Does Test-Anxiety Experience Impair Student Teachers' Later Tendency to Perspective-Taking?

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Abstract:
Introduction: We aimed to examine whether student teachers' tendency to test anxiety relates to their later perspective-taking tendency and self-efficacy. The purpose of the presented study was to obtain first insights into the relationship between test anxiety, perspective-taking, and self-efficacy tendencies in student teachers. These tendencies may determine student orientation across different situations. We tested the hypothesis that the test anxiety components emotionality and worry relate to later low perspective-taking and self-efficacy.
Methods: We conducted a longitudinal study with 275 student-teachers and analyzed the obtained data using structural equation modeling.
Results: The data analysis revealed that only emotionality is related to lower perspective-taking and self-efficacy in later life.
Discussion: We conclude that lowering student teachers' test anxiety emotionality (e.g. through interventions) would result to later increased perspective-taking tendency.
Limitations: Participants attended the study voluntarily, so it was a self-selected sample. We employed a correlational design over two measurement times instead of experimental methods.
Conclusions: The obtained results give an explanation of why student teachers focused rather on themselves than on school students in classes. The perspective-taking tendency is important for teachers' student

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orientation. The role of perspective-taking in different teaching situations might be investigated in further research.

Key words: student teachers; emotionality; worry; test anxiety; perspective-taking.

Introduction

Teachers' empathic responses to students, interpersonal understanding, and constructive handling of conflict situations (e.g. Tamášová & Barnová, 2011) with students are precursors of students' learning and academic achievement (e.g. Gehlbach, 2004). These precursors are potentially related to self-efficacy - a well-known resource for teachers' well-being (see Zee & Koomen, 2016, for a research synthesis over 40 years). Indeed, teachers should apply their content knowledge, pedagogical content knowledge, and pedagogical knowledge (e.g. Shulman, 1987) to engage in student-oriented teaching as often as possible. Student-oriented teaching is stipulated in Germany's national teaching standards (Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany, 2014). Other national education standards (e.g. Every Student Succeeds Act, U.S. Department of Education, 2019) require teachers to consider students' diverse learning prerequisites and socially appropriate teacher-student interactions. In essence, these standards from Germany and the United States demand that teachers pay attention to their students in class.

Scholars have discussed paying attention to others and socially appropriate responses in light of emotional intelligence (e.g., Uitto, Jokikokko, & Estola, 2015), empathy (e.g. Gáborová, 2011; Mattan, Rotshtein, & Quinn, 2016; Ütkür, 2019), or perspective-taking tendency. Several studies have found significantly positive relations at mild to moderate levels between perspective-taking tendency (personality trait approach, e.g. Davis, 1980) and processing social perspective-taking (state approach, e.g. Mattan et al., 2016).

Social perspective-taking involves making assumptions about a target person's self - his or her abilities, interests, beliefs, values, goals or habits - as if one were the target person. The assumption and understanding that people have different knowledge and different thoughts and therefore act differently is known as the 'theory of mind' (e.g. Baron-Cohen, Wheelwright, Hill, Raste, & Plumb, 2001). The concept of theory of mind has been widely studied, particularly regarding its development in children with and without autism spectrum disorder (e.g. Baron-Cohen et al., 2001). That is, an individual can only understand deviations between him or her own desires or intentions and a target person's desire and intentions when he or she knows that the target person, and other people as well, has individual desires or intentions that may differ from his or her own. The

ability to understand this deviation is necessary for developing perspective-taking tendency (Schaafsma, Pfaff, Spunt, & Adolphs, 2015).

For example, teachers with high tendency to perspective-taking are motivated to collect information about different situations in order to better understand the students' intentions or actions (e.g. Gehlbach & Vriesema, 2019) because they expect different intentions in different students. In this way, the teachers attempt to discern cognitive processes in their students that are not actually visible. Another example occurs when teachers attempt to understand how students construct the meaning of a subject-related concept (e.g. light or light reflection). The teachers might ask questions of their students to discern their misconceptions (arrows instead of light waves) and inferring from their answers what kind of support would help to stimulate their development of new concepts (e.g. that light moves in waves).

Perspective-taking tendency is related to several external and internal factors that are likewise important for (student) teachers. For example, it is positively correlated with a student orientation (e.g. Kordts-Freudinger, 2017) and self-efficacy (e.g. Zee & Koomen, 2016). The latter has been found to be a resource for (student) teachers' well-being (e.g. Zee & Koomen, 2016).

Self-efficacy is associated with an individual's expectancy (e.g. Bandura, 1977; Wigfield & Eccles, 2000) directed to the next moment or future. Academic self-efficacy refers to the expectancy of solving a task, passing an exam or achieving other kinds of academic success (e.g. Schwarzer & Jerusalem, 1999). Social self-efficacy refers to individuals' expectations with respect to their ability to deal with social situations, especially conflict situations, and their subjectively perceived success in such situations. Previous studies have repeatedly shown that student teachers' and teachers' self-efficacy can be considered an intraindividual resource (e.g. Barnová, Tamášová, & Krásna, 2019) that is related to low test anxiety (e.g. Barrows, Dunn, & Lloyd, 2013; Roick & Ringeisen, 2017).

Findings from other studies have even indicated relationships between teachers' social behavior and students' learning prerequisites. Students who perceived attention, monitoring, and rule clarity on the part of their teachers reported higher interest in math than students who did not perceive these forms of student orientation from their teacher (Kunter, Baumert, & Köller, 2007).

