sound theoretical conception we aim at investigating the predictive power of intrinsic motivation for academic achievement in international comparative studies. In order to identify the level of intrinsic motivation of students we will focus on the indicators (items) measuring fulfilment of the three psychological needs that lead to intrinsic motivation: competence, autonomy and relatedness. International comparative studies together with reliable and valid measurement of achievement (in specific domains) measure also student's back-

ground information using background questionnaires. In order to analyse the predictive power of all three psychological needs for achievement, we firstly have to identify items (in the background questionnaires) indicating the fulfilment of all three psychological needs. In order to increase generalizability of the findings, we used four different international comparative studies: PIRLS (Progress in International Reading Literacy Study), ICCS (International Civic and Citizenship Survey), TIMSS (Trends in International Mathematics and Science Study), TIMSS Advanced (Trends in International Mathematics and Science Study Advanced). All studies measure achievement in a specific domain (PIRLS - reading comprehension; TIMSS and TIMSS Advanced - math and science achievement; ICCS - civic and citizenship literacy) and in a specific age group (PIRLS - 4th grade, TIMSS - 8th grade; TIMSS Advanced - 13th grade; ICCS - 9th grade). The most recent data for Slovenia from the selected studies are used.

Specific objectives of this paper are:

- to identify indicators of competence, autonomy and relatedness in the pool of all items from background questionnaires of selected studies; these indicators have up to now not yet been identified and will be used in the present paper for the first time;
- to identify the predictive power (regression analyses) of perceived autonomy support for achievement in selected international comparative studies (controlling for SES);
- to identify the predictive power (regression analyses) of perceived competence for achievement in selected international comparative studies (controlling for SES);
- to identify the predictive power of perceived relatedness (regression analyses) for achievement in selected international comparative studies (controlling for SES).

Due to differences in the item pools of the studies used, the findings will be preliminary and used for further more in depth analyses of international comparative studies achievement predictors. The content of the items is nevertheless similar (also due to the studies being conducted by the same international organization: IEA International Evaluation Association).

Method

Participants

In order to increase the generalizability of our findings, the aim was to include the wider possible age and content range. Therefore four different international comparative studies (data bases) for Slovenia were used. Below each study with participating sample is presented in detail.

4th Grade - Reading.

Progress in International Reading Literacy Study 2011 (PIRLS 2011) is an international assessment of reading comprehension at the fourth grade which is conducted every five years (Martin & Mullis, 2013b). For our analysis data for Slovenia from 2011 study cycle were used. PIRLS uses a two-stage random sample design, with a sample of schools drawn as a first stage and one or more intact classes of students selected from each of the sampled schools as a second stage (Joncas & Foy, 2013). The target population of PIRLS are all students in their fourth year of formal schooling and therefore their mean age at the time of testing in each country is 9.5 years. Each sampled student answered a cognitive test and a background questionnaire.

8th Grade - Mathematics.

Trends in International Mathematics and Science Study 2011 (TIMSS 2011) is an international assessment of mathematics and science comprehension at the fourth and eighth grade of formal schooling, which is conducted every four years. As PIRLS, TIMSS also uses a stratified two-stage random sample design with firstly sampling schools and then sampling one or more whole classes at a sampled school (Joncas & Foy, 2013). The target population of TIMSS are students in their fourth and eighth year of formal schooling averagely aged at least 9.5 (fourth grade) or 13.5 (eighth grade) years at the time of testing. Since we used the PIRLS data for fourth grade and as already stated at the beginning, the aim of the article is to cover as wide an age range and knowledge range as possible, TIMSS 2011 Slovenian eighth grade sample for Mathematics was used for the purposes of this analysis. Since mathematics and science achievements in TIMSS 2011 are highly correlated ($r = 0.85$) we only used mathematics sample. Each sampled student answered a cognitive test and a background questionnaire.

9th Grade – Civics and Citizenship Knowledge.

International Civic and Citizenship Survey 2009 (ICCS 2009) focused on civics and citizenship content and knowledge. Again to cover the wid-

est age range possible ICCS Slovenian additional grade¹ database is used (students enrolled in Grade 9) in the analyses. The population of schools with Grade 9 students tested was identical to the population of schools with Grade 8 students tested (Schulz, Ainley & Fraillon, 2011) and the average age of students enrolled in Grade 9 should be 14.5 or higher. Slovenia used a two-stage cluster sampling, where schools were sampled within the country using probability proportional to size measured by the number of students enrolled in a school. Within each sampled school, an intact class from the target grade was sampled randomly and all students in that class were surveyed (Schulz et al., 2011). With these sampling procedures the representativeness of the selected test population was ensured. Each student answered a cognitive test and a background questionnaire.

13th Grade - Mathematics.

Trends in International Mathematics and Science Study Advanced 2008 (TIMSS Advanced 2008) is an international assessment of achievements in advanced Mathematics and Physics in the final year of upper secondary school (in Slovenia these are students in their 13th year of schooling). The survey measured achievement in two student populations, one in Mathematics and one in Physics. Again the Slovenian mathematics sample of students included in TIMSS Advanced 2008 was used for the purpose of this analysis. Mathematics sample was used since it was larger than the physics sample and therefore it is more representative for the age group. TIMSS Advanced uses the same two-stage sampling design as PIRLS 2011 and TIMSS 2011 (Arora, Foy, Martin & Mullis, 2009).

Instruments and Included Variables

For selected studies the data gathered with achievement test and background questionnaires were included. Included variables are listed below separately for all age groups.

All ages – All Surveys

Achievement Scores (Plausible Values).

To test achievement, all surveys use matrix-sampling approach where achievement items are divided into groups, blocks or sets and each achievement booklet is then made up of these sets of items according to a systematic arrangement (Mullis et al., 2009a; Mullis et al., 2009c; Schulz, Ainley, Fraillon, 2011; Arora, Foy, Martin & Mullis, 2009).

The PIRLS cognitive assessment is composed of 10 blocks of items. Each booklet consists of two blocks, with each block containing a reading passage and 12-17 associated items. One half of the blocks assess the

¹ The additional grade sample was used for estimating trends from CIVED 1999.

literary purpose and the other half assesses informational purpose. Eight blocks are then assigned to 12 booklets according to a specific plan that enables linking among booklets and balances position effects. The remaining two blocks (one literary and the other informational) are presented in a magazine format in the PIRLS reader² (Mullis et al., 2013).

TIMSS cognitive test is composed of packages of the entire pool of mathematics and science items. Each item appears in two booklets, providing a mechanism for linking together the student responses from various booklets. In TIMSS 2011 28 assessment blocks are distributed across 14 student achievement booklets. Each booklet consists of four blocks of items, two blocks of mathematics and two blocks of science items. (Mullis et al., 2009c).

ICCS cognitive test consisted of 80 items which were allocated to seven clusters that were assembled into a fully balanced rotated test design comprising of seven paper-based booklets (Schulz, Ainley, Fraillon, 2011). The ICCS assessment framework includes four content (civic society and systems; civic principles; civic participation; civic identities) and two cognitive (knowing; reasoning and analysing) domains.

The cognitive test or the assessment in TIMSS Advanced is composed of 14 item blocks – a total of 72 advanced mathematics items were included in the assessment. These items were distributed across 8 booklets. The design was chosen to ensure that each student responded to a sufficient number of items to provide a reliable measure (Arora, Foy, Martin & Mullis, 2009).

To derive student achievement scores for analysis and reporting Rasch one-parameter item response theory (IRT) model was used in all surveys. Since each student answers only some questions the surveys use multiple imputations (plausible values³) to obtain proficiency scores. In order to enhance the reliability student responses are combined with information about student's background using the "conditioning" scaling approach (Foy, Brossman & Galia, 2013; Schulz et al., 2011).

Socioeconomic Background (SES)

Variables or scales that each respective survey uses as a socioeconomic background indicator in their respective international reports were used in the present article as control variables of socioeconomic background in the regression analyses.

2 PIRLS reader is a magazine-type format of reading booklet with the questions in a separate booklet.

3 There are five plausible values for each student in each of the databases and all five plausible values for each survey were included in the computing of the achievement score for a respective student.

PIRLS and TIMSS use scale for home resources for learning (ASBGHRL in PIRLS and BSBGHRL in TIMSS). The scale combines answers to the questions on parents' education, parents' occupation, number of children's books and books at home and the availability of internet connection and their own room (Mullis et al., 2012b; Mullis et al., 2012a).

In ICCS three different measures for socioeconomic background of students were used (parental occupational status, parental educational attainment and home literacy resources). Since the parental occupational status (HISEI) explained the highest percentage of variance in civic knowledge we used this scale as a measure for socioeconomic background in our analyses (Schulz et al., 2010).

In TIMSS Advanced report number of books at home (MS2G-BOOK) was used as a measure of socioeconomic background (Mullis et al., 2009b).

4th Grade (PIRLS 2011).

Autonomy.

The autonomy of the student is measured with one set of questions ASBG07. In the set of questions ASBG07 students had to evaluate how often (*every day or almost every day, once or twice a week, once a month or twice a month or never or almost never*) the following things happen at home: *My parents ask me what I am learning in school; I talk about my schoolwork with my parents; My parents make sure that I set aside time for my homework; My parents check if I do my homework.* Cronbach alpha's for this set of questions is 0.61 which is relatively low due to small number of items included. This will be considered in further interpretation of results. In order to define the underlying structure of the question set measuring autonomy support the correlation matrix of the question set was subjected to factor analyses (method: principal axis factoring). The preliminary test showed the data are suitable for this kind of analyses (KMO = 0.661; Bartlett's Test of Sphericity (χ^2) = 1868.123; $p < .001$). The Kaiser-Guttman criteria (Eigenvalue over 1) revealed one factor explaining 28.75 % of the question set total variance. We named the factor *autonomy_PIRLS*. Factor loading ranged from 0.403 to 0.616 for selected sub questions. Higher values reflect higher degrees of autonomy. In the regression models *autonomy_PIRLS* was used.

Competence.

For competence Students Confident in Reading (ASBGSCR) scale was used. The scale or factor already existed in the PIRLS database and it was created based on students' degree of agreement (*agree a lot, agree a little,*

disagree a little, disagree a lot) with seven statements: *I usually do well in reading (+)*⁴; *Reading is easy for me (+)*; *Reading is harder for me than for many of my classmates (-)*; *If a book is interesting, I don't care how hard it is to read (+)*; *I have trouble reading stories with difficult words (-)*; *My teacher tells me I am a good reader (+)*; *Reading is harder for me than any other subject (+)*. Cronbach's alpha for these questions is 0.77. The higher values on this scale reflect perceptions of higher reading competence (Martin & Mullis, 2013a). In the regression model scale ASBGSCR (Student Confident in Reading) was used as measure for competence.

Relatedness.

We used a set of questions ASBG08 to measure relatedness. Students had to evaluate their agreement (*agree a lot, agree a little, disagree a little, disagree a lot*) on three statements: *I like being in school (+)*; *I feel safe when I am at school (+)*; *I feel like I belong at this school (+)*. Cronbach alpha's for this set of questions is 0.66 which is relatively low due to small number of items included. This will be considered in further interpretation of results. In order to define the underlying structure of the question set measuring relatedness the correlation matrix of the question set was again subjected to factor analyses (method: principal axis factoring). The preliminary test showed the data are suitable for this kind of analyses (KMO = 0.655; Bartlett's Test of Sphericity (χ^2) = 1917.110; $p < .001$). The Kaiser-Guttman criteria (Eigenvalue over 1) revealed one factor explaining 40.07 % of the question set total variance. We named the factor *relatedness_TIMSS*. Factor loading ranged from 0.564 to 0.690 for selected sub questions. The higher values on this factor represent higher students' perception of relatedness. Factor *relatedness_TIMSS* was used in the regression model as measure for relatedness.

8th grade (TIMSS 2011).

Autonomy.

As a measure of autonomy BSBG11 set of questions from the TIMSS background questionnaire was used. These questions were formulated in the same way as the question ASBG07 from PIRLS 2011, therefore see the previous section of the article (PIRLS 2011; *Autonomy*). Cronbach alpha's for this set of questions is 0.68 which is relatively low due to small number of items included. This will be considered in further interpretation of results. To define the underlying structure of the question set measuring autonomy the correlation matrix of the question set was subjected to factor

4 In the bracket the method of item valuation is presented. The same approach of presenting the item valuations was used throughout the article.

analyses (method: principal axis factoring). The preliminary test showed the data are suitable for this kind of analyses ($KMO = 0.715$; Bartlett's Test of Sphericity ($\chi^2 = 2683.139$; $p < .001$). The Kaiser-Guttman criteria (Eigenvalue over 1) revealed one factor explaining 35.56 % of the question set total variance. Factor loading ranged from 0.515 to 0.667 for the selected set of questions. We named the factor *autonomy_TIMSS*. The higher values on this factor reflect higher students' perception of autonomy. In the regression model factor *autonomy_TIMSS* was used.

Competence.

The scale Student Confident in Mathematics (BSBGSCM) was used as a measure of competence. The scale is based on students' degree of agreement (*agree a lot, agree a little, disagree a little, disagree a lot*) to the nine following statements: *I usually do well in mathematics (+)*; *Mathematics is more difficult for me than for many of my classmates (-)*; *Mathematics is one of my strengths (+)*; *I learn things quickly in mathematics (+)*; *Mathematics makes me confused and nervous (-)*; *I am good at working out difficult mathematics problems (+)*; *My teacher thinks I can do well in mathematics lessons with difficult materials (+)*; *My teacher tells me I am good at mathematics (+)*; *Mathematics is harder for me than any other subject (-)*. Cronbach's alpha for this set of questions is 0.89. The higher values on this scale reflect perceptions higher mathematics competence (Martin & Mullis, 2013a). In the regression model scale BSBGSCM (Student Confident in Mathematics) was used as competence predictor.

Relatedness.

For a measure of relatedness BSBG12 set of questions was used. Again the question was formulated the same as the question ASBG08 in PIRLS 2011 (see PIRLS 2011, *Relatedness*). Cronbach's alpha for this set of questions is 0.71. The correlation matrix of the question set was subjected to factor analyses (method: principal axis factoring) in order to define the underlying structure of the question set measuring autonomy. The preliminary test showed the data are suitable for this kind of analyses ($KMO = 0.667$; Bartlett's Test of Sphericity ($\chi^2 = 2339.618$; $p < .001$). The Kaiser-Guttman criteria (Eigenvalue over 1) revealed one factor explaining 44.40 % of the question set total variance. Factor loading ranged from 0.597 to 0.735 for the selected set of questions. We named the factor *relatedness_TIMSS*. The higher values on this factor reflect higher students' perception of relatedness. In the regression model factor *relatedness_TIMSS* was used.

9th Grade (ICCS 2009).

Autonomy.

To estimate autonomy scale Student's perception of openness in classroom discussion (OPDISC) was used. To derive this scale six statements to which students could answer with *never*, *rarely*, *sometimes* or *often* were used. These statements were: *teachers encourage students to make up their own minds (+)*; *teachers encourage students to express their opinions (+)*; *students bring up current political events for discussion in class (+)*; *students express opinions in class even when their opinions are different from most of the other students (+)*; *teachers encourage students to discuss the issues with people having different opinions (+)*; *teachers present several sides of the issues when explaining them in class (+)*. The scale's reliability (Cronbach's alpha) is 0.77. The higher values on the scale reflect perceptions of higher levels of classroom discussion and therefore a higher level of autonomy (Schulz, Ainley, & Fraillon, 2011). In the regression model scale *OPDISC* was used as a measure of autonomy.

Competence.

As a measure of competence we used Students' sense of internal political efficacy (INPOLEF). This scale is composed of six statements: *I know more about politics than most people my age (+)*; *when political issues or problems are being discussed, I usually have something to say (+)*; *I am able to understand most political issues easily (+)*; *I have political opinions worth listening to (+)*; *As an adult I will be able to take part in politics (+)*; *I have a good understanding of the political issues facing this country (+)*. Response options ranged from *strongly agree* to *strongly disagree*. The scale's reliability (Cronbach's alpha) is 0.86. The higher level on this scale reflects a higher sense of internal political efficacy and consequently competence (Schulz et al., 2011). As a measure of competence scale *INPOLEF* was used in the regression model.

Relatedness.

To measure relatedness scale Student's perception of student-teacher relation at school (STUTREL) was used. Scale is composed of five variables – students' answers to questions: *Most of my teachers treat me fairly*, *Students get along well with most of the teachers*, *Most teachers are interested in students' well-being*, *Most of my teachers really listen to what I have to say* and *If I need extra help, I will receive it from my teachers*. Response options ranged from *strongly agree* to *strongly disagree*. The scale's reliability (Cronbach's alpha) is 0.76. The higher values on this scale reflect perceptions of strong relations between students and teachers and therefore relatedness (Schulz,

et al., 2011). In the regression model scale *STUTREL* was used as a measure for relatedness.

13th Grade (TIMSS Advanced 2008).

Autonomy.

As a measure of autonomy three sub questions were used: MS2MACWP, MS2MDL05 and MS2MDL06. The students had to evaluate how often (*every or almost every lesson, about half the lessons, some lessons and never*) they do the following activities in their mathematic lessons: *We work problems on our own (+); We decide on our own procedures for solving complex problems (+); We communicate our arguments (+)*. Cronbach alpha's for this set of questions is 0.64 which is relatively low due to small number of items included. This will be considered in further interpretation of results. The correlation matrix of the question set was subjected to factor analyses (method: principal axis factoring) in order to define the underlying structure of the question set measuring autonomy. The preliminary test showed the data are suitable for this kind of analyses (KMO = 0.567; Bartlett's Test of Sphericity (χ^2) = 1082.188; $p < .001$). The Kaiser-Guttman criteria (Eigenvalue over 1) revealed one factor explaining 48.82 % of the question set total variance. Factor loading ranged from 0.366 to 0.942 for the selected. We named the factor *autonomy_TIMSSAdv*. The higher values on this factor reflect higher students' perception of autonomy. In the regression model factor *autonomy_TIMSSAdv* was used.

Competence.

In the analyses three sub questions, namely MS2MWSWM, MS2MWSLT and MS2MWSEP, were used as a measure of competence. The students had to evaluate how important (*very important, important, unimportant or very unimportant*) were for them the following reasons for studying advanced mathematics: *I usually do well in mathematics (+); Studying or doing mathematics homework does not take me a lot of time (+); I expect that I will easily pass the tests (+)*. Cronbach alpha's for this set of questions is 0.6 which is relatively low due to small number of items included. This will be considered in further interpretation of results. In order to define the underlying structure of the question set measuring competence the correlation matrix of the question set was subjected to factor analyses (method: principal axis factoring). The preliminary test showed the data are suitable for this kind of analyses (KMO = 0.637; Bartlett's Test of Sphericity (χ^2) = 619.652; $p < .001$). The Kaiser-Guttman criteria (Eigenvalue over 1) revealed one factor explaining 32.99 % of the question set total variance. Factor loading ranged from 0.549 to 0.604 for the se-

lected. We named the factor *competence_TIMSSAdv*. The higher values on this factor reflect higher students' perception of competence. In the regression model factor *competence_TIMSSAdv* was used as a measure for competence.

Relatedness.

Relatedness was measured with nationally added School climate scale (Kozina, Rožman, Vršnik Perše & Rutar Leban, 2012) that measure four dimensions of school climate: relations-school, relations-teacher and relations-students, organizational structure. We used first three dimensions in the analyses. The factors were composed of sub questions from Slovenian national question N5 (19 of 22 sub questions), which tried to evaluate the degree of agreement (*completely agree, agree, uncertain, disagree, completely disagree*) to statements on students' relations at school in general (e. g. *I like being at school; I am proud at my school*, etc.), student-teacher relations (e. g. *We get on well with our teachers; Inappropriate behaviour is always duly punished at our school*, etc.) and relations among students (e. g. *Students at our school have good relations* etc.). The scale is reliable ($0.66 < \alpha < 0.80$). We used total scores on these three factors to create a new multi-dimensional relatedness scale. In order to define the underlying structure of the three factors measuring relatedness, the correlation matrix of the factors was subjected to factor analyses (method: principal axis factoring). The preliminary test showed the data are suitable for this kind of analyses (KMO = 0.609; Bartlett's Test of Sphericity (χ^2) = 1354.404; $p < .001$). The Kaiser-Guttman criteria (Eigenvalue over 1) revealed one factor explaining 50.46 % of the question set total variance. Factor loading ranged from 0.483 to 0.935 for the selected. We named the factor *relatedness_TIMSSAdv*. The higher values on this scale reflect higher students' perception of relatedness. In the regression model factor *relatedness_TIMSSAdv* was used as a measure for relatedness.

Procedure and Statistical Analyses.

For the analyses of the data we used two statistical programmes. First, we used IBM SPSS Statistics 23 for the calculation of internal reliability and for defining the underlying structure of the factors with the method Principal Axis Factoring, and secondly, we used IDB Analyser 3.2.19 for regression analyses, since this programme, unlike IBM SPSS Statistics, takes into account all five plausible values for student achievement in all mentioned surveys. Since the present analysis is a preliminary one, we used simple regression analyses instead of HLM. In the regression mod-

el achievement scores (all five plausible values) for each of the surveys are used as predicting variables.

Results

The results present the regression analyses where achievement score is predicted by competence, autonomy and relatedness. Moreover, we also included social and economic status in the regression models as a control variable.

Table 1. Descriptive statistics

	N	Age (s. e.)	Gender (%)		Average achievement score (s. e.)
			Female (s. e.)	Male (s. e.)	
PIRLS 2011	4466	9,9 (0,01)	48 (0,8)	52 (0,8)	530 (2,0)
TIMSS 2011	4415	13,9 (0,01)	49 (0,9)	51 (0,9)	505 (2,2)
ICCS 2009	3042	14,8 (0,01)	49 (0,8)	51 (0,8)	540 (2,6)
TIMSS Advanced 2008	2156	18,8 (0,01)	60 (1,8)	40 (1,8)	457 (4,4)

The average age of students included in PIRSL 2011 was almost 10 (9.9) and their average achievement score was 530 score points. Moreover, 4466 students participated in the PIRLS survey, among which 48% were girls and 49% were boys. In TIMSS 2011 4415 students were included in Slovenia, of which 49% were girls and 51% were boys. Their average achievement score on the cognitive test was 505 score points and their average age was 13.9 years. Likewise, in Slovenia 3042 students were included in ICCS (49% female and 51% male). Their average age was almost 15 (14.8) and their average score on ICCS cognitive test was 540 score points. In TIMSS Advanced 2156 students participated. There were 60% girls and 40% boys in the sample and their mean age was almost 19 years (18.8). Their average mathematics achievement was 457 score points.

The data shows competence, autonomy and socioeconomic background as significant predictors of achievement in PIRLS 2011, whereas relatedness is not a statistically significant predictor of achievement. If perceived reading competence increases by one unit (the average value), the students' reading achievement score increases by 12 score points (if autonomy, relatedness and SES are held constant). If autonomy raises by one unit while controlling for other predictors, then the students' reading achievement increases by almost 9 score points. However, if SES raises by one unit while controlling for other predictors, then the students' achievement increases by 17 score point. The regression model for PIRLS accounts for 31% of the variance of the students' reading achievement score.

Table 2. Predictive power of self-determination theory concepts for achievement.

	b (SE)	β (SE)	R ² (SE)
4th Grade - PIRLS 2011			
constant	235.00 (9.99)		
Competence (ASBGSCR)	11.52 (0.68)*	0.35 (0.02)*	
Autonomy (autonomy_PIRLS)	8.62 (1.61)*	0.10 (0.02)*	
Relatedness (relatedness_PIRLS)	-0.34 (1.64)	0.00 (0.02)	
SES (ASBGHRL)	17.08 (0.91)*	0.35 (0.02)*	0.31 (0.02)
8th Grade - TIMSS 2011			
Constant	167.03 (10.52)		
Competence (BSBGSCM)	19.78 (0.80)*	0.50 (0.02)*	
Autonomy (autonomy_TIMSS)	12.02 (1.32)*	0.14 (0.02)*	
Relatedness (relatedness_TIMSS)	2.70 (1.61)	0.03 (0.02)	
SES (BSBGHRL)	12.98 (0.83)*	0.25 (0.02)*	0.41 (0.01)
9th Grade - ICCS 2009			
constant	299.20 (14.46)		
Competence (INPOLEF)	1.92 (0.18)*	0.24 (0.02)*	
Autonomy (OPDISC)	1.43 (0.24)*	0.15 (0.02)*	
Relatedness (STUTREL)	0.38 (0.31)	0.04 (0.03)	
SES (HISEI)	1.27 (0.12)*	0.23 (0.02)*	0.16 (0.01)
13th Grade - TIMSS Advanced 2008			
constant	460.09 (3.81)		
Competence (competence_TIMSSAdv)	27.16 (2.84)*	0.24 (0.03)*	
Autonomy (autonomy_TIMSSAdv)	9.98 (3.02)*	0.11 (0.03)*	
Relatedness (relatedness_TIMSSAdv)	16.58 (3.17)*	0.18 (0.03)*	
SES (MS2GBOOK)	-5.86 (6.14)	-0.03 (0.03)	0.13 (0.02)

Notes. Owing to the nested sampling design, data were weighted with Total Student Weight (PIRLS, TIMSS, TIMSS Advanced) or Final Student Weight (ICCS). To increase the possibility of generalisation, we used adjusted R². Multiple regression was conducted (forced entry method) on IDB Analyzer (IEA DPC, v.3.2). The assumption of multicollinearity was tested on all data sets and was not violated (the VIFs were lower than 10 (Myers, 1990) and varied between 1.12 and 1.25). Statistically significant ($p > 0.05$) coefficients are marked with *.

The regression analysis for TIMSS 2011 also shows that relatedness is not a statistically significant predictor of achievement. However-

er, SES, competence and autonomy are statistically significant predictors of achievement. Every unit increase in perceived competence is associated with a 20 score point increase in the students' mathematics achievement (if other predictors are held constant) and every unit increase in perceived autonomy is associated with a 12 score point increase in students' mathematics achievement (if other predictors are held constant). Moreover, every unit increase in SES is associated with a 13 score point increase in students' mathematics achievement (if other predictors are held constant). The regression model for TIMSS achievement accounts for 41% of the variance of the students' mathematics achievement.

The data again shows SES, competence and autonomy as significant predictors of achievement in ICCS 2009 survey as well, whereas relatedness again is not a statistically significant predictor of achievement. The results show that if competence increases by one unit, the students' civic and citizenship achievement score increases by 2 score points (if all other predictors are constant). If autonomy increases by one unit, then the students' civic and citizenship score increases by a little bit more than 1 score point while controlling for other predictors. Moreover, if SES increases by one unit, then the students' civic and citizenship knowledge increases by 1 score point too (if other predictors are held constant). The model accounts for 16% of the variance of the students' civic and citizenship achievement.

The regression analysis for TIMSS Advanced however shows that all three SDT predictors (competence, autonomy and relatedness) of mathematics achievement are statistically significant, whereas SES is not a statistically significant predictor. The results show that if competence increases by one unit, the students' advanced mathematics score increases by 27 score points (if all other predictors are held constants). If autonomy increases by one unit, then the students' advanced mathematics score increases by almost 10 score points (again if all other predictors are constant). Moreover, if autonomy and competence are held constant and relatedness increases by one unit, then students' advanced mathematics score increases by almost 17 score points. The model accounts for 13% of the variance in the students' advanced mathematics achievement.

Except for TIMSS Advanced, where the strongest predictor for advanced mathematics score is autonomy, and PIRLS, where the strongest predictor for reading score is SES, competence is the strongest predictor among all other predictors for other surveys (TIMSS and ICCS). Moreover, relatedness is a statistically significant predictor only in TIMSS Advanced regression model. In all other models relatedness is not a statistically significant predictor of achievement.

Discussion

The study aimed at identifying the possible indicators of psychological needs fulfilment in the background questionnaires of selected international comparative studies in order to analyse the predictive power of these indicators for educational achievement across content domains. Rough comparisons were made across different studies, different age groups and content domains. The study is the first of this type (to use the international comparative studies in order to find possible indicators of psychological needs fulfilment among students and their relationship with academic achievement) in Slovenia. Even though the data available and analyses conducted are rough and preliminary, the findings show consistency across studies and across age groups. In all samples included, self-perceived confidence and self-perceived autonomy are significant predictors of students' academic achievement. The more competent and the more autonomy supported students feel, the higher on average is their achievement (when controlling for SES). The percentages of explained achievement variances with the included indicators of psychological needs (SES included) are largest in 4th and 8th grade students, followed by 13 and 9th grade students.

Self-perceived competence is a significant predictor of student's achievement in various content domains: reading, maths and civic education and across age groups from 4th to 13th grade. The competence is the strongest predictor out of the ones included (compared to autonomy, relatedness and SES) in 8th, 9th and 13th grade indicating that an increase in perceived competence would result in significant increase in achievement. In 4th grade, SES is the strongest predictor and is followed by perceived self-competence. When students feel their efforts and abilities are being recognized, they use the learning situation for building their academic success. We see consistency across samples even though the achievement domain varies and competence measures vary. The items measuring self-perceived competence varied across studies and focused on specific domains of the study (e.g. self-perceived reading competence in PIRLS) and varied in the number of items measuring competence (from 4 in TIMSS Advanced to 9 in TIMSS). The content of the items is nevertheless similar (also as already mentioned due to the studies being conducted by the same international organization).

The results are in line with research literature indicating self-perceived competence (self-efficacy) as one of the most prominent predictors of academic success. Self-efficacy is directly related to behaviour in academic tasks (e.g. the effort, persistence in the tasks despite obstacles

and challenges) (Maddux, 2009; Ragozzino et al., 2003, Motti-Stefanidi & Masten, 2013). High perceived self-efficacy for self-regulated learning contributes to better learning outcomes and also increases the likelihood of remaining in school (Caprara, Fida, Vecchione, Del Bove, Veccio, & Barbaranelli, 2008). Competence being the strongest predictor is in line also with initial research findings of Ryan and Deci (2002) that autonomy itself is not enough for gains in academic achievement - the competence takes (according to the authors of the framework) the leading role. Optimal functioning and high engagement (with active participation in learning) in school setting is both a result of high autonomy support and self-perceived competence.

Practical implications when promoting competence at the school and classroom level involve mastery goal structure (Wang & Holcombe, 2010). Mastery goal structure promotes positive and effort based praise while avoiding pressuring students for correct answers or high grades (Wang & Holcombe, 2010) as opposed to performance goal structure. Mastery type school climate provides students with more opportunities to feel successful. Mastery goal structure also provides more opportunities for students to work together (support for relatedness) and not compete against each other. In order to foster student's sense of competence, school community collaboration can be of use as well. For instance different forms of project community based work can provide an example of students' knowledge being directly used and reinforce their perception of self-efficacy. These types of activities (mentoring and tutoring programs, contextual learning and job shadowing) have research support as well (Epstein et al., 2009). And also as shown in the experiment by Benware and Deci (1984) when students learn in order to use their knowledge, their knowledge is more conceptual. One example of this type of collaboration would be for instance project work on the agricultural planning of planting local green areas in which representatives of a local community would cooperate with biology teachers and students of a local school.

The second most important predictor of academic achievement, out of included indicators of psychological needs fulfilment, is self-perceived autonomy. In 8th, 9th and 13 grade the predictive power of self-perceived autonomy is similar (8th grade) or even higher (9th and 13 grade) when compared to SES as a predictor of academic achievement. Autonomy is a building stone of intrinsic motivation. Students with a greater sense of autonomy in school have better school outcomes such as classroom engagement, persistence, enjoyment and achievement (Wang & Holcombe, 2010).

Autonomy was measured differently in selected studies: in PIRLS and TIMSS the only items related to autonomy were indicated to perceived autonomy support at home (a lack of control over school work). In ICCS and in TIMSS Advanced studies the autonomy measure represented the perceived autonomy in classroom (autonomy support from teachers). The autonomy support is a significant predictor of student's achievement when the autonomy is supported at home or in the classroom. The perceived parental autonomy support was significantly related also to achievement in PISA study (math, science and reading literacy) (Rutar Leban, Vršnik Perše, Kozina, Pavlović, 2009). Practical implications suggest various activities inside the classroom as well as in the form of school-community collaboration. For instance, given the choice and supporting autonomy in organizing and conducting project work fosters their sense of autonomy. As already mentioned in the introduction autonomy support from teachers (e.g. letting students choose from various alternatives, listening to them and asking them for their point of view) increases students intrinsic motivation (Ryan & Grolnick, 1986; Tsai et al., 2008) and have higher educational achievement (Vallerand, et al., 1997). Previously mentioned school community collaboration fosters autonomy as well. With students planning the whole project their autonomy would be supported.

Relatedness was a significant predictor in TIMSS Advanced study (13th grade students) but not in other age groups. This could be due to developmental characteristics of the sample. Although the need to connect and belong is likely to be pervasive throughout one's life, research has suggested that during the period of adolescence the need to connect with others through mutually supportive relationships is at its peak (Wang & Holcombe, 2010). Nevertheless since the 8th and 9th grade students are in the period of adolescence as well the results would need some extra elaboration in future research. Relatedness refers in its core to the strengths of ones connections to others. And a sense of connectedness to teachers and peers in school is associated with multiple indicators of academic motivation and engagement (Wang & Holcombe, 2010) indicating that the association between relatedness and achievement is indirect (through engagement) which results in nonsignificant prediction in most of the samples included in the analyses. Engagement is according to Wang and Holcombe (2010) composed of three interrelated dimensions: behavioural, emotional and cognitive engagement. When all three are addressed and supported, academic outcomes are increased. Relatedness supports emotional engagement. And emotional engagement is, according to re-

search review (Wang & Holcombe, 2010), not directly related to academic achievement.

Even though our results have not wholly supported the importance of the relatedness in academic achievement we believe that it has to be addressed also as a support for autonomy and competence. In future research one focus could be in the elaboration in more detail of the relationship between all three predictors. Social support fosters feeling of social connectedness, which is required in order for children to internalize social standards (for instance value of education) and to develop respect for social institutions (also school) (Ellias & Hayes, 2008). With collaboration in and outside of school students build their own social network, social capital that is as an important well-being indicator as is material capital (Morenoff & Sampson, 2008). Even if a child or adolescent possesses the required skill for school success, motivation to use them is related to perception of social support for school related activities (from parents and community).

Together with the research relevance of the findings (congruency with the SDT theoretical assumptions), the findings have high practical value as well. Individuals seek experiences that fulfil their need for competence, autonomy and relatedness through interaction with the environment (Deci & Ryan, 2002). As said the theory proposes that the degree to which students perceive that the school context meets these psychological needs determines the level of student's engagement in school. We can use school related activities as a source of activities that can foster student's self-perceived autonomy, competence and relatedness. Intrinsically motivated learning can be greatly influenced by social environments (Ryan & Deci, 2009). For instance, the key feature is autonomy supporting teacher's behaviour. When teachers support students' autonomy they achieve more, learn conceptually and stay in school longer (Reeve, 2002). An important emphasis has to be put also on teachers' motivation and the quality of their teaching. Various studies of elementary and high school students (e.g. Hardre & Reeve, 2003; Jang, Reeve and Deci, 2010) show that teachers' autonomy support is related to teachers' own autonomous motivation and later work engagement.

As pointed out by Ryan and La Guardia (1999, in: Ryan & Deci, 2009) the importance of autonomy and competence support needs to be recognized in the school setting also in the light of addressing students at risk (e.g. low achieving students, students prone to early school leaving) even more since the first response of teachers and parents in situations of low achievement and anticipated early school leaving is adding more controls (e.g. scheduled time for studying, constant control over school

work...) and additional pressures to the students, which in a way closes the door for intervention and even lowers their motivation for learning and staying in school. Support for autonomy inside the classroom, inside school and also using community relevant activities, which would affect the relatedness, autonomy and competence as well - increase students' motivation for learning and continuing their education. As seen in our data the parental support (lack of controlling behaviour) for autonomy plays a vital part as well indicating our role in educating parents as parents meaning their role of autonomy support and of the developmental characteristics of their adolescents.

Conclusion

The findings support the importance of intrinsic motivation for academic achievement in various content domains as well as in various age groups. Even though the measures are rough and not directly comparable the findings show consistency. Since the results show somehow a different pattern in 13th grade, these results would benefit from further investigation of the role that all three psychological needs play in academic achievement in different developmental periods (with the same and comparable measure). The measures used are at this point rough – the international comparative studies are not designed to specifically measure perceived competence, autonomy and relatedness, therefore the findings should be understood as preliminary and as a starting point for future more in depth analyses with more consistent measures of all predictors as well as the use of more advanced statistical techniques (e.g. hierarchical regression models).

References

- Alivernini, F., Lucidi, F. (2011) Relationship between social context, self-efficacy, motivation, academic achievement, and intention to drop out of high school: A longitudinal study. *The Journal of Educational Research* 104, pp. 241–252.
- Arora, A., Foy, P., Martin, M. O. Mullis, I. V. S. (2009) *TIMSS Advanced 2008 technical report*. Chestnut Hill, MA: TIMSS PIRLS International Study Center, Boston College.
- Benware, C., Deci, E. L. (1984) Quality of learning with an active versus passive active set. *American Educational Research Journal* 21, pp. 755–765.
- Caprara G. V., Fida, R., Vecchione, M., Del Bove, G., Veccio, G. M., Barbaranelli, C. (2008) Longitudinal analyses of the role of perceived self-efficacy for self-regulated learning in academic continuance and achievement. *Journal of Educational Psychology* 100 (3), pp. 525–534.

- Deci, E. L., Ryan, R. M. (2002) *Handbook of self-determination research*. Rochester: The University of Rochester Press.
- Ellias, M. J., Haynes, N. M. (2008) Social competence, social support, and academic achievement in minority, low income, urban, elementary school children. *School Psychology Quarterly* 23 (4), pp. 474–495.
- Epstein, J. L., Sanders, M. G., Sheldon, S. B., Simon, B. S., Clark Salinas, K., Rodrigue Jansorn, N., Van Voorhis, F. L., Martin, C. S., Thomas, B. G., Greenfeld, M. D., Hutchins, D. J., Williams, K. J. (2009) *School, family and community partnership*. London: Corwin Press.
- Flink, C., Boggiano, A. K., Main, D. S., Barrett, M. Katz, P. A. (1992) Children's achievement-related behaviors: The role of extrinsic and intrinsic motivational orientations. In Boggiano, A. K., Pittman, A. K. (eds.). *Achievement and motivation: A social-developmental perspective*. New York: Cambridge University Press, pp. 189–214.
- Fortier, M. S., Vallerand, R. J., Guay, F. (1995) Academic motivation and school performance: Toward a structural model. *Contemporary Educational Psychology* 20, pp. 257–274.
- Foy, P., Brossman, B., Galia, J. (2013) Scaling the TIMSS and PIRLS 2011 Achievement Data. In Martin, M. O., Mullis, I. V. S. (eds.). *TIMSS and PIRLS methods and procedures*. Chestnut Hill, MA: TIMSS PIRLS International Study Center, Boston College and International Association for the Evaluation of Educational Achievement, pp. 1–28.
- Grolnick, W. S., Ryan, R. M. (1987) Autonomy in children's learning: An experimental and individual difference investigation. *Journal of Personality and Social Psychology* 5, pp. 890–898
- Guay, F., Vallerand, V. J. (1997) Social context, students motivation and academic achievement: Toward a process model. *Social Psychology of Education* 1, pp. 211–233.
- Hardre, P. L., Reeve, J. (2003) A motivational model of rural students' intentions to persist in, versus drop out of, high school. *Journal of Educational Psychology* 95 (2), pp. 347–356.
- Jang, H., Reeve, J., Deci, E. L. (2010) Engaging students in learning activities: It's not autonomy support or structure, but autonomy support and structure. *Journal of Educational Psychology* 102, pp. 588–600.
- Joncas, M., Foy, P. (2013) Sampling Design in TIMSS and PIRLS. In Martin, M. O., Mullis, I. V. S. (eds.). *Methods and Procedures in TIMSS and PIRLS 2011*. Chestnut Hill, MA: TIMSS PIRLS International Study Center, Boston College and International Association for the Evaluation of Educational Achievement, pp. 1–21.