Like interest, anxiety is another learning prerequisite among students. However, teachers were found to overlook the symptoms of students' anxiety in a nomination task (Bilz, 2014). The students' symptoms were assessed by the Strengths and Difficulties Questionnaire (SDQ, Goodman, 1997). We therefore ask the following question: Which factors facilitate or hinder teachers' discernment and understanding of learning prerequisites such as anxiety among all students in class (with and without additional needs)? One possible reason for (student) teachers' weaker student orientation might be their own anxiety. Student teachers engaged in practice teaching in schools and even in-service

teachers (e.g. Sinclair & Ryan, 1987) may experience anxiety in class (e.g. Frenzel et al., 2016). Teachers' self-reported distress is related to higher self-reported anxiety (e.g. Van Droogenbroeck & Spruyt, 2015) and lower self-reported perspective-taking (Kordts-Freudinger, 2017). In addition, higher levels of the general tendency to anxiety known as neuroticism are related to low self-reported perspective-taking (e.g. Mooradian, Davis, & Matzler, 2011). However, there is still a research gap regarding whether and to what extent test anxiety relates to student teachers' later perspective-taking tendency. Research on teachers' perspective-taking tendency is important because it might facilitate student-oriented teaching.

We assumed that perspective-taking tendency is fundamental to teachers' student orientation (e.g. Kordts-Freudinger, 2017), discernment (e.g. Gehlbach & Vriesema, 2019) and understanding of the students' learning prerequisites (e.g. symptoms of anxiety, Bilz, 2014), and handling of conflict situations (e.g. Davis, 1980). We further assumed that test anxiety is related to low perspective-taking tendency and that the latter is a further resource for student teachers in achievement test situations in addition to already evident resources (e.g. self-efficacy). We therefore expected, high perspective-taking tendency is to be related to high self-efficacy.

In the current study, test anxiety and perspective-taking tendencies are considered as personality traits that are associated with behavior across different situations (e.g. Sinclair & Ryan, 1987), such as student teachers' practice teaching in school classes. Note that personality traits may change in a relatively short time (four weeks or a few months) through interventions, as Roberts et al. (2017) synthesized in their meta-analytical review. Similar to an intervention, practical teaching experiences in schools, university lectures and courses can all affect students' traits.

We aimed to extend the findings presented above (e.g. Davis, 1980; Gehlbach, 2004; Zee & Koomen, 2016) and close the existing research gap by examining whether student teachers' test anxiety tendency relates to their later perspective-taking tendency and self-efficacy. To enrich our correlational design, we also included further variables found to be relevant in existing theoretical frameworks and previous research findings (e.g. Pekrun, 1984, 2006; Wigfield & Eccles, 2000). These are outlined in the following sections.

1 Components of test anxiety

Test anxiety is described as a construct with an affective and a cognitive component (e.g. Hodapp, Laux, & Spielberger, 1982; Zeidner, 1998) and sometimes further components as well (e.g. Frenzel et al., 2016; Pekrun, 2006; Scherer, 1984). Examples of further test anxiety components are: motivation (e.g. avoidance goal orientation), expressions (e.g. anxious facial expression), and physiological reactions (e.g. increased heart rate and blood pressure). However, there is broad agreement concerning the existence of an affective

component (e.g. emotionality, feelings of nervousness) and a cognitive component (e.g. worry, Szafranski, Barrera, & Norton, 2012; Zeidner, 1998). Emotionality and worry in test anxiety are linked to the expected test outcome, such as failing or passing an exam. In addition, experiences with failing an exam and the associated short- or long-term negative consequences (e.g. Pekrun, 2006) may increase test anxiety (emotionality and worry, e.g. Zeidner, 1998) before upcoming exams. In the current study, we applied the classical two-component conceptualization of test anxiety (Hodapp et al., 1982). In this approach, emotionality refers to self-reported physiological and emotional states, such as detecting one's heart beating faster or excitement (e.g. Hodapp et al., 1982).

The worry, the cognitive component, involves thinking about the personal and social consequences of failing an exam. Worry requires cognitive resources, which are then no longer available for test performance. A student teacher experiences control with regard to an upcoming exam when he or she expects that he or she can positively influence the test outcome by studying and practicing the types of tasks that will appear on it. Academic self-efficacy refers to subject beliefs that one has a high probability of solving all tasks before and during the exam (e.g. Bandura, 1977; Zee & Koomen, 2016). Most exam tasks are usually unknown prior to test taking, so a certain degree of subjective uncertainty about passing the upcoming exam will remain even when a student studies and practices as best they can.

Mooradian et al. (2011) examined self-reported emotionality and worry within the test anxiety framework and found that both were related to high neuroticism. Furthermore, self-reported test anxiety was related to high levels of self-reported social anxiety and to situational emotionality/worry before or during an exam (state test anxiety, e.g. Bolger & Eckenrode, 1991). Interestingly, socially anxious undergraduates with experimentally induced worry (Zainal & Newman, 2018) outperformed controls in the reading-the-mind-in-the-eyes test (RMET; Baron-Cohen et al., 2001). Moreover, gender differences existed: Female undergraduates scored higher than male undergraduates on both emotionality and worry (e.g. Farooqi, Ghani, & Spielberger, 2012). Test anxiety prevalence among German undergraduate students in 2016 was about 12% (Middendorff, Apolinarski, Becker, Bornkessel, Brandt, Heißenberg, & Poskowsky, 2017). Although high levels of self-reported test emotionality and worry have been related to various impairments in achievement situations (e.g. Barrows et al., 2013), to our knowledge, no findings exist about the relationships with student teachers' perspective-taking tendency - the assumed precursor of their later student orientation in class.

2   Theoretical framework

Several theories address students' academic test anxiety. One approach is the control value theory of achievement emotions, which Pekrun (2006) developed on the basis of previous theoretical frameworks, such as the expectancy value model of anxiety and the framework of individuals' perceived control (Pekrun, 1984). His control value theory focuses on explaining test anxiety (Pekrun, 2006). If one perceives a lack of control and focuses on failure while studying for an exam, the probability of test anxiety is assumed to increase (e.g. Pekrun, 1984, 2006). In later research, some scholars have explained undergraduates' test anxiety with the control value approach (e.g. Roick & Ringeisen, 2017). Other authors have explained undergraduates' test anxiety (e.g. Xu, 2017) with the expectancy-value model proposed by Wigfield and Eccles (2000). The expectancy-value model assumes that subjective academic values correspond with expectancies of failing or passing an exam (Wigfield & Eccles, 2000). High-stakes tests are subjectively important for student teachers and other test-takers. Consequently, both higher academic expectations about success and higher failure anxiety can be expected in high-stakes tests compared to low-stakes tests. Expectations have been also considered part of appraisals in control value theory and supporting empirical research (e.g. Pekrun, 2006). Academic expectations are often operationalized by assessing academic self-efficacy. Statements assessing perspective-taking tendency at least partially capture social relations and interactions.

Since we were interested in explaining student teachers' perspective-taking tendency and its relation to their self-efficacy, as introduced above, we mainly followed Davis' model, depicted in Figure 1. It outlines in a simple and concise way the complex relations between the person, situation, tend to make accurate assumptions about a target person (perspective-taking as "Non-Affective Outcomes", Davis, 2018, p. 13), and possible empathetic responses to the target. Taken together, previous study results (e.g. Kordts-Freudinger, 2017) suggest that perspective-taking tendency is a personal resource in dealing with one's own emotionality and worry within the test anxiety framework. However, the relationships between student teachers' self-reported test anxiety, specifically the components emotionality or worry; later perspective-taking; and self-efficacy have not yet been sufficiently researched.
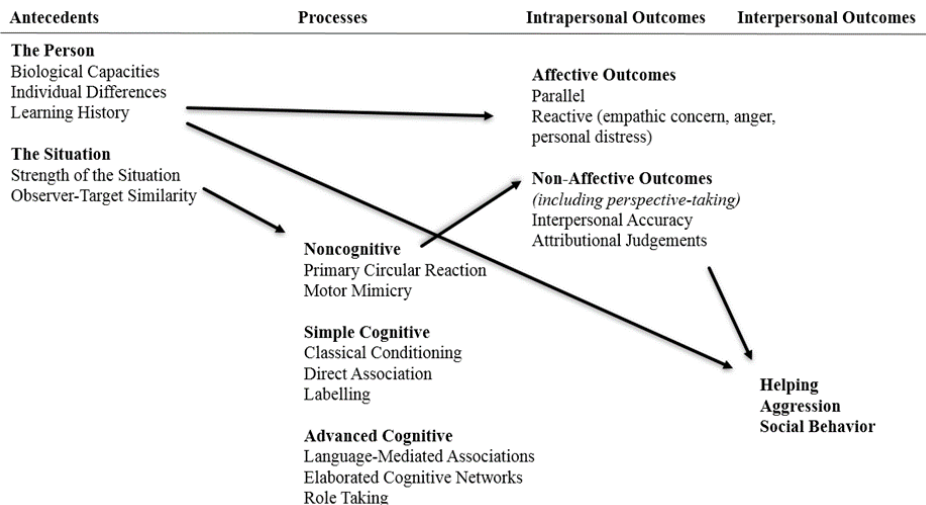
Note. The model considers antecedents such as characteristics of the person (biological capacities, individual differences, learning history) and the situation (strength of situation, observer-target similarity), noncognitive (primary circular reaction, motor mimicry), simple cognitive (conditioning, associations, labelling), and advanced cognitive processes (mediated associations, elaborated networks, role taking). Furthermore, the model distinguishes between intrapersonal (empathic concern, anger, personal distress, attributional judgements) and interpersonal outcomes (helping, aggression, social behavior) (Davis, 2018, p. 13).

Figure 1. *The organizational model of empathetic responses and social behavior.*

3 Further relevant variables

Further variables of potential relevance for the relations between test anxiety, perspective-taking tendency, and self-efficacy should also be considered due to the correlation study design. Previous research suggests that gender (e.g. Gerwing, Rash, Gerwing, Bramble, & Landine, 2015), grade point average in school (e.g. Zeidner, 1998), and neuroticism (e.g. Malone & Bertsch, 2016, Mooradian et al., 2011) are relevant for test anxiety. Females have been found to report higher levels of emotionality and worry with regard to exams than males (e.g. Gerwing et al., 2015). Neuroticism is positively related to test anxiety (e.g. Malone & Bertsch, 2016, Mooradian et al., 2011), as already introduced above. Konrath, O'Brien, and Hsing (2011) described that perspective-taking tendency follows inverted u-curve with regard to age. In another longitudinal study, females' perspective-taking tendency was significantly higher than males' tendency at six measurement points (Van der Graaff et al., 2014).

However, there is little evidence on whether a study semester, the number of completed courses, or individual learning outside of courses relate to

undergraduates' test anxiety and perspective-taking tendencies. We thus considered these variables as well in the current study to explore their relevance for self-reported test anxiety, perspective-taking and self-efficacy. Based on findings from previous research and possible relations to further relevant variables (e.g. Gerwing et al., 2015; Konrath et al., 2011; Malone & Bertsch, 2016, Mooradian et al., 2011; Van der Graaff et al., 2014), we calculated structural equation models (SEM) including the variables gender, grade point average in school, and neuroticism.

4 The current study

Research questions derived from the Davis' model (see Figure 1), control value theory (Pekrun, 2006), and the research summarized in Section 1 were as follows: (1) What proportion of student teachers in an illustrative sample from the field of teacher education exhibit test anxiety tendency (emotionality/worry)? Does a high tendency to exhibit emotionality or worry affect student teachers' later (2) perspective-taking tendency or (3) self-efficacy when the further relevant variables are included as predictors at T1 in structural equation models (i.e. gender, age, grade point average, study semester, the number of attended courses, hours spent studying individually per week, neuroticism, academic/social self-efficacy, perspective-taking at T1)?