- Kage, M., Namiki, H. (1990). The effects of evaluation structure on children's intrinsic motivation and learning. *Japanese Journal of Educational Psychology* 38, pp. 36-45.
- Kozina, A., Rožman, M., Vršnik Perše, T. Rutar Leban, T. (2012) Napovedna vrednost različnih ocen šolske klime za dosežke v raziskavah TIMSS [The predictive power of different school climate evaluations in the TIMSS studies]. *Didactica Slovenica* 27 (1/2), pp. 127-144.
- Legault, L., Green-Demers, I., Pelletier, L. G. (2006) Why do high school students lack motivation in the classroom? Toward an understanding of academic amotivation and social support. *Journal of Educational Psychology* 98, pp. 567-582.
- Maddux, J. E. (2009) Self-Efficacy: The power of believing you can. In Lopez, S. J., Snyder, C. R. (eds.). *The Oxford handbook of positive psychology* (2nd ed.). New York: Oxford university press, pp. 335-345.
- Martin, M. O., Mullis, I. V. S. (2013a) *TIMSS and PIRLS methods and procedures*. Chestnut Hill, MA: TIMSS PIRLS International Study Center, Boston College and International Association for the Evaluation of Educational Achievement.
- Martin, M. O., Mullis, I. V. S. (2013b) *TIMSS and PIRLS 2011: Relationships Among Reading, Mathematics, and Science Achievement at the Fourth Grade – Implications for Early Learning*. Chestnut Hill, MA: TIMSS PIRLS International Study Center, Boston College and International Association for the Evaluation of Educational Achievement.
- Miserandino, M. (1996) Children who do well in school: Individual differences in perceived competence and autonomy in above average children. *Journal of Educational Psychology* 88, pp. 203-214.
- Morenoff, J. D., Sampson, R. J. (2008) Constructing community indicators of child well-being. Brown, B. V. (ed.). *Key indicators of child and youth well-being*. New York, London: Psychology Press, pp. 307-331.
- Motti-Stefanidi, F., Masten, A. S. (2013) School success and school engagement of immigrant children and adolescents. *European Psychologist* 18 (2), pp. 126-135.
- Mullis, I. V. S., Drucker, K. T., Preuschoff, C., Arora, A., Stanco, G. M. (2013) Assessment Framework and instrument development. In Martin, M. O., Mullis, I. V. S. (eds.). *TIMSS and PIRLS methods and procedures*. Chestnut Hill, MA: TIMSS PIRLS International Study Center, Boston College and International Association for the Evaluation of Educational Achievement, pp. 1-22.

- Mullis, I. V. S., Martin, M. O., Foy, P., Arora, A. (2012a) *TIMSS 2011 International Results in Mathematics*. Chestnut Hill, MA: TIMSS PIRLS International Study Center, Boston College.
- Mullis, I. V. S., Martin, M. O., Foy, P., Drucker, K. T. (2012b) *PIRLS 2011 International Results in Reading*. Chestnut Hill, MA: TIMSS PIRLS International Study Center, Boston College.
- Mullis, I. V. S., Martin, M. O., Kennedy, A. M., Trong, K. L., Sainsbury, M. (2009a) *PIRLS 2011 Assessment Framework*. Chestnut Hill, MA: TIMSS PIRLS International Study Center, Boston College.
- Mullis, I. V. S., Martin, M. O., Robitaille, D. F., Foy, P. (2009b) *TIMSS Advanced 2008 International Report: Findings from IEA's Study of Achievement in Advanced Mathematics and Physics in the Final Year of Secondary School*. Chestnut Hill, MA: TIMSS PIRLS International Study Center, Boston College.
- Mullis, I. V. S., Martin, M. O., Ruddock, G. J., O'Sullivan, C. Y., Preusschoff, C. (2009c) *TIMSS 2011 Assessment Framework*. Chestnut Hill, MA: TIMSS PIRLS International Study Center, Boston College.
- Ragozzino, K., Resnik, H., Utne-O'Brien, M., Weissberg, R. P. (2003) Promoting academic achievement through social and emotional learning. *Educational Horizons* 81, pp. 169–171.
- Reeve, J. (2002) Self-determination theory applied to educational settings. In Deci, E. L., Ryan, R. M. (eds.). *Handbook of self-determination research*. Rochester, NY: University of Rochester Press, pp. 183–203.
- Reeve, J. (2015) *Understanding motivation and emotion*. Hoboken: Wiley.
- Rutar Leban, T., Vršnik Perše, T., Kozina, A., Pavlovič, Z. (2009) Elementi vzgojnega sloga staršev in dosežki mladostnikov [The elements of parental styles and students' academic achievement]. *Šolsko polje* 20 (3/4), pp. 87–103.
- Ryan, R. M., Deci, E. L. (2000) Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist* 55, pp. 68–78.
- Ryan, R. M., Deci, E. L. (2002) An overview of self-determination theory: An organismic-dialectical perspective. In Deci, E. L., Ryan, R. M. (eds.). *Handbook of self-determination research*. Rochester, NY: University of Rochester Press, pp. 3–37.
- Ryan, R. M. (1995) Psychological need and the facilitation of integrative processes. *Journal of Personality* 63, pp. 397–427.
- Ryan, R. M., Deci, E. L. (2009) Promoting self-determined school engagement - motivation, learning and wellbeing. In Wentzel, K. R., Wig-

- field, A. (eds.). *Handbook of motivation at school*. New York: Routhledge, pp. 171–196.
- Ryan, R. M., Grolnick, W. S. 1986) Origins and pawns in the classroom: Self-report and projective assessments of individual differences in children's perceptions. *Journal of Personality and Social Psychology* 50, pp. 550–558.
- Ryan, R. M., La Guardia, J. G. (1999) Achievement motivation within a pressured society: Intrinsic and extrinsic motivations to learn and the politics of school reform. In Urdan, T. (ed.). *Advances in motivation and achievement*. Greenwich, CT: JAI Press, pp. 45–85.
- Schulz, W., Ainley, J., Fraillon, J. (2011) *ICCS 2009 Technical Report*. Amsterdam: International Association for the Evaluation of Educational Achievement.
- Sheldon, K. M., Elliot, A. J. (1999) Goal striving, need-satisfaction, and longitudinal wellbeing: The self-concordance model. *Journal of Personality and Social Psychology* 76, pp. 482–497.
- Skinner, E. A., Belmont, M. J. (1993) Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology* 85 (4), pp. 571–581.
- Tsai, Y., Kunter, M., Lüdtke, O., Trautwein, U., Ryan, R. M. (2008) What makes lessons interesting? The role of situational and individual factors in three school subjects. *Journal of Educational Psychology* 100, pp. 460–472.
- Vallerand, R. J., Fortier, M. S., Guay, F. (1997) Self-determination and persistence in a real life setting: Toward a motivational model of high school dropout. *Journal of Personality and Social Psychology* 72 (5), pp. 1162–1176.
- Wang, M. T. Holcombe, R. (2010) Adolescents' perceptions of school environment, engagement, and academic achievement in middle school. *American Educational Research Journal* 47 (3), pp. 633–662.

Samopodoba in socialna sprejetost identificiranih nadarjenih in visoko učno uspešnih osnovnošolcev

Urška Aram, Nina Jurinec, Marina Horvat in Katja Košir

V veliko je raziskav (npr. Lopez in Sotillo, 2009; Luftig in Nichols, 1990), ki preučujejo socialno-emocionalne razlike med nadarjenimi in ostalimi učenci v razredu; manj pa je raziskav, ki bi se ukvarjale z razliko na omenjenih področjih med nadarjenimi in visoko učno uspešnimi učenci. Zaradi različnih opredelitev nadarjenosti v različnih regionalnih in nacionalnih kontekstih (glej npr. Carman, 2013) raziskave ne dajejo konsistentnih rezultatov. V slovenskem okolju raziskav, ki bi se ukvarjale s podobnim vprašanjem, nismo zaznali, zato nas je v pričujoči raziskavi najprej zanimalo, 1) ali na vzorcu slovenskih učencev obstajajo razlike v socialni sprejetosti in samopodobi med učno uspešnimi (nadarjenimi in visoko učno uspešnimi) ter ostalimi učenci, 2) in nato še bolj podrobno, ali obstajajo razlike v socialni sprejetosti in samopodobi med identificiranimi nadarjenimi učenci in tistimi, ki so jim po ocenah v šoli najbolj podobni – visoko učno uspešnimi učenci, ki niso bili identificirani kot nadarjeni, ter 3) ali med zgoraj navedenimi skupinami učencev, razdeljenimi glede na nadarjenost in učno uspešnost, obstajajo razlike med spoloma v samopodobi in socialni sprejetosti.

V nadaljevanju so podrobneje predstavljeni izsledki raziskav, ki so preučevale omenjene pojave pri nadarjenih in visoko učno uspešnih učencih oziroma pri nadarjenih učencih in učencih, ki niso bili prepoznani kot nadarjeni.

Nadarjeni učenci

Starejše opredelitve operacionalizirajo nadarjenost zelo ozko in nadarjene učence največkrat enačijo z visoko inteligentnimi učenci (Carman, 2013). Novejše definicije pa poudarjajo, da so nadarjeni učenci zelo heterogena

skupina (Robinson, 2002), saj se lahko nadarjenost oziroma talent kaže na različnih področjih (Olszewski-Kubilius, Subotnik in Worrell, 2015).

Ena bolj uveljavljenih definicij je Renzullijeva (1977) opredelitev nadarjenosti, ki nadarjenost opisuje kot soobstoj visokih sposobnosti, ustvarjalnosti in motivacije. Renzullijev trikrožni model predstavlja v Sloveniji osnovo za izvajanje postopka odkrivanja nadarjenih učencev v osnovni šoli (Juriševič, 2009).

Zaradi neenotnih opredelitev nadarjenosti so merila za nadarjenost odvisna od nacionalnih in/ali šolskih kontekstov, kar pomeni, da se lahko razlikujejo od države do države in celo od šole do šole. Pomanjkanje enotne definicije nadarjenosti oziroma enotnih meril za identifikacijo nadarjenih učencev tako ne vodi samo v različne operacionalizacije (Carman, 2013), ampak tudi v razlike v deležu identificiranih nadarjenih učencev v različnih regionalnih in nacionalnih kontekstih, posledično pa onemogoča neposredno primerjavo nadarjenih. Ker je pri nas definicija nadarjenosti precej široko zastavljena, predstavlja Slovenija eno od držav z največjim deležem nadarjenih učencev (Juriševič, 2012).

Prepoznavanje nadarjenih učencev v Sloveniji

V Sloveniji poteka odkrivanje nadarjenih učencev v treh korakih (Koncept: Odkrivanje in delo z nadarjenimi učenci v devetletni osnovni šoli, 1999):

- 1) evidentiranje učencev;
- 2) identificiranje nadarjenih učencev, kjer mora posameznik, po slovenskem modelu, izpolnjevati vsaj eno od naslednjih treh meril:
 - učiteljeva ocena učenčeve uspešnosti: učitelj s pomočjo ocenjevalne lestvice oceni delovanje učenca na različnih področjih;
 - kognitivne sposobnosti: nadpovprečni rezultati na testu inteligentnosti;
 - ustvarjalnost: nadpovprečni rezultati na Torrancovih testih ustvarjalnega mišljenja;
- 3) seznanitev in mnenje staršev.

Postopek identifikacije se običajno izvaja v četrtem razredu, učenca pa se lahko evidentira tudi v višjih razredih. Pri uporabi takšnega koncepta je v Sloveniji 26 % učencev identificiranih kot nadarjenih (Juriševič, 2012).

Visoko učno uspešni učenci

Visoko učno uspešni učenci (angl. *high achievers*) so učenci, ki v šoli dobivajo visoke ocene. Običajno so dobro organizirani in znajo upravljati s časom. Na podlagi tega opravijo zahtevano delo in naloge pravočasno ter zelo

dobro. Za visoko učno uspešne učence je značilno tudi, da se pretežno ustrezno vedejo, se dobro prilagajajo šolskemu okolju, v učnih razpravah pa sodelujejo z navdušenjem. Visoko učno uspešni učenci niso nujno tudi nadarjeni učenci (Bainbridge, 2016).

Podobno, kot velja za nadarjenost, je v raziskavah različno opredeljena tudi visoka učna uspešnost. Bain in Bell (2004) sta visoko učno uspešne učence določili na podlagi testa (Comprehensive Test of Basic Skills; McGraw-Hill, 1996), Ritchotte in sodelavci (2016) pa so med visoko uspešne učence uvrstili tiste, katerih povprečna ocena je bila enaka ali višja od 3,5.

Socialne in čustvene značilnosti nadarjenih učencev

Ugotovitve raziskav, ki so preučevale socialne in čustvene značilnosti nadarjenih učencev, niso enotne. Nekateri avtorji predpostavljajo, da so nadarjeni učenci psihično šibki in ranljivi oziroma da predstavlja oznaka učenca kot nadarjenega dejavnik tveganja (Neihart, 1999; Olszewski-Kubilius et al., 2015). Obenem so nekateri raziskovalci (Terman, 1925; Terman in Oden, 1947, 1959) že pred desetletji ugotovili, da so nadarjeni učenci uspešnejši od svojih vrstnikov ne samo na kognitivnem, temveč tudi na socioemocionalnem področju. Slednje so podprle številne študije (npr. Chan, 2010; Cross et al., 2004; Garland in Zigler, 1999; LoCicero in Ashby, 2000; Lee et al., 2012; López in Sotillo, 2009; Mueller, 2009), kljub temu pa nekatere ugotovitve raziskav nakazujejo, da lahko predstavlja identificirana nadarjenost dejavnik tveganja za težave v psihološki prilagojenosti učenca (npr. Coleman in Cross, 1988; Cross et al., 1991; Cross, 1997; Pfeiffer, 2009).

Neihart (1999, 2002) navaja prej omenjene nasprotujoče si ugotovitve o socialnem in čustvenem razvoju nadarjenih učencev ter jih povzema kot dva različna pristopa k razumevanju socioemocionalnih značilnosti nadarjenih: pristop odpornosti in pristop tveganja (angl. *resilience and risk approach*):

- 1) Pristop odpornosti pojmuje nadarjenost kot varovalni dejavnik: kljub morebitnemu doživljanju stresorjev iz okolja imajo nadarjeni učenci vrsto notranjih virov, ki jim omogočajo uspešno spoprijemanje s stresnimi dogodki.
- 2) V nasprotju s tem pa pristop tveganja predpostavlja, da oznaka učenca kot nadarjenega lahko predstavlja dejavnik tveganja. Tako na primer Freeman (2006) izpostavlja, da večja družbena pričakovanja in pritisk, povezan z učno uspešnostjo pri identificiranih nadarjenih učencih, lahko vodijo v doživljanje čustvene stiske. Znotraj tega pristopa avtorji predpostavljajo, da nekatere značilnosti nadar-

jenih učencev povečajo tveganje za težave v socialnem prilagajanju; asinhroni razvoj (Silverman, 2002) in višja čustvena intenzivnost ter občutljivost so najpogostejše omenjeni elementi, ki naj bi izpostavljali nadarjene učence višji stopnji stresa.

Samopodoba nadarjenih in visoko učno uspešnih učencev

Samopodoba je vse tisto, kar si posameznik misli o sebi, da je, in vse to, kar si želi pokazati, da je. Zajema naše predstave, zaznave, misli, pojmovanja in prepričanja o sebi, čustva do sebe ter vrednotenje samega sebe (Musek, 2005). Raziskav, ki bi se osredotočale izključno na primerjavo nadarjenih in visoko učno uspešnih učencev, ki niso bili identificirani kot nadarjeni, ni veliko. Bain in Bell (2004) sta primerjali identificirane nadarjene in visoko učno uspešne učence, ki niso bili identificirani kot nadarjeni, na štirih dimenzijah samopodobe: telesne sposobnosti, zunanji videz, odnosi z vrstniki in odnosi s starši. Ugotovili sta, da so učenci, ki so bili identificirani kot nadarjeni, dosegli višje rezultate od učencev, ki so visoko učno uspešni, a niso bili identificirani kot nadarjeni, na treh od štirih v raziskavo vključenih dimenzijah samopodobe: telesna sposobnost, zunanji videz in odnosi z vrstniki. Prav tako so nadarjeni učenci dosegli višji rezultat na lestvici splošne samopodobe, medtem ko na področju odnosov s starši statistično pomembnih razlik ni bilo. Poleg tega sta avtorici ugotovili, da so se nadarjeni učenci v primerjavi z učno uspešnimi učenci bolj nagibali k temu, da so svoj socialni uspeh, se pravi uspešnost v socialnih situacijah, prej pripisovali svojemu trudu in svojim sposobnostim kot pa sreči ali težavnosti situacije.

Medtem ko sta se Bain in Bell (2004) pri raziskovanju osredotočili bolj na telesni in socialni vidik, so Ritchotte in sodelavci (2016) raziskovali učno samopodobo. Ugotovili so, da je učna samopodoba visoko učno uspešnih učencev, ki niso bili identificirani kot nadarjeni, primerljiva z učno samopodobo identificiranih nadarjenih učencev. Poleg tega so ugotovili, da je povprečna ocena visoko učno uspešnih učencev primerljiva s povprečno oceno identificiranih nadarjenih učencev.

V nadaljevanju predstavljamo še nekaj ugotovitev iz raziskav, ki so se osredotočale na primerjavo samopodobe nadarjenih in nenadarjenih učencev.

Metaanaliza, ki sta jo opravila Hoge in Renzulli (1993), je pokazala, da se nadarjeni učenci v primerjavi z vrstniki, ki niso bili prepoznani kot nadarjeni, zaznavajo kot uspešnejši na splošnem, učnem in vedenjskem področju. Na področju socialne samopodobe in samopodobe, povezane s telesnimi sposobnostmi, ni bilo statistično pomembnih razlik med nadarjenimi in nenadarjenimi učenci. Metaanaliza izpred nekaj let, ki sta

jo opravila Litster in Roberts (2011), pa je pokazala, da je največja razlika med nadarjenimi in nenadarjenimi učenci v učni samopodobi. To pomeni, da nadarjeni učenci dojemajo svoje učne sposobnosti višje kot njihovi vrstniki, ki niso bili identificirani kot nadarjeni. Nadarjeni učenci se zaznavajo tudi kot vedenjsko kompetentnejši, kar pomeni, da se v večji meri dojemajo kot osebe z lepim oziroma ustreznim vedenjem, poleg tega pa imajo tudi višjo splošno samopodobo. Na drugi strani pa so nadarjeni učenci nižje ocenili svoj zunanji videz in telesne sposobnosti. V zaznani socialni kompetentnosti ni bilo razlik med nadarjenimi in nenadarjenimi učenci. Litster in Roberts (2011) sta preverjala tudi, ali sta spol in starost moderatorja povezave med nadarjenostjo in različnimi področji zaznane kompetentnosti. Ugotovila sta, da so razlike med nadarjenimi in nenadarjenimi učenci v zaznanih učnih sposobnostih večje pri starejših učencih in pri dekleth.

Vlogo spola je raziskovala tudi Ablard (1997), ki je ugotovila, da imajo nadarjena dekleta na učnem področju nižjo socialno samopodobo v primerjavi z nadarjenimi fanti. Preckel et al. (2008) pa so ugotovili razlike med nadarjenimi in povprečnimi učenci v učni samopodobi na področju matematike. Razlike so se pokazale le pri fantih, in sicer v prid nadarjenim. Na drugi strani pa obstajajo tudi študije, ki niso našle nobenih razlik med spoloma za področje učne, socialne in čustvene samopodobe pri nadarjenih učencih (npr. Bain in Bell, 2004; Chan, 2001; Cunningham in Rinn, 2007; Lee et al., 2012).

Socialna sprejetost nadarjenih in visoko učno uspešnih učencev

Odnos med socialno sprejetostjo in učno uspešnostjo učencev je bil v preteklosti pogosto preučevano področje: priljubljeni učenci so praviloma učno uspešnejši (npr. Hatzichtistou in Hopf, 1996; Košir et al., 2007; Wentzel, 1991, 1993; Wentzel in Asher, 1995), učenci z nižjim sociometričnim statusom, predvsem zavrtnjeni učenci, pa predstavljajo skupino z večjim tveganjem za učne težave in izpad iz šolskega sistema (Frederickson in Furnham, 2001; Hatzichtistou in Hopf, 1996; Ollendick et al., 1992).

Socialna sprejetost učencev je bila v raziskavah operacionalizirana na različne načine. Bain in Bell (2004) sta socialno sprejetost učencev ocenjevali kot s strani učitelja zaznano socialno sprejetost posameznega učenca. Primerjali sta identificirane nadarjene učence in visoko učno uspešne učence, ki niso bili identificirani kot nadarjeni. Med nadarjenimi in visoko učno uspešnimi učenci nista ugotovili razlik v socialni sprejetosti. Pokazala pa se je statistično pomembna razlika v zaznani socialni sprejetosti

s strani učitelja glede na spol, in sicer so učitelji višje ocenili socialno sprejetost fantov.

V nadaljevanju navajamo še nekaj ugotovitev iz raziskav, ki so primerjale socialno sprejetost identificiranih nadarjenih učencev in učencev, ki niso bili identificirani kot nadarjeni. López in Sotillo (2009) sta raziskovali socialno sprejetost nadarjenih učencev in učencev, ki niso bili prepoznani kot nadarjeni; za oceno socialne sprejetosti sta uporabili sociometrično preizkušnjo in učiteljevo oceno socialne sprejetosti. Rezultati niso pokazali razlik med skupinama nadarjenih in nenadarjenih v priljubljenosti, zavrtnjenosti, socialnem vplivu in socialni preferenčnosti. Poleg tega ni bilo razlik med obema skupinama v umestitvi učencev v sociometrične skupine. Prav tako se učenci, ki so bili prepoznani kot nadarjeni, od svojih vrstnikov niso razlikovali v učiteljevi oceni socialne sprejetosti.

O učinkovitejšem delovanju nadarjenih učencev v socialnih odnosih pa poročajo Cohen et al. (1994). Ugotovili so, da so bili učenci bolj sprejeti s strani svojih vrstnikov, pokazali so večje zavedanje vzajemnosti v prijateljskih odnosih in s strani vrstnikov so bili zaznani kot manj pogosto vključeni v agresivno vedenje ali manj pogosto označeni kot žrtve takšnega vedenja. Niso pa se pokazale razlike med obema skupinama v številu prijateljskih odnosov. Podobno je Peairs (2010) ugotovila, da imajo nadarjeni učenci višjo socialno preferenčnost (tj. razliko med standardiziranimi pozitivnimi in negativnimi sociometričnimi izbirami) in so pogostejše označeni kot priljubljeni v primerjavi z nenadarjenimi učenci. Prav tako je ugotovila, da je za nadarjene učence verjetneje, da so prijatelji in pripadniki vrstniških klik z nadarjenimi posamezniki. Poleg tega so bili s strani učiteljev zaznani kot socialno spretnejši kot njihovi nenadarjeni vrstniki.

Tako se zdi, da so tudi medsebojni odnosi nadarjenih učencev primerljivi ali celo boljši v primerjavi z njihovimi vrstniki, ki niso bili identificirani kot nadarjeni. Rimm (2002) ob tem poudarja, da lahko nadarjeni učenci kljub s strani vrstnikov zaznani višji socialni sprejetosti poročajo o drugačnih občutjih; ne glede na objektivne pokazatelje njihove socialne sprejetosti lahko ti učenci doživljajo svojo nadarjenost kot negativni dejavnik za svoje medosebne odnose (Kerr et al., 1988). Poleg tega je Peairs (2010) ugotovila, da so negativne posledice zavrtnitve izrazitejše pri nadarjenih učencih v primerjavi z njihovimi zavrtnjenimi nenadarjenimi vrstniki.

Nekatere raziskave tudi nakazujejo, da je spol moderator odnosa med nadarjenostjo in socialno sprejetostjo. Luftig in Nichols (1990) sta med raziskovanjem socialne sprejetosti med štirimi skupinami, ki so bile oblikovane na podlagi kognitivnih sposobnosti in spola, ugotovila, da so nadarjeni fantje najbolj priljubljeni, sledili so nenadarjeni fantje in nena-

darjena dekleta. Nadarjena dekleta so predstavljala najmanj priljubljeno skupino izmed omenjenih štirih. Ta ugotovitev nakazuje, da lahko nadarjenost vendarle predstavlja dejavnik tveganja za socioemocionalne izide pri dekletih. Poleg tega nekatere raziskave kažejo, da nadarjena dekleta v večji meri zanikajo svojo nadarjenost v primerjavi s fanti (Swiatek, 2001; Swiatek in Dorr, 1998) in pripisujejo večjo vrednost sprejemanju s strani vrstnikov (Chan, 2003, 2004). Nekatere raziskave pa na tem področju niso ugotovile razlik med spoloma (npr. Foust et al., 2006).

Izhajajoč iz navedenih nekonsistentnih ugotovitev o razlikah v samopodobi in socialni sprejetosti med prepoznanimi nadarjenimi učenci in učno uspešnimi učenci, ki niso bili prepoznani kot nadarjeni, je namen naše raziskave preveriti razlike v splošni, učni in samopodobi na področju odnosov z vrstniki ter socialni sprejetosti med nadarjenimi, visoko učno uspešnimi in ostalimi učenci v razredu. Dodatno želimo preveriti še, ali je spol dejavnik teh razlik znotraj omenjenih skupin. Na koncu nas zanima tudi, ali rezultati naše raziskave govorijo v prid hipotezi, ki predpostavlja večjo psihološko odpornost nadarjenih učencev (angl. »resilience hypothesis«), ali v prid hipotezi, ki nadarjenost opredeljuje kot dejavnik tveganja za težave v socialnem in emocionalnem razvoju nadarjenih učencev (angl. »risk hypothesis«).

Metoda

Udeleženci

V raziskavi je sodelovalo 422 učencev, od tega 198 fantov (47,6 %), ter 25 njihovih učiteljev. Rezultati so bili zbrani v 25 oddelkih petih priložnostno izbranih slovenskih osnovnih šol. Učenci so bili stari od 11 do 15 let ($M = 13,15$, $SD = 1,15$). Vključeni so bili učenci od šestega do devetega razreda; 34 (8,1 %) jih je bilo iz šestega, 167 (39,8 %) iz sedmega, 87 (20,7 %) iz osmega in 132 (31,4 %) iz devetega razreda. 85 sodelujočih učencev je bilo identificiranih kot nadarjenih¹ (20,1 %) in 117 učno uspešnih (27,7 %) učencev, ki niso bili prepoznani kot nadarjeni, njihova lanska ocena pri matematiki, slovenščini in tujem jeziku pa ni bila nižja od prav dobre. V skupini ostalih učencev, ki ne izpolnjujejo zgornjih dveh pogojev, je bilo 220 učencev (52,1 %). 173 učencev (41 %) je bilo iz šole v osrednjem delu Slovenije, preostali učenci, vključeni v raziskavo, so prihajali iz štirih osnovnih šol iz podravske regije.

Pripomočki

Sociometrična preizkušnja. Za pridobitev podatkov o socialni sprejetosti učencev v razredu je bila uporabljena sociometrična preizkušnja s pozi-

1 V skladu z dokumentom Koncept: Odkrivanje in delo z nadarjenimi učenci v devetletni osnovni šoli (1999).

tivnim (»Navedi tri sošolce, s katerimi se najraje družiš.«) in z negativnim kriterijem (»Navedi tri sošolce, s katerimi se najmanj rad/a družiš.«), pri čemer so bili učenci opozorjeni, da jim pri negativnem kriteriju ni treba navesti treh učencev. Po pristopu standardiziranih dosežkov Coiea, Dodgea in Coppotellija (1982) je bila za učence v razredu na podlagi rezultatov sociometrične preizkušnje določena *mera socialne preferenčnosti oziroma všečnosti*, ki je glavna mera socialne sprejetosti učenca. Definirana je kot razlika med standardiziranimi pozitivnimi in negativnimi izbirami.

Učiteljeva ocena socialne sprejetosti učencev. Učitelji (običajno razredniki) so na štiristopenjski lestvici (1 – učenca sošolci sploh ne sprejemajo, 2 – učenca sošolci večinoma ne sprejemajo, 3 – učenca sošolci večinoma sprejemajo, 4 – učenca sošolci dobro sprejemajo) ocenili učenčevo stopnjo sprejetosti s strani sošolcev.

Vprašalnik samopodobe – Self Description Questionnaire (SDQ-II). Vprašalnik samopodobe SDQ-II je uveljavljena in pogosto uporabljena mera samopodobe za mladostnike; osnovana je na modelu samopodobe Shavelsona, Hubnerjeve in Stanton (1976).

Za potrebe raziskave so bile za pridobitev podatkov o samopodobi mladostnikov uporabljene tri dimenzije iz Vprašalnika samopodobe (Self-description questionnaire II, Marsh, 1992): 1) samopodoba na področju odnosov z vrstniki (»Imam mnogo prijateljev.«), 2) učna samopodoba (»Pri večini šolskih predmetov se hitro učim.«) in 3) splošna samopodoba (»Nič, kar naredim, se ne posreči.«). Dimenzija samopodobe na področju odnosa z vrstniki meri samozaznano priljubljenost med vrstniki, zmožnost sklepanja prijateljstev in zaznano kvaliteto teh prijateljstev. Notranja zanesljivost lestvice je visoka (Cronbach α znaša od 0,84 do 0,86; Marsh, Parada in Ayotte, 2004; Cronbach α za naš vzorec 0,78). Dimenzija učne samopodobe meri mladostnikovo samozaznavo znanj, zmožnosti in interesa za šolsko delo na splošno. Notranja zanesljivost lestvice je visoka in znaša od Cronbach $\alpha = 0,88$ do $\alpha = 0,90$ (Marsh et al., 2004; Cronbach α na našem vzorcu 0,81). Dimenzija splošne samopodobe preverja mladostnikovo zaznavo sebe kot sposobnega in učinkovitega posameznika, ki je zadovoljen in ponosen nase. Notranja zanesljivost te lestvice se giblje od $\alpha = 0,82$ do $\alpha = 0,85$ (Marsh et al., 2004) ter $\alpha = 0,76$ na našem vzorcu. Vse tri dimenzije vsebujejo po deset postavk, polovica postavk na vsaki dimenziji se vrednoti obrnjeno. Učenci so na 4-stopenjski lestvici (1 – nikoli ne velja, 2 – včasih velja, 3 – skoraj vedno velja in 4 – vedno velja) označili, v kolikšni meri navedena trditev drži zanje.

Šolska uspešnost. Učenci so zapisali zaključene ocene treh predmetov (slovenščina, matematika in prvi tuji jezik) za preteklo šolsko leto. Ocene so bile seštete in oblikovane v mero šolske uspešnosti za vsakega učenca.

Nadarjenost in učna uspešnost. Podatke o identificiranih nadarjenih učencih smo pridobili od šolske svetovalne službe. V skupino visoko učno uspešnih učencev smo vključili vse učence, ki niso bili identificirani kot nadarjeni učenci, njihova zaključena ocena v preteklem šolskem letu pa ni bila nižja od prav dobre pri nobenem od predmetov (slovenščina, matematika, tuji jezik). Tretjo skupino – ostali učenci – pa sestavljajo tisti, ki niso identificirani niti kot nadarjeni niti kot visoko učno uspešni.

Postopek

Podatki so bili zbrani v šolskem letu 2013/2014. Sodelovali so le učenci, katerih starši so s podpisom potrdili, da soglašajo s sodelovanjem. Da bi zagotovili veljavnost podatkov, pridobljenih s sociometrično preizkušnjo, je bila raziskava izvedena v razredih, kjer je bilo vrnjenih več kot 70 % soglasij. Ker sociometrična preizkušnja ni anonimna mera, so učenci zaradi varovanja podatkov dobili šifre, ki so bile sestavljene iz prvih dveh črk imen/-a in prvih dveh črk priimka/-ov. Reševanje vprašalnika je potekalo skupinsko v razredu, učenci niso bili časovno omejeni, večina pa je vprašalnik rešila v 15 minutah. Medtem ko so učenci reševali vprašalnik, smo za oceno socialne sprejetosti vseh učencev, vključenih v raziskavo, prosili njihove učitelje. Podatke o nadarjenosti učencev smo pridobili od šolske svetovalne službe.

Analiza podatkov

Pozitivne in negativne nominacije sociometrične preizkušnje in učiteljeva ocena socialne sprejetosti učencev so bile standardizirane znotraj vsakega razreda. Analizo učinka nadarjenosti (nadarjeni, učno uspešni, ostali učenci) za različne mere socialne sprejetosti in lestvice splošne, socialne in učne samopodobe smo izvedli z multivariatno analizo variance. Nadaljnja analiza učinka skupine (nadarjeni, visoko učno uspešni, ostali učenci) in spola ter interakcij skupina x spol je bila opravljena z dvosmerno analizo variance. Post hoc analize za glavne učinke so bile opravljene z Bonfferonijevim testom, analize interakcij pa s parnimi primerjavami (angl. *simple effects*).

Rezultati

Osnovne deskriptivne statistike

Tabela 1: Mere opisne statistike in Pearsonov koeficient korelacije za uporabljenе spremenljivke.

	M	SD	1	2	3	4	5	6	7	8
1 SDQ Splošna	28,96	5,43	-,08	-,18**	1					
2 SDQ Socialna	29,79	5,86	-,09	,00	,69**	1				
3 SDQ Učna	28,07	6,03	-,01	-,38**	,75**	,52**	1			
4 Soc. prcf.	0,00	1,64	,04	-,18**	,01	,14**	,06	1		
5 Učit. ocena	3,34	0,62	,03	-,15**	,10	,13*	,15**	,42**	1	
6 Ocene skupno	11,61	2,67	,15**	-,75**	,24**	,01	,43**	,24**	,23**	1

Opombe: SDQ Splošna = splošna samopodoba; SDQ Socialna = socialna samopodoba; SDQ Učna = učna samopodoba; Učit. ocena = učiteljeva ocena socialne sprejetosti učenca; Ocene skupno = seštevek ocen treh predmetov v lanskem šolskem letu; * $p < 0,05$, ** $p < 0,01$.

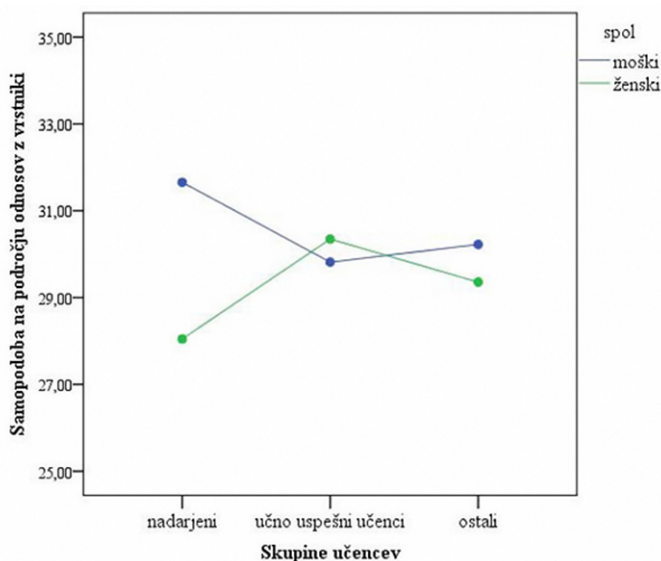
V Tabeli 1 so prikazane mere opisne statistike in Pearsonov koeficient korelacije za vse tri preverjane dimenzije samopodobe (učna, splošna in samopodoba na področju odnosov z vrstniki), socialno preferenčnost skupaj z učiteljevo oceno socialne sprejetosti in seštevek ocen pri treh predmetih (slovenščina, matematika in prvi tuj jezik). Splošna, učna in samopodoba na področju odnosov z vrstniki med seboj statistično pomembno in visoko pozitivno korelirajo, kar kaže na dobro povezanost poddimenzij konstrukta samopodobe. Nizka, vendar statistično pomembna pozitivna povezava se je pokazala med splošno samopodobo in povprečno oceno v preteklem šolskem letu. Socialna samopodoba se statistično pomembno pozitivno, vendar nizko povezuje z obema merama socialne sprejetosti – s socialno preferenčnostjo in učiteljevo oceno socialne sprejetosti učenca. Učna samopodoba nizko pozitivno, vendar statistično pomembno korelira z učiteljevo oceno socialne sprejetosti učenca; s seštevkom ocen v preteklem šolskem letu pa je srednje visoko statistično pomembno pozitivno povezana. Meri socialne sprejetosti sta med seboj srednje visoko pozitivno in statistično pomembno povezani, s seštevkom ocen iz preteklega leta pa zmerno in statistično pomembno pozitivno.

Samopodoba nadarjenih, visoko učno uspešnih in ostalih učencev
Multivariatna analiza variance splošne, učne in samopodobe na področju odnosov z vrstniki kot odvisnih spremenljivk ter spola in skupin učne uspešnosti kot neodvisnih spremenljivk je pokazala statistično pomemben učinek spola, $V = 0,021$, $F(3, 408) = 2,97$, $p = 0,032$, parcialna $\eta^2 = 0,021$ in skupine (nadarjen, učno uspešen, ostali), $V = 0,205$, $F(6, 818) = 15,587$,

$p < 0,001$, parcialna $\eta^2 = 0,103$. Učinek interakcije spol x skupina pa ni bil statistično pomemben, $V = 0,016$, $F(6, 818) = 1,115$, $p = 0,351$, parcialna $\eta^2 = 0,008$. V nadaljevanju sledijo analize z dvosmernimi analizami varianc, kjer smo preverjali učinek spola, skupine učne uspešnosti in interakcije med njima za vsako izmed treh lestvic samopodobe posebej – za učno, splošno in samopodobo na področju odnosov z vrstniki.

Samopodoba na področju odnosov z vrstniki

Za lestvico samopodobe na področju odnosov z vrstniki smo ugotovili statistično pomemben učinek spola, $F(1, 410) = 4,50$, $p = 0,03$, parcialna $\eta^2 = 0,011$, ki nakazuje, da so fantje v povprečju dosegali višje rezultate na lestvici samopodobe na področju odnosov z vrstniki, medtem ko učinek skupine ni bil statistično pomemben, $F(2, 410) = 0,01$, $p = 0,91$. Pokazal se je statistično pomemben učinek interakcije med spolom in skupino, $F(2, 410) = 3,08$, $p = 0,047$, parcialna $\eta^2 = 0,015$. Nadaljnje parne primerjave (angl. *simple analysis*) so pokazale, da imajo nadarjeni fantje statistično pomembno višjo samopodobo na področju odnosov z vrstniki kot nadarjena dekleta ($p = 0,005$). Ugotovili smo tudi, da imajo nadarjena dekleta statistično pomembno nižjo samopodobo na področju odnosov z vrstniki kot visoko učno uspešna dekleta ($p = 0,038$), ostale parne primerjave niso pokazale statistično pomembnih razlik ($p > 0,05$).

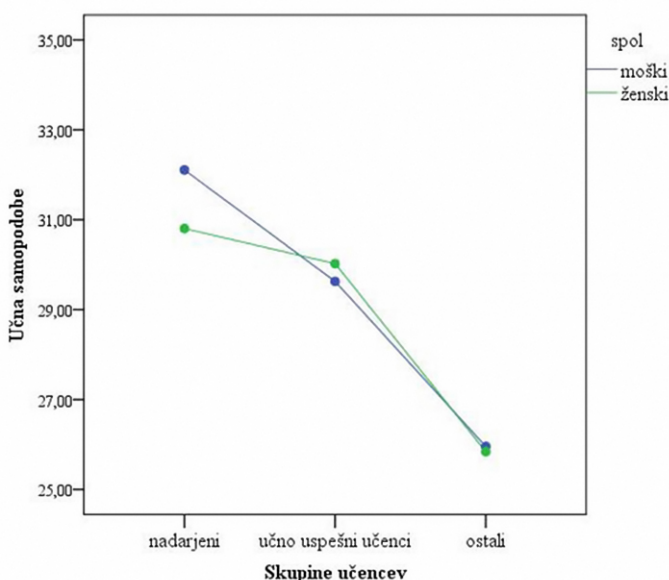


Slika 1: Rezultati na lestvici samopodobe na področju odnosov z vrstniki, ločeni po spolu in skupinah učencev.

Učna samopodoba

Nadalje se je pri dvosmerni analizi variance lestvice učne samopodobe pokazal statistično pomemben učinek skupine, $F(2, 410) = 36,86, p < 0,001$, parcialna $\eta^2 = 0,15$. Post hoc analize so pokazale, da je učna samopodoba ostalih učencev statistično pomembno nižja kot učna samopodoba nadarjenih in učno uspešnih učencev ($p < 0,001$). Ostale razlike med skupinami niso bile statistično pomembne.

Na podlagi dvosmerne analize variance učinek spola na lestvici učne samopodobe ni bil statistično pomemben, $F(1, 410) = 0,330, p = 0,57$, parcialna $\eta^2 = 0,001$. Prav tako tudi učinek interakcije spol x skupina ni bil statistično pomemben, $F(2, 410) = 0,57, p = 0,57$, parcialna $\eta^2 = 0,003$.

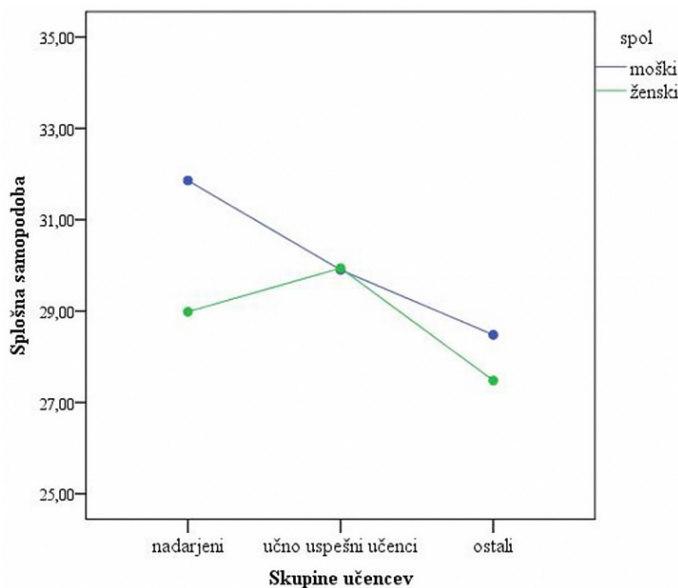


Slika 2: Rezultati na lestvici učne samopodobe, ločeni po spolu in skupinah učencev.

Splošna samopodoba

Rezultati dvosmerne analize variance so pokazali, da je učinek spola pri splošni samopodobi statistično pomemben, $F(1, 410) = 5,09, p = 0,03$, parcialna $\eta^2 = 0,012$, in sicer imajo fantje višjo splošno samopodobo v primerjavi z dekleti. Nadalje se je kot statistično pomemben izkazal tudi učinek skupine, $F(2, 410) = 8,56, p < 0,001$, parcialna $\eta^2 = 0,40$; post hoc analize so pokazale, da imajo učenci, ki sodijo v skupino ostalih učencev, statistično pomembno nižjo splošno samopodobo kot učenci, ki sodijo v

skupino nadarjenih in učno uspešnih učencev ($p < 0,01$). Učinek interakcije spol \times skupina ni bil statistično pomemben, $F(2, 410) = 1,82$, $p = 0,16$, parcialna $\eta^2 = 0,009$. Takšni rezultati nakazujejo, da imata skupina učne uspešnosti in spol močnejši učinek na splošno samopodobo kot interakcija med njima. Navkljub statistično nepomembni interakciji smo zaradi relativno velikih razlik v vrednostih opravili parne primerjave, ki razkrivajo, da je razlika med nadarjenimi fanti in dekleti statistično pomembna ($p = 0,01$), medtem ko razlika med fanti in dekleti pri visoko učno uspešnih učencih ni statistično pomembna (glej Sliko 2). Tako ne moremo sklepati, da gre za interakcijo med skupinami in spolom, prihaja pa do statistično pomembnih razlik znotraj nadarjenih učencev, ki nakazuje, da imajo nadarjeni fantje višjo splošno samopodobo v primerjavi z nadarjenim dekletom, medtem ko razlika med visoko učno uspešnimi fanti in dekleti ni statistično pomembna.



Slika 3: Rezultati lestvice splošne samopodobe, ločeni po spolu in skupinah učencev.

Razlike v merah socialne sprejetosti

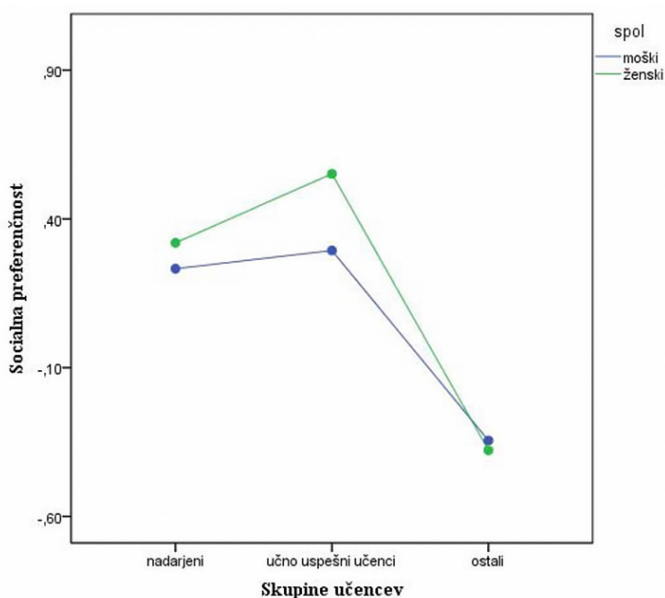
Za ugotavljanje razlik v merah socialne sprejetosti smo izvedli multivariatno analizo variance socialne preferenčnosti in učiteljeve ocene socialne sprejetosti učenca ter ugotovili, da obstaja statistično pomemben učinek skupine (nadarjen, učno uspešen, ostali), $V = 0,06$, $F(4, 806) = 5,81$, $p <$

0,001; učinek spola in učinek interakcije spol x skupina pa nista bila statistično pomembna.

Sledijo rezultati dvosmernih analiz varianc za obe meri socialne sprejetosti učencev.

Socialna preferenčnost

Rezultati dvosmerne analize variance so pokazali, da je bil glavni učinek skupine za socialno preferenčnost statistično pomemben, $F(2, 405) = 10,40$, $p < 0,001$, parcialna $\eta^2 = 0,049$. Post hoc analize so pokazale, da je socialna preferenčnost ostalih učencev statistično pomembno nižja v primerjavi z učenci iz skupine nadarjenih in učno uspešnih učencev ($p < 0,01$), medtem ko razlika med nadarjenimi učenci in učno uspešnimi učenci ni bila statistično pomembna. Učinek spola, $F(1, 405) = 0,37$, $p = 0,55$, parcialna $\eta^2 = 0,001$, in učinek interakcije spola ter skupine nista bila statistično pomembna, $F(2, 405) = 0,30$, $p = 0,74$, parcialna $\eta^2 = 0,001$.



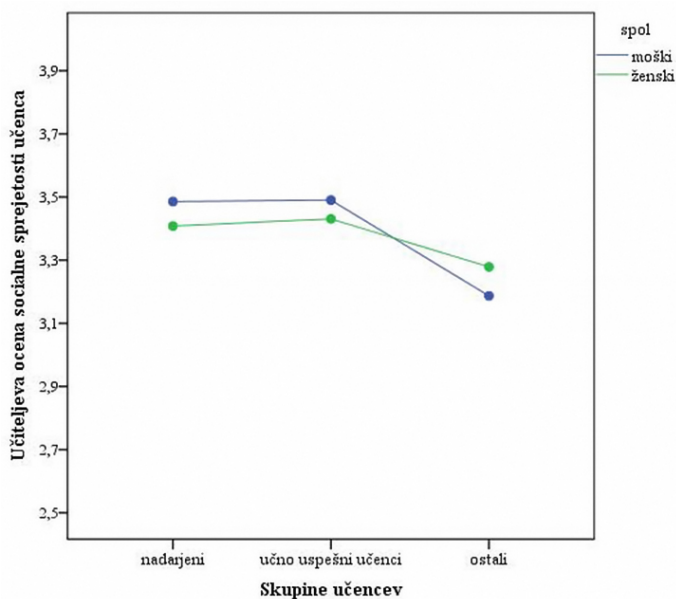
Slika 4: Rezultati socialne preferenčnosti učencev, ločenih po spolu in skupinah učencev.

Učiteljeva ocena socialne sprejetosti učencev

Kot druga mera socialne sprejetosti je bila analizirana učiteljeva ocena. Rezultati dvosmerne analize variance so pokazali statistično pomemben učinek skupine, $F(2, 405) = 6,67$, $p = 0,001$, parcialna $\eta^2 = 0,032$. Post hoc

analize so pokazale statistično pomembno razliko v učiteljevi oceni med skupino ostalih učencev in drugima dvema skupinama (nadarjeni in učno uspešni učenci), $p < 0,05$; učitelji so skupino ostalih učencev ocenili kot socialno slabše sprejeto v primerjavi z visoko učno uspešnimi in nadarjenimi učenci, medtem ko razlike med ostalima skupinama niso bile statistično pomembne.

Učinek spola, $F(1, 405) = 0,05$, $p = 0,82$, parcialna $\eta^2 < 0,001$, in učinek interakcije spol x skupina pa nista bila statistično pomembna, $F(2, 405) = 0,86$, $p = 0,43$, parcialna $\eta^2 = 0,004$.



Slika 5: Rezultati učiteljeve ocene socialne sprejetosti učencev, ločenih po spolu in skupinah učencev.

Diskusija

Namen pričujoče raziskave je bil preučiti razlike v različnih vidikih samopodobe in socialni sprejetosti treh skupin osnovnošolcev: identificiranih nadarjenih učencev, visoko učno uspešnih učencev, ki niso bili identificirani kot nadarjeni, in ostalih učencev, pri čemer smo upoštevali še moderatorsko vlogo spola. Ugotovitve raziskav, ki so preučevale socialno-emoционаlne značilnosti nadarjenih učencev, so nekonistentne, kar lahko delno pripišemo tudi različnim opredelitvam nadarjenosti. Ker je večina teh raziskav narejenih na tujih vzorcih, posplošitve in primerjave s slovenskim vzorcem, tudi zaradi širše opredelitve nadarjenosti pri nas, niso

zanesljive, zato smo želeli raziskati, kako se omenjeni pojavi odražajo pri slovenskih osnovnošolcih.

Samopodoba na področju odnosov z vrstniki

Rezultati na lestvici samopodobe na področju odnosov z vrstniki, kjer so nadarjena dekleta dosegla pomembno nižji rezultat kot nadarjeni fantje in pomembno nižji rezultat kot visoko učno uspešna dekleta, nakazuje, da bi nadarjena dekleta utegnili biti rizična skupina, za katero oznaka nadarjenosti predstavlja dejavnik tveganja. Skladno z rezultati naše raziskave je podobno tudi Ablard (1997) ugotovila, da imajo dekleta, nadarjena na učnem področju, nižjo socialno samopodobo v primerjavi z nadarjenimi fanti. Nasprotno pa nekatere raziskave niso našle nobenih razlik med spoloma za področje učne, socialne in čustvene samopodobe pri nadarjenih učencih (npr. Bain in Bell, 2004; Chan, 2001; Cunningham in Rinn, 2007; Lee et al., 2012).

Rezultati raziskav, ki so primerjali nadarjene in nenadarjene učence (Hoge in Renzulli, 1993; Litster in Roberts, 2011), sovpadajo z našimi rezultati, saj ugotavljajo, da na področju socialne samopodobe med skupinama ni pomembnih razlik. Bain in Bell (2004), ki sta primerjali identificirane nadarjene in visoko učno uspešne učence, sta ugotovili, da nadarjeni učenci dosegajo višje rezultate (med drugim tudi) pri dimenziji samopodobe na področju odnosov z vrstniki, česar pa rezultati v naši raziskavi ne potrjujejo.

Učna samopodoba

Glede na kriterij razdelitve učencev v skupine po učni uspešnosti imajo nadarjeni učenci pričakovano najvišjo učno samopodobo, sledijo jim visoko učno uspešni učenci, najnižje pa so se uvrstili učenci iz skupine ostalih učencev, ki imajo na dotičnem področju pomembno nižjo samopodobo od ostalih dveh skupin učencev. Naši rezultati so skladni z raziskavo Ritchotte in sodelavci (2016), ki so primerjali identificirane nadarjene in visoko učno uspešne učence v samozaznavanju na področju učnih sposobnosti in ugotovili, da so njihove samozaznave primerljive. Če štejemo skupino visoko učno uspešnih učencev k nadarjenim, potem so naši rezultati skladni tudi z večino drugih raziskav in metaanaliz, ki so primerjale učno samopodobo med nadarjenimi in nenadarjenimi vrstniki ter ugotovile, da je učna samopodoba nadarjenih učencev višja (Hoge in Renzulli, 1993; Litster in Roberts, 2011; Preckel et al., 2008).

Zanimiva je ugotovitev, da imajo nadarjena dekleta nižjo učno samopodobo kot nadarjeni fantje, čeprav imajo dekleta boljše ocene od fantov in bi lahko sklepali, da bodo imela posledično tudi višjo učno samopo-

dobro. V skupini visoko učno uspešnih učencev pa so rezultati na lestvici učne samopodobe skladnejši z ocenami – dekleta imajo boljše ocene in se tudi zaznavajo kot sposobnejše na učnem področju. Nižjo zaznavo učne samopodobe nadarjenih deklet bi morda lahko pripisali njihovim pričakovanjem do sebe, da morajo biti, zaradi označbe nadarjenosti in s tem višjih pričakovanj družbe, še boljše.

Splošna samopodoba

Rezultati na področju splošne samopodobe so pokazali, da ni pomembnih razlik med identificiranimi nadarjenimi in visoko učno uspešnimi učenci. Učenci iz skupine ostalih učencev imajo najnižjo splošno samopodobo – pomembno nižjo od ostalih dveh skupin; razlike med spoloma pa so pokazale, da imajo fantje višjo splošno samopodobo kot dekleta.

Dobljeni rezultati sovpadajo z ugotovitvami metaanalize, v kateri sta Hoge in Renzulli (1993) primerjala nadarjene in nenadarjene učence; ugotovila sta, da se nadarjeni učenci na področju splošne samopodobe zaznavajo kot uspešnejši od nenadarjenih učencev. Bain in Bell (2004), ki sta primerjali identificirane nadarjene in visoko učno uspešne učence, ki niso bili identificirani kot nadarjeni, sta v svoji raziskavi ugotovili, da so nadarjeni učenci dosegli višji rezultat na lestvici splošne samopodobe kot visoko učno uspešni, kar se v naši raziskavi ni pokazalo.

Socialna sprejetost

Kot eno izmed mer socialne sprejetosti smo uporabili socialno preferenčnost. Skupini nadarjenih učencev in visoko učno uspešnih učencev sta imeli statistično pomembno višjo socialno preferenčnost kot skupina ostalih učencev. Dobljeni rezultati sovpadajo z ugotovitvami raziskave Peairs (2010), ki je ugotovila, da imajo nadarjeni učenci višjo socialno preferenčnost. O učinkovitejšem delovanju nadarjenih učencev v socialnih odnosih poročajo tudi Cohen et al. (1994).

Podrobnejše analize primerjav med skupinami in spoloma (ki niso bile statistično pomembne) pa nakazujejo podobnost z raziskavo Luftiga in Nicholisa (1990), ki sta skupine oblikovala na podlagi kognitivnih sposobnosti in spola ter ugotovila, da so nadarjeni fantje najbolj priljubljeni, sledili so nenadarjeni fantje in nenadarjena dekleta. Nadarjena dekleta so predstavljala najmanj priljubljeno skupino izmed omenjenih štirih. Če iz naše raziskave izvzamemo skupino ostalih učencev in primerjamo skupini nadarjenih in učno uspešnih, tudi naši rezultati kažejo, da so nadarjena dekleta v socialni preferenčnosti ocenjena najslabše. Ta ugotovitev nakazuje, da lahko nadarjenost vendarle predstavlja dejavnik tveganja za razvoj socialno-emocionalnih težav pri dekletih. Poleg tega nekatere raziskave

kažejo, da nadarjena dekleta v večji meri zanikajo svojo nadarjenost v primerjavi s fanti (Swiatek, 2001; Swiatek in Dorr, 1998) in pripisujejo večjo vrednost sprejemanju s strani vrstnikov (Chan, 2003, 2004).

Nasprotno z rezultati naše raziskave pa rezultati, ki sta jih dobili López in Sotillo (2009), niso pokazali razlik med skupinama nadarjenih in nenadarjenih učencev v socialni preferenčnosti.

Kot drugo mero socialne sprejetosti smo uporabili učiteljevo oceno socialne sprejetosti učencev. Rezultati so pokazali, da so učitelji ocenili nadarjene in učno uspešne učence kot pomembno bolj sprejete od ostalih učencev. Če združimo skupini nadarjenih in učno uspešnih učencev, ki sta dosegli primerljive ocene učiteljev v socialni sprejetosti, rezultati pričujoče raziskave skladno z rezultati Peairs (2010) kažejo, da učitelji zaznavajo nadarjene učence kot spretnejše od njihovih nenadarjenih vrstnikov. Nasprotno pa López in Sotillo (2009) nista ugotovili razlik v učiteljevi oceni socialne sprejetosti med nadarjenimi in nenadarjenimi učenci.

Če povzamemo rezultate mer socialne sprejetosti, lahko trdimo, da so rezultati identificiranih nadarjenih in visoko učno uspešnih učencev podobni; pomembne razlike se pokažejo, če ti dve skupini primerjamo s skupino ostalih (nenadarjenih) učencev, saj so slednji, sodeč po rezultatih, slabše socialno sprejeti. Če pojmujeemo socialno preferenčnost in učiteljevo oceno sprejetosti kot objektivna pokazatelja socialne sprejetosti, potem bi lahko predpostavljali, da se bodo rezultati samopodobe na področju odnosov z vrstniki skladali z rezultati socialne sprejetosti, vendar rezultati samopodobe na področju odnosov z vrstniki niso pokazali pomembnih razlik med nobeno izmed treh skupin. Presenetljivo pa rezultati nadarjenih deklet, ki se kljub dobri socialni sprejetosti s strani vrstnikov zaznavajo pomembno nižje kot nadarjeni fantje in visoko učno uspešna dekleta, ki naj bi bila nadarjenim dekletom izmed vseh ostalih skupin v našem vzorcu najbolj podobna. Raziskave (Cillessen, 2011; Pittinsky in Carolan, 2008) sicer kažejo, da podatki, pridobljeni s samooceno ali učiteljevo oceno, niso nujno skladni s podatki, ki jih pridobimo s sociometrično preizkušnjo.

Zaključek

Na podlagi podatkov te raziskave lahko sklenemo, da identificirani nadarjeni učenci in visoko učno uspešni učenci dosegajo primerljive rezultate pri vseh treh preverjanih dimenzijah samopodobe (splošna, učna in samopodoba na področju odnosov z vrstniki) kakor tudi v obeh merah socialne sprejetosti (socialna preferenčnost in učiteljeva ocena socialne sprejetosti učenca). Pomembne razlike pa so se pokazale med omenjenima skupinama in skupino ostalih učencev v vseh v raziskavo vključenih spremenljivkah, razen v samopodobi na področju odnosov z vrstniki, kjer ni

bilo razlik med skupinami. Skupini identificiranih nadarjenih in visoko učno uspešnih učencev sta si torej kljub široki opredelitvi nadarjenosti bolj podobni kot različni. Očitno je učna uspešnost skupni imenovalec, ki prinaša pozitivnejšo samopodobo in socialno sprejetost, ne glede na druge različnosti in posebnosti posameznikov.

Nadarjena dekleta imajo izmed vseh primerjanih skupin najnižjo samopodobo na področju odnosov z vrstniki, kljub temu da se v obeh merah socialne sprejetosti pomembno ne razlikujejo od drugih skupin nadarjenih in visoko učno uspešnih učencev. Na podlagi rezultatov pričujoče študije in obravnavane literature lahko predpostavljamo, da oznaka nadarjenosti za nadarjena dekleta predstavlja dejavnik tveganja, medtem ko za nadarjene fante predstavlja varovalni dejavnik.

Omejitve raziskave in predlogi za nadaljnje raziskovanje

Pričujoča raziskava ima nekaj pomanjkljivosti, na katere je treba opozoriti pri interpretaciji in posplošitvi naših rezultatov.

Ena izmed ključnih pomanjkljivosti je priložnostno vzorčenje in velikost vzorca, vključenega v raziskavo. Da bi rezultate, pridobljene v raziskavi, lahko posplošili na celotno slovensko osnovnošolsko populacijo zadnje triade, bi bilo treba zajeti vzorec, proporcionalen s slovenskimi učenci zadnje triade glede na spol, starost in regijo.

Vse zaključke, vezane na primerjanje skupin identificiranih nadarjenih učencev in učno uspešnih učencev, je treba sprejeti z zadržki, saj je razdelitev vzorca vprašljiva 1) zaradi neizenačenosti in heterogenosti skupine nadarjenih učencev, ki je posledica zelo široke slovenske opredelitve nadarjenosti, in zaradi 2) določitve kriterija za visoko učno uspešne učence, ki je postavljena na podlagi samoporočanih ocen. Prav tako za učence iz skupine visoko učno uspešnih učencev nismo imeli podatkov, ali so bili v preteklosti v postopku identifikacije nadarjenosti in v postopku niso bili prepoznani ali pa preprosto niso bili evidentirani kot potencialno nadarjeni učenci. Obstaja možnost, da so v skupini učno uspešnih učencev tudi učenci, ki bi bili v postopku identifikacije prepoznani kot nadarjeni učenci, če bi bili evidentirani.

Nadaljnjo omejitev predstavlja tudi veljavnost podatkov, pridobljenih s samoporočanjem, kar še posebej velja za podatke o učni uspešnosti učencev.

Kot slabost oziroma omejitev raziskave lahko navedemo tudi majhno variabilnost v učiteljevi oceni socialne sprejetosti učencev. Večina učiteljev je učencem namenila eno izmed dveh najvišjih ocen sprejetosti (»učenci sošolca večinoma sprejemajo« in »učenci sošolca dobro sprejemajo«). Dodatno bi lahko postopek pridobivanja učiteljevih ocen objek-

tivizirali z vključitvijo več učiteljev za ocenjevanje posameznega razreda in kot končno mero uporabili povprečno učiteljevo oceno za vsakega učenca.

V nadaljnjih raziskavah bi bilo smiselno dodatno kvalitativno preučiti skupino nadarjenih deklet, ki se je v naši raziskavi izkazala kot rizična, saj bi na ta način pridobili dragocen vpogled v delovanje dotične skupine deklet. Glede na široko zastavljeno slovensko opredelitev nadarjenosti bi bilo zanimivo analizirati tudi različne programe za nadarjene, ki jih predpisuje Koncept o delu z nadarjenimi učenci v osnovni šoli.

Literatura

- Ablard, K. (1997) Self-perceptions and needs as a function of type of academic ability and gender. *Roeper Review* 20 (2), pp. 110–115.
- Bain, S. K., Bell, S. M. (2004) Social self-concept, social attributions, and peer relationships in fourth, fifth, and sixth graders who are gifted compared to high achievers. *Gifted Child Quarterly* 48 (3), pp. 167–178.
- Bainbridge, C. (2016) <https://www.verywell.com/high-achiever-1449168> (12. 5. 2016).
- Carman, C. A. (2013) Comparing apples and oranges: Fifteen years of definitions of giftedness in research. *Journal of Advanced Academics* 24 (1), pp. 52–70.
- Chan, D. W. (2001) Global and specific self-concepts of gifted adolescents in Hong Kong. *Journal for the Education of the Gifted* 24 (4), pp. 344–364.
- Chan, D. W. (2003) Dimensions of emotional intelligence and their relationships with social coping among gifted adolescents in Hong Kong. *Journal of Youth and Adolescence* 32 (6), pp. 409–418.
- Chan, D. W. (2004) Social coping and psychological distress among Chinese gifted students in Hong Kong. *Gifted Child Quarterly* 48 (1), pp. 30–41.
- Chan, D. W. (2010) Perfectionism among Chinese gifted and nongifted students in Hong Kong: The use of the Revised Almost Perfect Scale. *Journal for the Education for the Gifted* 34 (1), pp. 68–98.
- Cillessen, A. H. N. (2011) Sociometric Methods. V Rubin, K. H., Bukowski, W. M., Laursen, B. (eds.). *Handbook of Peer Interactions, Relationships, and Groups*. New York: A Division of Guilford Publications, Inc., pp. 82–99.
- Cohen, R., Duncan, M., Cohen, S. L. (1994) Classroom peer relations of children participating in a pull-out enrichment program. *Gifted Child Quarterly* 38 (1), pp. 33–37.

- Coie, J. D., Dodge, K. A., Coppotelli, H. A. (1982) Dimensions and types of social status: A crossage perspective. *Developmental Psychology* 18, pp. 557–570.
- Coleman, L. J., Cross, T. L. (1988) Is being gifted a social handicap? *Journal for the Education of the Gifted* 11 (4), pp. 41–56.
- Cross, T. L. (1997) Psychological and social aspects of educating gifted students. *Peabody Journal of Education* 72 (3&4), pp. 180–200.
- Cross, T. L., Adams, C., Dixon, F., Holland, J. (2004) Psychological characteristics of academically gifted adolescents attending a residential academy: A longitudinal study. *Journal for the Education of the Gifted* 28 (2), pp. 159–181.
- Cross, T., Coleman, L., Terhaar-Yonkers, M. (1991) The social cognition of gifted adolescents in schools: Managing the stigma of giftedness. *Journal for the Education of the Gifted* 15 (1), pp. 44–55.
- Cunningham, L. G., Rinn, A. N. (2007) The role of gender and previous participation in a summer program on gifted adolescents' self-concepts over time. *Journal of the Education of the Gifted* 30 (3), pp. 326–352.
- Foust, R. C., Rudasill, K. M., Callahan, C. M. (2006) An investigation into the gender and age differences in the social coping of academically advanced students. *Journal of Advanced Academics* 18 (1), pp. 60–80.
- Frederickson, N. L., Furnham, A. F. (2001) The long-term stability of sociometric status classification: A longitudinal study of included pupils who have moderate learning difficulties and their mainstream peers. *Journal of Child Psychology and Psychiatry* 42 (5), pp. 581–592.
- Freeman, J. (2006) Giftedness in the long term. *Journal for the Education of the Gifted* 29 (4), pp. 384–403.
- Garland, A. F., Zigler, E. (1999) Emotional and behavioral problems among highly intellectually gifted youth. *Roeper Review* 22 (1), pp. 41–44.
- Hatzichristou, C., Hopf, D. (1996) A multiperspective comparison of peer sociometric status groups in childhood and adolescence. *Child Development* 67 (3), pp. 1085–1102.
- Hoge, R. D., Renzulli, J. S. (1993) Exploring the link between giftedness and self-concept. *Review of Educational Research* 63 (4), pp. 449–465.
- Juriševič, M. (2012) *Nadarjeni učenci v slovenski šoli*. Ljubljana: Pedagoška fakulteta.
- Juriševič, M. (2009) Odkrivanje in delo z nadarjenimi učenci v šoli – stanje in perspektive. *Psihološka obzorja* 18 (4), pp. 153–168.
- Kerr, B. A., Colangelo, N., Gaeth, J. (1988) Gifted adolescents' attitudes toward their giftedness. *Gifted Child Quarterly* 32 (2), pp. 245–247.

- Košir, K., Sočan, G., Pečjak, S. (2007) The role of interpersonal relationships with peers and with teachers in students' academic achievement. *Review of Psychology* 14 (1), pp. 43-58.
- Lee, S.-Y., Olszewski-Kubilius, P., Turner Thomson, D. (2012) Academically gifted students' perceived interpersonal competence and peer relationships. *Gifted Child Quarterly* 56 (2), pp. 90-104.
- Litster, K. in Roberts, J. (2011) The self-concepts and perceived competencies of gifted and non-gifted students: A meta-analysis. *Journal of Research in Special Educational Needs* 11 (2), pp. 130-140.
- LoCicero, K. A., Ashby, J. S. (2000) Multidimensional perfectionism in middle school age gifted students: A comparison to peers from the general cohort. *Roeper Review* 22 (3), pp. 182-185.
- López, V., Sotillo, M. (2009) Giftedness and social adjustment: Evidence supporting the resilience approach in Spanish speaking children and adolescents. *High Ability Studies* 20 (1), pp. 39-53.
- Luftig, R. L., Nichols, M. L. (1990) Assessing the social status of gifted students by their age peers. *Gifted Child Quarterly* 34 (3), pp. 111-115.
- Marsh, H. W. (1992) *Self Description Questionnaire, II*. Sydney, New South Wales, Australia: University of Western Sydney.
- Marsh, H. W., Parada, R. H., Ayotte, V. (2004) A Multidimensional Perspective of Relations Between Self-Concept (Self Description Questionnaire II) and Adolescent Mental Health (Youth Self-Report). *Psychological Assessment* 16 (1), pp. 27-41.
- McGraw-Hill. (1996) *Comprehensive Test of Basic Skills*, Monterrey, CA: CTB/McGraw-Hill.
- Mueller, C. E. (2009) Protective factors as barriers to depression in gifted and nongifted adolescents. *Gifted Child Quarterly* 53 (1), pp. 3-14.
- Musek, J. (2005) *Psihološke in kognitivne študije osebnosti*. Ljubljana: Znanstveni inštitut Filozofske fakultete.
- Neihart, M. (1999) The impact of giftedness on psychological well-being: What does the empirical literature say? *Roeper Review* 22 (1), pp. 10-17.
- Neihart, M. (2002) Risk and resilience in gifted children: A conceptual framework. In Neihart, M., Reis, S., Robinson, N. M., Moon, S. M. (eds.). *The social and emotional development of gifted children: What do we know?*. Waco, TX: Prufrock Press, pp. 113-122.
- Ollendick, T. H., Weist, M. D., Borden, M. C., Greene, R. W. (1992) Sociometric status and academic, behavioral, and psychological adjustment: A five-year longitudinal study. *Journal of Consulting and Clinical Psychology* 60 (1), pp. 80-87.

- Olszewski-Kubilius, P., Subotnik, R. F., Worrell, F. C. (2015) Conceptualizations of giftedness and the development of talent: Implications for counselors. *Journal of Counseling Development* 93 (2), pp. 143–152.
- Peairs, K. F. (2010) *The social world of gifted adolescents: Sociometric status, friendship and social network centrality* (Neobjavljena disertacija). Pridobljeno iz ProQuest dissertation thesis (9. 5. 2016).
- Pfeiffer, S. I. (2009) The gifted: Clinical challenges for child psychiatry. *Journal of the American Academy of Child Adolescent Psychiatry* 48 (8), pp. 787–790.
- Pittinsky, M., Carolan, B. V. (2008) Behavioral versus cognitive classroom friendship networks. *Social Psychology of Education* 11 (2), pp. 133–147.
- Preckel, F., Goetz, T., Pekrun, R., Kleine, M. (2008) Gender differences in gifted and average-ability students comparing girls' and boys' achievement, self-concept, interest, and motivation in mathematics. *Gifted Child Quarterly* 52 (2), pp. 145–159.
- Renzulli, J. S. (1977) *The enrichment triad model: A guide for developing defensible programs for the gifted and talented*. Wethersfield, CT: Creative Learning Press.
- Rimm, S. (2002) Peer pressures and social acceptance of gifted students. In Neihart, M., Reis, S., Robinson, N. M., Moon, S. M. (eds.). *The social and emotional development of gifted children: What do we know?* Waco, TX: Prufrock Press, pp. 13–18.
- Ritchotte, J. A., Suhr, D., Alfurayh, N. F., Graefe, A. K. (2016) An Exploration of the Psychosocial Characteristics of High Achieving Students and Identified Gifted Students: Implications for Practice. *Journal of Advanced Academics* 27 (1), pp. 23–38.
- Robinson, N. M. (2002) Introduction. In Neihart, M., Reis, S., Robinson, N. M. in Moon, S. M. (eds.). *The social and emotional development of gifted children. What do we know?* Waco, TX: Prufrock Press, pp. xi–xxiv.
- Shavelson, R. J., Hubner, J. J., Stanton, G. C. (1976) Self-concept: Validation of construct interpretations. *Review of Educational Research* 46 (3), pp. 407–441.
- Silverman, L. K. (2002) Asynchronous development. In Neihart, M., Reis, S., Robinson, N. M., Moon, S. M. (eds.). *The social and emotional development of gifted children. What do we know?* Waco, TX: Prufrock Press, pp. 31–37.
- Strokovni svet RS za splošno izobraževanje (1999) *Koncept: Odkrivanje in delo z nadarjenimi učenci v devetletni osnovni šoli*.

- Swiatek, M. A. (2001) Social coping among gifted high school students and its relationship to self-concept. *Journal of Youth and Adolescence* 30 (1), pp. 19-39.
- Swiatek, M. A., Dorr, R. M. (1998) Revision of the social coping questionnaire: Replication and extension of previous findings. *Journal of Advanced Academics* 10 (1), pp. 252-259.
- Terman, L. M. (1925) *Genetic studies of genius: Vol. 1. Mental and physical traits of a thousand gifted children*. Stanford, CA: Stanford University Press.
- Terman, L. M., Oden, M. H. (1947) *The gifted group grows up: Twenty five years' follow-up of a superior group. Genetic studies of genius, Vol. 4*. Stanford, CA: Stanford University Press.
- Terman, L. M., Oden, M. H. (1959) *The gifted group at mid-life: 35 years' follow up of the superior child. Genetic studies of genius, Vol. 5*. Stanford, CA: Stanford University Press.
- Wentzel, K. R. (1991) Relations between social competence and academic achievement in early adolescence. *Child Development* 62 (5), pp. 1066-1078.
- Wentzel, K. R. (1993) Does being good make the grade? Social behavior and academic competence in middle school. *Journal of Educational Psychology* 85 (2), pp. 357-364.
- Wentzel, K. R., Asher, S. R. (1995) The academic lives of neglected, rejected, popular, and controversial children. *Child Development* 66 (3), pp. 754-763.

Motivational Goals and Academic Performance from the Perspective of Students' Perceived Quality of Relationship with Their Class Teachers at the Start of the Upper Secondary Education Level

Klaudija Šterman Ivančič and Melita Puklek Levpušček

Student's Transition to the Secondary Education Level

The transition to the secondary education level represents a new educational and social environment for an adolescent. Each adolescent meets peers and teachers previously unknown to them, and in addition, the upper secondary education level environment is much more academically oriented and focused on educational achievements in comparison with the primary education. Gutman and Eccles (2007) stated that this transition to the new form of education is one of the most important life changes for the adolescent beside puberty, cognitive development and changes in family and friendship relationships which all play an important role in adolescents' further development.

Various studies show that adolescents – upon entering a new school environment – are likely to deal with lower levels of confidence in establishing new relationships and perceive a poorer social support from teachers and peers (Bronfenbrenner, 1979; Eccles & Midgley, 1989; Wentzel, 1998); lower motivation for learning and lower educational achievements (Barber & Olsen, 2004; Eccles et al., 1993; Eccles, 2004; Gutman & Midgley, 2000; Wigfield & Eccles, 1994); as well as can have poorer endeavor for attending classes (Elias, Gara & Ubriaco, 1985). Beside, some authors (e.g. Bronfenbrenner, 1979; Eccles & Midgley, 1989; Wentzel, 1998) point out that interpersonal relationships play an important role in an adolescent's adaptation to the

¹ In Slovenia the education system consists of uniformed 9-year primary school and secondary school. This means that secondary education level often described in the literature is equivalent to grades 6-9 of Slovenian primary school and not to Slovenian upper secondary education level. This is why we make a distinction between secondary and upper secondary education level.

new school environment, as they affect motivation for learning, academic achievements and adapted learning behaviour.

Authors (Maulana, Opdenakker, Den Brook & Bosker, 2012; Wentzel, 1994) who studied changes in relationship of adolescents with their teacher at the transition to the secondary education level, have found that adolescents and teachers establish a certain level of mistrust at the start of the new educational journey, as both of them only get to know each other; and that adolescents in general perceive less opportunities for establishing more confident relationships with their teachers as they had on the primary school level. The authors see this initial mistrust in the relationship between adolescents and teachers as one of the most important reasons for the decrease in the motivation for learning and academic achievements.