Our predictions were as follows: (1) Up to 20% of student teachers will indicate a test anxiety tendency (emotionality/worry). (2) Student teachers' test anxiety (emotionality/worry) will be negatively related to perspective-taking tendency assessed several months later (controlling for the further relevant variables). (3) Self-reported emotionality and worry will be negatively related to student teachers' self-efficacy assessed several months later (again controlling for the further relevant variables). We expected results suggesting that both perspective-taking tendency and self-efficacy are possible resources in dealing with emotionality and worry before an upcoming exam.

5 Method

5.1 Participants

The sample for the longitudinal analyses consisted of N=257 student teachers (78% female) from Martin-Luther-University Halle-Wittenberg in Germany. Anonymity was protected by using participant ID numbers. Seven cases with missing ID values were excluded from the longitudinal analysis and one case was excluded because the participant was enrolled in a study program outside teacher education. All of the remaining n=249 participants were undergraduates in teacher education who had been studying for 4.86 semesters on average (SD=2.79). According to university statistics from 2018 (Martin-Luther-University, not published; see https://www.daad.de/en/information-services-for-

higher-education-institutions/further-information-on-daad-programmes/
lehramtinternational/) the number of student teachers from abroad or with an
ethnic background other than German was below 1%. Due to this small number,
we did not explicitly ask about participants' ethnic background. Data were
collected in the context of educational psychology courses. The first
measurement point was during the summer term (T1, N=943) and the second
during the following winter term about five months later (T2, N=1058). An
acceptable number of student teachers participated twice, yielding the
longitudinal dataset. However, many student teachers only participated once at
either T1 or T2, and their cross-sectional data were excluded from the analyses
(see Appendix A for tests for possible differences between the included
longitudinal data and the excluded cross-sectional data).

5.2 Procedure

The student teachers participated in our study voluntarily. They received and
answered a questionnaire during courses on research in teacher education. The
questionnaire began with items assessing different constructs, including items on
the test anxiety components of emotionality (e.g. Hodapp et al., 1982) and worry
(Schwarzer & Jerusalem, 1999), perspective-taking (Davis, 1980), self-efficacy
(Schwarzer & Jerusalem, 1999), and neuroticism (Rammstedt et al., 2004) in
randomized order. Afterwards, a few background questions followed regarding
the participants' gender, age, and study program (e.g. teaching in special
education, in elementary school, lower- or middle-track secondary school,
vocational school, or an academic-track secondary school, i.e., Gymnasium).
The participants were able to complete the entire questionnaire within 30
minutes.

5.3 Instruments

We presented each of the self-report measures described below on a 5-point
scale (1=not true at all to 5=completely true) in German. The item order within
the questionnaire was randomized, with the exception that the demographic
background questions always occurred at the end.

Test anxiety
We used four statements to assess student teachers' emotionality at T1, three of
which came from the Test Anxiety Inventory (TAI) (Hodapp et al., 1982) and
the fourth constructed by Schwarzer and Jerusalem (1999). Participants
indicated whether they experienced physical and emotional symptoms of test
anxiety in the face of an upcoming exam. The emotionality statements were
introduced with the question: How do you feel when you are about to take an
exam? (e.g. I am excited. - translated from German for the purposes of this
paper). Internal consistency (Cronbach's alpha) was satisfactory (α=.86). The
five items (Schwarzer & Jerusalem, 1999) assessed the test anxiety dimension

worry at T1, for example: I wonder if my exam performance will be sufficient (α=.87). Both emotionality and worry served as predictor variables in the SEM.

Perspective-taking tendency
Four statements from the Interpersonal Reactivity Index (Davis, 1980) assessed perspective-taking tendency. The statements were introduced with the question: To what extent do the following statements apply to you? Participants indicated how they would act in social situations involving self-reflective and reciprocal perspectives. An example item is: I believe that there are two sides to every question and try to look at them both. We included the construct assessed at T1 (α=.80) as a predictor variable and at T2 (α=.83) as an outcome variable in the SEM.

Self-efficacy
We adapted nine statements developed by Schwarzer and Jerusalem (1999) to measure self-efficacy. Five items were used to measure the undergraduates' academic self-efficacy (e.g. It is easy for me to understand new learning materials, T1 α=.64, T2 α=.66) and four items to measure social self-efficacy (e.g. I easily find new friends even in a new group, T1 α = 67, T2 α=.68). Both self-efficacy factors assessed at T1 were included as predictor variables and at T2 as outcome variables in the SEM.

Further relevant variables
The correlation study design as well as previous research findings (e.g., Gerwing et al., 2015; Konrath et al., 2011; Malone & Bertsch, 2016, Mooradian et al., 2011; Van der Graaff et al., 2014) suggested that we ought to consider further variables in the statistical modeling, as outlined in Section 3.2. We included the variables age, gender, study semester, socioeconomic status, use of learning opportunities in the teacher education program, and school achievement. In the present study, these variables, perspective-taking, and self-efficacy assessed at T1 were specified as predictor variables in order to account for their contribution to the outcome variables perspective-taking and self-efficacy at T2. We further included factor neuroticism at T1, constructed on the basis of four items (Rammstedt, Koch, Borg, & Reitz, 2004), as a predictor variable on the outcome variables at T2.
Participants' age was assessed in categories for anonymity reasons, as described above in Section 2.1. Male student teachers were coded as 0, females as 1. The students' semester of studies was assessed as a discrete integer. The undergraduate study program was treated as a categorical variable (as described above in Section 2.1.). The use of learning opportunities was assessed with the number of credit hours taken in the current semester. Grade point average in school served as an indicator of previous academic achievement. The questionnaire also comprised further instruments (see Appendix A for a

complete list of measures used in survey) that we excluded from the current analyses due to their lack of relevance for the current study.