Results of some studies (e.g. Rueger, Malecki & Demaray, 2010; Sawyer, Pfeiffer & Spence, 2009) also show that girls are more sensitive to the transition to the upper secondary education level than boys and perceive this transition as more stressful.

The Quality of Student-Teacher Relationship

In this study, we wanted to explore the quality of teacher-student relationship from point of socio-emotional support as perceived by students². We used Weiss' definition of social support (1988) which includes all important elements of the above mentioned features of social support, i.e. the function of socialising, and the emotional, instrumental and informational aspects of a social support: *a*) stable attachment which gives us the feeling of emotional security and closeness (emotional support); *b*) social integration or sense of belonging and closeness with the similarly thinking individuals (emotional support and socialising); *c*) altruism or the need to care for others (emotional support); *d*) providing a reciprocal approval, including a mutual stimulation of confidence and affirmation of one's own worth (emotional support); *e*) a reliable alliance which is related to the reliable availability of a social environment if help at resolving everyday problems is needed (or instrumental help); and *f*) guidance in case of any stressful developments or danger in the form of advice, direction or efficient strategies in resolving problems (informational support). According to Weiss, an individual will perceive appropriate support from the environment and will not feel isolated if they has an access to all six above mentioned sources to fulfil their social needs in his social environment (Cutrona & Russell, 1987; Furman & Buhrmester, 1985; Grego, 2008).

2 Since we discuss the relationship between adolescents and teachers (i.e. in educational context), in the following sections adolescents are referred to as students.

However, different studies show that students more often seek for the instrumental and informational support of the teacher and less often for the emotional one (Darling, Hamilton & Niego, 1994; Furman & Buhrmester, 1985; Lempers & Clark-Lempers, 1992). Boys are especially keener to seek informational support in their relationship with teachers whereas girls more often turn to teachers for emotional support and also tend to report of higher levels of such support in their relationship (Kerr, Preuss & King, 2006; Rueger, Malecki & Demaray, 2010; Sawyer, Pfeiffer & Spence, 2009; Sontag & Graber, 2010).

What we are interested here is, to what extent is the teacher's socio-emotional support present in the first year of an upper secondary school level education and how it relates to students' academic motivation and achievement.

The Quality of Student-Teacher Relationship and Academic Achievement

In his theoretical model of a relationship between a teacher and a student,³ Pianta (Pianta, Hamre & Stuhlman, 2003) defines a good-quality relationship as a key factor contributing to the student's academic achievements, and stresses the importance of the teacher's socio-emotional support. Such support stimulates the individual's socio-emotional development and is of particular importance for students with learning and behavioural difficulties. Pianta also pointed out that the importance of a good-quality relationship with the teacher does not diminish with student's growing up, and that the teacher's socio-emotional support is important in the times of transition to the higher levels of education.

An upper secondary school teacher, who shows emotional warmth and acceptance and is there for their students, stimulates students' learning interests which in turn is shown in better academic achievements and vice versa. Students who report higher levels of conflict and negative interactions in their relationships in their school environment on average report of lower academic achievements (Berndt & Keefe, 1996; Pianta, Hamre & Stuhlman, 2003; Wentzel & Caldwell, 1997; Wentzel, 2012).

An interesting study done by Košir (2013) revealed that even young teachers in Slovenia still believe in a stereotype that teacher's warm, supportive and caring relationships with his students result in poorer achievements of educational goals. However, studies from the past decade show the opposite. Various Slovenian and foreign researchers (e.g. Connell &

3 Peklaj and Pečjak (2015) state that we find only Pianta's theoretical model for explaining a relationship between a teacher and a pupil in the field of educational psychology, despite the importance of this relationship.

Wellborn, 1991; Deci, 1992; Gregory & Weinstein, 2004; Magajna, Kavkler, Čačinovič-Vogrinič, Pečjak & Bregar, 2008; Pianta & Walsh, 1996; Wentzel, 1997) established – their conclusions are based on the findings from the studies exploring the quality of students' relationships in educational context – that a student's perception of socio-emotional support by their teacher is very important for achieving their learning goals.

A teacher's emotional support hence plays an important role in improving students' learning adjustment.

The Quality of Student-Teacher Relationship and Motivation for Learning

In their model of academic motivation, Darling and Steinberg (1993) pointed out that the teacher's emotional support was an important motivational factor in an educational situation. In other words, it is important that the teacher offers the student an opportunity for a supportive and mutual relationship beside rules and expectations the teacher has for an individual. Teacher's expectations regarding academic achievements and behaviour are the most effective if expressed within emotionally positive and thoughtful relationship (Wentzel, 1997, 2002, 2003, 2012). Pupils thus find it easier to identify with the teacher's values which gradually become their own motivation for learning. In addition, the socio-emotional support by the teacher strengthens the young person's sense of connectedness and belonging to the school, and as such stimulates their motivation for learning that consequently contributes to better academic achievements. The motivation for learning stretches beyond the contextual factors in a school and classroom – it is mainly a result of a successful socialization processes, including the good-quality relationships between teachers and students.

Recent studies (e.g. Crosnoe, Johnson & Elder, 2004; Gregory et al., 2010; Murdock & Miller, 2003; Wentzel, 1997; Wentzel, 2012, Wentzel, Russell & Baker, 2015) confirmed the importance of the following aspects of a relationship with a teacher which contribute to a student's better motivation for learning: a confidential relationship with students, aspiration to link the school curriculum with students' interests, and a balance between awarding achievements and emphasizing the importance and value of a learning experience. The results further show that the perception of a teacher to be supportive to some extent depends on the students' school curriculum and students' learning abilities. Students from a general upper secondary school perceive a supportive teacher as a person who encourages them to tackle new challenges and to cooperate within the class, while for students from vocational schools a teacher has to be above all kind and

just; be able to explain subject matter clearly and to maintain order in the classroom (Daniels & Araposthatis, 2005).

Student's Motivational Orientation

Since we are interested in the effects of teacher-student relationship on students' motivational orientation in the context of students' transition to the secondary school level education, we used the achievement goal theory to investigate motivational goals in academic environment (Elliot, McGregor & Gable, 1999; Harackiewicz & Elliot, 1993; Middleton & Midgley, 1997). According to this theory, it is the motivation goals and not final results that give a meaning to active performance in a certain learning situation for an individual (Machr & Zusho, 2009). The two most important motivational goals within the framework of this theoretical concept (Elliot et. al, 1999; Harackiewicz & Elliot, 1993; Middleton & Midgley, 1997) are: *i) mastery goals* and the development of one's own abilities, and *ii) performance goals* of showing and comparing one's own abilities. The latter represent self-presentation goals which can be further divided into performance-approach goals and performance-avoidance goals.

Student's Motivational Orientation and Academic Achievement

Various studies in Slovenia and abroad show that the correlation between students' motivational goals and academic achievements is ambiguous. Peklaj and her colleagues (Peklaj et al., 2009) studied the effects of motivational orientations on learning achievements (Mathematics, Slovene language and final academic achievement). The study included Slovenian pupils (grade eight of primary school) and secondary school students (third year of upper secondary school). The results show that mastery goal orientation is importantly related to higher marks in Mathematics in the former group (similar finding in the study of Puklek Levpušček & Zupančič (2009)), and to higher marks in the Slovene language and Mathematics in the latter group. Performance goal orientation of students in secondary school was connected with better achievements in both subjects. The same holds for the individual's performance-avoidance goal orientation in Mathematics. The authors therefore point out that correlations between motivational orientation and achievements show significant differences according to the learning context (e.g., more achievement oriented secondary school environment).

These findings are supported by some other studies (e.g., Linnenbrink-Garcia, Tyson & Patall, 2008; Zusho, Karabenick, Bonney & Sims, 2008) where the researchers established that the correlation between mas-

tery goals and academic achievement does not differ from the correlation between performance goal and educational achievements in the school contexts where marks serve as a criterion for measuring academic success. Although the correlations between mastery goals and academic achievements are in general positive, regression analyses do not show that such motivational orientation would be a clear indicator of learning achievements, especially if the researchers took the individual's previous learning achievements into account. This of course poses a question (Maehr & Zusho, 2009), to what extent are the individuals with mastery goals orientation even motivated for achieving high marks and to what extent can marks even be a real indicator of an individual's abilities.

In their literature review of the effects of individual's motivational orientation on learning achievements, Maehr and Zusho (2009) establish that the majority of studies used marks as a criterion for evaluating individual's abilities. They further state that such an approach ignores the contextual factors that influence the individual's motivational orientation. They – similar to the authors of the above mentioned studies – establish that the results of the studies exploring correlations between the individual's motivational goals, other aspects of motivation and academic achievements, are rather unified regarding an individual's mastery goals and performance-avoidance goals: the individual's mastery orientation strengthens his interest for a certain learning field and meta-cognitive learning strategies use (e.g. Elliot et al., 1999; Pintrich, 2000), and while it is true that the performance goals orientation has a positive effect on the individual's motivation and academic achievements, students with this kind of motivational orientation generally express a higher level of anxiety in learning situations and a poorer interest for the subject (e.g. Church, Elliot & Gable, 2001; Elliot & Church, 1997). As Grolnick and her colleagues (Grolnick, Friendly & Bellas, 2009) claim, we witness a significant difference between those with the mastery goals orientation and those with the performance goals orientation which is expressed in the fact that the latter lacks the autonomous motivation in the sense of interest for an in-depth learning of a certain subject, although they show similar positive learning self-image and on average achieve good academic performance.

Aims and Hypotheses

In the present study we want to examine students' perceived socio-emotional support of their class teacher because the effects of interpersonal relationships on students' learning adjustment during the transition to upper secondary school has not been profoundly researched yet. We assume

that interpersonal relationships are an important factor in the student's adaptation to a new educational environment, as they are connected to the student's motivation for learning and consequently to their learning achievements and adapted learning behaviour (e.g. Bronfenbrenner, 1979; Eccles & Midgley, 1989; Wentzel, 1998). Different authors have already confirmed the effects of emotional closeness, connection and affection in the student-teacher relationship on the student's motivation for learning and the learning achievements (e.g. Armenta, Knight, Carlo & Jacobson, 2011; Brittain et al., 2013; Gregory & Weinstein, 2004; Spera, 2006; Wentzel et al., 2015). However, in most research, the motivation for learning is explored mainly from the aspect of the student's interest for learning. Students that receive more affection, support and positive attitude from a teacher, have a greater interest in learning and feel more competent, and consequently show better learning achievements (Midgley, Feldlaufer & Eccles, 1989; Roeser, Eccles & Sameroff, 1998; Ryan & Grolnick, 1986). Some studies (e.g. Bouffard, Boileau & Vezeau, 2001; Eccles, Midgley & Adler, 1984) also show significant changes in student motivational orientation when entering secondary school, especially negative changes in mastery goal orientation. The results show that one of the reasons for such changes lie in student's social experiences encouraged by systematic changes in their school environment that are in contrast with student's increased competency and social maturity, e.g. more closed, controlled teacher-dominated and formal school environment, teaching practices that provide students with lower sense of autonomy and control, and external reward system. However, there is less research examining students' perceptions of teacher's support when entering secondary educational level and their motivational orientation in this period. We are also interested in investigating the predictive power of student's perceived socio-emotional support and negative interactions in their relationship with the class teacher when predicting student's motivational orientation and academic performance, while controlling for educational programme and gender.

Based on previous research we formed the following hypotheses: *i*) students will report relatively low levels of perceived socio-emotional support in relationship with their class teacher and relatively high levels of performance goal orientation, *ii*) there are significant differences in perceived socio-emotional support and motivational orientation between students from different educational programmes, *iii*) there are significant gender differences in perceived socio-emotional support and motivational orientation, *iv*) perceived teacher socio-emotional support is an impor-

tant predictor of student's motivational orientation and academic performance when controlling for enrolled educational programme and gender.

Method

Participants

Students that participated in this research also participated in the PISA 2012 research. The PISA research in Slovenia includes all secondary school programmes; within the programme among all the 15-year-olds approximately 30 students are randomly chosen. We kept the sample of randomly chosen students within educational programmes and randomly selected 56 programmes to participate in our study. 47 of the 56 invited educational programmes decided to participate.

The study included 602 students enrolled in their first grade of different upper secondary school programmes. Their mean age was 15.5 years. A little less than half of the sample were female students ($N = 272$; 45.2%) and more than half were male students ($n = 330$; 54.8%). Students attended technical education programmes ($n = 260$; 43.2%), general gymnasium ($n = 139$; 23.1%), vocational education programmes ($n = 95$; 15.8%), gymnasium specialist ($n = 75$; 12.5%), while the least of participating students were from short-term vocational education programmes ($n = 33$; 5.5%).

Instruments

Quality of the Student-Teacher Relationship

For establishing the quality of student and class teacher relationships, we used the Network of Relationship Inventory questionnaire (NRI, Furman and Buhrmester, 1985). The questionnaire consists of 33 items to which students answered according to a five-point Likert-type scale (from 1 - a little or not at all, to 5 - mostly), and measures the quality of the student's relationship with their parents, their best friend and their teacher. For the purposes of this research only the student's evaluation of the relationship with the teacher were used. The questionnaire includes 11 subscales that describe socio-emotional support in a relationship: *i) socialising*, referring to the frequency of the adolescent's socialising with a certain person (e.g. *How much of your free time do you spend with this person?*), *ii) intimate disclosure* in a relationship, referring to the degree of the student's trusting intimate information to a class teacher (e.g. *How much do you tell this person?*), *iii) instrumental aid*, referring to the degree of help the student feels they receive from the class teacher (e.g. *How much does this person help you figure out or fix things?*), *iv) nurturance* (e.g. *How much do you protect and look out for this person?*), *v) approval*, referring to how much the student feels approved, respected and admired by the class teacher or how

much they feel their actions are approved, respected and admired (e.g. *How much does this person treat you like you're admired and respected?*), vi) *reliable alliance*, referring to the student's perception of relationship stability and durability (e.g. *How sure are you that your relationship will last in spite of fights?*), vii) *affection* that the student feels he receives from the class teacher (e.g. *How much does this person really care about you?*), viii) *satisfaction with a relationship*, referring to the student's general evaluation of satisfaction with a relationship with a class teacher (e.g. *How satisfied are you with your relationship with this person?*), ix) *antagonism*, referring to the student's perception of tension in a relationships (e.g. *How much does this person punish you?*) x) *conflict*, referring to the student's evaluation of contradiction, conflict and quarrel frequency in a relationship (e.g. *How much do you and this person disagree and quarrel?*), and xi) *relative power*, referring to the student's perception of his autonomy and subordination within the relationship (e.g. *Who tells the other person what to do more often, you or this person?*). Each subscale contains three items.

In the research literature, we did not identify any information referring to psychometric properties of the already mentioned subscales in a student-teacher relationship. According to the preliminary study results we decided to eliminate the subscale that refers to the student's socialising with the class teacher, because of low inter-item correlations in our sample. After reviewing the content of items we established that the items did not reflect the student-teacher relationship in Slovenian cultural environment. All of the other scales show moderately good internal consistency in our sample, that is the coefficient alpha values range between $\alpha = 0.73$ and $\alpha = 0.87$. Furman and Buhrmester (1985) found that the aforementioned subscales constitute two higher-order factors: socio-emotional support and negative interactions in a relationship. The authors did not identify the psychometric properties for those two scales in a student-teacher relationship. In our study these two scales showed moderately good internal consistency with coefficient values $\alpha = 0.91$ and $\alpha = 0.77$.

The results on individual subscales were calculated for each student by adding the values of all three items that form the scale. For the purpose of comparing student results on different subscales, we calculated the average values of each scale. Missing values in individual items were substituted by the average value of the other two items in the same scale, according to the instructions given by the authors (Furman and Buhrmester, 1985), based on the condition that at least two values were available. In case they were not available, the student's answers on that scale were not taken into account.

The Student's Motivational Goals

Students' achievement goals were measured by the Patterns of Adaptive Learning Scales questionnaire (Midgley et al., 2000; Slovenian translation and adaptation Puklek Levpušček & Zupančič, 2009). In the study we used the following three subscales: *i) mastery goal orientation* (e.g. "It's important that in this school year I gain a lot of knowledge in this subject"), *ii) performance-approach goal orientation* (e.g. "One of my goals is to show others how successful I am at schoolwork."), and *iii) performance-avoidance goal orientation* (e.g. One of my goals is to show my classmates that I am not doing poorly at school."). According to authors (Midgley et al., 2000) internal consistency coefficients for those three scales are good: $\alpha = 0.86$ for mastery goal orientation subscale, $\alpha = 0.86$ for performance-approach orientation subscale, and $\alpha = 0.75$ for performance-avoidant orientation subscale. The questionnaire consists of 14 items to which students answered on a five-point Likert-type scale (from 1 - very untrue of me, to 5 - very true of me). The first two subscales consist of five items and the last one consists of four. The results on individual subscales were calculated for each student by adding the values of all the items that form the scale. For the purpose of comparing student results on different subscales we calculated average values of each subscale.

Student's Academic Achievement

Student's general academic record at the end of the school year was used as a measure of his academic achievement (1-unsufficient, 2-sufficient 3-average, 4-good, 5-excellent).

Procedures

School headmasters were the first to be invited to the research, and based on their decision to participate they chose a research coordinator. Included in the letter were also consent forms for parents to sign and to confirm the students' voluntary participation in the research. The participation was anonymous; each student was assigned a code by the school. The questionnaires were filled in during class meetings under the supervision of the school psychologist who gave students directions for filling in the questionnaires. Students were given an hour to fill in the questionnaires. The content of the questionnaires and the research process were examined by the Ethics Commission at the Department of Psychology of the University of Ljubljana.

Results

In the results, we first list the descriptive parameters for subscales of the students' socio-emotional support and motivational goals in the whole sample. Then, based on the analysis of variance (ANOVA), we investigate the effects of gender, educational programme, and academic performance on students' perceived socio-emotional support of their class teacher and their achievement goals. Finally we test the predictive model of the effects of gender, educational programme, and perceived socio-emotional support on the students' achievement goals and academic performance by using a multiple regression method.

Table 1. Descriptive statistics for the perceived socio-emotional support, achievement goals, and academic achievement

	N	M	SD	Skewness	Kurtosis		
	Statistic	Statistic	Statistic	Statistic	SE	Statistic	SE
NRI subscales							
Conflict	569	1.64	.81	1.61	.10	2.47	.19
Instrumental aid	569	2.71	1.01	.31	.10	-.67	.19
Satisfaction	569	3.19	1.15	-.06	.10	-.99	.19
Intimate disclosure	569	1.65	.75	1.44	.10	2.05	.19
Nurturance	569	2.17	.96	.76	.10	-.03	.19
Affection	569	2.53	1.01	.34	.10	-.62	.19
Antagonism	569	2.00	.89	1.24	.10	1.55	.19
Reassurance of worth	569	2.74	.99	.23	.10	-.57	.19
Relative power	569	2.81	.99	.19	.10	-.55	.19
Reliable alliance	569	2.67	1.09	.41	.10	-.52	.19
NRI higher-order factors							
Socio-emotional support	569	2.49	.81	.33	.10	-.35	.19
Negative interactions	569	1.62	.81	1.75	.10	3.25	.19
Achievement goals							
Mastery goals	565	3.80	.79	-.23	.10	-.35	.20
Performance-approach goals	565	3.05	.95	.11	.10	-.36	.20
Performance-avoidance goals	565	3.43	.887	-.057	.100	-.403	.200

	N	M	SD	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	SE	Statistic	SE
Academic achievement							
Final academic success	569	3.27	.91	-.259	.102	.22	.20
Valid N (listwise)	565						

Table 1 shows that the students in general evaluated teacher's socio-emotional support as relatively low, while the presence of negative interactions in a relationship was, on average, evaluated even lower. They perceived higher reassurance of worth, class teacher instrumental aid, reliable alliance and their affection in a relationship than intimate disclosure. Regarding achievement goal orientation, the students assessed their mastery goals the highest, followed by performance-avoidance goals, while the performance-approach goals were the least present.

Perceived Socio-emotional Support of the Class Teacher

In the next step, we sought to discover differences in the perceived socio-emotional support and negative interactions of the class teacher (the two higher-order NRI factors) among the students from different educational programmes. We excluded students from the short-term vocational programmes due to its poor representativeness ($n = 33$; 5.5%). We examined the differences in perceived socio-emotional support and negative interactions of student's according to educational programme by one-way ANOVA. The results did not show any significant differences in the perception of socio-emotional support by the class teacher in relation to the student's educational programme: $F(3, 565) = 2.143$, $p = 0.094$, $MSE = 1.377$, partial $\eta^2 = 0.016$, $1-\beta = 0.546$, but showed significant differences in student's perceived negative interactions in relation to educational programme: $F(3, 565) = 6.617$, $p = 0.000$, $MSE = 4.251$, partial $\eta^2 = 0.034$, $1-\beta = 0.973$.

We have established similar results regarding differences in the perceived socio-emotional support in relation to gender, where girls on average state a somehow higher perceived socio-emotional support from their class teachers than boys ($M = 2.51$, $SD = 0.808$ vs. $M = 2.45$; $SD = 0.801$), but the differences are nevertheless not statistically significant: $F(1, 567) = 0.932$, $p = 0.335$, $MSE = 0.603$, partial $\eta^2 = 0.002$, $1-\beta = 0.161$. However, the results point to statistically significant differences amongst boys and girls in perceived negative interactions with their class teacher: $F(1, 567) = 47.678$, $p = 0.000$, $MSE = 29.14$, partial $\eta^2 = 0.078$, $1-\beta = 1.00$

Further, we have also established statistically significant differences in the students' perceived negative interactions with regard to their level of academic performance: $F(4, 564) = 17.318, p = 0.000, MSE = 10.275$, partial $\eta^2 = 0.109, 1-\beta = 1.000$. Again, we did not establish significant differences in perceived socio-emotional support in relation to academic performance: $F(4, 564) = 1.598, p = 0.173, MSE = 1.029$, partial $\eta^2 = 0.011, 1-\beta = 0.494$.

Students' Achievement Goals

Table 2. Descriptive statistics of the students' achievement goals according to the educational programme

	Mastery goal orientation		Performance-approach goal orientation		Performance-avoidance goal orientation	
	M	SD	M	SD	M	SD
Gymnasia general	3.83	0.75	2.87	0.91	3.33	0.89
Gymnasia specialist	3.52	0.82	2.81	0.86	3.23	0.86
Technical education programmes	3.82	0.76	3.02	0.95	3.42	0.89
Vocational programmes	3.81	0.84	3.35	0.90	3.60	0.83
Total	3.78	0.78	3.01	0.93	3.40	0.88

The results in Table 2 show that the students from all educational programmes perceive themselves as highly mastery-goal oriented. This is followed by performance-avoidance goal orientation, while their performance-approach goals were the least present.

The results of one-way ANOVA show statistically significant differences in students' mastery goal orientation according to the type of educational programme, albeit the differences are small: $F(3,56) = 3.19, p = 0.02, MSE = 1.93$, partial $\eta^2 = 0.02, 1-\beta = 0.74$. From all four educational programmes included in the comparison, students from the gymnasia specialist perceive themselves as the least mastery-goal oriented ($M = 3.52, SD = 0.82$). The results also show statistically significant differences in the students' performance goal orientation: $F(3,52) = 6.53, p = 0.00; MSE = 5.53$, partial $\eta^2 = 0.03, 1-\beta = 0.97$. The most prominent are differences between gymnasia and vocational educational programmes, where the students from the latter, on average, express higher performance goal orientation ($M = 3.02; SD = 0.95$ and $M = 3.35; SD = 0.90$ vs. $M = 2.81; SD = 0.86$ and $M = 2.87; SD = 0.91$). The results of one-way ANOVA also indicate statistically significant differences among educational programmes regarding the performance-approach goal orientation: $F(3,56) = 2.98, p = 0.03; MSE = 2.29$, partial $\eta^2 = 0.02, 1-\beta = 0.704$. The highest perfor-

mance-avoidance goal orientation was expressed by the vocational secondary educational programmes' students, followed by the technical education programmes' students.

Table 3. Correlations among studied variables

	Academic achievement	Prog.	Gender	Socio-emotional support	Negative interact.	Mastery goal orientation	Performance-approach goal orientation	Performance-avoidance goal orientation
Academic achievement								
Programme	-.20***							
Gender	-.18***	.11**						
Socio-emotional support	.09*	.02	-.03					
Negative interactions	-.30***	.18***	.27***	-.19***				
Mastery goal orientation	.12**	.02	-.08**	.35***	-.13**			
Performance-approach goal orientation	.03	.16***	.14***	.26***	-.01	.53***		
Performance-avoidance goal orientation	.019	.102**	.03	.26***	-.06	.59***	.78***	

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Further, results of one-way ANOVA show that when looking at the gender differences in students' achievement goal orientation, there are statistically significant differences in performance-approach goal orientation ($M = 2.86$; $SD = 0.94$ for females vs. $M = 3.13$; $SD = 0.91$ for males): $F(1, 563) = 12.33, p = 0.00$; $MSE = 2.34$, partial $\eta^2 = 0.01$, $1-\beta = 0.49$ and mastery goal orientation: $F(1, 563) = 3.83, p = 0.05$; $MSE = 5.53$, partial $\eta^2 = 0.03$, $1-\beta = 0.97$. The results show no statistically significant differences between males and females in their reports of performance-avoidance goal orientation: $F(1, 563) = 0.38, p = 0.54$; $MSE = 0.29$, partial $\eta^2 = 0.00$, $1-\beta = 0.09$.

In the next step, we wanted to examine the effects of students' perceived socio-emotional support and negative interactions with their class teacher on their motivational goals and achievement. Gender and educational programme served as controls. The analysis of correlation between the considered variables (Table 3) shows that the socio-emotional support in comparison with the programme, gender, academic achievement and negative interactions correlates the highest with all three student's motivational goals, although the magnitude of correlations are relatively low. We can also notice the strongest positive correlation between socio-emotional support of the class teacher and the student's mastery goal orientation, while the student's gender and educational programme have significant positive and the highest correlation with students' performance-approach goals. The student's perceived negative interactions in relationship with their teacher are significantly correlated only to student's mastery goal orientation. The correlation is negative but low.

We further examined the effects of the type of educational programme, gender and socio-emotional support/negative interactions (higher-order factors) on the three achievement goals with the multiple regression analysis. The variables were included in the model with *Enter* method, in this order: educational programme, gender, and student's perceived socio-emotional support/negative interactions.

Table 4. Summary of multiple regression analyses for educational programme, gender, perceived socio-emotional support, and negative interactions predicting students' mastery goal orientation.

Predictor	R ²	B	95 % CI for B	β
Programme		.019	[-.040, .079]	.026
Gender		-.092	[-.218, .034]	-.059
Socio-emotional support		.332***	[.255, .409]	.341***
Negative interactions		-.053	[-.135, .028]	-.054
.133***				

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

The results (Table 4) indicate that we can explain 13.3% of variability in student's mastery goal orientation by this model. Student's perceived socio-emotional support of their class teacher has the strongest predictive power while educational programme, gender and negative interactions were not significant predictors.

The educational programme and the perceived socio-emotional support proved to be significant predictors of student's performance-approach goal orientation (Table 5), whereas negative interactions had no significant effect on this motivational orientation. Using the model, we explained 10.8% of variability in student's performance-approach goal orientation.

Table 5. Summary of multiple regression analyses for educational programme, gender, perceived socio-emotional support, and negative interactions predicting students' performance-approach goal orientation.

Predictor	R ²	B	95 % CI for B	β
Programme		.127**	[.055, .199]	.141**
Gender		.273***	[.120, .426]	.146***
Socio-emotional support		.294***	[.201, .387]	.253***
Negative interactions		-.026	[-.125, .073]	-.022
.108***				

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Students' perceived socio-emotional support in relationship with their class teacher also proved to be the strongest predictor of student's performance-avoidance goal orientation followed by the educational programme, while gender and negative interactions were not important predictors. Using the model, we explained 8% of the variance in students' performance-avoidance goal orientation (Table 6).

Table 6. Summary of multiple regression analyses for educational programme, gender, perceived socio-emotional support, and negative interactions predicting students' performance-avoidance goal orientation.

Predictor	R ²	B	95 % CI for B	β
Programme		.085*	[.016, .154]	.100*
Gender		.061	[-.086, .208]	.035
Socio-emotional support		.281***	[.192, .370]	.256***
Negative interactions		-.043	[-.138, .052]	-.039
.081***				

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Academic Performance

At the last step, we searched for independent contributions of perceived socio-emotional support of the class teacher and students' achievement goal orientation to the prediction of students' academic performance. With the *Enter* method, we included predictors to the model, in this order: educational programme, gender, student's perceived socio-emotional support/negative interactions, and students' motivational goals. In full, this model explained 13.5% of variability in student's academic achievement (Table 7). The strongest predictor of academic performance was negative interaction with the class teacher, while perceived socio-emotional support was not a significant predictor. Students who reported lower levels of perceived negative interactions in their relationship with the class teacher performed better academically than those students who reported higher levels of negative interactions. Educational programme and gender were also important independent predictors of student's academic achievement.

Table 7. Summary of multiple regression analyses for educational programme, gender, perceived socio-emotional support, negative interactions, and students' achievement goal orientation predicting students' academic performance.

Predictor	R ²	B	95 % CI for B	β
Programme		-.132***	[-.202, -.063]	-.152***
Gender		-.185**	[-.335, -.035]	-.102**
Socio-emotional support		.014	[-.081, .109]	.012
Negative interactions		-.270***	[-.365, -.176]	-.238***
Mastery goals		.112	[-.005, .229]	.097
Performance-approach goals		.107	[-.018, .232]	.111
Performance-avoidance goals		-.127	[-.262, .007]	-.124
	.135***			

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Code for female = 1, code for male = 2.

Discussion

The aim of this study was to examine the level of students' perceived socio-emotional support in their relationship with class teacher and their motivational (achievement) goals during the transition to the upper secondary education level. We also wanted to investigate the predictive power of students' perceived socio-emotional support/negative interactions with the class teacher in explaining their achievement goals and academic performance when controlling for the type of educational programme and gender.

Students' Perceived Socio-emotional Support and Motivational Orientation

The results show that students included in the sample on average perceived more instrumental aid, reassurance of their worth and reliable alliance in their relationship with teacher than intimate disclosure. These results are in accordance with the findings from other studies (e.g. Darling, Hamilton & Niego, 1994; Furman & Buhrmester, 1985; Lempers & Clark-Lempers, 1992) where the researchers similarly established that students seek more instrumental aid than emotional support from their teachers. This was confirmed also by PISA 2009 international study (OECD, 2010), where Slovenian 15-years old students stood out in relation to the low evaluation of their relationships with their teachers regarding their perception that their teachers are not interested in their well-being and they do not listen when they want to tell them something.

The first hypothesis was only partially supported by the results while students on average perceived themselves as mostly mastery goal oriented. This was followed by the performance-avoidance goal orientation, while the performance-approach goal orientation was on average stated as the least present by the students in their first year of upper secondary school.

Educational Programme, Students' Perceived Socio-emotional Support and Motivational Orientation

When comparing the differences in achievement goal orientation of students in different educational programmes, the ANOVA results confirmed the existence of statistically significant differences. Although these differences are relatively small, we have established that specialist gymnasium students state the least performance-approach goal orientation among all four educational programmes, while there are almost no differences between the students from general gymnasias and vocational educational programmes. We have noticed larger differences in mastery goal orientation and performance-avoidance goal orientation, where a higher percentage of professional and vocational educational programmes' students expressed such motivational goals.

We found no statistically significant differences among educational programmes in perceived socio-emotional support in the relationship with the class teacher. Since we anticipated statistically significant differences in both, the perceived socio-emotional support of the teacher and achievement orientation in relationship to educational programme (Wentzel, Battle, Russell & Looney, 2010), we can only partly confirm our second hypothesis.

Gender, Students' Perceived Socio-emotional Support and Motivational Orientation

The results showed significant differences in mastery goal and performance-approach goal orientation between males and females, with males reporting significantly higher levels of those types of motivational orientation than females. The differences between males and females proved not to be significant in performance-avoidance goal orientation.

We did not find significant gender differences in the perceived socio-emotional support of the class teacher. These findings are partly in contradiction with our third research hypotheses where we expected statistically significant differences in students' motivational orientation and the perceived socio-emotional support of the teacher in relationship to gender (Rueger et al., 2010; Wentzel et al., 2010). However, the results confirmed statistically significant differences in students' perceived negative interactions according to their gender.

Socio-emotional Support, Motivational Orientation and Academic Achievement

In the last step of our research, we examined the predictive power of perceived socio-emotional support of the class teacher when explaining students' achievement goal orientations and academic performance while controlling for educational programme and gender. The results confirmed our hypothesis that perceived socio-emotional support of the class teacher proves to be an important predictor of student's achievement goal orientation, mainly mastery goal orientation. In contrast to gender and educational programme, we can explain the highest percentage of explained variability in student's mastery goal orientation by perceived socio-emotional support of the class teacher. This is followed by the percentage of explained variability in performance-approach goal orientation, and finally performance-avoidance goal orientation. The result is in line with findings in previous studies (e.g., Midgley, Feldlaufer & Eccles, 1989; Roeser, Eccles & Sameroff, 1998; Ryan & Grolnick, 1986) which showed that students who perceived more support and positive orientation from their teachers, stated stronger intrinsic motivation for learning.

With our predictive model, we explained 13,5% of the variability in the first year upper secondary school students' academic performance, with the perceived negative interactions in relationship with the class teacher as the strongest (negative) predictor. The findings thus confirmed our last hypothesis and are in accordance with the findings in previous studies (e.g., Gregory & Weinstein, 2004; Owens, Shippe & Hensel, 2008; Wentzel et al., 2015), which have established important positive ef-

fects of the perceived quality of the relationship with teacher on student's academic performance.

Limitations, Strengths and Conclusions

This study contributed to a better understanding of the role that supporting relationship between a teacher and student plays in the transition to the upper secondary educational level. It confirmed the assumption that supportive teacher-student relationship characterized by affection, reassurance and intimate disclosure importantly contributes to successful students' adaptation to the new school environment. Albeit the study is cross-sectional and correlational in nature, and includes only student self-perceptions, we may nevertheless conclude that students' perceived quality of the relationship with teacher is an important predictor of their motivational orientation and academic performance. Since 15-year olds in the sample stated a relatively low perceived socio-emotional support from their class teachers, it would be worth to promote this aspect of the teacher-student relationship and in such a way strengthen student perception of acceptance and safety in a new school environment. Since different social contexts undoubtedly play a role in students' learning adjustment (Bronfenbrenner, 1979; Dubois, Felner, Brand, Adan & Evans, 1992; Eccles & Midgley, 1989; Wentzel, 1998), it would be advisable to study the effects of socio-emotional and academic support, and academic expectations in student's other microsystems such as family and peer social network.

References

- Armenta, B. E., Knight, G. P., Carlo, G., Jacobson, R. P. (2011) The relation between ethnic group attachment and prosocial tendencies: The mediating role of cultural values. *European Journal of Social Psychology* 41, pp. 107–115.
- Barber, B. K., Olsen, J. A. (2004) Assessing the transition to middle and high school. *Journal of Adolescent Research* 19, pp. 3–30.
- Berndt, T. J., Keefe, K. (1996) Friends' influence on school adjustment: A motivational analysis. In Juvonen, J., Wentzel, K. R. (eds.). *Social Motivation: Understanding children's School Adjustment*. New York: Cambridge University Press, pp. 248–278.
- Boufard, T., Boileau, L., Vezeau, C. (2001) Students' transition from elementary to high school and changes of the relationship between motivation and academic performance. *European Journal of Psychology of Education* 4, pp. 589–604.
- Brittian, A. S., O'Donnell, M., Knight, G. P., Carlo, G. Umana-Taylor, A. J., Roosa, M. W. (2013) Associations between adolescents' perceived

- discrimination and prosocial tendencies: The mediating role of Mexican American values. *Journal of Youth and Adolescence* 42, pp. 328–341.
- Bronfenbrenner, U. (1979) *The ecology of human development*. Cambridge: Harvard University Press.
- Church, M. A., Elliot, A. J., Gable, S. L. (2001) Perceptions of classroom environment, achievement goals, and achievement outcomes. *Journal of Educational Psychology* 93, pp. 43–54.
- Connell, J. P., Wellborn, J. G. (1991) Competence, autonomy and relatedness: A motivational analysis of self-system processes. In Gunnar, M., Sroufe, L. A. (eds.). *Selfprocesses and development*. Hillsdale, NJ: Lawrence Erlbaum Associates, pp. 43–77.
- Crosnoe, R., Johnson, M. K., Elder, G. H, Jr. (2004) Integrational bonding in school: The behavioral and contextual correlates of student-teacher relationships. *Sociology of Education* 77 (1), pp. 60–81.
- Cutrona, C. E., Russell, D. W. (1987) The provisions of social relationships and adaptation to stress. *Advances in Personal Relationships* 1, pp. 37–67.
- Daniels, E., Arapostathis, M. (2005) What do they really want? Students voices and motivation research. *Urban Education* 40 (1), pp. 34–59.
- Darling, N., Hamilton, S. F., Niego, S. (1994) Adolescents' relations with adults outside the family. In Montemayor, R., Adams, G., Gullotta, T. (eds.). *Personal relationships during adolescence*. Thousand Oaks, CA: Sage, pp. 216–235.
- Darling, N., Steinberg, L. (1993) Parenting style as context: An integrative model. *Psychological Bulletin* 113, pp. 487–496.
- Deci, E. L. (1992) The relation of interest to the motivation of behavior: A self-determination theory perspective. In Renninger, K. A., Hidi, S., Krapp, A. (eds.). *The role of interest in learning and development*. Hillsdale, NJ: Erlbaum, pp. 43–70.
- DuBois, D. L., Felner, R.D., Brand, S., Adan, A. M., Evans, E. G. (1992) A prospective study of life stress, social support, and adaptation in early adolescence. *Child Development* 63, pp. 542–557.
- Eccles, J., Midgley, C., Adler, T. F. (1984) Grade-related changes in the school environment: Effects on achievement motivation. *Advances in Motivation and Achievement* 3, pp. 283–331.
- Eccles, J. S. (2004) Schools, academic motivation, and stage-environment fit. In Lerner, R. M., Steinberg, L. D. (eds.). *Handbook of adolescent psychology*. New York: Wiley, pp. 125–153.
- Eccles, J., Midgley, C. (1989) Stage-environment fit: Developmentally appropriate classrooms for young adolescents. In Ames, C., Ames, R.

- (eds.). *Research on motivation in education*. New York: Academic Press, pp. 139–186.
- Eccles, J. S., Wigfield, A., Midgley, C., Reuman, D., Mac Iver, D., Feldlaufer, H. (1993b) Negative effects of traditional middle schools on students' motivation. *Elementary School Journal* 93, pp. 553–574.
- Elias, M. J., Gara, M., Ubriaco, M. (1985) Sources of stress and support in children's transition to middle school: An empirical analysis. *Journal of Clinic Child Psychology* 14, pp. 112–118.
- Elliot, A. J., Church, M. A. (1997) A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology* 72 (1), pp. 218–232.
- Elliot, A. J., McGregor, H. A., Gable, S. (1999) Achievement goals, study strategies, and exam performance: A mediational analysis. *Journal of Educational Psychology* 91 (3), pp. 549–563.
- Furman, W., Buhrmester, D. (1985) Children's perceptions of the personal relationships in their social networks. *Developmental Psychology* 21, pp. 1016–1024.
- Greggo, S. P. (2008) *Trekking toward wholeness: A resource for care group leaders*. Downers Grove: InterVarsity Press.
- Gregory, A., Cornel, D., Fan, X. T., Sheras, P., Shih, T. H., Huang, F. (2010) Authoritative school discipline: High school practices associated with lower bullying and victimization. *Journal of Educational Psychology* 102, pp. 483–496.
- Gregory, A., Weinstein, R. S. (2004) Connection and regulation at home and in school: Predicting growth in achievement for adolescents. *Journal of Adolescent Research* 19, pp. 405–427.
- Grolnick, W. S., Friendly, R. W., Bellas, V. M. (2009) Parenting and children's motivation at school. In Wentzel, K. R., Wigfield, A. (eds.). *Handbook of motivation at school*. New York: Routledge, pp. 279–300.
- Gutman, L. M., Eccles, J. S. (2007) Stage-environment fit during adolescence: Trajectories of family relations and adolescent outcomes. *Developmental Psychology* 43, pp. 522–537.
- Gutman, L. M., Midgley, C. (2000) The role of protective factors in supporting the academic achievement of poor African American students during the middle school transition. *Journal of Youth and Adolescence* 20, pp. 223–248.
- Harackiewicz, J. M., Elliot, A. J. (1993) Achievement goals and intrinsic motivation. *Journal of Personality and Social Psychology* 65, pp. 904–915.

- Kerr, D. C. R., Preuss, L. J., King, C. A. (2006) Suicidal adolescents' social support from family and peers: Gender-specific associations with psychopathology. *Journal of Abnormal Child Psychology* 34, pp. 99–110.
- Košir, K. (2013) Socialni odnosi v šoli. Maribor: Pedagoška fakulteta Maribor in Subkulturni azil, zavod za umetniško produkcijo in založništvo.
- Lempers, J. D., Clark-Lempers, D. S. (1992) Young, middle, and late adolescents' comparisons of the functional importance of five significant relationships. *Journal of Youth and Adolescence* 21, pp. 53–96.
- Linnenbrink-Garcia, L., Tyson, D.F., Patall, E.A. (2008) When are achievement goal orientations beneficial for academic achievement? A closer look at moderating factors. *International Review of Social Psychology* 21, pp. 19–70.
- Magajna, L., Kavkler, M., Čačinovič Vogrinčič, G., Pečjak, S., Bregar, G., K. (2008) *Koncept dela učne težave v osnovni šoli. Program osnovnošolskega izobraževanja*. Ljubljana: Zavod RS za šolstvo.
- Maulana, R., Opdenakker, M. C., Den Brook, P., Bosker, R. J. (2012) Teacher-student interpersonal relationship during the first year of secondary education. In Wubbles, T., den Brook, P., van Tartwijk, J., Levy, J. (eds.). *Interpersonal Relationships in Education: An Overview of Contemporary Research*. Rotterdam: Sense Publishers, pp. 207–224.
- Maehr, M. L., Zusho, A. (2009) Achievement Goal Theory: The past, present, and future. In Wentzel, K. R., Wigfield, A. (eds.). *Handbook of motivation at school*. New York: Routledge, pp. 77–104.
- Middleton, M. J., Midgley, C. (1997) Avoiding the demonstration of lack of ability: An underexplored aspect of goal theory. *Journal of Educational Psychology* 89, pp. 710–718.
- Midgley, C., Feldlaufer, H., Eccles, J. (1989) Student/teacher relations and attitudes toward mathematics before and after the transition to junior high school. *Child Development* 60, pp. 981–992.
- Midgley, C., Maehr, M. L., Hruda, L. Z., Anderman, E., Anderman, L., Freeman, K. E., Gheen, M., Kaplan, A., Kumar, R., Middleton, M. J., Nelson, J., Roeser, R., Urdan, T. (2000) *Manual for the Patterns of Adaptive Learning Scales*. Michigan: University of Michigan.
- Murdock, T. B., Miller, A. (2003) Teachers as sources of middle school students' motivational identity: Variable-centered and person-centered analytic approaches. *Elementary School Journal* 103, pp. 383–399.

- OECD (2010) *PISA 2009 results: Overcoming social background – Equity in learning opportunities and outcomes (Volume II)*. Paris: OECD Publishing.
- Owens, T. J., Shippe, N. D., Hensel, D. J. (2008) Emotional distress, drinking, and academic achievement across the adolescent life course. *Journal of Youth and Adolescence* 37, pp. 1242–1256.
- Peklaj, C., Kalin, J., Pečjak, S., Puklek Levpušček, M., Valenčič Zuljan, M., Ajdišek, N. (2009) *Učiteljske kompetence in doseganje vzgojno-izobraževalnih ciljev v šoli*. Ljubljana: Znanstvena založba Filozofske fakultete Univerze v Ljubljani.
- Pianta, R. C., Hamre, B., Stuhlman, M. (2003) Relationships between teachers and children. In Reynolds, W., Miller, G. (eds.). *Handbook of Psychology: 7th Ed. Educational psychology*. New York: Wiley, pp. 199–234.
- Pianta, R. C., Walsh, D. B. (1996) *High-risk children in schools: Constructing sustaining relationships*. New York: Routledge.
- Pintrich, P. R. (2000) The role of goal orientation in self-regulated learning. In Boekaerts, M., Pintrich, P. R., Zeidner, M. (eds.). *Handbook of self-regulation*. San Diego, CA: Academic Press, pp. 452–502.
- Puklek Levpušček, M., Zupančič, M. (2009) Math achievement in early adolescence: The role of parental involvement, teachers' behavior, and students' motivational beliefs about math. *Journal of Early Adolescence* 29, pp. 541–570.
- Roeser, R. W., Eccles, J. S., Sameroff, A. J. (1998) Academic and emotional functioning in early adolescence: Longitudinal relations, patterns and prediction by experience in middle school. *Development and Psychopathology* 10, pp. 321–352.
- Rueger, S. Y., Malecki, C. K., Demaray, M. K. (2010) Relationship between multiple sources of perceived social support and psychological and academic adjustment in early adolescence: Comparisons across gender. *Journal of Youth and Adolescence* 39, pp. 47–61.
- Ryan, R.M., Grolnick, W.S. (1986) Origins and pawns in the classroom: Self-report and projective assessments of individual differences in children's perceptions. *Journal of Personality and Social Psychology* 50, pp. 550–558.
- Sawyer, M. G., Pfeiffer, S., Spence, S. H. (2009) Life events, coping and depressive symptoms among young adolescents. A one-year prospective study. *Journal of Affective Disorders* 117, pp. 48–54.
- Sontag, L. M., Graber, J. A. (2010) Coping with perceived peer stress: Gender-specific and common pathways to symptoms of psychopathology. *Developmental Psychology* 46, pp. 1605–1620.

- Spera, C. (2006) Adolescent's perceptions of parental goals, practices, and styles in relation to their motivation and achievement. *Journal of Early Adolescence* 26, pp. 456–490.
- Weiss, R. S. (1988) Loss and recovery. *Journal of Social Issues* 44, pp. 37–52.
- Wentzel, K. R. (1994) Relations of social goal pursuit to social acceptance, classroom behaviour, and perceived social support. *Journal of Educational Psychology* 86 (2), pp. 173–182.
- Wentzel, K. R. (1997) Student motivation in middle school: The role of perceived pedagogical caring. *Journal of Educational Psychology* 89 (3), pp. 411–419.
- Wentzel, K. R. (1998) Social relationships and motivation in middle school: The role of parents, teachers, and peers. *Journal of Educational Psychology* 90 (2), pp. 202–209.
- Wentzel, K. R. (2002) Are effective teachers like good parents? Teaching styles and student adjustment in early adolescence. *Child Development* 73(1), pp. 287–301.
- Wentzel, K. R. (2003) School adjustment. In W. Reynolds and G. Miller (eds.). *Handbook of psychology, 7: Educational psychology* (pp. 235–258). New York: Wiley.
- Wentzel, K. R. (2012) Teacher-student relationship and adolescent competence at school. In Wubbels, T., den Brok, P., van Tartwijk, J., Levy, J. (eds.). *Interpersonal relationships in education: An overview of contemporary research*. Rotterdam: Sense Publishers, pp. 19–36.
- Wentzel, K. R., Battle, A., Russell, S. L., Looney, L. B. (2010) Social supports from teachers and peers as predictors of academic and social motivation. *Contemporary Educational Psychology* 35, pp. 193–202.
- Wentzel, K. R., Caldwell, K. (1997) Friendships, peer acceptance, and group membership: relations to academic achievement in middle school. *Child Development* 68 (6), pp. 1198–1209.
- Wentzel, K. R., Russell, S., Baker, S. (2015) Emotional support and expectations from parents, teachers, and peers predict adolescent competence at school. *Journal of Educational Psychology* Advance Online Publication (<http://dx.doi.org/10.1037/edu0000049>).
- Wigfield, A., Eccles, J. S. (1994) Children's competence beliefs, achievement values, and general self-esteem: Change across elementary and middle school. *Journal of Early Adolescence* 14, pp. 107–138.
- Zusho, A., Karabenick, S. A., Bonney, C. R., Sims, B. C. (2007) Contextual determinants of motivation and help seeking in the college classroom. In Perry, R., Smart, J. (eds.). *The scholarship of teaching and learning in higher education: An evidence-based perspective*. New York: Springer, pp. 611–659.

Teachers' Relational Competencies: the Contribution from Teacher Education

Per F. Laursen and Anne Maj Nielsen

Research has thoroughly documented the importance of good social relations in school. Good relations in the classroom improve students' academic achievements and wellbeing (Nordenbo et al., 2008; Hattie, 2009). This applies to relations among fellow students and the relations between teacher and students. General research reviews of typical characteristics of good teaching single out relations as one of the most important factors, and it is well-documented that teachers' relational competencies are of core importance to build good relations in the classroom (ibid.). However, there are only limited experiences of developing teachers' relational competence in teacher education and only a limited amount of scientific knowledge exists concerning how to develop teachers' relational competence in pre-service teacher education. This article aims to contribute to the development of such knowledge.

Current research into the significance of relations in the teaching process, relational teacher competencies and how these can be developed in the teacher education programme is outlined below followed by a presentation of our own case-study of a Danish project in teacher education. But first, we shortly discuss terminology.

A Note on Terminology

There is no settled terminology that is generally accepted within the field, when it comes to either students' learning or teachers' competencies. Different authors use different concepts to describe roughly the same phenomena. The following are among the most important concepts in relation to *students' learning* in school:

Emotional literacy is often defined as a combination of self-understanding, the ability to understand and manage emotions, understand social situations and make relationships (Weare, 2004).

Emotional intelligence was defined by Goleman (1995) as managing feelings so that they are expressed appropriately and effectively, enabling people to work together smoothly toward their common goals. According to Goleman, there are four major skills that make up emotional intelligence: Self-Awareness, Self-Management, Social Awareness and Relationship Management.

Mental health and well-being are concepts normally used in their widest sense. WHO (2014) defines mental health “as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community”.

Social-emotional learning is a widely-used concept and it is defined by Collaborative for Academic, Social, and Emotional Learning as:

“The process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions” (CASEL, 2016).

The most frequently used concepts involving *teacher competence* are:

Social-emotional competence can be defined simply as the outcome of social and emotional learning (Jennings, 2011). When used to refer to teachers’ social-emotional competence, it is worth adding that the concept is about the ability to manifest these competencies in school settings (Tom, 2012).

Relational competence: based on a systematic review of international empirical research on teacher competencies, a teacher who manifests relational competence is described as someone who “exercises student-supportive leadership to promote student activation and motivation to give the student the opportunity to practise self-management, taking differing student capabilities into account. This increases both academic learning output (e.g. higher motivation) and autonomy. A good relationship between teacher and student requires the teacher to show respect, tolerance, empathy and interest in students. Each student is characteristically viewed as having the potential to learn and to achieve this learning individually.” (Nordenbo et al., 2008, p. 84).

These definitions overlap in many different areas. Similarly to Weare (2004), we recommend proceeding pragmatically and eclectically with

these terminological differences. In this article, we mainly use the concept of “relational competence”, because it is used to designate the project on which this article’s empirical section is based.

Research on Relations in Teaching and Social-emotional Learning

Research has demonstrated that relations are an important aspect of good teaching. In his synthesis of meta-analyses, Hattie (2009) emphasises four variables in particular concerning the teacher’s relations with students: non-directivity, empathy, warmth, and encouragement of higher-order thinking. In his synthesis of research into good teaching, Helmke (2012) also includes teacher-student relations as one of the most important factors. He emphasises the teacher’s empathy in particular.

The research syntheses of Hattie (2009) and Helmke (2012) are based on studies of the quantifiable effects of students’ academic outcomes. Teacher-student relationships are also important from an ethical perspective. The purpose of teaching is to change the student for the purpose of some kind of betterment, making it a significant moral aspect of the teacher’s relations with students (Frelin, 2013). The influential work of van Manen (1991) launched the designation “tact” to describe the ethically-influenced relational competence of teachers.

Relations are important for teaching in general and they play a special role in certain approaches to teaching: Programmes aimed at promoting students’ social-emotional learning have a well-documented effect on factors such as students’ well-being and social-emotional competencies (Weare, 2004; Weare & Nind, 2011; Durlak et al., 2011), and the same is true of programmes dealing specifically with mindfulness-based approaches (Weare, 2013).

Research on Relational Teacher Competencies

What competencies do teachers need to promote good relations and social-emotional learning? A general principle of teaching is that the teacher must have a command of the skills that they want students to learn and that this command must be on at least the same level as the goal set for the students. This principle naturally applies not least to social and emotional competencies, mindfulness, or whatever concept one prefers. Weare also emphasises that “It is axiomatic within the community of mindfulness teachers that those who would teach mindfulness to others need to be experienced practitioners themselves and practice mindfulness on a regular basis” (Weare, 2013, p. 147). The intervention model of Jennings et al. (2013) – CARE (Cultivating Awareness and Resilience in Education) –

considers the teacher's social and emotional competencies a requirement for student outcomes. Also, a comprehensive meta-analysis of the effect of social and emotional learning emphasises the significance of the teacher's knowledge and competence (Durlak et al., 2011).

Research into teacher competencies generally emphasises the significance of relational and social-emotional competencies. A systematic review of research into identifying the teacher competencies with a quantifiable impact on student outcomes showed that relational competence is one of three fundamental teacher competencies (the other two being didactic and classroom-management competencies) (Nordenbo et al., 2008).

Studies of Dutch teachers (Klaasen, 2002) and Serbian teachers (Pantic & Wubbels, 2010) both showed that moral, social and relational competencies are important but that teachers' competencies in these areas are frequently inadequate.

Korthagen (2004) emphasises that teacher competencies are based on the teacher's beliefs, identity and mission as an educator. Therefore, there is a need for a holistic approach to teacher education that involves working on future teachers' professional identity and experience of their mission.

There is general agreement that the relational and social aspects of the learning process have been increasingly challenging for a number of years (Jennings, 2011). The general authority of teachers, previously associated with the teacher's position, has been weakened, and it has become more important for the individual teacher to earn students' respect. The number of disruptive students in the classroom has increased, and in many countries, special needs students – previously assigned to special needs classes – are now included in ordinary classes (Jennings, 2011).

At the same time that the social and relational aspects of the teaching process have become more difficult, the level of ambition has risen. The development of students' social and emotional competencies has become an object of focus (Goleman and Senge, 2014), and life skills and communication skills are considered to be some of the most important skills of the 21st century (Bellanca and Brandt, 2010).

Consequently, teachers are facing increasingly stringent requirements and rising expectations in social and emotional areas, and at the same time the conditions for fulfilling these are becoming more difficult. In this situation, it is crucial for teachers to be assisted in acquiring the best skills possible. The interest in emotional competence is traceable far back in history, whereas the interest in the school's contribution to promoting students' mental health and emotional competence is more recent and emerged particularly in the 1970s (Weare, 2004).

Interest in the teacher's personality arose in the early 1900s, and a number of research projects seeking to find the ideal teacher personality were conducted over several decades (Getzels & Jackson, 1963). Identifying the specific personality traits that characterise a good teacher proved impossible, however. Instead, the research showed that the personal qualities in the teaching process constituted the key element for students' outcomes (Ryans, 1960). This shifted the focus from the teacher's personality traits to the teacher's competencies. It was no longer a question of having the right personality, but of developing the right competencies. Recently, initial results were generated by systematic efforts to develop teachers' social, emotional and relational competencies through in-service training programmes (Weare, 2013; Jennings et al., 2013).

In the light of the fundamental and increasing importance of teachers' relational competencies, it is important to study whether pre-service teacher education could contribute to the student teachers' development of these competencies.

The Present Study

This article presents experiences described by student teachers who participated in the development project at VIA University College, Aarhus, Denmark. The project is being carried out with selected student teachers throughout their teacher education in the period from 2012 to 2016. The present article is based on the interviews in 2014 where 12 student teachers from the project classes ('project-group') were interviewed in the late spring, shortly after they had completed their internship and were halfway through their four-year teacher education program. 10 student teachers who attended the ordinary teacher education program ('mainstream-group' or 'control group') were interviewed as well. The purpose of the interviews was to investigate the students' preliminary experience with relational challenges in teaching practice and whether there were differences between students in the project group and the mainstream group.

Development of Relational Teacher Competencies

The development of teachers' relational competencies has been studied in both pre-service and in-service education. A number of courses have been developed in the field of in-service teacher education. The common feature of these courses is that they aim to develop teachers' habits of mind in an endeavour to make teachers better at reducing stress and developing supportive relations to students (Roeser et al., 2012). The CARE project has conducted courses and studied their effect in in-service education and has documented improvements in the well-being and efficacy of the par-

ticipating teachers (Jennings et al., 2013). A pilot study of a modified version of a mindfulness-based stress reduction (MBSR) course for teachers showed that the participants improved their observer-rated classroom organisation, among other outcomes (Flook et al., 2013).

In the context of this article, it is more relevant to focus on initial teacher education. In this respect, the most thorough studies of mindfulness-inspired approaches so far have been conducted at the Ontario Institute for Studies in Education, which studied the effects of an eight-week Mindfulness-Based Wellness Education (MBWE) as an elective course in the teacher education programme. The primary aim of the course was to prevent stress and burnout rather than enhance participants' teaching competencies. The results showed enhanced teaching self-efficacy, among other things, compared to a control group. Qualitative in-depth interviews with the participants after graduation showed that they perceived themselves to be better placed to be attentive in the classroom and grab the teachable moment (Poulin et al., 2008). Several participants shared the knowledge they learned with their students and observed that this was an effective response to the needs of their classes (Poulin, 2009). A qualitative study using a grounded theory approach showed that MBWE participants became better at nurturing themselves as teachers, and several developed a more holistic view of teaching (Soloway, 2011).

Context: Teacher Education in Denmark and the VIA Project

The education of teachers in Denmark takes place at seven university colleges, most of which have several different campuses. The programmes are of a concurrent type in which student teachers interchangeably work with theory and have periods of practicums throughout the programme. The programmes last four years and include pre-service teaching at schools for a total of six months, the organisation of which is decided by each college. The general outlines of the programmes are regulated by legislation: duration, content, rules regarding the institutions, management, etc. The theoretical part of the programme includes pedagogical subjects as well as school subjects.

The official goals of the teacher education programme in Denmark state that the teacher must be capable of facilitating development-supporting relations with particular emphasis on one's own position as teacher. The teacher education programme at VIA University College, Campus Aarhus, is carrying out a project from 2012 to 2016 in which a number of student teachers undergo an adapted version of the ordinary teacher education programme, in which particular emphasis is given to relational competencies. The project is being carried out in collaboration with

the Danish Society for the Promotion of Life Wisdom in Children. The aim of the project is to produce knowledge on how to develop student teachers' relational competencies in initial teacher education. No detailed goals of the project were specified. During the first two years of the project, which this article deals with, the student teachers participating in the project have typically taken part in one whole-day seminar per month involving theoretical discussions and practical exercises involving communication, supervision, mindfulness and body awareness. Wherever possible, student teachers taking part in the relational project have done their internships with mentor teachers who are particularly interested in relations with pupils as part of the instruction.

The project activities were developed on an ongoing basis in collaboration with the student teachers. Consequently, the project is a development project rather than a well-defined and pre-defined intervention programme. Even though the activities in the project were not totally pre-defined they were neither randomly selected. The organization of project phases year by year was guided by the overall principles that the intervention activities should involve the participants' experiences of their breath, their body, their consciousness, their heart/empathy, and their spontaneously creative mind (Jensen, 2014). These five so-called gates to conscious awareness can be accessed in various practices and the guided exercises in the project often included two or three gates in each exercise activity. For example, a meditation could begin with awareness of the breathing followed by guided awareness of various body parts and continue to awareness of the flowing stream of emotions or thoughts or awareness to the heart area and loving kindness to a specific person. The specific exercises and activities in the project were decided according to the alignment with the project aim and according to themes and questions brought up by the student teachers.

Method

Two classes were randomly selected by the institution management to participate in the project, in total 50 students. All of them were assigned to participate from the beginning of their teacher education. The majority of the participants were ethnic Danes in their 20s. Less than ten participants had other ethnic backgrounds.

We are two researchers from Aarhus University who have studied the project since its beginning in 2012 and will continue to do so until the conclusion of the student teachers' education in 2016, and including the first year of the graduate teachers' work in school, 2016–2017. As researchers, we are independent of the project institution. Throughout the

four project years, we will have engaged in dialogue with the teachers involved, but otherwise we will not be actively involved, either as initiators or as educators.

We have applied a phenomenological approach in the study of the student teachers' experiences and learning in the course, their education, and beyond into school practice (Petitmengin & Bitbol, 2009). Therefore we took part in course activities, and we joined exercises and conversations in classes to learn what the student teachers learned in practice. For a more systematic data collection, we interviewed the student teachers in 2014 and recently in 2016 about their experiences in groups of 3–5. We will conduct similar interviews in 2017.

Procedure

The interview subjects volunteered to take part in interviews after being encouraged to do so by their teachers. We assume that the student teachers from the relational project who volunteered take a relatively positive view of the project. Therefore we may learn whether the relational competence project makes a difference considering the positively attuned student teachers' experiences of students in internship in school, as well as their experiences of themselves as becoming teachers and of their opportunities to transform challenging relational situations when they are in the teacher's role.

Instruments

The interviews were phenomenologically based, qualitative, and in-depth asking for detailed descriptions of significant incidents as they were experienced by the student teachers during their recent pre-service training (Petitmengin & Bitbol, 2009). In order to recall such lived experiences, the interviews were initiated by a guided body scan followed up by an invitation to recall an incident with good contact to a pupil ('a good relation'), and an incident in which they experienced to be a good teacher ('teacher identity'). After the guidance, the interviewees had 10 minutes to individually depict the incidents as experienced. In the group each member then described his/her incident and its significance, and in group they all discussed the special and the common features of their described experiences. The interviewer guided their reflections to focus on shared themes and explored how to understand and explain the experiences. The interviewer asked questions attempting to make the interviewees wonder and study together how they 'did' in order to become mindfully aware of 'the good opportunities' for relation-building in the complex classroom practice.

Analysis

The analysis was a meaning categorization (Kvale & Brinkmann 2015) conducted as an iterative process looking for shared themes as well as variations in and across the two groups. The purpose of the analysis in this article was to study whether the relational project had resulted in a situation where the student teachers in the project-group experienced their pre-service training in school and the teacher's role differently compared to student teachers in mainstream-group.

A recurring theme concerning the student teachers' relationship to the teacher's role emerged in the initial analysis phases as a key difference between participants in the project-group and the mainstream-group respectively.

Results

The results of this analysis focus on differences between participants in the project-group and the mainstream-group because these differences illuminate effects of the relational competence project. Some differences are discreet variations in the large palette of shared experiences and orientations described by the student teachers. Approximately 95% of their teacher education is shared as the relational competence-project is only a small part of the participants' entire education. The analysis of differences is compared to some of the shared experiences across groups in the end of this part of the article.

Experiences of Student Teachers in the Project-group

The main results of the interviews were that student teachers who participated in the relational project-group are aware of the possibility of analytically distancing themselves from the teacher's role. Student teachers from the relational project consider the teacher's role as something that can be entered into and withdrawn from. Even if someone *is* a teacher (or in the process of becoming one), it is possible to withdraw from the role and be on an equal footing with the students. Being in touch with oneself makes it possible to take a more distanced and reflective approach to the teacher's role, which can make it easier to establish close contact with the students. The student teachers in the relational project experience being able to be in the role wholeheartedly, but at the same time do not fully identify with it. They can experiment with the role, they can show pupils that they are ordinary human beings, while being a teacher at the same time, and that they can occasionally drop out of the role altogether. The following presents the results in more detail.

Methods for Restoring Calm

Several student teachers described how the relational project has truly helped them to establish such a sort of contact with the students that they can restore calm in the classroom without having to enter into the traditional authoritarian role:

It's like a magic wand. We used it in every lesson. It's a good tool for restoring calm. Even if the students have just returned from a break, and everyone's climbing the walls, this tool enables you to calm them down.

The student teachers also explained how mentor teacher shouted and yelled at students until she went red in the face. The students showed little respect for this tactic. Instead, the student teachers found that beginning the lesson with a concentration exercise, lasting 2–5 minutes, would restore calm. The mentor teacher usually spent ten minutes scolding them, ruining the rest of the lesson in the process. The student teachers explained:

Instead of the example of the teacher who stood there shouting – regardless of whether they needed to gear up or down, she would shout at them – it was satisfying to see how other techniques work than those you bring with you from back in your school days. In other words, throwing chalk at students isn't the only way to make them sit still. But there are other methods that work, too, and actually spread a much better atmosphere and feeling of security in the classroom.

Other student teachers described how they would use movement exercises to liven up a class when it was low on energy. And another student teacher described how he felt it was easy to create good relations.

It came very automatically and in relation to the fact that we had these courses here (*in the teacher education programme*). It seems to be well-assimilated now, in my opinion.

Competence to Enter Into and Drop Out of the Teacher's Role

One student teacher, who did his internship in physical education, described an episode involving a student who was being noisy and disruptive. The student teacher described how he was very annoyed by this and “was very close to going through the roof”. However, he then began to think about how it could have been him when he was a student. This defused the student teacher's irritation, and he talked with the student in the equipment room afterwards.

I talked to him and put one hand on his shoulder and said: “Quite annoying that things didn't work out, wasn't it?” Then I smiled a little and

said: "Couldn't we have made a better job of it?" (*handling disruptive behaviour*) "Yes, we could have," the boy answered.

When they returned to the class, they joked about it, and the student teacher experienced how he had had excellent contact with him, and the fact that this was because he had made contact with the student in a "non-teacher" manner.

Another student teacher described how she and her group had been assigned to a decidedly "dull" class for their internship. There was "absolutely no life", regardless of what they did. "We did cartwheels" but nothing seemed to help. But then one day "something happened". The class was outside playing a game:

And then I had to compete in a foot-race against one of the students and I very much wanted to win. I ended up falling down, and as I lay there on the ground, I thought (...) we were having so much fun. Things turned around from that moment on. They were killing themselves laughing once they knew I was all right.

Here, too, is an episode where the fact that she – literally – falls out of the teacher's role makes a decisive difference. It was not just the actual mood that changed, but the academic teaching also improved after the episode. "The students became very academically minded and wanted to participate."

A student teacher stated that, in his opinion, you have established good contact when "you base your conversation on things other than school issues" and when you are "on an equal footing" with students. Other student teachers in the group of interviewees continued, saying that you cannot be afraid to make a mistake and you have to be willing to give something of yourself. They also said that you have to want something other than academic results from students. And you have to be open to episodes where something amusing and unexpected happens all of a sudden. A student teacher said that one of her best experiences during her pre-service training was when she began talking to a few students in the canteen "about computer games, clubs and all sorts of things". They actually started discussing things in detail and the students stuck around even though school was actually over.

One aspect of this contact, which is not only professional, also involves being open to students. A student teacher described how she had been contacted by a student who said:

"Hey Randi, come over here!" and motioned for me to come over to him. I remember thinking that this must be what it feels like to be a

teacher, when a child comes up and says, “Hi, you’re just the person I need right now, please come with me.” I felt quite proud that I was the person he wanted to talk to... It actually felt good to know that I was just the one he wanted to talk to.

It turned out that the boy had some personal problems that he wanted to discuss with the student teacher.

According to another student teacher, being able to enter into and drop out of the teacher’s role in relation to the students is crucial, and she described an exercise where she took part on an equal footing with the students:

There I somehow dropped out of the teacher’s role. But, of course, if I am supposed to instruct them in something they haven’t properly understood, I enter into it again. But otherwise I drop out of it and put myself on an equal footing with the students.

This student teacher seems to have a rather traditional and strict version of teacher role in mind when talking about “teacher’s role”.

Along the same lines, another student teacher said that this ability to enter into and drop out of the teacher’s role had been developed by the relational course:

I think perhaps that this relational course has taught us how using this option is OK. In other words, that you say: “I am just me, and this is what I have to offer”. That you must be professional at all times, but that you don’t always have to sit there looking up how you should react in the answer book.

The quote shows that the student teacher is aware of the fact that it is never possible to completely drop out of the teacher’s role when they are in school with the students, but that it is possible to distance oneself from the traditional version and that you can indicate to the students that although you are a teacher, you are also just yourself, too.

Being able to enter into and drop out of the teacher’s role is also a matter of being able to strike a suitable balance between the professional and the personal. Another student teacher said this about the balance:

It (*the relational project*) has heightened my awareness of how I can enter into the teacher’s role. And this largely relates to the act of striking a balance between the professional and the personal. While being true to yourself at the same time. And not compromising your own principles and values, things like that.

And a little later:

By opening up to them, I feel that they usually open up to me, too. And I have had lots of positive experiences of this happening.

Experimenting with the Teacher's Role

Several student teachers in the project-group used the internship to consciously experiment with the teaching role. A student teacher said:

One of my goals with the internship was to experiment with my teacher's role. Because I'm very rigid and authoritarian, and because I feel that whenever I enter a room, I own it (...) I agreed with my mentor teacher that I would go in and take charge of a few lessons that were completely chaotic, where I didn't have a plan and I couldn't ask anyone for help. That gave me the opportunity to actually see how I coped with the situation. And it went fine, of course!

Very few student teachers, however, perform such radical experiments with the teacher's role that they dare go from "rigid and authoritarian" to "completely chaotic".

The student teachers experience the teacher's role as intimidating and full of contradictions – "you have to be both an authority and a friend" – but that you can take on the role nonetheless. A student teacher explained how two things helped her:

First of all, I always have to take a deep breath if I am in the process of leaving the situation. This also includes being aware of the brevity of the situation you are in ... it's not you... it's the situation you are involved in that is difficult for you to handle. And there is a remedy for this.

She continued:

In any case, I feel a sort of calmness by just being able to say: "It's not me who is in dire straits. It's not the students either. It's the situation we are creating together that is in dire straits." Therefore, we can try to do something to make it better. We have to change things to make everything all right again.

Being in Touch with Oneself: The "60-40" Principle

One of the main points of the relational course has been that you have to be in touch with yourself in order to be able to be in touch with the students. Several student teachers have embraced this point. One described how he was standing at the blackboard reviewing some difficult material. He sensed that the students did not really understand what he was talking about, and so he tried different ways of explaining it but without success.

Eventually he became rather impatient and was just about to “fly off the handle a little, but I restrained myself.” He used the “60–40” theory about using most of one’s awareness for staying in touch with oneself:

And then I thought: “Now I have to take a deep breath, and another one, and start again.” I can really remember that it had a profound effect on me, the deep breathing and then trying to start again. Thinking of a different way to explain it.

Another student teacher said:

In my opinion, I have wholeheartedly embraced this 60–40 balance – being 60% grounded in yourself – at any rate. The fact that, in order for me to be able to give of myself, I have to be firmly grounded in myself and know exactly what I’m bringing with me and have to offer, and what I can give today, right now.

According to this student teacher some peaceful contemplation is probably best for establishing contact with oneself (the 60%), but also with students (the 40%).

This 60–40 was mentioned earlier. Knowing that you have just enough time to breathe deeply and think about how they (the students) are doing right now.

For instance, this could lead to a situation where the student teacher become more aware of the slightly more reticent students and make a point of encouraging them to take part.

Being Able to Accept Your Feelings and Let Go of Them

Being in touch with yourself requires you not only to be aware of what you are thinking and feeling, but also to not get mired down by your emotions. A student teacher described how he frequently became nervous if he had to stand up in front of a group of people. This was often a self-perpetuating problem, because he would say to himself, “Oh, no. Now I’m going to get nervous.” To him, the relational project has meant:

(...) that I’ve have become better at saying: “Oh, no, now I’m a little nervous” and then saying: “That doesn’t matter”. In other words, getting over my nervousness and then saying: “Yes, it exists and that’s OK. Fine. Now something else in this situation is more important.” I think that this has helped me. Consequently, it is easier to be open and talk to other people than when you are just standing there having a fit of anxiety.

Another student teacher followed up on this:

The act of articulating some things can actually help you to relax completely. I think that this was partly responsible for the feeling of having succeeded that I had after some of the German lessons.

A third student teacher talked about the problems she has with being short-tempered:

"Hey! I am starting to lose my temper. What should I do now?" This enables you to know what you are feeling right now. (...) Being able to accept that now you are entering this frame of mind. And then just being in it (...) Just accepting it.

Student Teachers from the Mainstream-group

Whereas student teachers from the relational group take an experimental and somewhat distancing approach to the teacher's role, student teachers from the control group appear more inclined to think that it is important to precisely tailor a specific version of the teacher's role to one's own personality.

A student teacher described how fortunate she was to experience how the good combination of having good relations with students and earning their respect came to her spontaneously.

But it is hard to explain where it comes from (*the combination of being able to relate and earning their respect*). I just think I have it in me.

Interviewer: So it just comes naturally to you? (...)

Yes, I think so.

Other student teachers have seen how a little experience made them more aware of their personal preferences in terms of the teacher's role. A student teacher explained how she realised that complete calm in the classroom is important to her whenever she has to teach:

Some people have the ability to stand there teaching, even in the midst of lots of noise. But I can't teach if it's noisy. It stresses my train of thought. Quietness is imperative.

Student teachers in the control group apparently think that it is possible to gradually shape one's own teacher's role after having amassed sufficient experience. Another student teacher said:

Then suddenly, at some point, perhaps when you have 10 years' experience, you will have created a teacher you are satisfied with. Where you

actually feel that you are in such harmony with the role that you can handle anything that could arise in any situation.

Independent of this student teacher, another interviewee also mentioned this ten-year perspective:

I don't think I will be a good teacher until ten years from now, in other words when I truly feel that I have everything fairly well under control.

This requires learning more about oneself through the process of amassing this experience and realising the factors which influence how one is as a teacher:

The more experience you get, the better. The further you proceed in this training, the more you learn from it. You can have a lot of ideas about how you actually are or which type of teacher you want to become, including what it is like when you are actually in the situation.

A group of student teachers say that it is a matter of being authentic in the teacher's role, i.e. shaping a teacher's role so that you feel that you are being true to yourself. One of them said that everyone has his/her "own unique personality".

As one gradually shapes one's own teacher's role, one becomes calmer and more self-assured, knowing that what one does actually works. Another student teacher followed up on this:

You become calmer, you feel a little more self-confident and have faith in the fact that what you do actually works. You have the experience.

By contrast with the student teachers from the relational project, some of the student teachers from the control group described episodes in which they acted somewhat inappropriately emotionally:

But often when something intense happens, it is easy for you to lose your head and your ability to maintain calm.

Common Features of the Two Groups of Student Teachers

The two groups shared many experiences and perceptions, which is not surprising given that they are taking part in a teacher education programme where most of the content is identical for the two groups. Both groups of student teachers wanted to make a difference through their teaching, and they mentioned good contact with students and becoming more relaxed over time as important experiences.

Accomplishing Something

Student teachers want to experience doing something that makes a difference. They experience this with the greatest clarity when they can help weak students. Several student teachers describe processes in which they have assisted students who were academically perhaps a little weak, but whose self-confidence was even weaker. This gives them the feeling that they are on the way to becoming a teacher when one sees how such students can be helped to improve their academic results and gain more self-confidence and how students who are mired down can be helped to move forward. The feeling of accomplishing something has a calming effect. A student teacher from the mainstream-group said:

And I felt that I could help them without feeling nervous about all sorts of things at the same time. And this also included having the feeling of making a difference. (...) It actually feels incredibly nice to know that you can help other people.

This sense of accomplishment can also come from genuinely feeling that the class is academically involved in what you are teaching. A student teacher from the project-group happily related how he got a class to realise that water is not an element.

I feel pleased to tell students that they can also investigate how the world actually works.

A few student teachers strongly identify with their school subjects and feel uplifted by it. A participant in the project-group said:

I become a happier person just by being in a physics laboratory.(...) The subject fills me with happiness and enthusiasm, and I'm particularly enthusiastic when I can get the students on board with the subject matter as well.

Close Contact with Students

Several student teachers spoke warmly about occasionally being able to experience a special closeness to a student and momentarily excluding the rest of the class from their awareness. A participant in the mainstream-group said:

About taking the time to see the individual. And the fact that the two of us have been sitting and talking, perhaps without everyone else having to listen in. That maybe this is where you can create a feeling of "You are all right, damn it".

Achieving close contact is experienced as a success also by student teachers from the mainstream-group:

When she opened up to me, I felt I had accomplished something.

And if you also experience being able to help the student well on their way academically, you feel good as a teacher, too. Some student teachers have also experienced being able to help students with personal issues, such as helping a student articulate feelings that are difficult for them to express.

Student teachers experience being actually capable of accomplishing something by interacting with students on their own terms and ignoring an incorrect perception or label which a student may have had to endure previously. A great service can be done for students who consider themselves poor at Mathematics by interacting with them as if they are good at mathematics. This is a rewarding experience for the student teacher too.

Becoming More Relaxed and Being Able to Improvise

Student teachers have already experienced how a little experience makes them calmer, more relaxed, and better able to improvise and go with the flow in terms of what is happening in the classroom – rather than just sticking to their plan. One student teacher from the mainstream-group said that she had become better at “letting things rip and seeing where it leads”.