6 Analysis strategy

An a-priori sample size calculation for structural equation models (https://www.danielsoper.com/statcalc/calculator.aspx?id=89) with an anticipated effect size of h=0.25, adjusted from the effects found in previous research on anxiety and theory-of-mind performance (Zainal & Newman, 2018), yielded a required sample size of at least 281 participants to achieve a 80% power and enable the detection of effects between test anxiety and perspective-taking. Compared to the a-priori sample size calculation, our sample size for analyses (n=249) was fairly small. Hence, we set the significance level at $\alpha \leq .05$.

6.1 Missing values

The missing values for the dependent variables perspective-taking and self-efficacy across the two measurement points were 0% and 0.4% of n=249 respectively. The other used variables contained from 0% up to 1.6% missing values. Table 1 shows the absolute numbers of missing values.

Table 1

Means, standard deviations, range, and missing values in emotionality, worry, perspective-taking, self-efficacy, and neuroticism tendencies at Time 1 (T1) and Time 2 (T2)

	M	*SD*	*Range*	*Missing values*
1 Emotionality, T1	3.38	0.87	1.20-5.00	3
2 Worry, T1	3.06	0.90	1.00-5.00	3
3 Perspective-taking, T1	3.92	0.58	1.75-5.00	2
4 Academic self-efficacy, T1	3.77	0.45	2.20-5.00	3
5 Social self-efficacy, T1	3.72	0.57	2.00-5.00	1
6 Perspective-taking, T2	3.90	0.58	2.00-5.00	3
7 Academic self-efficacy, T2	3.80	0.44	2.40-5.00	5
8 Social self-efficacy, T2	3.76	0.53	2.25-5.00	2
9 Neuroticism, T1	2.92	0.74	1.30-5.00	3

Note. Emotionality and worry are considered components of test anxiety tendency. Ranges are specified with regard to the five-point rating scale.

6.2 Structural equation modeling (SEM)

First, we conducted a confirmatory factor analysis (CFA) with a nine-factor model, including all self-report items described in Section 2.2 as indicators measuring the latent factors emotionality and worry at T1, neuroticism at T1, and perspective-taking, academic and social self-efficacy tendencies at T1 and T2. The constructed model is depicted in Figure 2.
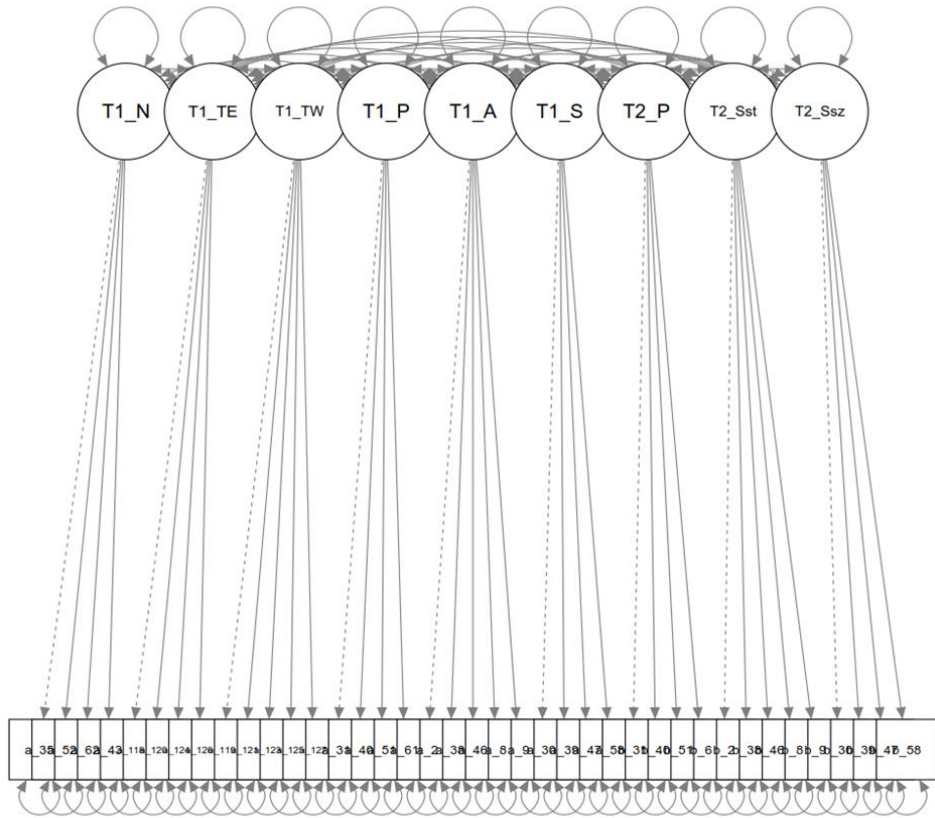
Note. N = neuroticism, test anxiety components TE = emotionality, TW = test worry; PT = perspective-taking tendency, ASE = academic self-efficacy, SSE = social self-efficacy as measured by the items below the circled latent factors.

Figure 2. *CFA model.*

The CFA (R package lavaan; Rosseel, 2012) indicated an acceptable fit between the assumed model and the structure found in our data, $\chi 2$ (666)=686.22, p=.29, Further fit statistics were as follows: root mean square error of approximation (RMSEA)=.01, C.I. [< .01, .02], comparative fit index (CFI)=.99, standardized root mean square residual (SRMR=.07) using weighted least square of mean

variance estimation (WLSMV). We then tested for measurement invariance over time by including the factors measured at T1 and T2 (i.e. perspective-taking, academic and social self-efficacy). This test suggested equivalent factor loadings and means over five months according to suggested cut-off values by Rutkowski and Svetina (2014): fit-means $\chi^2(294)=414.84$, p=.07, ΔCFI=.01 (scalar invariance). Detailed invariance test results are not provided for reasons of space and can be obtained from the corresponding author upon request. We then constructed the SEM (R package lavaan, Rosseel, 2012) by extending the CFA model (see Figure 2) to include the predictor variables emotionality, worry, perspective-taking, academic and social self-efficacy, neuroticism, age, gender, school achievement, number of semesters, the number of attended courses, and individual learning hours outside courses, all at T1.