It felt good to have an inner harmony which makes you feel like daring to do something you hadn't considered.

Both groups of student teachers have experienced how informal humorous relations with students make teaching easier. A participant in the mainstream-group said:

My teaching was greatly helped by the fact that the students felt that it was all right for them to poke fun at me.

The student teachers have experienced how they have been less anxious about making mistakes. They feel energised and feel that they are better teachers. Instead of nervously clinging to their pre-planned lessons, they are better at adapting their teaching to the specific students in the class. Also realising that what works in one class will not always work in another.

Student teachers are interested in striking a balance between their professional, personal and private spheres. Several student teachers touched on the fact that it is fine if the students get a sense of the individual behind the teacher. One is more than a teacher.

Discussion

In the present study, we have examined the experiences of student teachers in a project focusing on relational competencies compared to student teachers following the ordinary teacher education programme. The student teachers in the project-group articulated that they were not identical with the teacher's role, not even when they could form a personal teaching practice. They considered it valuable to be able to drop out of the teacher's role or put it aside and say, "I am who I am". In some situations, it put them better in touch with the students. The student teachers in the project-group viewed reflection and experiments, together with experience, as the way to become a better teacher.

Student teachers from the mainstream-group envisaged themselves as an individual with specific qualities. Correspondingly, they expected there to be one specific teacher's role for this unique personality, and that it would take time and lots of experience to create this role. They imagined that when the role was finally formed, they would feel comfortable in it and be an effective teacher. The student teachers from the mainstream-group apparently considered the amassing of lots of practical experience to be the golden path to becoming a better teacher and developing a personalised teacher's role.

From this, can we conclude that student teachers have actually acquired relational competencies to a greater extent than the control group? No, it is too early to reach this conclusion. Based on this study, we cannot draw any conclusions about the extent to which the VIA project has resulted in student teachers acquiring the relational competence as described in the previously mentioned definition by Nordenbo et al (2008). However, the reflective, experimenting approach to the teacher's role and their approach to experiences which the student teachers are in the process of assimilating is probably an important step towards relational competence.

The VIA Project Compared to Other Approaches

Most of the targeted attempts to develop student teachers' personal and relational skills in other programmes have been carried out on the basis of mindfulness approaches, usually as a modified version of the MBSR course. The significant strengths of these projects are that their effects must be considered well-documented by now and that they have the nature of a precisely defined intervention. The inherent weakness of these projects is that they risk being only a small (eight-week) part of a three or four-year teacher education programme, and that the competence associated with this cannot be integrated into general teaching competencies.

Compared to courses inspired by MBSR, a strength of the VIA project is that the relational project is integrated into the rest of the teacher education programme because it is developed on an ongoing basis using input received from student teachers and lecturers. The project is long-term, as it runs through all four years of the teacher education programme. Another crucial quality of the VIA project is that most of the student teachers in the relational project do their internships under teachers who have incorporated relational aspects in particular into their teaching.

Since the 1980s, reflection has been considered an important aspect of teacher competence (Schön, 1983; Hatton & Smith, 1995), but it is often difficult for student teachers to learn to be reflective, and many student teachers are critical of the teacher education programme's reflection ideal (Soloway, 2011, p. 113). The preliminary results of the VIA project indicate that the deliberate efforts involving relations, mindfulness, communication and awareness make it easier for student teachers to be reflective.

Strengths and Weaknesses of this Study

The study and how it is designed have several strengths: The study is randomised in the sense that the participants were randomly selected by the institution. The study design is longitudinal in that we follow the students throughout their four-year teacher education programme and during their first year as qualified teachers. In addition, we have endeavoured to boost the credibility of the study by also interviewing a group of students following the mainstream teacher education.

The phenomenological approach in interviews and analysis has given access to detailed descriptions of the students' experiences (in drawings, body expressions and verbal language). The data has described experiences and multimodal kinds of meaning as experienced and articulated by the individual student teacher. In the group reflections, we gained access to their use and the negotiation of meanings of the language and theories they have learned throughout the project as part of their teacher education. This rich information has been analysed by two researchers who were looking for themes emerging in the data. We compared our readings and critically examined the criteria for themes in the interview material. The analytical results are therefore strongly founded in the data.

The study applied qualitative methods which are relevant in order to illuminate experiences in social activities such as education. However, other research paradigms might criticize the present study for not using objectifying and quantifiable data collecting methods and analysis.

Obviously the study is also limited by the fact that the student teachers have yet to complete the whole process. As the study continues further results will be reported in future articles.

Conclusion

Halfway through a four-year process with particular emphasis on relational competencies, the student teachers participating in the project are taking a more reflective and experimental approach to the teacher's role and they approach personally experiences as indicators for professional orientation and action. Although this may not be a fully developed relational competence, it is presumably a significant step along the way.

References

- Bellanca, J., Brandt, R. (2010) *21st Century Skills*. Bloomington: Solution Tree Press.
- CASEL (2016) What is Social and Emotional Learning? <http://www.casel.org/social-and-emotional-learning/> (10.6.2016).
- Durlak, J. A., Dymnicki, A. B., Taylor, R. D., Weisberg, R. P., Schellinger, K. B. (2011) The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development* 82 (1), pp. 405–432.
- Flook, L., Goldberg, S. B., Pinger, L., Bonus, K., Davidson, R. J. (2013) Mindfulness for teachers: a pilot study to assess effects on stress, burnout, and teaching efficacy. *Mind, Brain, and Education* 7 (3), pp. 182–195.
- Frelin, A. (2013) *Exploring relational professionalism in school*. Rotterdam: Sense Publishers.
- Getzels, J. W., Jackson, P. W. (1963) The Teacher's Personality and Characteristics. In Gage, N. L. (ed.). *Handbook of Research on Teaching*. Chicago: Rand McNally Company, pp. 506–582.
- Goleman, D. (1995) *Emotional Intelligence: Why it matters more than IQ*. London: Bloomsbury
- Goleman, D., Senge, P. (2014) *The triple focus. A new approach to education*. Florence, MA: More Than Sound.
- Hattie, J. (2009) *Visible Learning. A synthesis of over 800 meta-analyses relating to achievement*. London: Routledge.
- Hatton, N., Smith, D. (1995) Reflection in teacher education: towards definition and implementation. *Teaching and Teacher Education* 11 (1), pp. 33–49.
- Helmke, A. (2012) *Unterrichtsqualität und Lehrerprofessionalität. Diagnose, Evaluation und Verbesserung des Unterrichts*. Seelze-Velber: Klett Kalmeyer.
- Jennings, P. A. (2011) Promoting Teachers' Social and Emotional Competencies to Support Performance and Reduce Burnout. In Cohan, A., Honigsfeld, A. (eds.). *Breaking the Mold of Preservice and Inservice*

- Teacher Education: Innovative and Successful Practices for the Twenty-first Century*. Lanham., Maryland: Rowman Littlefield Publishers, pp. 133–143.
- Jennings, P. A., Frank, J. L., Snowberg, K. E., Coccia, M. A., Greenberg, M. T. (2013) Improving classroom learning environments by cultivating awareness and resilience in education (CARE): Results of a randomized controlled trial. *School Psychology Quarterly* 28 (4), pp. 374–390.
- Jensen, H. (2014) *Nærvær og empati i skolen*. Copenhagen: Akademisk Forlag.
- Klaasen, C. A. (2002) Teacher pedagogical competence and sensibility. *Teaching and Teacher Education* 18, pp. 151–158.
- Korthagen, F. (2004) In search of the essence of a good teacher: towards a more holistic approach in teacher education. *Teaching and Teacher Education* 20, pp. 77–97.
- Kvale, S., Brinkmann, S. (2015) *InterViews: learning the craft of qualitative research interviewing*. Third Edition. Los Angeles: Sage.
- Nordenbo, S.E., Søgaard Larsen, M., Tiftikci, N., Wendt, R.E., S. Østergaard (2008) *Lærerkompetencer og elevers læring i førskole og skole*. Copenhagen: Dansk Clearinghouse for Uddannelsesforskning, DPU, University of Aarhus.
- Pantic, N., Wubbels, T. (2010) Teacher competence as a basis for teacher education. Views of Serbian teachers and teacher educators. *Teaching and Teacher Education* 26, pp. 694–703.
- Petitmengin, C., Bitbol, M. (2009) The Validity of First-Person Descriptions as Authenticity and Coherence. *Journal of Consciousness Studies* 16 (10–12), pp. 363–404.
- Poulin, P. A. (2009) *Mindfulness-based wellness education: a longitudinal evaluation with students in initial teacher education*. PhD thesis. Toronto: Ontario Institute for Studies in Education, University of Toronto.
- Poulin, P.A., Mackenzie, C. S., Sooway, G. Karayolas, E. (2008) Mindfulness training as an evidence-based approach to reducing stress and promoting well-being among human services professionals. *International Journal of Health Promotion Education* 46 (2) pp. 35–43.
- Roeser, R. W., Skinner, E., Beers, J., Jennings, P. A. (2012) Mindfulness training and teachers' professional development: an emerging area of research and practice. *Child Development* 6 (2), pp. 167–173.
- Ryans, D. G. (1960) *Characteristics of Teachers: Their description, comparison and appraisal: a research study*. Washington D.C.: American Council on Education.

- Schön, D. A. (1983) *The reflective practitioner. How professionals think in action*. New York: Basic Books.
- Soloway, G. B. (2011) *Preparing Teacher Candidates for the Present: Exploring the Praxis of Mindfulness Training in Teacher Education*. PhD thesis. University of Toronto.
- Tom, K. M. (2012) *Measurement of teachers' social-emotional competence: Development of the social-emotional competence teacher rating scale*. PhD thesis. Eugene: University of Oregon.
- van Manen, M. (1991) *The tact of teaching: the meaning of pedagogical thoughtfulness*. London, Ontario: Althouse Press.
- Weare, K. (2004) *Developing the emotionally literate school*. Los Angeles: Sage.
- Weare, K. (2013) Developing mindfulness with children and young people: a review of the evidence and policy context. *Journal of Children's Services* 8 (2), pp. 141–153.
- Weare, K., Nind, M. (2011) Mental health promotion and problem prevention in schools: what does the evidence say? *Health Promotion International* 26 (1), pp. 26–69.
- WHO (2014) http://www.who.int/features/factfiles/mental_health/en/ (18.8.2015).

Comparison of Interpersonal Communication and Interpersonal Relationship Between Early Years Educators and Children in Selected English and Slovenian Nurseries

Jana Hafner and Maja Krajnc

Being an early years educator¹ is a responsible job where daily the individual shows the ability to understand interpersonal relationships, apply effective methods of communication in these relationships and develop their social skills. As we, at Srednja vzgojiteljska šola in gimnazija Ljubljana, wished to develop these competencies during formal education at the secondary level, we formulated a project for students of the preschool education program. The main aims of the project are to promote broad linguistic diversity and intercultural awareness and thus contribute to the acquisition of key competences needed for the students' successful life and career (communication skills, interpersonal and social skills, cultural awareness and expression). We selected 16 students of the 3rd year preschool education program to add practical training in English nurseries² to their existing experiences with practical training in Slovenian nurseries.

Although we recognize that this represents a small group of students in the formal education process in addition to having limited experience with working in nurseries, we therefore cannot generalize their findings. However we think that their unladed view can contribute to the relevant findings on interpersonal communication and interpersonal relationship between early years educators and children in the nurseries regarding the similarities and differences between the Slovenian and English system of early childhood ed-

1 Throughout the paper we will use the term »early years educator« as a uniform term to describe the professional staff that work with children in nurseries.

2 Throughout the paper we will use the term »nursery« as a uniform term to describe the early childhood education and care settings in England and Slovenia. We are aware of different types of early childhood education and care settings in England and Slovenia and the differences between the two systems, the term is used to ease the reading process.

ucation and care. In addition to the students' experiences, we will outline the importance of communication in the preschool period and also present the two national documents that regulate the institutionalized early childhood education and care in Slovenia and in England.

The Definition and Classification of Communication

There is no single, universally accepted usage of the word »communication«. Definitions differ according to the theorist's view of communication. In the scientific study of communication, there are two general and basic views about communication: a technical view and a meaning-centered view (Steinberg, 2007). From a technical point of view, communication can be defined very simply as *sending and receiving messages*, or *the transmission of messages from one person to another*. From the meaning-centered view, communication can be defined as *a dynamic process of exchanging meaningful messages*. For the purpose of this article, we used Adler's and Rodman's (2003) definition of communication as the term for the process of human beings responding to the symbolic behavior of other persons, where the term *symbol* is used to represent things, processes, idea, events etc.

Communication can be divided into several types according to different criteria: according to the used signs, channel, content, goals, etc. Below, we look at some of the most common classifications of communication (Ucman, 2003, in Larikov, 2015).

Communication can be *direct* or *indirect*. Direct communication is when there is no intermediary between the sender and the recipients of the message. This is a conversation between two or more people who are in contact with each other. Direct communication is generally most effective for immediate feedback and efficiency is affected primarily by the psychological factors of participants to communicate directly. In indirect communication there is a communication channel, an intermediary, between the sender and the recipient of the communication channel of communication. It is less effective than a direct way, since immediate feedback is generally not possible and the efficiency can also be reduced by disruptions in the communication channel (Ucman, 2005; in Larikov, 2015).

Communication can be analyzed from *a contextual* or *a relational* point of view. The contextual aspect deals with the content of the message, while relational aspect determines how to understand the relationship between the sender and the recipient (ibid.).

Communication can be *conscious* or *unconscious*. Mostly, we communicate consciously and with a particular intent, but many messages are transmitted unconsciously. We are fully aware of only some of the mo-

tives that determine our behavior, some motives we recognize when we are alerted to them, but of some we are not aware of and do not recognize them, although they were pointed out to us. We communicate unconsciously when we use certain gestures, expressions that we have little or no control over, as well as when we speak (Larikov, 2015).

Communication can be *unidirectional* or *bidirectional*. One-way communication means that the impact takes place in one direction only, from the sender to the recipient of the message, but with no feedback. In this case, this cannot be defined as a dialogue, because the recipient does not affect the sender. Two-way communication means that the recipient forwards feedback to the sender. Both the sender and recipient respond, they influence each other, they are complementary and coordinated. In two-way communication we forward the messages, we accept and explain misunderstandings, so this type of communication means higher efficiency in solving misunderstandings compared to one-way communication (Larikov, 2015).

We will now explain the last, but perhaps most common classification of communication, but in a context of early childhood education and care – that is, of *verbal* and *non-verbal* communication.

When we think of communication, we tend to think about spoken messages. However the way in which we understand messages depends on more than words. The tone of voice, gestures, the use of space and touch, facial expressions, accent and the clothes of the communicator all influence our understanding. Verbal communication refers to the spoken or written signs called words which make up a particular language, such as Slovenian or English. People who speak the same language understand one another because they usually ascribe similar meanings to words (Steinberg, 2007).

Education and interactions in the nurseries depend on verbal communication to a large degree, with the use of speech while describing, explaining or encouraging child's understanding of activities. Children develop their speaking competency with listening, asking, the formation of assumptions and claims and whilst interpreting early years educator's answers (Larikov, 2015). A. Browns (1996; in Larikov, 2015) connects the successfulness of the early years educator to encouraging the speaking development of children as being dependent on early years educator's:

- a) understanding of value of the conversation in group (discusses certain contents and problems together with children, they allow children to explain their opinions and expand their knowledge);

- b) standpoint towards verbal communication (if an early years educator shows an interest for what children have to say, then children can express and speak more relaxed);
- c) organization of time for conversation (children need opportunities for testing different manners of speaking in different situations, with different partners – with this, they expand also their own vocabulary and they are assimilating grammar);
- d) own speaking expression (an early years educator represents an important adult person in a child's life, therefore with their manner of speaking influences children's communication);
- e) knowledge of strategies and activities that encourage listening and speaking in children (they are encouraging speaking development with planning and including all sorts of situations, that make talking and listening of peers possible for children).

Nonverbal communication refers to all human communication that does not use written or spoken signs, such as smile or a nod of the head (Steinberg, 2007). Essentially, a nonverbal message functions in one of five ways: it reinforces or accents the verbal message when it adds to its meaning, it complements the verbal message when it conveys the same meaning, it can contradict the verbal message, it can replace the verbal message or it can function to regulate the flow of verbal interaction. Early years educators can use their face, eyes, posture, gesture, voice, touch as well as clothing, distance, or even physical environment to communicate with children in their group (*ibid.*).

Each of these types of communication can, of course, be intentional (knowingly started and directed) or spontaneous (as a result of a sudden impulse or inclination and without premeditation or external stimulus) (Oxford English Dictionary, 2016).

Kurikulim za vrtce and Framework for Early Yearly Foundation Stage (EYFS)

In order to compare the two national documents, i.e. Slovenian Kurikulim za vrtce (1999) and English Framework for Early Years Foundation Stage (2014), which regulates the center-based early childhood education and care in Slovenia and in England, it is necessary to outline the systems of early childhood education and care in both countries.

A Brief Review of Early Childhood Education and Care Systems in Slovenia and England

There are similarities and differences between the two countries on the *organizational level* of early childhood education and care systems. Both

countries have early childhood education and care regulated at the national level (Kameraman, 2000), but the systems within differ. In Slovenia, we have a unitary system of early childhood education and care, which means it is organised in a single phase and delivered in nurseries catering for the whole age range (children from 11 months until the start of compulsory primary education - the year when the child reaches 6 years) (European Commission/EACEA/Eurydice/Eurostat, 2014). The vast majority (nearly 90% in year 2015/2016) of nurseries in Slovenia are public nurseries (Predšolska vzgoja in ..., 2016). Education and care are intertwined in the programs which are carried out in Slovene nurseries. In Slovenia, children have a statutory right to a place in a nursery after the end of maternity leave. Jurisdictionally Slovene nurseries all fall under the Ministry of Education, Science and Sport. Public nurseries receive their financial resources from the local community (the founder of public nurseries), as well as from parental payments that can be subsidized, but only a minority is exempt from payment (Devjak et al., 2012; Lipužič, 2002; Lindeboom and Buiskool, 2013; Vidmar and Taštanoska, 2014).

In England the present early childhood education and care system has evolved from two separated systems, one being a system where the primary focus of early childhood was on education and the other being a system where the primary focus of early childhood was on care (Early childhood education ..., 2000). In the 1990's that slowly started to change into an integrated system of education and care where now the Department for Education has primary responsibility for early childhood education and care in England (ibid.).

Early childhood education and care in England takes place in a variety of settings in the state sector (state nursery schools, nursery classes and reception classes within primary schools) and in voluntary or private sector (voluntary pre-schools, playgroups, privately run nurseries or child-minders) (Education system in ..., 2012). Part of the early childhood education and care in England is free of charge for children aged 3 and 4 years. In recent months, The Childcare Act 2016 was passed which gives the right to free childcare to the extent of 38 weeks at 30 hours per week for working parents (The Childcare Act, 2016). The remaining is up to the parents to decide how, where and if their child will be enrolled in a state or a private early childhood education and care setting.

In Slovenia, the area of early childhood education and care is covered by two mayor laws, one being *Zakon o organizaciji in financiranju vzgoje in izobraževanja* (1996) and the other one *Zakon o vrtcih* (1996). In England, early childhood education and care area is more broadly covered by different acts such as *The Childcare Act* (2006, with integration

in 2016), The Apprenticeships, Skills, Children and Learning Act (2009), The Children and Families Act (2014) and Early years (under 5s) foundation stage framework (EYFS) (2014). Both systems of early childhood education and care have a binding national document that represents and sets the basis for the work of early childhood educators in nurseries.

Kurikulum za vrtce

In Slovenian system, Kurikulum za vrtce (1999) represents the professional basis for carrying out the programs of early childhood education and care and was adopted in 1999. It is designed to be wider than just an educational program as its content covers fundamental principles and objectives of early childhood education and care and is written with the understanding that the child perceives and understand the world as being wholesome, that they develop and learn through an active connection with their social and physical environment and that they develops their own sociability and individuality through interactions with peers and adults in a nursery (ibid.).

The content of Kurikulum za vrtce is divided into four main parts. The first and the second part define the objectives of Kurikulum za vrtce and the principles behind these objectives. All of the objectives and the 16 principles are consistent with the objectives and principles of early childhood education and care in Slovenia, as is reflected in legislative documents.

The third part includes a description of the characteristics of children in pre-primary stage such as knowledge of the child's development, the relational aspect of early childhood education and care, the description of space as an element of the curriculum and the description of co-operation with parents. The fourth part of Kurikulum za vrtce represents six prime areas of activity (movement, language, art, society, nature, mathematics). Each area defines a description of the area, objectives, proposed examples of contents and activities and the role of adults in educational work in that area. There are also four support areas that intertwine with the prime areas throughout the content of the Kurikulum za vrtce. These areas are: health education, safety, traffic education, moral education (ibid.).

Kurikulum za vrtce is suitable for all preschool programs, is designed for early childhood educators and it emphasizes process-oriented early childhood education and care instead of target-oriented (Kurikulum za vrtce, 1999; Marjanovič Umek et.al., 2008). With Kurikulum za vrtce Slovenia gained a more open program that recognizes professional autonomy of early childhood educators in the planning process. This furthermore

implies the need for better qualification and greater professional responsibility of early childhood educators (Batistič Zorec, 2003; Kroflič, 2008).

Kurikulum za vrtce is a substantive document that provides a framework for the planning process and implementation of educational activities for early childhood educators in institutional settings (Dolar Bahovec and Golobič Bregar, 2004; Marjanovic Umek et.al., 2008).

Framework for Early Years Foundation Stage

A similar role as Kurikulum za vrtce in Slovenia has the Framework for Early Years Foundation Stage (EYFS) in England, although its content is designed wider. The Early Years Foundation Stage came into force in September 2008, and is a single regulatory and quality framework for the provision of learning, development and care for children in all registered early years settings between birth and the age of 5 (Bertram and Pascal, 2000).

EYFS establishes standards to ensure progress in the development of children aged from 0 to 5 years. It focuses on the progress of the individual child and is at the same time focused on the child's proper preparation for school. It seeks to provide quality and consistency in all early years settings, a secure foundation for each child, a partnership between practitioners and with parents and an equality of opportunity for every child (EYFS, 2014).

The document comprises of three sections which are: the learning and development requirements, the assessment and the safeguarding and welfare requirements (ibid.).

The learning and development requirements section covers three prime areas of learning and development: communication and language, physical development and personal, social and emotional development. Furthermore these three prime areas are supported with four specific areas which are: literacy, mathematics, understanding the world and expressive arts and design. EYFS defines the early learning goals for each of these areas, prime and specific.

Every early childhood education and care program must contain activities that promote these areas and when planning, they must take into account the characteristics of successful learning in early childhood which are: play and exploration; active learning; creation and critical thinking (ibid.).

The assessment section defines the review of the child's progress. There are two progress checks, one at age two and the other at age five (at the end of EYFS). The progress check at the age of two is to assess the child's development in terms of the objectives reached at this age and to suggest possible support for the child to be implemented in the institution

or to be advised to parents (*ibid.*). A portfolio is made for each child where the early years educators record the child's progress. The early years educators are observing children throughout the day and making notes whenever a child makes a progress in its development (*ibid.*).

At the end of EYFS, there is an EYFS Profile made for each child. It represents a comprehensive review of the child's knowledge, skills, progress and general school readiness (the EYFS profile is given to parents and to the school that the child will be attending the following year).

The safeguarding and welfare requirements set out the requirements for the safety and welfare of children and staff such as child protection (the signs of abuse and how to proceed in a case of abuse); suitable people and staff qualifications; staff-child ratios; how to care for children's health; the requirements for the safety of the environment and equipment; information and records (what information is collected, who reports and what, who has access to the data collected, regulations about informing the Office for Standards in Education, Children's Services and Skills (Ofsted ...)) (*ibid.*).

By comparing the two national documents we can see they represent two similar yet also different early childhood education and care systems. Both documents share the definition of the main areas of child development, which the nurseries should pay particular attention to. We can also notice that the prime areas defined by the two documents intertwine (e.g. language, mathematics, art), although EYFS (2014) sets the areas wider and also includes areas like the child's emotional and social development. The definition of objectives for individual areas of activity in Kurikulum za vrtce (1999) is more specific, but it is important to note that the early years educators in England have the help in the form of two documents, Early years outcomes (2013) and the Early years Foundation stage profile (2015). Within the first document, development achievements in all areas for a certain age of the child are written (from birth to 60+ months) while written in the second document there are details on the purpose and content of the EYFS profiles for the child. Slovenian Kurikulum za vrtce (1999) does not have any similar official documents to help early childhood educators. The only exception is perhaps *Otrok v vrtcu* (Marjanovic Umek et. al., 2008), a guide that was first released in 2001.

Comparing the volumes, EYFS is vaster than Kurikulum za vrtce. If Kurikulum za vrtce is a more open and substantive document and it serves as a professional support for planning, implementation and evaluation of educational activities, then we can say that the EYFS involves the process and structural indicators (personnel profiles, cooperation with other institutions, the relationship between the early childhood educa-

tor and children, health care ...) that are not found in Kurikulum za vrtce (EYFS 2014, Kurikulum za vrtce 1999). Maybe the reason behind this is the difference in historical development of early childhood education and care in both countries (Devjak et al., 2012, Early childhood education ..., 2000, Education system in ..., 2012, European Commission/EACEA/Eurydice/Eurostat, 2014, Kameraman, 2000, Lipužič, 2002, Lindeboom and Buiskool, 2013). Early childhood education and care in Slovenia developed as a constant and simple system that turned into a more complex, more professional-founded system. Early childhood education and care in England, on the other hand, can be defined as an attempt to combine different systems in an increasingly uniform (but not entirely uniform) system (ibid.). Such a system needs more complex rules in the field of structural and indirect indicators.

Both the EYFS and Kurikulum za vrtce mention language as one of the areas of learning and development. In the remainder of the paper we will present how the mentioned areas intertwine in implementing curriculum.

Communication, Interaction and Quality of Early Childhood Education and Care

Communication to an early years educator is, for a child, simply a continuation of communication that they established in family (Devjak, Novak and Lepičnik Vodopivec, 2009). It is also one of the key routes in achieving the goals of early childhood education. Communication between children and early years educators is an active link, which must be unconditional and positive. Therefore, the early years educator must handle their verbal or nonverbal communication intentionally, independently, creatively and goal-orientated. Quality interaction and communication in the educational world of the field of early childhood education represents a multi-faceted process and because it is impossible not to communicate with each other, we must consciously strive towards all aspect of this process (Devjak and Petek, 2011).

Establishing suitable communication between an adult and a child and between children in the playgroup could be one the most important tasks of an early years educator. It is important that an early years educator plans activities appropriately, that they engages in them, encourages and develops communication and expressing of children, expands a child's speech and offers as many as possible opportunities for expressing. An early years educator can carry out all of it successfully with appropriate funds and materials, encouraging mutual communication of children at play, within daily routine activities and also with directed activities in smaller

group and with a suitably organized place. A child must be engaged in diverse activities actively, must have enough possibilities for listening, talk, narrative, describing, explaining, the dialogue conversation etc. This way, child's vocabulary expands and social and cognitive development are also being encouraged (Janžič, 2011). As Kumer (2014) points out, the competent early years educator acknowledges the importance of quality communication, which influences well-being, acceptance and co-operation, and the need to develop this competence throughout lifelong learning.

The importance of communication in early childhood education and care is recognized by both national documents that outline early childhood education in England and Slovenia, Statutory Framework for the Early Years Foundation Stage (2014) and Kurikulum za vrtce (1999). To start with early childhood education and care in England, the Statutory Framework for the Early Years Foundation Stage (2014) defines »communication and language« as one of the three prime areas and therefore recognizes communication as a crucial developmental area for supporting other specific developmental areas (literacy, mathematics, understanding the world and expressive arts and design). According to this document, educational programs should involve activities, opportunities and experiences for children to develop their confidence and skills in expressing themselves, to experience a rich language environment and to speak and listen in a range of situations. According to the , Framework for the Early Years Foundation Stage (2014) the early learning goals in the area of communication and language are (1) listening and attention (children listen attentively in a range of situation; they listen to stories, accurately anticipating key events and respond to what they hear with relevant comments, questions and actions; they give their attention to what others say and respond appropriately, while engaged in another activity), (2) understanding (children follow instructions involving several ideas or actions; they answer »how« and »why« questions about their experiences and in response to stories or events) and (3) speaking (children express themselves effectively, showing awareness of the listeners' needs; the use of past, present and future forms accurately when talking about events that have happened or are to happen in the future; they develop their own narratives and explanations by connecting ideas or events). The use of quality communication is also emphasized in one of the four themes of the Statutory Framework for the Early Years Foundation Stage (ibid.) that is in positive relationships. Through positive relationships children learn to be strong and independent. According to this document positive relationships should be warm and loving and foster a sense of belonging,

sensitive and responsive to the child's needs, feelings and interests, supportive of the child's own efforts and independence, consistent in setting clear boundaries, stimulating and built on key person relationships in early years settings.

Secondly, the contents of Slovenian national document for early childhood education and care, *Kurikulum za vrtce* (1999), underline the importance of communication as well. Although we could connect communication to various curricular principles, mentioned in *Kurikulum za vrtce* (ibid.), the principle of active learning and enabling possibilities for verbalization and other ways of expressing is the one that directly refers to it. It points out the importance of enabling and encouraging children to verbally communicate and express themselves in various ways while paying attention to their individual needs, interests and the right to privacy, and the importance of enabling and encouraging the use of language in different functions. The early years educators should set an example with their communication and, at the same time, plan and carry out the activities to develop children's language, which is defined as one of the six prime curricular areas. One of the goals in that particular curricular area is for children to listen to language and to engage in communication processes with children and adults, and therefore developing verbal and non-verbal communication, different styles of communication, politeness and culture of communication.

Kurikulum za vrtce (1999) directly describes the sought-after interaction and relationships between early years educators and children. An early years educator is seen as a regulator of interaction, but not a directive one. The important elements of interaction between the early years educator and the children (and among children themselves) is the frequency of positive interactions with children (smile, touch, speaking on the level of children's eyes); responding to children's questions and requests, encouraging questions, discussions, involvement; encouraging children to share their experience, ideas and feelings; attentive and respectful listening; the use of positive instructions and directions (encouraging expected behavior, redirecting to a more acceptable activity and behaviour, solving conflict in a socially acceptable manner, consistent and very clear instructions and no critiques, punishments or humiliation in a general way) and encouraging appropriate independency (according to the child's age).

Last but not least, the quality of communication can be understood also as an indicator of the quality of early childhood education and care. Marjanovič Umek, Fekonja, Kavčič and Poljanšek (2002) list structural and process indicators of early childhood education and care quality, which - in mutual interaction- either directly or indirectly enable the con-

ditions for child's development and learning in the context of nursery. Social interactions between a child and early years educator, the use of speech in different speaking positions, the child's well-being, engagement, responsiveness and sensibility of an early years educator, are all considered as process indicators of quality early childhood education and care. Their self-evaluation questionnaire for nurseries, in which they employ a seven point rating scale for different process indicators, including informal use of speech, encouragement of speech comprehension, encouragement of verbal expression, frequency of book-reading and picture - narrating activities, communication encouragement, and connecting speech to thinking and various aspects of social interactions. With this self-evaluation questionnaire the early years educators can get an over-all and detailed insight of the quality of their work in nursery and we used it as a theoretical background of our focus interview.

Problem

There is quite a history of comparing different national early education and care systems. The comparison of these systems is mostly based on quantitative research and statistical data analyses, while direct classroom experience and in-depth information is rarely considered. In our paper, we wanted to introduce a different, direct, although a subjective look of future early years educators on an area that is an important indicator of quality of early education and care – communication.

The purpose of this paper is to answer the question of how the differences between Slovenian and English early childhood education and care system reflect in interpersonal communication and interpersonal relationship between early years educators and children in nursery. We focused primarily on the differences in communication and interpersonal relationship between early years educator and a child.

We expect that the results will show that differences in communication exist, notably in events and activities tied to the prescribed framework of early childhood education and care system in each country. At the same time, we expect that the quality of interpersonal relationships is tied also to individual personality characteristics (e.g. age or sex) of early years educators rather than just the differences within the prescribed framework of early childhood education and care.

Method

We use a qualitative research approach, direct unscientific observation to participation in a natural situation, focus interview and analysis of documents as data collection techniques (e.g. Kurikulum za vrtce, Statutory Framework for the Early Years Foundation Stage, nursery publications, students written records, etc.).

Description of the Sample

The sample consists of 17-year-old female students of the 3rd year pre-school education program from Srednja vzgojiteljska šola in gimnazija Ljubljana who attended a 14-day international mobility in Leeds in England within the Erasmus + Project World in our hands. The project involves 16 students, but the focus interview was attended by 10 students. Students had practical training in Leeds in eight nurseries which differ from one another:

- Nursery 1 is a private nursery part of a larger group of nurseries and was attended by 43 children. It was registered in 1997. Latest Ofsted report on the quality and standards of the early years provision: good³.
- Nursery 2 is a playgroup run by the local Methodist church and was registered in 1974. 20 children were attending. Latest Ofsted report on the quality and standards of the early years provision: good.
- Nursery 3 and Nursery 4 are private nurseries part of a larger group of nurseries. Nursery 3 was registered in 2010 and was attended by 80 children. Latest Ofsted report on the quality and standards of the early years provision: outstanding. Nursery 4 was registered in 2005 and was attended by 69 children. Latest Ofsted report on the quality and standards of the early years provision: good.
- Nursery 5 is a private nursery. It was registered in 2011 and was attended by 59 children. Latest Ofsted report on the quality and standards of the early years provision: outstanding.
- Nursery 6 is a private nursery part of a larger group of nurseries that were established in 1989. This particular nursery was opened in 2015. No Ofsted report on the quality and standards of the early years provision yet.
- Nursery 7 is a private bilingual (English/Lithuanian) nursery. It was registered in 2014 and was attended by 30 children. Latest Ofsted report on the quality and standards of the early years provision: good.

3 Ofsted grades on a scale from 1 to 4, grade 1 being outstanding, grade 2 – good, grade 3 – requires improvement and grade 4 – inadequate.

- Nursery 8 is a voluntary nursery. It was registered in 2005 and was attended by 45 children. Latest Ofsted report on the quality and standards of the early years provision: outstanding.

Students involved in the project previously had 14 days of practical training in Slovenian nurseries in the first two years of their education in preschool education program. They had their previous practical training in 16 different nurseries from 16 different towns in Slovenia. 15 nurseries were public nurseries and 1 was a private nursery run by Karitas. 11 nurseries were independent nurseries while 5 nurseries were part of a primary school. All of the nurseries followed the program Kurikulum za vrtce (1999).

Research Instruments

For the purpose of the focus interview we created a network plan with elementary questions covering the following four areas:

1. *The non-verbal communication:*

In non-verbal communication, we focus on two areas, the first being the perception of facial expressions, tone of voice, relaxation in the relationship, establishing physical contact, eye contact and the second being the use of non-verbal communication to control the behavior of children.

2. *Verbal communication:*

In verbal communication, we focus on asking questions and the use of explanation (the use of closed and open questions, the explanation used for description of events, the characteristics of objects or phenomena ...) and the use of verbal communication to control the behavior of children.

3. *Encouraging communication:*

We focus mainly on encouraging communication activities with children when changing clothes, during daily routines, during free activities ...

4. *Spontaneous communication:*

We focus on the spontaneous involvement of early years educator in talks, taking the initiative to communicate, do they engage in discussions with children as an equal interlocutor or are they taking control in communication.

The students attended a 68-hour course in communication skills in their 2nd year of education in preschool education program. They did not have observation forms for interpersonal relationship and communication present at the nurseries, but they had observation guidelines for their written daily record of activities in the nurseries.

Procedure

The procedure was conducted in two parts. First, we examined documentation regarding the organization of systems of early childhood education and care in Slovenia and England. We reviewed the national documents of the two countries, Kurikulum za vrtce (1999) the Framework for Early Years Foundation Stage (EYFS, 2014) and some legislative documents.

Secondly we conducted a group focus interview. The interview took place on 31. 3. 2016 and lasted about 60 minutes in total. We asked the students questions from the network plan and the majority of students answered questions from all the areas. If a student wished not to answer a question we didn't force an answer. The questions followed the areas as written above. In case of doubt, we asked sub-questions relating to the discussed area. The conversation was recorded with a recorder and we then made a verbatim transcript.

The main questions asked for each of the four areas were:

1. The non-verbal communication:

Early years educators constantly use non-verbal communication (adequate physical contact, eye contact, body responsiveness ...). Some also use non-verbal communication to control the behavior of children (e.g. to praise they applaud, to calm a child they touch their shoulder ...).

How much and what non-verbal communication have you observed in nurseries in Leeds?

Do your observations differ in any way from your experiences with practical training in Slovenian nurseries?

2. Verbal communication:

Early years educators ask questions, they explain to children what's happening around them, they explain the characteristics of objects or phenomena. Some also use verbal communication to control the behavior of children (e.g. they praise the children, they moderate their behavior ...).

How much and what verbal communication have you observed in nurseries in Leeds? What was the main purpose of verbal communication?

Do your observations differ in any way from your experiences with practical training in Slovenian nurseries?

3. Encouraging communication:

Early years educators encourage communication during activities with children e.g. when they are changing children's clothes, during daily routines, during planned activities in the play corners.

Have you observed any kind of communication encouragement in nurseries in Leeds?

Do your observations differ in any way from your experiences with practical training in Slovenian nurseries?

4. Spontaneous communication:

Early years educators spontaneously engage in communication with children e.g. when they take the initiative to communicate with children, when they engage in discussions with children as an equal interlocutor or they can even assume control of the communication.

Have you observed any kind of spontaneous communication in nurseries in Leeds?

Do your observations differ in any way from your experiences with practical training in Slovenian nurseries?

Results and Interpretation

Focus Interview

Non-verbal Communication

The students did not detect many noticeable differences in the use of non-verbal communication between English and Slovenian nurseries. Most of them connected the use of non-verbal communication to the personal characteristics of early years educators, such as age and work motivation.

Some of them mentioned a more restrained attitude to children in English nurseries, as Student 4 said: »...as if they were afraid to touch them or to develop an attachment to them«. Two students (Student 4 and Student 7) reported of a more relaxed attitude towards younger children as opposed to older ones – the early years educators were holding them more, allowing them to sit in their laps and comforting them when they were crying, while they interacted less with the older ones. The early years educators in English nurseries didn't refuse physical contact with the children, and if a child came to them they comforted them. The students thought that there is more physical contact in Slovenian nurseries and that the early years educators show more affection in a non-verbal way than in English nurseries. As for the use of non-verbal communication for behavior regulation the students noticed that the early years educators used more non-verbal communication to praise the child's achievements and didn't use that much non-verbal communication for unwanted or unacceptable behavior. The students noticed that non-verbal communication for praising the child's achievements in English nurseries was more obvious when the early years educators were filling out the portfolios of

children. Non-verbal communication for praising the child's achievements involved clapping, smiling, frequent eye contact while non-verbal communication for the regulation of unwanted behavior included serious facial expression, stern looks and finger pointing.

Student 2 linked the non-verbal skills for the regulation of the behavior of Slovenian early years educators with educator's age and therefore their education (meaning that the younger early years educators knowledge is more contemporary). She said that in her experience the younger early years educators used more appropriate ways of non-verbal communication when addressing the child than the older ones.

Verbal Communication

The students perceived more verbal communication between early years educators and children in Slovenian nurseries compared to English nurseries. They reported that Slovenian early years educators use more verbal communication throughout the whole day with more use of describing everyday activities (present and future activities of the group or individual), giving explanations, asking questions (frequent use of open- and closed-ended questions or asking questions about the child's activities). Student 10 said: ".../ as much as I could hear, their early years educators didn't talk to them for example now we're going to put on the trousers and socks and now the slippers, as we are used to in Slovenia, where we use that speech to develop their vocabulary."

In English nurseries verbal communication appeared mostly while filling out the portfolios. One of the nurseries had a list of questions for encouraging the child's play in every play area but Student 4 said the early years educators didn't use them except when they were filling out the portfolio. Our students tried to explain the difference in the use of verbal communication between Slovene and English nurseries with the number of early years educators in a group – because there were more early years educators in English nurseries⁴ they had less chance to communicate with the whole group so they communicated more with one or two children. In Slovene nurseries there are two early years educators and they are more accustomed to addressing the whole group and each child. Student 8 said: "I noticed, in England, that the early years educators talked more with one or two children, it wasn't often that they talked with all of them. In Slovenia we have an activity called morning circle and there is a chance for each child to tell something and then everybody talks to each other."

4 The early years educator: child ratio in nurseries increases with the age of children and goes from 1:3 to 1:13 in English nurseries and from 1:6 to 1:11 in Slovene nurseries. The ratio in English nurseries is more flexible to changes (European Commission/EACEA/Eurydice/Eurostat, 2014).

Another reason our students found the difference of the use of verbal communication between English and Slovenian nurseries is that Slovenian nurseries have a daily routine that includes a planned activity carried out by the early years educator. In their opinion, the English early years educators don't have to communicate as much with the children, because their main focus is on observation and taking notes of the child's development.

Regarding the use of verbal communication for regulating behavior the students noticed that in English nurseries the early years educators used a lot of praise again especially when observing the child and filling out the portfolio. In their opinion, the Slovenian early years educators use praise as well, but not as much as the English early years educators.

Some of our students described a practice in English nurseries where the early years educator sent a child who was misbehaving to sit away from the group. After a while the early years educator came to the child and talked to him about his behavior. The students did not report about any special observations regarding the use of verbal communication for regulating unwanted behavior in Slovenia nurseries but they did mention a practice where early years educator takes the child that was misbehaving to another group and leaves them there. After a little while the early years educator comes back and takes the child back to his group.

Encouraging Communication

The students reported that they perceived more communication encouraging activities in Slovenian nurseries than in English nurseries. They noticed that communication when encouraging activities in English nurseries occurred mostly when the child was doing an activity and the early years educator interacted with the child to observe their development and take notes for the child's portfolio. The students said that in Slovenia, the early years educator tend to encourage communication with the children as a group and/or the child as an individual regardless of the activity or part of the daily routine.

Spontaneous Communication

Regarding the differences in the amount of spontaneous communication in different English nurseries, the students had various experiences. Some of them observed more spontaneous communication, others less. Some of them thought they perceived more spontaneous communication in Slovenia, as Student 6 said: "In my nursery, in England, there was spontaneous communication, but not as much as in my Slovenian nursery. When the early years educator was with a child, engaged in an activity, she was

asking him, what he is doing and...to whom will he give this, why does he need this...In Slovenia, I think, the early years educator is more engaging, knows the children better, asks them even about family members..."

Conclusions

In this paper we tried to show the differences in interpersonal relationships and communication between the early childhood education and care systems in Slovenia and in England as observed by students during their practical training in nurseries in both countries. The analysis of the national documents regulating early childhood education and care i.e. Slovenian Kurikulum za vrtce (1999) and English Early Years Foundation Stage (2014) revealed contextual differences between the two documents. Early Years Foundation Stage (ibid.) requires a different planning method and implementation of educational activities from early years educators, which focuses mainly on observation of the child's individual development without their influence on the child's development while Kurikulum za vrtce (1999) helps early years educators to actively contribute to and help the child's development. Both documents however list communication as one of the child's important developmental areas.

According to our results, we did not find many noticeable differences in the use of non-verbal communication between English and Slovenian nurseries, only in more often observed physical contact in Slovenian nurseries, mostly to show affection towards children. The differences, however, were more often connected to the personal characteristics of early years educators, such as age and work motivation. Therefore we could assume that the differences within each group of observed early years educators are larger than between the groups of English and Slovenian early years educators.

The differences were, however, observed on the use of verbal communication. These differences can be explained by two major factors: (1) the ratio between the number of early years educators and children in Slovenian and English nurseries, and (2) the main focus of each national early childhood education and care system (daily routine vs. observing child's development through portfolio). Since there are less early years educators in a group in Slovenian nurseries, the verbal communication is more needed and, so, more often used. While the amount of interaction, and therefore verbal communication in English nurseries is focused mostly on the event (or procedure) of filling out the children's portfolios, the interaction and verbal communication in Slovenian nurseries is effectuated and distributed through the day, naturally with its peak during daily planned activity. This was also observed in comparing the use of communication

for encouraging activities between early years educators in Slovenian and English nurseries.

Regarding the differences in the amount of spontaneous communication in different English nurseries, the students had various experiences and therefore we could not make any conclusions.

Considering that interaction between early years educators and children derives from all of the observed types of communication, we could assume that the structural differences (such as the size of the nursery, the ratio between the number of early years educators per child etc.) and process differences (focus on daily routine vs. focus on portfolio) connected with the amount and distribution of interaction in a similar way as communication. The conclusions or comparison about the contents of these interactions can, however, not be made.

We would like to emphasize that all of the conclusions above were made based on the subjective experiences and views of students, future early years educators, and should be considered with appropriate caution. They do, however, suggest that structural (as listed above), indirect (e.g. early year educator's personal characteristics, professional development, work motivation and satisfaction etc.) and process (e.g. activities in nurseries or program implementation) indicators of both national preschool systems certainly have an impact on interpersonal relationships and communication in nurseries. In the future it would, of course, be necessary to include also quantitative research methods and to include cultural differences between countries and personality characteristics of early years educators in the independent variables.

References

- Apprenticeships, Skills, Children and Learning Act* (2009) <http://www.legislation.gov.uk/ukpga/2009/22/contents> (1.3.2016).
- Batistič Zorec, M. (2003) *Razvojna psihologija in vzgoja v vrtcih*. Ljubljana: Inštitut za psihologijo osebnosti.
- Bertram, T., Pascal, C. (2000) *The OECD thematic review of Early childhood education and care: background report for the United Kingdom*. Worcester: centre for research in early childhood: University College Worcester.
- Children and families Act* (2014) <http://www.legislation.gov.uk/ukpga/2014/6/contents> (1.3.2016).
- Devjak, T., Novak, L., Lepičnik Vodopivec, J. (2009) Kakovostna interakcija in komunikacija. In Devjak, T., Skubic, D. (eds.). *Izzivi pedagoškega koncepta Reggio Emilia*. Ljubljana: Pedagoška fakulteta, pp. 189–207.

- Devjak, T., Petek, T. (2011) Besedna komunikacija med vzgojiteljem in otrokom, spremljanje in dokumentiranje proces. In Vrbošek, B. (ed.). *Kakovost učenja in poučevanja jezika v kurikulumu v vrtcu*. Ljubljana: Supra, pp. 22–29.
- Devjak, T., Skubic, D., Polak, A., Kolšek, V. (2012) *Predšolska vzgoja: od starega k novemu*. Ljubljana: Pedagoška fakulteta
- Dolar Bahovec, E., Golobič Bregar, K. (eds.) (2004) *Šola in vrtec skozi ogledalo*. Ljubljana: DZD, d. d.
- Early Childhood Education and Care Policy in the United Kingdom* (2000) <http://www.oecd.org/unitedkingdom/2535034.pdf> (27.2.2016).
- Education system in the UK*. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/219167/vo1-2012ukes.pdf (1.3.2016).
- Early years foundation stage profile* (2015) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/488745/EYFS_handbook_2016_-_FINAL.pdf (2.2.2016).
- Early years outcomes* (2013) http://www.foundationyears.org.uk/files/2012/03/Early_Years_Outcomes.pdf (2.2.2016).
- European Commission/EACEA/Eurydice/Eurostat (2014) *Key Data on Early Childhood Education and Care in Europe*. 2014 Edition. Eurydice and Eurostat Report. Luxembourg: Publications Office of the European Union.
- Kammerman, S. B. (2000) Early childhood education and care: an overview of developments in the OECD countries. *International Journal of Educational Research* 7, pp. 7–29.
- Kroflič, R. (2008) Temeljne predpostavke, načela in cilji kurikula za vrtce. In Marjanovič Umek, L. (ed.). *Otrok v vrtcu: priročnik h Kurikulu za vrtce*. Maribor: Obzorja.
- Kumer, M. (2014) Profesionalna komunikacija – kompetenca vzgojitelja. In Željeznov Seničar, M. (ed.). *Kompetence vzgojitelja – izzivi, izkušnje, spoznanja: zbornik prispevkov, VII. Mednarodna strokovna konferenca vzgojiteljev v vrtcih 2014 (Hrvaška, Italija, Slovenija)*. Ljubljana, MiB d.o.o, pp. 30–38.
- Kurikulum za vrtce: predšolska vzgoja v vrtcih* (1999) Ljubljana: Ministrstvo za šolstvo in šport: Zavod RS za šolstvo.
- Larikov, N. (2015) *Komunikacija z otroki v predšolskem obdobju: diplomsko delo*. Univerza v Ljubljani: Teološka fakulteta.
- Lindeboom, G. J., Buiskool, B. J. (2013) *Quality in early education and care*. Bruselj: Policy Department Structural and Cohesion Policies.

- Lipužič, B. (2002) *Globalna razvojna vprašanja v Evropi: primerjalna analiza izobraževalnih politik v državah EU, EFTE in predpristopnih kandidatkih za EU*. Nova Gorica: Educa.
- Marjanovič Umek, L. (ed.) (2008) *Otrok v vrtcu: priročnik h Kurikulu za vrtce*. Maribor: Obzorja.
- Marjanovič Umek, L., Fekonja, U., Kavčič, T., Poljanšek, A. (2002) *Kakovost v vrtcih*, Ljubljana: Znanstveni inštitut Filozofske fakultete.
- Oxford English Dictionary* (2016) <http://www.oed.com/view/Entry/37309?redirectedFrom=communication#eid> (18.7.2016).
- Predšolska vzgoja in izobraževanje v vrtcih, Slovenija, šolsko leto 2015/16* (2016) <http://www.stat.si/StatWeb/prikazi-novico?id=5916&idp=9&headerbar=7> (18.7.2016).
- Statutory framework for the early years foundation stage* (2014). https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/335504/EYFS_framework_from_1_September_2014__with_clarification_note.pdf (2.2.2016).
- Steinberg, S. (2007) *An introduction to communication studies*, Cape Town: JutaCo.
- The Childcare Act* (2016) <http://www.legislation.gov.uk/ukpga/2016/5/enacted> (15.3.2016).
- The Childcare Act* (2006) <http://www.legislation.gov.uk/ukpga/2006/21/contents> (15.3.2016)
- Vidmar, M., Taštanoska, T. (2014) *Umestitev predšolske vzgoje v Sloveniji v evropski prostor s pomočjo mednarodnih primerjalnih poročil*. <http://www.eurydice.si/index.php/fokus/9366-umestitev-predsolske-vzgoje-v-sloveniji-v-evropski-prostor-s-pomocjo-mednarodnih-primerjalnih-porocil> (13.2016).
- Zakon o organizaciji in financiranju vzgoje in izobraževanja*. (1996) <http://pisrs.si/Pis.web/pregledPredpisa?id=ZAKO445> (15.3.2016).
- Zakon o vrtcih* (1996) <http://pisrs.si/Pis.web/pregledPredpisa?id=ZAKO447> (15.3.2016).

3 REVIEW RECENZ IJA

Review/Recenzija

Wendy R. Kohli in Nicholas C. Burbules (2013). *Feminisms and Educational Research*. Lanham: Rowman & Littlefield Education.

Feminisms and Educational Research je kratek in koncizen, skoraj učbeniški pregled razvoja filozofskih, epistemoloških in teoretičnih idej ter kritične misli različnih pramenov feminizma, hkrati pa – vsaj v zadnjem delu – tudi poskus plastičnega prikaza plejade feminističnih vključevanj v edukacijsko raziskovanje. Cilj, ki ga avtorja¹ orišeta že v prvem poglavju, nekakšnem uvodu v besedilo, je »analizirati razmerje med feminizmi² in edukacijskim raziskovanjem«, s poudarkom na »epistemoloških, ontoloških in političnih vprašanjih, ki zadevajo produkcijo ospoljene vednosti in raziskovanja« (Kohli in Burbules, 2013: 2).

»Kaj je feminizem?« Široko koncipirano in pogumno vprašanje, na katerega je nemogoče odgovoriti v samem stavku, je naslov drugega poglavja. S tem, ko si ga avtorja zastavita, že vzpostavita potrebo po prepoznavanju raznolikosti feminističnih pogledov. Vsiljevanje kategorij in poskus poenotenja diverzificiranih, med sabo pogosto celo konfliktnih prepričanj in teorij, zgolj za doseg enotne definicije, bi po njunem mnenju namreč kršil temeljna feministična načela (str. 18). Z vprašanjem definicije so se ukvarjale tudi mnoge

1 Primarno avtorstvo pripada Wendy R. Kohli. Urednik zbirke »Philosophy, Theory, and Educational Research Series« v kateri je izšlo pričujoče delo, Nicholas C. Burbules, ima sekundarno avtorstvo predvsem zaradi svojega širšega sodelovanja pri nastanku dela, ki presega zgolj uredniško vlogo.

2 Avtorja striktno govorita o feminizmih v množini, saj sta mnenja, da pluralnih, pogosto nasprotujočih si pogledov v feministični teoriji in raziskovanju ne gre poenostavljati in reducirati v enotno definicijo feminizma, kot unitarnega in univerzalnega koncepta v ednini. Več o tem v nadaljevanju.

feministične avtorice, med njimi Oakley, Mitchell, Code, Evans, Delmar, Caine in Beasley, ki prepoznavajo diverziteto in pluralnost emancipatoričnih projektov in feminizmov (ibid.). A tako kot pri malodane vsakem pomembnem vprašanju se pogledi feministk tudi na tej točki razhajajo. Na drugi strani avtorice namreč kot osrednji problem feminističnega diskurza prepoznajo nezmožnost oblikovanja konsenza mnenj in skupne definicije kot točke unifikacije (hooks v Kohli in Burbules, 2013: 18–19). Avtorja sta v dilemi o smiselnosti enotne definicije sicer naklonjena izraženi želji po skupnem feminističnem glasu, a se (prav tako kot recenzentka) nagibata k razumevanju razcepljene narave feminizma skozi pluralistično prizmo, ki ohranja živost raziskovalnega polja in odpira prostor vrsti idej, možnosti in gledišč. To pa ne pomeni, da se delo prične izgublja v vrtincu brkljanja po nešteti, variacijah na temo, saj sistematično kategorizira in pogosto tudi primerjalno predstavi različne feministične poudarke, ki imajo vsi skupen vsaj najširši imenovallec – so razprave o tem, kaj pomeni biti ženska oz. kaj pomeni biti feministka, pri čemer gre za dve identitetni razsežnosti, ki sicer ne sovpadata vedno.

V nadaljevanju se vzpostavi prostor za razpravo o različnih državah, ki so jih feministke zavemale skozi čas (str. 2). Gre za zgodovinski pregled razvoja feministične misli skozi popularno in samoumevno konceptualizacijo teorije valov, ki jo avtorja sicer problematizirata kot nezadosten okvir. Zakriva namreč pomembna obdobja feminističnega aktivizma, ki se je odvijal v presledkih med valovi ter predpostavlja neizogibno zatišje med „zlomom vrha“ prejšnjega in začetkom vzpona novega vala (McPherson v Kohli in Burbules, 2013: 23). Ena izmed kritik forme teorije valov je tudi kritika dejstva, da ustreza strukturi fazne teorije, ta pa vedno sledi ideji o napredku – nov val predstavlja „novo stopničko“ v razvoju vednosti. Primernejša se zdi metafora o pramenih feminizma (angl. *strands*), ki ne sledijo drug drugemu, pač pa se medsebojno prepletajo (str. 24). Avtorja tako svarita, da teorije valov ne smemo razumeti preveč dobesedno, kljub temu pa – predvsem zaradi splošno priznane veljavnosti kategorij treh valov, ki „preplavljajo“ večino diskusij o feminizmu – zgodovino razvoja feminizma tudi sama orišeta v tem konceptualnem okviru (str. 24–32).

V naslednjih dveh poglavjih so predstavljeni filozofski pomisleki in vprašanja v feminističnem raziskovanju, ki se nanašajo na epistemološke in ontološke vidike feministične teorije ter na feministično metodologijo. Epistemološki odnos feministk – med drugimi Code, Nelson, Harding, Haraway, Jaggar – je prikazan skozi obširno kritiko tradicionalne konceptualizacije (moške) objektivne in pozitivistične znanosti, ki skuša delovati kot zunanja avtoriteta brez vrednot, čustev, predsodkov in povsem ločena od fenomenov, ki jih preučuje (str. 43–44). Za feministične avtorice

je nevtralna vednost v globoko (spolno, rasno, razredno) razslojeni družbi iluzija (Harding v Kohli in Burbules, 2013: 43), zato Donna Haraway razvije koncept umeščenih vednosti³ ter kritiko fikcije objektivnosti. V nasprotju s hegemonskim pozitivističnim pogledom, ki predpostavlja objektivno in nevtravno držo, namreč trdi, da je gledišče znanstvenika dominantna pozicija, s katere se ne da doseči objektivnosti (v Kohli in Burbules, 2013: 43). Feministična epistemološka kritika je tako namenjena pozitivističnemu zasledovanju objektivnosti in univerzalnosti, »božjemu triku« – pogledu, ki vidi vse od nikoder v nasprotju s pogledom iz specifične, točno določene pozicije (glej npr. Vendramin, 2012: 88). Zgolj z umeščenim raziskovanjem lahko namreč dosežemo odpravo družbenih – v prvi vrsti (a ne izključno!) spolnih – neenakosti in neuravnoteženih razmerij moči.

Avtorja orišeta tri struje kritik znanstvenega pozitivizma – feministični empirizem, feministično teorijo stališč ter feministični postmodernizem in poststrukturalizem⁴ – in skozi medsebojno primerjavo prikažeta njihova razhajanja v epistemoloških pozicijah ter v odnosu do metodoloških vprašanj (str. 45–63). Na diverzificiranih epistemoloških temeljih se v nadaljevanju gradi razprava o feministični metodologiji. Kakšna je vloga feminističnih raziskovalk in katera vprašanja (si) zastavljajo? Ali lahko govorimo o specifičnem fokusu feminističnega raziskovanja? Kakšne etične, družbene in politične zaveze ga spremljajo (str. 67)? Tudi tu avtorja ugotavljata pluralnost pristopov k raziskovanju (str. 68) v feminizmu kot postempiričnem, kritičnem diskurzu (str. 74). Čeprav feministično metodologijo (ponovno) vzpostavita primarno skozi kritiko tradicionalnih pristopov k znanosti, pa se v nadaljevanju dotakneta tudi vprašanja o edinstvenosti feminističnega raziskovanja kot alternativne možnosti (str. 76).

V zadnjem poglavju bralec oz. bralka dobi vpogled v feministično raziskovanje v edukaciji. Zgodovinski pregled najpomembnejših udejstvovanj na tem področju se odpre s ključnimi poudarki liberalnega, radikalnega in socialističnega feminizma. Primerjava ciljev, fokusov, kontekstov, konceptualnih okvirjev in načinov delovanja pokaže razlike v drži med femi-

3 Umeščene vednosti ».../ so vednosti, ki odsevajo perspektivo subjekta, ki je lahko le delna, omejena, ne pa univerzalna« (Vendramin, 2010: 110) in kot takšna ne zida gradov v oblakih na temeljih nevtravnosti. To ne pomeni, da raziskovanje ne sme slediti določenim korakom ali da mora opustiti vsa metodološka načela in zahteve po veljavnosti. A »drža vsevednega, od vsega ločenega .../ opazovalca oziroma opazovalke ni možna«, saj vedno izvira iz specifičnega konteksta, določene družbene pozicije, ki lahko hkrati odpira in omejuje pogled (Pendlebury v Vendramin, 2010: 111).

4 Feminist empiricism, feminist standpoint epistemology (standpoint theory), feminist postmodernism and poststructuralism.

nistkami različnih struj. Po razvojnem pregledu temeljev pa pridemo do ključnega vprašanja, ki aktualizira razpravo – kako je s feminističnim raziskovanjem v edukaciji danes? Liberalni diskurz o enakih možnostih je – kljub svojim pomanjkljivostim (!) – edini feministični diskurz, ki ga je sprejela in posvojila tudi širša javnost (Acker v Kohli in Burbules, 2013: 84), saj operira s splošnimi pojmi in popularnimi vrednotami (npr. enakost, pravičnost). Zato si upam trditi, da je kljub dejstvu, da se je danes razmerje v dosežkih med spoloma predrugačilo, povsem razumljivo, da je prav razprava o zagotavljanju enakih možnosti v izobraževanju (ki se je sicer ujela predvsem v diskurz glorifikacije dosežkov) še vedno zelo živahna. V postfeminističnem duhu tako *mainstream* diskurz o ‚krizi fantov‘ in o ‚uspešnih dekletih‘ predstavlja poligon za nekatera zdravorazumska, tudi esencialistična poenostavljanja in posploševanja. Feministično raziskovanje na področju edukacije je postavljeno pred izziv, kako kritično reflektirati te nepremišljene modele in stereotipizacije, ki perpetuirajo družbene neenakosti na različnih oseh marginalizacije.⁵

Tudi avtorja ugotovita, da je feministično raziskovanje v edukaciji spremenilo svoj fokus. Če so v preteklosti feministke izhajale iz pozicije kartiranja dokazov o spolni diskriminaciji in neenakih izobraževalnih možnostih deklet, ki so na edukacijski dnevni red sploh uvrstili vprašanje ženskih pravic, se danes ukvarjajo predvsem z artikulacijo vrednotnega sistema in praks feministične edukacije, ki hkrati omogočajo večjo spolno enakost in prepoznavajo razlike med ženskami (Weiner v Kohli in Burbules, 2013: 87). Kohli in Burbules poudarita, da novejše feministično delo v edukacijskem raziskovanju razvija večplastno razumevanje različnih družbeno-spolnih subjektivitet, njihovo produkcijo v izobraževalnem sistemu in umeščenost v širši sistem dinamik moči (str. 88).

Širok, a hkrati zgoščen zgodovinski pregled feministične teorije, raziskovanja, politike in aktivizma predstavi ključne poudarke, prelome in smeri v razvoju feminizma. Prav zaradi svoje jasnosti je *Feminisms and Educational Research* več kot primerno temeljno gradivo za študente, akademike in raziskovalce, lahko pa (in odlično bi bilo, če bi res bilo tako) predstavlja tudi uvod v spoznavanje kritičnih uvidov feminizma za prav vsakega posameznika ali posameznico, ki ga/jo zanima kontekstualizacija ospoljenih razmerij moči v edukaciji in širše. Kljub klasičnemu vsebinskemu formatu, katerega glavni namen je informiranje in ne nujno reflektiranje, pa aktualnosti dela ne gre zanikati. V luči postfeminizma, ko se v popularni kulturi ustvarja ozračje, kjer se zdi, da so feministične ideje preživete in nepotrebne, saj so ženske dosegle (*in – groza – celo presegle!*) že vse,

5 To med drugimi počnejo avtorice, kot so: B. Francis, Ch. Skelton, Sh. Pomerantz, R. Raby, J. Ringrose (glej npr. Francis in Skelton, 2005; Pomerantz in Raby, 2011; Ringrose, 2013).

kar se je doseči sploh dalo, je pomembnost takšnega temeljnega zbira feminističnih idej še toliko večja, saj pripomore k postopni selitvi feminizma iz zaprašenih obronkov javnega diskurza vse bolj proti točki veljavnosti. Čeprav tekst ostaja na orisni, deskriptivni ravni, brez poglobljenega in kritičnega vpogleda, tako značilnega ravno za feministično raziskovanje, pa odpira ogromno izhodiščnih točk za refleksijo bralca oz. bralke. Cilj dela ni razvoj lastne feministične kritične misli, pač pa prikaz razvoja le-te. Navsezadnje tudi avtorja sama v zaključku (str. 94) zapišeta, da je bil njun namen zbrati jasn pregled rezultatov feminističnega dela in prikazati njegov vpliv na edukacijsko raziskovanje, zato sta se namenoma oddaljila od lastnih interpretacij ter kategorizacij ter glavno besedo prepustila feministkam.

Ana Mladenović

Literatura

- Francis, B., Skelton, Ch. (2005). *Reassessing Gender and Achievement: Questioning Contemporary Key Debates*, Oxon, New York: Routledge.
- Pomerantz, Sh., Raby, R. (2011). 'Oh, she's so smart': girls' complex engagements with post/feminist narratives of academic success. *Gender and Education*, XXIII/5, 549–564.
- Ringrose, J. (2013). *Postfeminist Education?: Girls and the Sexual Politics of Schooling*, London, New York: Routledge.
- Vendramin, V. (2010). Feminizem, epistemologija in kurikulum. *Sodobna pedagogika* 3/2010: 106–118.
- . (2012). Why feminist epistemology matters in education and educational research. *Šolsko polje*, XXIII, 1-2: 85–94.

4 ABSTRACTS

POVZETKI

Abstracts/Povzetki

*Jennifer L. Hanson-Peterson, Kimberly A. Schonert-Reichl
and Veronica Smith*

Teachers' Beliefs about Emotions: Relations to Teacher Characteristics and Social and Emotional Learning Program Implementation

Teachers' beliefs about emotions in the classroom and their role in promoting students' social and emotional development were examined in relation to teacher background characteristics and their implementation of a social and emotional learning (SEL) program. Participants included 58 elementary school teachers who were either hosting an SEL curriculum - the Roots of Empathy (ROE) program - or in comparison classrooms. Self-report measures assessed dimensions of teachers' emotion beliefs (i.e. Bonds, Expressiveness, Instruction/Modeling, Protect, Display/Control) and teacher background characteristics (e.g. grade-level taught, years of teaching experience). Teachers hosting the ROE program also completed measures assessing program implementation. The results indicated that several dimensions of teachers' emotion beliefs were significantly related to both teacher background characteristics (note that the effect sizes were minimal) and the implementation of the ROE program (where moderate effect sizes were found). These findings bolster research on teacher-related factors associated with SEL program implementation and the need for SEL training and teacher support to maximize program effectiveness.

Keywords: social-emotional learning program, emotion beliefs, program implementation, teachers, socialization

*Jennifer L. Hanson-Peterson, Kimberly A. Schonert-Reichl
in Veronica Smith*

Prepričanja učiteljev o čustvih: povezava z značilnostmi učiteljev ter implementacijo programa socialnega in čustvenega učenja

V raziskavi smo preučevali vlogo učiteljevih prepričanj o čustvih v razredu za spodbujanje socialnega in čustvenega razvoja učencev, in sicer v povezavi z učiteljevimi ozadnjimi značilnostmi ter implementacijo programa socialnega in čustvenega učenja (SČU). Sodelovalo je 58 osnovnošolskih učiteljev, ki so bodisi izvajali SČU program (Izvori empatije) bodisi so bili v kontrolni skupini. Učitelji so s pomočjo samocenjevalnega inštrumenta poročali o svojih prepričanjih o čustvih (tj. vez z učenci, izraznost, modeliranje, zaščita, izražanje) ter svojih značilnostih (tj. razred, ki ga poučujejo, leta poučevanja). Učitelji, ki so izvajali program Izvori empatije, so izpolnili tudi vprašalnik v zvezi z implementacijo programa. Rezultati so pokazali, da so nekatere dimenzije učiteljevih prepričanj o čustvih pomembno povezane z njihovimi ozadnjimi značilnostmi (upoštevajte, da so velikosti učinka minimalen) kot tudi z implementacijo programa (kjer je bilo ugotovljeno, zmerne velikosti učinka). Ugotovitve poudarjajo pomen učitelja v povezavi z implementacijo SČU programa ter opozarjajo na potrebo po SČU usposabljanju ter podpori učiteljev za povečanje učinkovitosti programa.

Ključne besede: program socialnega –in čustvenega učenja, prepričanja o čustvih, implementacija programa, učitelji, socializacija

Maša Vidmar and Katja Kerman

The development of Teacher's Relational Competence Scale: Structural Validity and Reliability

The newly developed Teacher's Relational Competence Scale (TRCS) was tested for the first time within this study. The TRCS instrument addresses the need for the cultivation and promotion of socio-emotional competences of teachers, through the context of relational competence, as proposed by Juul and Jensen (2010). According to them, relational competence is defined as a teacher's ability to see a student as a unique being and to consequently adapt their own actions (behaviour) without abandoning the leadership role and their authenticity, as well as taking full responsibility for teacher-student relationship. Based on this definition and the conceptual work, three dimensions of relational competence were identified – respect for individuality, authenticity and responsibili-

ty for the relationship. We have constructed 33 items along these dimensions resulting in TRCS. Teachers who participated in the TIMSS 2015 were invited to complete the on-line instrument. About 49% of teachers responded, resulting in a sample size of 562 teachers. The total sample size was then randomly split into two halves. The first half was used for exploratory factor analysis (EFA); after running several EFA models and dropping items with low or non-target loadings, the 2-factor solution with 11 items proved to be most fitting and parsimonious (RMSEA = .06; CFI = .95; $\chi^2(34) = 66.68$, $p < .001$ and SRMR = .04). The model was then tested on the second sample half, using exploratory structural equation modelling (ESEM). The model fit the data well (RMSEA = .04; CFI = .98; $\chi^2(34) = 50.259$, $p < .05$ and SRMR = .03). Based on item content, the first factor was named Individuality (4 items, $\alpha = .70$) and the second factor was named Responsibility (7 items, $\alpha = .76$). Thus, in our study we did not find support for the presupposed three-factor structure of TRCS, because the third factor (presumed to be authenticity) did not emerge. Nevertheless, our study shows that teachers' relational competence (two of its dimensions – individuality and responsibility) can be reliably measured, using the newly developed TRCS. Items, designed to measure authenticity, proved to be problematic (loading onto non-respective factors, weak loadings, etc.). In further research, authenticity items should be revised, re-examined, and new items should be developed and examined in the context of a cohesive relational competence scale.

Key words: social and emotional competence, relational competence, instrument development, teachers

Maša Vidmar in Katja Kerman

Razvoj Lestvice odnosne kompetentnosti pri učiteljih: strukturna veljavnost in zanesljivost

V študiji smo prvič preizkusili nov instrument za merjenje odnosne kompetentnosti učiteljev (Teacher's Relational Competence Scale – TRCS). Instrument je nastal kot odziv na povečano zanimanje za socialne in emocionalne kompetentnosti učiteljev, in sicer v kontekstu odnosne kompetentnosti, kot jo opredeljujeta Juul in Jensen (2010). Avtorja odnosno kompetentnost opredelita kot sposobnost učiteljev, da vidijo posameznega otroka v njegovih specifičnostih in nanje uglasijo svoje ravnanje, ne da bi mu predali vodstveno vlogo, pri tem pa so v stikih z učencem avtentični; poleg tega je tudi sposobnost učiteljev, da prevzamejo polno odgovornost za kakovost odnosa. Na podlagi definicije in njunega konceptualnega dela so bile identificirane tri dimenzije odnosne kompetent-

nosti – spoštovanje individualnosti, avtentičnost in odgovornost za odnos. V skladu s temi dimenzijami smo sestavili 33 postavk in tako dobili TRCS. Učitelje, ki so sodelovali v raziskavi TIMMS 2015, smo povabili k izpolnjevanju spletnega vprašalnika. Odzvalo se je 49 % učiteljev, tako je bilo v vzorcu 562 učiteljev. Celotni vzorec smo nato naključno razdelili na dve polovici. Na prvi polovici podatkov smo opravili eksploratorno faktorsko analizo (EFA); testirali smo več modelov ter izločili postavke, ki so imele nizke oziroma neustrezne nasičenosti. Tako smo prišli do končne 2-faktorske rešitve z 11 postavkami, ki se je pokazala kot najboljše prilagojena in parsimonična (RMSEA = .06; CFI = .95; $\chi^2(34) = 66.68$, $p < .001$ in SRMR = .04). Isti model smo nato testirali na drugi polovici podatkov z eksploratornim strukturnim modeliranjem (ESEM). Rezultati so pokazali ustrezno prilaganje modela (RMSEA = .04; CFI = .98; $\chi^2(34) = 50.259$, $p < .001$ in SRMR = .03). Na podlagi vsebine postavk smo prvi faktor poimenovali Individualnost (4 postavke, $\alpha = .70$), drugi faktor pa Odgovornost (7 postavk, $\alpha = .76$). V pričujoči raziskavi torej nismo potrdili predvidene 3-faktorske strukture TRCS, saj se tretji faktor (ki naj bi bil avtentičnost) ni pokazal. Kljub temu rezultati kažejo, da odnosno kompetentnost učiteljev (dve dimenziji – individualnost in odgovornost) lahko zanesljivo merimo z novo razvito lestvico TRCS. Postavke, ki so bile oblikovane za merjenje avtentičnosti, so se izkazale kot problematične (nizke nasičenosti, nasičevanje na nepripadajoč faktor ipd.). Predlagamo, da se nadaljnje študije osredotočijo na postavke, ki merijo avtentičnost, jih ponovno pregledajo, prilagodijo in oblikujejo nove postavke ter preizkusijo v okviru enovitega inštrumenta za merjenje odnosne kompetentnosti pri učiteljih.

Ključne besede: socialne in čustvene kompetentnosti, odnosna kompetentnost, razvoj instrumenta, učitelji

Ana Kozina and Ana Mlekuž

Intrinsic motivation as a Key to School Success: Predictive Power of Self-perceived Autonomy, Competence and Relatedness on the Achievement in International Comparative Studies

The paper analyses the role of intrinsic motivation in achievement in international comparative studies using the framework of Self-determination theory (Ryan & Deci, 2002). Self-determination theory argues that people have three basic psychological needs: (i) need for autonomy, (ii) need for competence and (iii) need for relatedness. It has been established so far that when these psychological needs are met in students their well-being

significantly increases and their knowledge is conceptual (Ryan & Deci, 2009). In the paper we focused on the predictive power of all three psychological needs (as measured in background questionnaires in international comparative studies) for the achievement in selected international comparative studies (data bases for Slovenia): PIRLS (N = 4466), TIMSS (N = 4415), TIMSS Advanced (N = 2156), ICCS (N = 3042) controlling for SES. The preliminary results of regression analyses showed consistency across age groups (4th, 8th, 9th and 13th grade schools) and across studies indicating self-perceived competence and self-perceived autonomy as significant predictors of academic achievement as measured in international comparative studies. Relatedness was a significant predictor only in 13th grade students. The results are in line with the theoretical framework of SDT study. The practical implications of the results are discussed with suggested activities at the classroom level.

Key words: academic achievement, international comparative studies, motivation, relatedness, autonomy, competence

Ana Kozina in Ana Mlekuž

Notranja motivacija kot ključ do uspeha v šoli: napovedna vrednost avtonomnosti, kompetentnosti in povezanosti za dosežek v mednarodnih primerjalnih raziskavah znanja

Prispevek obravnava vlogo notranje motivacije pri dosežku v mednarodnih primerjalnih raziskavah znanja z uporabo teoretičnega okvira teorije samodoločanja (Ryan & Deci, 2002). Teorija samodoločanja prepoznava tri temelje psihološke potrebe: 1) potrebo po avtonomiji, 2) potrebo po kompetentnosti in 3) potrebo po povezanosti. Ko so te tri potrebe pri učencih in dijakih zadovoljene, se ti počutijo dobro in hkrati dosegajo višje ravni znanja (Ryan & Deci, 2009). V prispevku smo preverili napovedno vrednost indikatorjev teh potreb (kot so merjene v ozadenjskih vprašalnikih) za učne dosežke v izbranih mednarodnih primerjalnih raziskavah znanja (vključujoč različne starostne skupine in različne merjene vsebine). Uporabili smo podatkovne baze za Slovenijo: PIRLS (N = 4466), TIMSS (N = 4415), TIMSS Advanced (N = 2156), ICCS (N = 3042). Ugotovili smo, da sta zaznana kompetentnost in avtonomnost učencev in dijakov pomembna napovednika učnih dosežkov (ob kontroli socialno ekonomskega statusa) v vseh vključenih raziskavah, medtem ko je zaznana povezanost pomembne napovednih samo v raziskavi TIMSS Advanced. Rezultati so konsistentni po različnih starostnih skupinah (4., 8., 9. in 13. leto šolanja) in različnih dosežkih (bralna pismenost, znanje matematike, znanje državljanske vzgoje). Ugotovitve so skladne z teoretičnimi pred-

postavkami teorije samodoločanja. Praktične izpeljave ter pomen za šolsko prakso je izpostavljen.

Ključne besede: učni dosežek, mednarodne primerjalne raziskave znanja, motivacija, povezanost, avtonomnost, kompetentnost

Urška Aram, Nina Jurinec, Marina Horvat and Katja Košir

Self-concept and Social Acceptance of Identified Gifted and High Achieving Students

Research findings about social and emotional characteristics of gifted students are not consistent. In this field, two prevailing hypotheses exist; the resilience hypothesis assumes higher psychological resilience of gifted pupils and the risk hypothesis predicts that giftedness can be a risk factor for pupils' social and emotional development. The purpose of this study was to investigate the differences between identified gifted adolescents and high achievers that are not identified as gifted in their social acceptance and self-concept (general, academic, and peer relations) and compare the two groups with remaining students. 422 (47.6% males) slovenian six to ninth graders from five elementary schools participated in the study. Among them, 85 (20.1%) were identified as gifted and 117 (27.7%) were high achievers, who were not identified as gifted; the remaining 220 pupils (52.1%) did not belong to any of the previous definition. Also, 25 class teachers were asked to assess social acceptance for every student in their class. No significant differences were found between high achievers and gifted pupils in any of the self-concept subscales measured, nor social preference or teacher assessed social acceptance. In addition, we found significant effect of gender; girls had lower general self-concept and lower peer relations self-concept, while differences in academic self-concept were not significant. We found significant interaction of group and gender only in peer relations self-concept – gifted girls had lower peer relations self-concept than gifted boys and high achieving girls. Research findings suggest that academic achievement is a factor of positive self-concept and social acceptance regardless of the giftedness status. In addition, the importance of further research of gifted girls as a high-risk subgroup of gifted students should be emphasized.