7   Results

The correlations are presented in Table 2.

Table 2

Latent correlations in SEM between the constructed factors for neuroticism, the test anxiety components emotionality and worry, perspective-taking, and self-efficacy

	1	*2*	*3*	*4*	*5*	*6*
1 Neuroticism at T1	-	-	-	-	-	-
2 Emotionality at T1	.50*	-	-	-	-	-
3 Worry at T1	.58*	.78*	-	-	-	-
4 Perspective-taking, T1, T2	.06	.21*	.05	-	.81*	-.16
5 Academic self-efficacy, T1, T2	-.44*	-.11	-.30*	.18	-	.96*
6 Social self-efficacy, T1, T2	-.61*	-.20*	-.16*	.02	.55*	-

Note. Emotionality and worry are considered components of test anxiety tendency. Correlations from SEM: Time 1(T1) below the diagonal. T2 above the diagonal, only perspective-taking and self-efficacy at Time 2 (T2) were included in the SEM. *$p < .05$.

Our first hypothesis was that up to 20% of the student teachers would self-report test anxiety emotionality and worry. In fact, 18% of the 249 student teachers selected "rather true" or "completely true" on statements about the test anxiety component of emotionality at T1, while 28% of the 249 student teachers selected these values for the test anxiety component of worry. At T2, 19% of the 249 student teachers indicated rather true or completely true to statements about the test anxiety component of emotionality, and 28% of the 249 student teachers selected these values about the test anxiety component of worry. Thus, the student teachers' experiences with emotionality were in line with expectations, but their experiences with worry were higher than assumed in our Hypothesis 1.

Table 3 shows the standardized path coefficients, standard errors, and confidence intervals from the SEM.

Table 3

SEM results: standardized regression coefficients, standard errors and confidence intervals

Variables at T1	PT at T2					ASE at T2					SSE at T2				
	β	*SE*	*p*	CI$_l$	CI$_u$	β	*SE*	*p*	CI$_l$	CI$_u$	β	*SE*	*p*	CI$_l$	CI$_u$
Emotionality	**-.32**	.14	.03	-.60	-.04	**-.37**	.18	.05	-.73	.00	.15	.19	.44	-.23	.52
Worry	.14	.16	.37	-.17	.44	.27	.21	.20	-.14	.67	**-.34**	.23	.14	-.78	.11
PT	**.86**	.06	< .001	.75	.98	-.05	.09	.59	-.22	.13	.02	.08	.79	-.14	.18
ASE	-.11	.11	.30	-.33	.10	**.94**	.16	< .001	.86	.97	-.15	.14	.26	-.42	.11
SSE	**.30**	.13	.02	.04	.55	-.32	.21	.13	-.72	.09	**.94**	.17	< .001	.70	1.37
Age	-.09	.09	.32	-.26	.08	.07	.09	.47	-.11	.24	.08	.08	.31	-.08	.24
Gender	.10	.07	.16	-.04	.24	**-.20**	.08	.01	-.35	-.05	**-.18**	.07	.01	-.33	-.04
GPA	.08	.07	.25	-.05	.20	**-.35**	.07	< .001	-.48	-.22	.03	.07	.72	-.12	.17
Semester	.11	.08	.14	-.04	.26	.09	.08	.31	-.08	.25	.00	.08	.99	-.15	.15
Courses	.02	.07	.75	-.11	.15	-.12	.10	.24	-.31	.08	.03	.08	.71	-.12	.17
Learning	**.22**	.07	< .001	.07	.36	.12	.07	.10	-.02	.27	.09	.07	.20	-.05	.24
Neuroticism	**.30**	.14	.04	.02	.58	.08	.18	.68	-.28	.43	.12	.18	.50	-.23	.47

Note. Emotionality and worry are considered components of test anxiety tendency. PT = perspective-taking tendency, ASE = academic self-efficacy, SSE = social self-efficacy, GPA = grade point average in school, courses = number of attended courses, learning = individual learning hours. Males were coded as 0 and females as 1.

The results suggested a good fit between the assumed model structure and the structure found in the data: χ^2=1206.34, RMSEA=.04, CI=[.034, .045], CFI=.95, SRMR=.07. Statistically significant ($\alpha \leq .05$) SEM results were as follows: We predicted negative relations between perspective-taking tendency and the test

anxiety component emotionality but positive relations with the test anxiety component worry (Hypothesis 2). Student teachers who recalled more emotionality with regard to exams at T1 reported less perspective-taking at T2 compared to those who recalled less emotionality at T1. Worry at T1 did not significantly relate to perspective-taking at T2. We further assumed negative relations between emotionality and worry and academic and social self-efficacy (Hypothesis 3). Worry at T1 related positively, but not significantly to academic self-efficacy at T2. The relationship between worry at T1 and social self-efficacy at T2 was negative and statistically significant. Emotionality at T1 was negatively related to academic self-efficacy at T2, but was not significantly related to social self-efficacy at T2 (see Table 3).

8 Discussion

The presented research provides the first insights into the concurrent relationships between student teachers' test anxiety, perspective-taking, and self-efficacy tendencies using longitudinal data. That is important because previous findings suggest that student teachers and in-service teachers often tend to focus on their own actions rather than their students across different situations in class, suggesting relations to traits such as low perspective-taking tendency. Perspective-taking involves mentally moving attention away from oneself to other individuals (e.g. Author et al., 2018), which is necessary for learner-oriented education (e.g. Kordts-Freudinger, 2017). It can be conceptualized as a situated response (e.g. Mattan et al., 2016) or personal tendency (e.g. Davis, 1980).