Key words: gifted pupils, high-achievers, social acceptance, self-concept

Urška Aram, Nina Jurinec, Marina Horvat in Katja Košir

Samopodoba in socialna sprejetost identificiranih nadarjenih in visoko učno uspešnih osnovnošolcev

Izsledki raziskav o socialno-emocionalnih značilnostih nadarjenih učencev niso enotni. Zasledimo lahko dve nasprotujoči si hipotezi; prva predpostavlja večjo psihološko odpornost nadarjenih učencev (angl. »resilience hypothesis«), druga pa predpostavlja, da predstavlja nadarjenost dejavnik tveganja za socialni in emocionalni razvoj učencev (angl. »risk hypothesis«). Namen naše raziskave je bil primerjati socialne in emocionalne značilnosti (splošno samopodobo, učno samopodobo, samopodobo na področju odnosov z vrstniki in socialno sprejetost) nadarjenih učencev in visoko učno uspešnih učencev, ki niso identificirani kot nadarjeni, in obe skupini primerjati s preostalimi učenci. Vzorec je sestavljalo 422 slovenskih osnovnošolcev (47,6 % fantov) od šestega do devetega razreda iz petih osnovnih šol. Izmed teh je bilo 85 (20,1 %) identificiranih nadarjenih in 117 (27,7 %) visoko učno uspešnih, ki niso bili prepoznani kot nadarjeni, preostalih 220 učencev (52,1 %) ni pripadalo nobeni od zgornjih opredelitev. Sodelovalo je tudi 25 učiteljev, ki so ocenili socialno sprejetost učencev v razredu. Med nadarjenimi in visoko učno uspešnimi učenci ni prišlo do statistično pomembnih razlik pri nobeni izmed merjenih podlestvic samopodobe, kakor tudi ne pri socialni preferenčnosti in učiteljevi oceni socialne sprejetosti. Ugotovili smo statistično pomemben učinek spola – dekleta imajo nižjo splošno samopodobo in samopodobo na področju odnosa z vrstniki, medtem ko razlike na področju učne samopodobe niso bile statistično pomembne. Statistično pomemben učinek interakcije skupin in spola se je pokazal samo pri samopodobi na področju odnosov z vrstniki – nadarjena dekleta imajo nižjo samopodobo na področju odnosov z vrstniki kot nadarjeni fantje in visoko učno uspešna dekleta. Ugotovitve raziskave nakazujejo možnost, da je učna uspešnost dejavnik pozitivne samopodobe in socialne sprejetosti ne glede na status nadarjenosti. Izsledki nakazujejo pomembnost nadaljnjega raziskovanja samopodobe nadarjenih deklet kot rizične podskupine nadarjenih učencev.

Ključne besede: nadarjeni učenci, učno uspešni učenci, socialna sprejetost, samopodoba

Klaudija Šterman Ivančič and Melita Puklek Levpušček

Motivational Goals and Academic Performance from the Perspective of Students' Perceived Quality of Relationship with Their Class Teachers at the Start of the Upper Secondary Education Level

In this study, we examined the associations between students' perceived quality of the relationship with their class teacher, and their motivational goals and academic achievement in the first year of Slovenian upper secondary school. We also investigated the effects of educational programme and gender. Students ($N=602$, $Mage = 15.5$ years) reported on their motivational goals and perceived socio-emotional support of their class teacher by answering the Network of Relationship Inventory and Patterns of Adaptive Learning Scales questionnaire (Midgley et al., 2000). The results showed statistically significant differences in students' motivational goals according to the type of educational programme and gender. The strongest predictor of students' motivational goals proved to be their perceived socio-emotional support from their class teacher and negative interactions in this relationship proved to be the most significant predictor of students' academic achievement.

Key words: adolescence, upper secondary school, relationship with teachers, achievement goals, academic performance

Klaudija Šterman Ivančič in Melita Puklek Levpušček

Motivacijski cilji in učna uspešnost z vidika kakovosti mladostnikovega odnosa z učiteljem na začetku srednješolskega izobraževanja

Prispevek obravnava povezave med mladostnikovo zaznano kakovostjo odnosa z razrednikom in njegovimi motivacijskimi cilji ter učno uspešnostjo v prvem letniku srednješolskega izobraževanja. Pri tem so nas zanimala razlike v omenjenih učinkih glede na izobraževalni program, ki ga mladostnik obiskuje, in spol. Mladostniki ($N=602$, $Mstarost = 15,5$ let) so o motivacijskih ciljih in zaznani socialno-čustveni opori v odnosu z razrednikom poročali s pomočjo vprašalnikov Network of Relationship Inventory in Patterns of Adaptive Learning Scales (Midgley et al., 2000). Rezultati kažejo statistično pomembne razlike v motivacijski usmerjenosti mladostnikov glede na izobraževalni program in spol (razen usmerjenosti v izogibanje izkazovanju lastnih nezmožnosti). Kot najmočnejši napovednik motivacijske usmerjenosti mladostnikov se je pokazala njihova zazna-

na socialno-čustvena opora s strani razrednika, negativne interakcije v odnosu pa so najpomembneje napovedovale mladostnikovo učno uspešnost. *Ključne besede:* mladostništvo, srednješolsko izobraževanje, odnos z učiteljem, motivacijska usmerjenost, učni dosežki

Per F. Laursen and Anne Maj Nielsen

Teachers' Relational Competencies: The Contribution from Teacher Education

Research has thoroughly documented that good social relations in school are important and effective for students' academic learning and well-being alike. It is also well-documented that having good social relations in a class requires the teacher to have relational competencies. This article presents experiences of relational work in the classroom described by student teachers who participated in a development project that aimed to include relational competencies in the pre-service teacher education curriculum compared to student teachers following the ordinary teacher education programme at VIA University College, Aarhus, Denmark. An interview survey of student teachers' preliminary output in the spring of 2014 were phenomenologically based, qualitative, and were in-depth asking for detailed descriptions of significant incidents as they were experienced by the student teachers during their recent pre-service training. The interviews showed that student teachers taking part in the project had acquired a relationship with the teacher's role that was more reflective and experimenting than the student teachers following the ordinary program. Halfway through a four-year process with particular emphasis on relational competencies, the student teachers participating in the project are taking a more reflective and experimental approach to the teacher's role. Although this may not be a fully developed relational competence, it is presumably a significant step along the way.

Keywords: teacher education, teacher competence, relational competence, phenomenological, approach mindfulness

Per F. Laursen in Anne Maj Nielsen

Učiteljeva odnosna kompetenca: kako jo lahko razvijamo v okviru izobraževanja učiteljev

Raziskave so pokazale, da so dobri socialni odnosi v šoli pomembni tako za učenje kot za dobro počutje pri učencih. Prav tako so pokazale, da je za dobre socialne odnose v razredu potrebno, da ima učitelj razvito odnosno kompetenco. V tem članku predstavljamo delo z odnosi v razredu, kot ga vidijo študenti-učitelji, ki so sodelovali v razvojnem projektu, katerega

cilj je bil vključiti odnosne kompetence v začetno izobraževanje učiteljev, v primerjavi s študenti-učitelji, ki so študirali po rednem programu izobraževanja učiteljev na VIA University College v Aarhusu na Danskem. Raziskava temelji na preliminarnih intervjujih s študenti-učitelji spomladi leta 2014 (torej po dveh letih oziroma po polovici študija); intervjuji so fenomenološki in temeljijo na kvalitativnih, poglobljenih opisih pomembnih dogodkov, kot so jih študenti-učitelji doživeli tekom svojega začetnega usposabljanja. Intervjuji so pokazali, da so študenti-učitelji, ki sodelujejo v projektu, zmožni večje refleksije svoje učiteljske vloge ter večjega eksperimentiranja z njo v primerjavi s študenti-učitelji v običajnem programu. Torej na polovici štiriletnega procesa izobraževanja, v katerem je poseben poudarek na razvijanju odnosne kompetence, so študenti, ki sodelujejo v projektu, do svoje vloge učitelja bolj refleksivno in eksperimentalno naravnani ter vidijo svoje osebne izkušnje kot indikatorje svoje profesionalne orientacije in delovanja. Čeprav to morda ni v celoti razvita odnosna kompetenca, je verjetno pomemben korak na tej poti.

Ključne besede: izobraževanje učiteljev, kompetenca učiteljev, odnosna kompetenca, fenomenološki pristop, čuječnost

Jana Hafner and Maja Krajnc

Comparison of Interpersonal Communication and Interpersonal Relationship Between Early Years Educators and Children in Selected English and Slovenian Nurseries

This paper deals with the comparison of selected nurseries in England and Slovenia on the topic of interpersonal communication and interpersonal relationship between early years educators and children in center-based early childhood education and care settings. There are differences between English and Slovenian early childhood education and care systems (differences in organization, financing, staff qualifications, the norms, children/staff ration in a nursery ...). We have gained an insight into both systems through the analysis of official documents and direct experiences of 16 secondary school students of the 3rd year early childhood education and care program. During their 1st and 2nd year, the students performed compulsory practical training in nurseries in Slovenia and in their 3rd year they performed it in English nurseries. In this article we tried to answer the question of how the differences between the two systems of early childhood education and care are reflected in interpersonal communication and interpersonal relationship between early years educators and children in the nursery. We used a qualitative research approach, as the

data collection technique was a direct unscientific observation of participation in a natural situation, focus interview and analysis of documents (e.g. Kurikulum za vrtce, Statutory Framework for the Early Years Foundation Stage, legislation documents etc.). Our findings suggest that the main differences in interpersonal communication and interpersonal relationships in observed nurseries are mostly caused by the early years educator's personality and cultural differences and not the structural or process differences between the two early childhood education and care systems.

Keywords: communication, interpersonal relations, nursery, early childhood education and care professional, child

Jana Hafner in Maja Krajnc

Primerjava medosebne komunikacije in medosebnih odnosov med strokovnimi delavci in otroki v izbranih vrtcih v Angliji in Sloveniji

V prispevku smo obravnavali primerjavo izbranih vrtcev v Angliji in Sloveniji na temo medosebne komunikacije in medosebnih odnosov med strokovnimi delavci in otroki v oddelku vrtca. Angleški in slovenski sistem predšolske vzgoje se v marsičem razlikujeta (organiziranost, financiranje, izobrazba strokovnih delavcev, normativi, razmerja otrok/odrasli v oddelku ...). Vpogled v oba sistema smo dobili preko analize uradne dokumentacije in neposrednih izkušenj 16 dijakinj 3. letnika programa predšolska vzgoja, ki so svoje obvezno praktično usposabljanje v vrtcih v 1. in 2. letniku opravile v slovenskih vrtcih, v 3. letniku pa v različnih angleških vrtcih. V prispevku smo skušali odgovoriti na vprašanje, kako se razlike teh dveh sistemov predšolske vzgoje odražajo v medosebni komunikaciji in medosebnem odnosu med strokovnimi delavci in otroki v oddelku. V prispevku smo uporabili kvalitativni raziskovalni pristop, kjer smo kot tehnike zbiranja podatkov uporabili neposredno neznanstveno opazovanje z udeležbo v naravni situaciji, fokusni intervju in analizo dokumentov (mdr. Kurikulum za vrtce, Statutory framework for the early years foundation stage, zakonodajni dokumenti ipd.). Naše ugotovitve kažejo, da glavne razlike v medosebni komunikaciji in odnosih v opazovanih vrtcih izhajajo predvsem iz osebnostnih razlik strokovnih delavcev in iz kulturnih razlik ter ne iz strukturnih in procesnih razlik med obema sistemoma predšolske vzgoje.

Ključne besede: komunikacija, medosebni odnosi, vrtec, odderek, strokovni delavec, otrok

5 AUTHORS
AVTORJI

Authors/Avtorji

Jennifer L. Hanson-Peterson

Jennifer Hanson-Peterson, M.A., completed her Masters in Human Development, Learning, and Culture, with a concentration in Social-Emotional Learning and Development in 2012 at the University of British Columbia, Canada. She currently resides in Melbourne, Australia and develops and delivers positive psychology training programs within the education sector, both nationally and internationally. She has experience conducting research on the effectiveness of social-emotional learning programs in classrooms and positive psychology practices in supported-housing services for disadvantaged youth.

Jennifer L. Hanson-Peterson je leta 2012 na Univerzi British Columbia, Kanada, zaključila magistrski študij na področju posameznikovega razvoja, učenja in kulture, v okviru katerega se je osredotočila na socialno in čustveno učenje in razvoj. Sedaj v Melbournu, Avstralija, razvija in izvaja programe usposabljanja s področja pozitivne psihologije v izobraževanju, tako na nacionalni kot na mednarodni ravni. Raziskovalno se ukvarja z učinkovitostjo programov socialnega in čustvenega učenja v razredu ter praks pozitivne psihologije v stanovanjskih skupnostih za deprivilegirane mladostnike.

Kimberly A. Schonert-Reichl

Dr. Kimberly Schonert-Reichl is a Professor in the Department of Educational and Counselling Psychology, and Special Education at the University of British Columbia, Canada. She is also the Director of the Human Early Learning Partnership. Her research focus is on the social and emotional development of children and adolescents in school and community settings,

and the effectiveness of classroom-based social-emotional learning and mindfulness-based education programs.

Kimberly A. Schonert-Reichl je profesorica na Oddelku za pedagoško in svetovalno psihologijo ter specialno pedagogiko na Univerzi British Columbia, Kanada. Opravlja tudi funkcijo direktorice raziskovalne mreže Human Early Learning Partnership. Njeno raziskovalno delo se osredotoča na socialni in čustveni razvoj otrok ter mladostnikov v šolah in skupnostih ter na učinkovitost v razredu izvajanih programov socialnega in čustvenega učenja ter čuječnosti.

Veronica Smith

Dr. Veronica Smith is an Associate Professor in the Department of Educational Psychology at the University of Alberta, Canada. She is also a Speech and Language Pathologist. She teaches courses on child development, program evaluation, and autism. Her research interests are the social and language development of children at risk or with identified disabilities/delays in school and community settings, including the effectiveness of early intervention and social-emotional learning programs in classrooms.

Dr. Veronica Smith je izredna profesorica na oddelku za pedagoško psihologijo na Univerzi Alberta, Kanada. Je tudi strokovnjakinja za področje govorne in jezikovne patologije. Poučuje o razvoju otrok, evalvaciji programov in avtizmu. Njeni raziskovalni interesi so na področju socialnega in jezikovnega razvoja rizičnih otrok in otrok s prepoznanimi primanjkljaji/zaostanki v šoli in skupnostih, vključno z raziskovanjem učinkovitosti zgodnjega ukrepanja in izvajanja programov socialnega in čustvenega učenja v razredih.

Maša Vidmar

Maša Vidmar is assistant professor and works at Educational Research Institute as scientific associate. Her research interests include social and emotional aspects of learning and teaching (teachers' relational competence, social and personality development in childhood and adolescence), early childhood education and care, and determinants of academic achievement. She is involved in several international and national projects (early school leaving, perception of knowledge in knowledge-based society).

Maša Vidmar je doktorica psiholoških znanosti, docentka za psihologijo in kot znanstvena sodelavka zaposlena na Pedagoškem inštitutu. Raziskovalno se ukvarja predvsem s socialnimi in čustvenimi vidiki učenja in poučevanja (odnosna kompetentnost učiteljev, socialni in osebni razvoj otrok in mladostnikov), predšolsko vzgojo ter dejavniki učne us-

pečnosti. Vključena je v različne mednarodne in nacionalne projekte (zgodnje opuščanje šolanja, odnos do znanja v družbi znanja).

Katja Kerman

Katja Kerman studied psychology at Faculty of Arts, University of Maribor, where she graduated with a Masters' thesis titled »Physiological indicators and self-rated stress: The influence of working conditions and personality traits«. As a doctoral student at University of Vienna, she will continue her research work, focusing on new work demands in light of physical and psychological health.

Katja Kerman je študirala psihologijo na Filozofski fakulteti Univerze v Mariboru, kjer je študij zaključila z magistrskim delom z naslovom »Fiziološki indikatorji in samoocena stresa: Vpliv delovnih pogojev in osebnostnih lastnosti«. Raziskovalno delo bo nadaljevala kot doktorska študentka na Univerzi na Dunaju, kjer bo preučevala sodobne delovne zahteve v luči pokazateljev telesnega in duševnega zdravja.

Ana Kozina

Ana Kozina is a researcher, assistant professor and a head of the Centre for evaluation studies in Educational Research Institute. Her work is in the field of developmental and educational psychology. She is focused on the developmental and time related trends of aggression and anxiety (in childhood and adolescence) their interplay and the role anxiety and aggression play on individual level, on school level and on the community level (with possible prevention and intervention designs). In the field of education she is interested in the factors related to students' achievement (school climate, social and emotional learning, motivation...). She has been involved in several national and international research and evaluation projects. She has successfully finished postdoctoral project: Development of guidelines for aggression reduction on school level based on an anxiety-aggression model and trend analyses of anxiety and aggression in Slovenia primary schools from year 2007 to year 2011. Her work is presented on national and international level (e.g. conferences, journals, monographs) on regular basis. She is a member of Editorial board: Educational research Institute Press.

Ana Kozina je diplomirana univerzitetna psihologinja, doktorica psiholoških ved in docentka za psihologijo. Zaposlena je na Pedagoškem inštitutu, kjer je vodja Centra za evalvacijske študije. Njeno raziskovalno delo sega na področji pedagoške in razvojne psihologije. Ukvarja se z razvojem agresivnosti in anksioznosti (obdobje otroštva in mladostništva) ter njune interakcije na ravni posameznika in na ravni širšega družbenega okolja

(vključno z razvojem preventivnih in intervencijskih dejavnosti). Na področju pedagoške psihologije se ukvarja s preučevanjem dejavnikov (šolska klima, socialno in čustveno učenje, motivacija ...), ki vplivajo na učne dosežke otrok in mladostnikov. Raziskovalno je vključena v mednarodne in nacionalne raziskovalne projekte ter evalvacijske študije. Uspešno je zaključila temeljni podoktorski raziskovalni projekti z naslovom: Razvoj smernic za zmanjševanje agresivnosti na ravni šol na podlagi modela povezanosti agresivnosti in anksioznosti ter analize trenda obeh pojavov v slovenskih osnovnih šolah od leta 2007 do leta 2011. Izsledke predstavlja na nacionalni in mednarodni ravni (znanstvene konference, posveti, članki, poglavja, monografije). Je članica uredniškega odbora Založbe Pedagoškega inštituta.

Ana Mlekuž

Ana Mlekuž holds a B.A. in political sciences and M. A. in economics. She is a researcher at the Educational Research Institute in Ljubljana. She is data manager for International Civic and Citizenship Education Study (ICCS 2009) and European Survey on Language Competences (ESLC 2011) and is a co-author of several scientific articles in the field of international large scale assessments. Her field of research is financial literacy.

Ana Mlekuž je diplomirana politologinja, magistrica ekonomskih znanosti in zaposlena kot raziskovalka na Pedagoškem inštitutu. Je upravljalica podatkovnih baz za Mednarodno raziskavo državljske vzgoje in izobraževanja (ICCS 2009) in Evropsko raziskavo o jezikovnih kompetencah (ESLC 2011) ter je soavtorica znanstvenih in strokovnih člankov s področja mednarodnih raziskav znanja. Njeno področje raziskovanja je finančna pismenost.

Urška Aram

Urška Aram obtained her Master's degree in psychology at the Faculty of Arts, University of Maribor in 2014. In her final thesis titled Different aspects of social acceptance of pupils in elementary school she investigated the concept of social acceptance in relation to different aspects of self-concept and behaviour in social networks. She is interested in research and even more in working with children and adolescents. She works as a school counselor and a learning assistance teacher in Slava Klavora elementary school, she is also part of the team that works with gifted students.

Magistrica psihologije Urška Aram je leta 2014 zaključila študij psihologije na Filozofski fakulteti Univerze v Mariboru. V zaključni nalogi z naslovom Različni vidiki socialne sprejetosti osnovnošolskih otrok je razisk-

ovala koncept socialne sprejetosti v povezavi z različnimi dimenzijami samopodobe in vedenja na spletnih socialnih omrežjih. Zanima jo raziskovanje, še bolj pa praktično delo z otoki in mladostniki. Kot svetovalna delavka in učiteljica dodatne strokovne pomoči je zaposlena na osnovni šoli Slave Klavore v Mariboru, dodatno pa je tudi del tima za delo z nadarjenimi učenci.

Nina Jurinec

Nina Jurinec completed her Master's education of psychology in February 2016, at the Faculty of Arts, University of Maribor. In her final thesis titled Validation of the Slovenian adaptation of situational tests of emotional understanding and emotion management she examined the psychometric characteristics of the mentioned tests. Besides researching, she is also interested in clinical psychology. She works as an apprentice at the Department of Psychiatry at the University Medical Centre Maribor.

Nina Jurinec je februarja 2016 zaključila študij psihologije na Filozofski fakulteti Univerze v Mariboru. V zaključnem delu z naslovom Validacija slovenske priredbe situacijskih testov razumevanja in uravnavanja čustev je preverjala psihometrične značilnosti omenjenih testov. Poleg raziskovanja jo še posebej zanima klinična psihologija. Sedaj je kot pripravnica zaposlena na Oddelku za psihiatrijo v Univerzitetnem kliničnem centru Maribor.

Marina Horvat

Asist. Marina Horvat works at the Department of Psychology (Faculty of Arts) at the University of Maribor, Slovenia. As a university assistant, she teaches Psychology students at BA level in form of exercises and seminar work. Her research interest include examining cognitive, mainly memory abilities, and social functioning of gifted students. She is an author and co-author of various scientific articles published in national and international scientific journals.

Asist. Marina Horvat je zaposlena na Oddelku za psihologijo Filozofske fakultete Univerze v Mariboru. Kot izvajalka vaj in seminarjev je vključena v izobraževanje predvsem študentov psihologije. Njeni raziskovalni interesi so vezani na preučevanje kognitivnih, predvsem spominskih, sposobnosti ter socialnega funkcioniranja nadarjenih učencev. Je avtorica in soavtorica različnih vrst prispevkov, objavljenih v domačih in tujih revijah.

Katja Košir

Katja Košir, PhD, works as associate professor at Faculty of Education, University of Maribor. She teaches students of elementary education, pri-

mary education, fine arts and music education, and psychology. She also takes part in teacher trainings and carries out psychological counselling for students. Her research and professional work is mainly focused on examining social relations in school context, bullying, teachers' professional development, psychological counselling in school and socioemotional characteristics of gifted pupils. She is an author and co-author of professional and scientific monographs and author of various scientific articles published in national and international scientific publications.

Izr. prof. dr. Katja Košir je zaposlena na Pedagoški fakulteti Univerze v Mariboru. Predava študentom razrednega pouka, predšolske vzgoje, likovne in glasbene pedagogike ter psihologije, sodeluje pa tudi pri programu pedagoško-andragoškega izpopolnjevanja za učitelje ter izvaja psihološko svetovanje za študente. Njeno raziskovalno in strokovno delo se nanaša predvsem na preučevanje socialnih spremenljivk v šolskem kontekstu, medvrstniško nasilje, profesionalni razvoj učiteljev, šolsko psihološko svetovanje in socioemocionalne značilnosti nadarjenih učencev. Je avtorica in soavtorica strokovnih in znanstvenih monografij ter avtorica različnih znanstvenih prispevkov, objavljenih v domačih in tujih publikacijah.

Klaudija Šterman Ivančič

Klaudija Šterman Ivančič is a researcher at the Educational Research Institute in the Center for Applied Epistemology. Her main research focus is results from international comparative studies (reading, mathematics, science and financial literacy) and personality, motivational and socio-emotional determinants that are linked to student's behaviour and achievement in national and international arena.

Klaudija Šterman Ivančič je zaposlena kot raziskovalka na Pedagoškem inštitutu, v Centru za uporabno epistemologijo. Raziskovalno se ukvarja s področjem bralne, matematične, naravoslovne in finančne pismenosti v okviru mednarodnih primerjalnih raziskav ter s preučevanjem osebnostnih, motivacijskih in socialno-čustvenih dejavnikov učnega vedenja in dosežkov mladostnikov tako v Sloveniji kot v mednarodnem prostoru.

Melita Puklek Levpušček

Melita Puklek Levpušček is an associate professor of educational psychology at the Department of Psychology at Faculty of Arts in Ljubljana. Her research interests include: psychosocial development of adolescents (i.e. social anxiety, interpersonal problems, individuation in relation to parents and friends, learning autonomy); representations of adulthood and individuation in emerging adults; multiple social contexts (family, peers,

school) and adolescent development; personality, motivational and social determinants of academic achievement; professional development of teachers in higher education.

Melita Puklek Levpušček je izredna profesorica za pedagoško psihologijo, zaposlena na Oddelku za psihologijo Filozofske fakultete v Ljubljani. Raziskovalno se ukvarja s psihosocialnim razvojem mladostnikov (socialno anksioznostjo, težavami v medosebnih odnosih, individualizacijo v odnosu s starši in prijatelji, vzpostavljanjem učne avtonomije), procesi individualizacije na prehodu v odraslost, psihosocialnim razvojem mladostnikov v različnih socialnih kontekstih (družina, vrstniki, šola), osebnostnimi, motivacijskimi in socialnimi dejavniki učne uspešnosti ter profesionalnim razvojem visokošolskih učiteljev.

Per F. Laursen

Per F. Laursen, PhD, is a Professor at Department of Education, Aarhus University. His research interests are in the fields of teacher education, curriculum theory, and teacher development. He is a teacher and supervisor at the MA in Education. He is the author of several books on teachers and teaching.

Dr. Per F. Laursen je profesor na Oddelku za edukacijo, Univerza Aarhus. Njegovi raziskovalni interesi so na področju izobraževanja učiteljev, teorije kurikuluma in razvoja učiteljev. Je učitelj in mentor v okviru magistrskega študija na področju edukacije. Je avtor več knjig o učiteljih in poučevanju.

Anne Maj Nielsen

Anne Maj Nielsen, PhD, is an Associate Professor at Department of Education, Aarhus University. Her research interests are in the fields of contemplative education and teaching, mindful awareness in teaching and teacher education, and aesthetic experience-based learning. Her research and teaching is inspired by phenomenology and cultural psychology. She is a teacher and supervisor at the MA in Educational Psychology, supervisor for PhD-students, and is presently Head of Department of Educational Psychology, Aarhus University.

Dr. Anne Maj Nielsen je izredna profesorica na Oddelku za edukacijo, Univerza Aarhus. Njeni raziskovalni interesi so na področju kontemplativnega izobraževanja in poučevanja, čuječega zavedanja pri poučevanju in izobraževanju učiteljev ter estetskega izkustvenega učenja. Navdih za njeno raziskovanje in poučevanje sta fenomenologija in kulturna psihologija. Je učiteljica in mentorica v okviru magistrskega študija na po-

dročju edukacijske psihologije, mentorica doktorskim študentom in v tem času predstojnica Oddelka za pedagoško psihologijo, Univerza Aarhus.

Jana Hafner

Jana Hafner is university graduate in the field of pedagogy. She is employed at the upper secondary school Srednja vzgojiteljska šola in gimnazija Ljubljana.

Jana Hafner je univerzitetna diplomirana pedagoginja, zaposlena na Srednji vzgojiteljski šoli in gimnaziji Ljubljana.

Maja Krajnc

Maja Krajnc is university graduate in the field of psychology. She is employed at the upper secondary school Srednja vzgojiteljska šola in gimnazija Ljubljana.

Maja Krajnc je univerzitetna diplomirana psihologinja, zaposlena na Srednji vzgojiteljski šoli in gimnaziji Ljubljana.

Navodila avtorjem/-icam člankov v reviji *Šolsko polje*

Članek (praviloma v obsegu od 7000 do največ 10.000 besed) naj ima na začetku: 1) naslov ter ime in priimek avtorja/-ice; 2) povzetek v slovenskem in angleškem jeziku, do 300 do 350 besed; 3) ključne besede v slovenščini in angleščini (do 5); 4) kratko predstavitev avtorja/-ice (do 100 besed v slovenščini in angleščini), navedena naj bo tudi organizacija zaposlitve.

Prispevki naj bodo napisani v knjižni slovenščini ob upoštevanju veljavnega pravopisa, v nasprotnem primeru si uredništvo pridržuje pravico, da članka ne recenzira oziroma ga zavrne.

Če je prispevek že bil objavljen v kaki drugi reviji ali če čaka na objavo, je treba to izrecno navesti.

Prispevek naj ima dvojni medvrstični razmik, tip črk naj bo Times New Roman, velikost 12 pik (v opombah 10). Besedilo naj bo levo poravnano, strani pa zaporedno oštevilčene. Odstavki naj bodo ločeni s prazno vrstico.

Uporabiti je mogoče tri hierarhične nivoje podnaslovov, ki naj bodo oštevilčeni (uporabljajte izključno navaden slog, v prelomu bodo ravni ločene tipografsko): 1. – 1.1 – 1.1.1

Za poudarke uporabite izključno *ležeči* tisk (v primeru jezikoslovnih besedil, kjer so primeri praviloma v ležečem tisku, lahko za poudarke izjemoma uporabite polkrepki tisk). Ležeče pišite tudi besede v tujih jezikih. Raba drugih tipografskih rezov (podčrtano, velike male črke, krepko kurzivno ...) ni dovoljena. Ne uporabljajte dvojnih presledkov, prav tako ne uporabljajte preslednice za poravnavo besedila. Edina oblika odstavka, ki je dovoljena, je odstavek z levo poravnavo brez rabe tabulatorjev prve ali katerekoli druge vrstice v ostavku (ne uporabljajte sredinske, obojestranske ali desne poravnave odstavkov). Oglate oklepaje uporabljajte izključno za fonetične zapise oz. zapise izgovarjave. Tri pike so stične le, če označujejo prekinjeno besedilo. Pri nedokončani misli so tri pike nestrčne in nedeljive. Prosimo, da izključite funkcijo deljenja besed.

Sprotno opombe naj bodo samooštevilčene (številke so levostično za besedo ali ločilom – če besedi, na katero se opomba nanaša, sledi ločilo) in uvrščene na tekočo stran besedila.

Citati v besedilu naj bodo označeni z dvojnimi, citati znotraj citatov pa z enojnimi narekovaji. Izpuste iz citatov in prilagoditve označite s tropičjem znotraj poševnic /.../. Daljše citate (več kot 5 vrstic) izločite v samostojne odstavke, ki jih od ostalega besedila ločite z izpustom vrstice in umikom v desno. Vir citata označite v okroglem oklepaju na koncu citata: (Benjamin, 1974: str. 42). Če je avtor/-ica naveden/-a v sobesedilu, priimek lahko izpustite.

V besedilu označite najprimernejša mesta za *likovno opremo* (tabele, skice, grafikone itd.) po zgledu: [Tabela 1 približno tukaj]. Posamezne enote opreme priložite vsako v posebni datoteki (v .eps, .ai, .tif ali .jpg formatu, minimalna resolucija 300 dpi). Naslov tabele je nad tabelo, naslov grafa pa pod grafom. Prostor, ki ga oprema v prispevku zasede, se šteje v obseg besedila, bodisi kot 250 besed (pol strani) ali 500 besed (cela stran).

Na vir v besedilu se sklicujete takole: (Ducrot, 1988). Stran navedka navedite za dvopičjem: (Foucault, 1991: str. 57).

Če so trije avtorji/-ice navedenega dela, navedite vse tri: Bradbury, Boyle in Morse (2002), pri večjem številu pa izpišite le prvo ime: (Taylor et al., 1978).

Dela enega avtorja/-ice, ki so izšla istega leta, med seboj ločite z dodajanjem malih črk (a, b, c itn.), stično ob letnici izida: (Bourdieu, 1996a).

Dela različnih avtorjev/-ic, ki se vsa nanašajo na isto vsebino, naštejte po abecednem redu in jih ločite s podpičjem: (Haraway, 1999; Oakley, 2005; Ramazanoglu, 2002).

Pri večkrat zaporedoma citiranih delih uporabite tole: (ibid.).

V članku uporabljena dela morajo biti po abecedi navedena na koncu, pod naslovom *Literatura*. Če so bili v prispevku uporabljeni viri, se seznam virov, pod naslovom *Viri*, uredi posebej. Če je naslovov spletnih strani več, se lahko navedejo tudi v posebnem seznamu z naslovom *Spletne strani*. Pri navedbi spletne strani se v oklepaju dopiše datum dostopa. Vsako enoto v teh seznamih zaključuje pika. Način navedbe enot je naslednji:

Knjige: Bradbury, I., Boyle, J., in Morse, A. (2002) *Scientific Principles for Physical Geographers*. Harlow: Prentice Hall.
Garber, M. (1999) *Symptoms of Culture*. Harmondsworth: Penguin.

Članki: Kerr, D. (1999b) Changing the political culture: the advisory group on education for citizenship and the teaching of democracy in schools. *Oxford Review of Education* 25 (4), str. 25–35.

Poglavja v knjigi: Walzer, M. (1992) The Civil Society Argument. V MOUFFE, Ch. (ur.), *Dimensions of Radical Democracy: Pluralism, Citizenship and Community*. London: Routledge.

Spletne strani: http://www.cahiers-pedagogiques.com/article.php?id_article=881 (pridobljeno 5. 5. 2008).

O morebitnih drugih posebnostih se posvetujte z uredništvom.

Naslov uredništva: Šolsko polje, Mestni trg 17, 1000 Ljubljana; tel.: 01 4201 240, fax: 01 4201 266, e-pošta: info@theschoolfield.com; eva.klemencic@pei.si

Naročilna revija: Šolsko polje, Slovensko društvo raziskovalcev šolskega polja, Mestni trg 17, 1000 Ljubljana, e-pošta: eva.klemencic@pei.si; tel.: 01 420 12 53, fax: 01 420 12 66

Guidelines to the authors

The submission of an article to the *Šolsko polje* journal should be between 7.000 to 10.000 words long. At the beginning it should include

- the author's name and address;
- a summary in both Slovene and English (from 300 to 350 words);
- 5 keywords in both Slovene and English;
- a short presentation of the author in both Slovene and English (each of up to 100 words) including his/her institutional affiliation.

The submission should be accompanied by a statement that the submission is not being considered for publication in any other journal or book collection.

The spacing of the article should be double spaced, the font Times New Roman (size 12 in the main text and size 10 in the footnotes). Paragraphs should be indicated using an empty row. There are three types of hierarchical subheadings, which should be numbered as follows:

I.

I.1

I.1.1

For emphasis, use italics only. Words in a foreign language should also be italicized. Use self-numbered footnotes.

Double quotations marks should be used for quotes in the text and single quotation marks for quotes within quotes. Longer quotations (more than 5 lines) should be extracted in separate paragraphs and separated from the rest of the text by omitting the rows and by having an indentation to the right. The source of the quotation should be in round brackets at the end of the quotation, e.g. (Benjamin, 1974, pp. 42–44).

Please mark in the text the place where a graphic product (tables, diagrams, charts, etc.) should be included, e.g. [Table 1 about here]. These products should be attached in a separate file (in 'eps', 'ai', 'tif' or 'jpg' format [300 dpi resolution]). The table title should be above the relevant table or the graph.

The source in the text should be referred to as follows: (Ducrot, 1988). Please quote the page for a: (Foucault, 1991, p. 57). If there are three authors, please refer as (Bradbury, Boyle and Morse, 2002) or (Taylor et al., 1978) for four or more authors.

For the works of an author that were published in the same year, distinguish between them by adding small letters (a, b, c, etc.), e.g. (Bourdieu, 1996a). Repeatedly cited works should use the following: (ibid.). Please, use the following style for each of publication:

Books:

Bradbury, I., Boyle, J., and Morse, A. (2002) *Scientific Principles for Physical Geographers*. Harlow: Prentice Hall.
Garber, M. (1999) *Symptoms of Culture*. Harmondsworth: Penguin.

Journal Articles:

Kerr, D. (1999b) Changing the political culture: the advisory group on education for citizenship and the teaching of democracy in schools. *Oxford Review of Education*. 25 (1–2), pp. 25–35.

Book chapters:

Walzer, M. (1992) The Civil Society Argument. In: Mouffe, Ch. (ed.), *Dimensions of Radical Democracy: Pluralism, Citizenship and Community*. London: Routledge.

Websites:

http://www.cahiers-pedagogiques.com/article.php?id_article=881 (5, 5, 2008).

Šolsko polje, Mestni trg 17, 1000 Ljubljana; tel.: 01 4201 240, fax: 01 4201 266,
e-pošta: info@theschoolfield.com; mojca.straus@pei.si

Šolsko polje, Slovensko društvo raziskovalcev šolskega polja, Mestni trg 17, 1000
Ljubljana, e-pošta: mojca.straus@pei.si; tel.: 01 420 12 53, fax: 01 420 12 66

Šolsko polje

Revija za teorijo in raziskave vzgoje in izobraževanja

Letnik XXVII, številka 1–2, 2016

EDITORIAL/UVODNIK

Maša Vidmar • Social and Emotional Aspects of Teaching and Learning 7

PAPERS/RAZPRAVE 11

Jennifer L. Hanson-Peterson, Kimberly A. Schonert-Reichl and Veronica Smith
• Teachers' Beliefs about Emotions: Relations to Teacher Characteristics
and Social and Emotional Learning Program Implementation 13

Maša Vidmar and Katja Kerman • The Development of Teacher's Relational
Competence Scale: Structural Validity and Reliability 41

Ana Kozina and Ana Mlekuž • Intrinsic Motivation as a Key to School Success:
Predictive Power of Self-perceived Autonomy, Competence and Relatedness
on the Achievement in International Comparative Studies 63

Urška Aram, Nina Jurinec, Marina Horvat in Katja Košir • Samopodoba
in socialna sprejetost identificiranih nadarjenih in visoko učno uspešnih
osnovnošolcev 89

Klaudija Šterman Ivančič and Melita Puklek Levpušček • Motivational Goals
and Academic Performance from the Perspective of Students' Perceived Quality
of Relationship with Their Class Teachers at the Start of the Upper Secondary
Education Level 113

Per F. Laursen and Anne Maj Nielsen • Teachers' Relational Competencies:
the Contribution from Teacher Education 139

Jana Hafner and Maja Krajnc • Comparison of Interpersonal Communication
and Interpersonal Relationship Between Early Years Educators and Children
in Selected English and Slovenian Nurseries 163

CENA: 10 EUR

ISSN 1581-6036