Due to previous findings (e.g. Barrows et al., 2013), we assumed that a high tendency to experience test anxiety among student teachers would predict a low perspective-taking tendency and low self-efficacy. If so, student teachers with test anxiety would likely focus on their own behavior rather than apply student-oriented teaching in practice teaching during their university studies. We focused on the two classical test anxiety dimensions - emotionality and worry (Szafranski et al., 2012; Zeidner, 1998). Our first assumption (1) was that 20% of student teachers self-reported experiencing test anxiety (i.e. emotionality and worry). The amount of student teachers' experienced emotionality supported our first assumption, but their experienced worry was with 28% above the expected 20%. This result suggested that about a quarter of the student teachers might experience anxiety in class (e.g. Frenzel et al., 2016; Sinclair & Ryan, 1987).

The second assumption (2) was that the two test anxiety components (emotionality, worry) at T1 would be related to low perspective-taking tendency at T2. Our results partially supported this hypothesis: Only student teachers with a high tendency to emotionality with regard to achievement tests exhibited a low perspective-taking tendency about five months later. We found a statistically not significant positive relationship between the test anxiety component worry and later perspective-taking tendency. We had expected a positive relationship

because positive associations between worry and empathetic responses had been described in other studies using different methods (e.g. Zainal & Newman, 2018).

Furthermore, we assumed (3) that the tendency to test anxiety would be negatively related to student teachers' self-efficacy. The relationships, that we found, supported the hypothesis of significant negative relations between the test anxiety component emotionality at T1 and academic self-efficacy at T2 or between worry at T1 and social self-efficacy at T2. We did not find significant relations between worry at T1 and academic self-efficacy at T2. The current results support the assumption of individual differences as antecedents of the non-affective outcome perspective-taking in the organizational model of empathic responses (Davis, 2018). Our findings offer new insights into student teachers' tendency to engage in interpersonal understanding.

8.1 Limitations and implications for future research and educational practice
There are several limitations which should be considered when discussing the current results. One limitation is that relatively few student teachers in the cross-section sample participated at both measurement points, yielding a relatively small sample size for longitudinal analyses (n=249). There were statistically significant differences in gender, study program, grade point average, and number of study semesters between the undergraduates who participated twice and those who participated only once (for details, see Appendix A.1). For example, the students who provided longitudinal data reported a better mean grade point average in school than those who participated only once. Thus, it was a self-selected longitudinal sample with regard to gender, study program, and school achievement. However, we did not find statistical differences in emotionality, worry, perspective-taking, or self-efficacy between the longitudinal and cross-sectional samples.

Further limitations are the self-report measures. The self-reported nature of the data might have led to an overestimation of common variance and/or to measurement errors due to social desirability bias. Such bias could have been relevant for the student teachers' responses to the perspective-taking items because these items represent flexible social cognitions and may activate knowledge of social norms and self-reflection on socially desirable behavior. Of note, for the most part our findings provide support for our hypotheses on the relations between these components and perspective-taking, supporting findings from other studies using different methods (e.g. experimentally induced worry on reading-the-mind-in-the-eyes performance, Zainal & Newman, 2018).

Moreover, the present study possessed some significant strengths despite these limitations. First, our study addressed a significant gap in research on student teachers' test anxiety and perspective-taking tendencies, with the latter being a possible antecedent of student teachers' later empathic responses to their students and student orientation in class. A second major strength lies in the

study's longitudinal design, which allowed us to examine whether student teachers' tendency to test anxiety at T1 affected perspective-taking and self-efficacy assessed five months later at T2 (with these constructs assessed at T1 also included in SEM). Our study thus provides the first insights into the relationships between test anxiety and perspective-taking tendency at the latent level within SEM.

Conclusions and implications for educational practice

The obtained results give an explanation approach why student teachers focused rather on themselves than on school students in classes in previous research (e.g. Bilz, 2014). The perspective-taking tendency is important for teachers' student orientation. For educational practice in higher education, we suggest that mindfulness training programs (e.g. Roeser et al., 2012) might be offered to all student teachers at university. Those with a high tendency to experience the test anxiety component emotionality might benefit especially from learning mindfulness techniques that can be applied during an achievement situation. Interventions to reduce (student) teachers' anxiety or distress would be highly relevant to teachers' perspective-taking tendency, and for students who may then be able to positively change their social behavior (Singh, Lancioni, Winton, Karazsia, & Singh, 2013) at university and in their lifelong professional learning as teachers (Geršicová & Barnová, 2018; Tamášová, 2015; Ütkür, 2019).

References

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review, 84*, 191-215. http://dx.doi.org/10.1037/0033-295X.84.2.191

Barnová, S., Tamášová, V., & Krásna, S. (2019). The role of resilience in coping with negative parental behaviour. *Acta Educationis Generalis, 9*(2), 93-106. https://doi.org/10.2478/atd-2019-0010

Barrows, J., Dunn, S., & Lloyd, C. A. (2013). Anxiety, self-efficacy, and college exam grades. *Universal Journal of Educational Research, 1*, 204-208. http://dx.doi.org/10.13189/ujer.2013.010310

Baron-Cohen, S., Wheelwright, S., Hill, J., Raste, Y., & Plumb, I. (2001). The "reading the mind in the eyes" test revised version: a study with normal adults, and adults with Asperger syndrome or high-functioning autism.

Journal of Child Psychology Psychiatry, 42, 241-251. http://dx.doi.org/ 10.1111/1469-7610.00715

Bilz, L. (2014). Are symptoms of anxiety and depression in children and adolescents overlooked in schools? *Zeitschrift für Pädagogische Psychologie, 28*, 57-62. https://dx.doi.org/10.1024/1010-0652/a000118

Bolger, N., & Eckenrode, J. (1991). Social relationships, personality, and anxiety during a major stressful event. *Journal of Personality and Social Psychology, 61*, 440-449. https://dx.doi.org/10.1037/0022-3514.61.3.440

Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology, 10*, 85-94. https://www.uv.es/friasnav/Davis_1980.pdf

Davis, M. H. (2018). *Empathy: A social psychological approach*. New York: Routledge.

Farooqi, Y. N., Ghani, R., & Spielberger, C. D. (2012). Gender differences in test anxiety and academic performance of medical students. *International Journal of Psychology and Behavioral Science, 2*, 38-43. https://dx.doi.org/ 10.5923/j.iijbs.20120202.06

Frenzel, A. C., Pekrun, R., Goetz, T., Daniels, L. M., Durkson, T. L., Becker-Kurz, B., & Klassen, R. M. (2016). Measuring teacher's enjoyment, anger, and anxiety: the teacher emotions scale (TES). *Contemporary Educational Psychology, 46*, 148-163. https://dx.doi.org/10.1016/j.cedpsych.2016.05.003

Gáborová, Ľ. (2011). Humanistic psychology in the university preparation of future teachers. *Acta Technologica Dubnicae, 1*(2), 1-15. https://doi.org/ 10.1515/atd-2015-0041

Gehlbach, H. (2004). Social perspective taking: a facilitating aptitude for conflict resolution, historical empathy, and social studies achievement. *Theory & Research in Social Education, 32*, 39-55. https://dx.doi.org/ 10.1080/00933104.2004.10473242

Gehlbach, H., & Vriesema C. C. (2019). Meta-bias: a practical theory of motivated thinking. *Educational Psychology Review, 1,* 65-85. https://dx.doi.org/10.1007/s10648-018-9454-6

Geršicová, Z., & Barnová, S. (2018). Personal and social training as a part of class teachers' lifelong learning. *Acta Educationis Generalis*, *8*(2), 24-39. https://doi.org/10.2478/atd-2018-0009

Gerwing, T. G., Rash, J. A., Gerwing, A. M A., Bramble, B., & Landine, J. (2015). Perceptions and incidence of test anxiety. *The Canadien Journal for the Scholarship of Teaching and Learning, 6*, Art. 3. https://dx.doi.org/ 10.5206/cjsotl-rcacea.2015.3.3

Goodman, R. (1997). The Strengths and Difficulties Questionnaire: a research note. *Journal of Child Psychology & Psychiatry, 38*(5), 581-586.

Hodapp, V., Laux, L., & Spielberger, C. D. (1982). Theorie und Messung der emotionalen und kognitiven Komponente der Prüfungsangst. *Zeitschrift für Differentielle und Diagnostische Psychologie, 3*(3), 169-184.

Konrath, S., O'Brien, E., & Hsing, C. (2011). Changes in self-reported empathy in American college students over time: a meta-analysis. *Personality and Social Psychology Review, 15*, 180-198. https://dx.doi.org/10.1177/1088868310377395

Kordts-Freudinger, R. (2017). Feel, think, teach - emotional underpinnings of approaches to teaching in higher education. *International Journal of Higher Education, 6*, 217-229. https://dx.doi.org/10.5430/ijhe.v6n1p217

Kunter, M., Baumert, J., & Köller, O. (2007). Effective classroom management and the development of subject-related interest. *Learning and Instruction, 17*, 494-509. https://dx.doi.org/10.1016/j.learninstruc.2007.09.002

Mattan, B. D., Rotshtein, P., & Quinn, K. A. (2016). Empathy and visual perspective-taking performance. *Cognitive Neuroscience, 7*, 170-181. https://doi.org/10.1080/17588928.2015.1085372

Malone, A., & Bertsch, S. (2016). Pencils down: contributions to neuroticism's effect on test anxiety. *North American Journal of Psychology, 18*, 419-426.

Middendorff, E., Apolinarski, B., Becker, K., Bornkessel, P., Brandt, T., Heißenberg, S., & Poskowsky, J. (2017). *Die wirtschaftliche und soziale Lage der Studierenden in Deutschland 2016*. 21. Sozialerhebung des Deutschen Studentenwerks durchgeführt vom Deutschen Zentrum für Hochschul- und Wissenschaftsforschung.

Mooradian, T. A., Davis, M. H., & Matzler, K. (2011). Self-reported empathy and the hierarchical structure of personality. *The American Journal of Psychology, 124*, 99-109. https://dx.doi.org/10.5406/amerjpsyc.124.1.0099

Pekrun, R. (1984). An expectancy-value model of anxiety. In H. M. van der Ploeg, R. Schwarzer, & C. D. Spielberger (Eds.), *Advances in test anxiety research, Vol. 3,* (pp. 53-72). Lisse, The Netherlands: Swets & Zeitlinger.

Pekrun, R. (2006). The control-value theory of achievement emotions: assumptions, corollaries, and implications for educational research and practice. *Educational Psychology Review, 18*, 315-341. https://dx.doi.org/10.1007/s10648-006-9029-9

Pekrun, R., Lichtenfeld, S., Marsh, H. W., Murayama, K., & Goetz, T. (2017). Achievement emotions and academic performance: Longitudinal models of reciprocal effects. *Child Development, 88*, 1653-1670. https://dx.doi.org/10.1111/cdev.12704

Rammstedt, B., Koch, K., Borg, I., & Reitz, T. (2004). Entwicklung und Validierung einer Kurzskala für die Messung der Big-Five-Persönlichkeitsdimensionen in Umfragen. *ZUMA-Nachrichten, 55*, 5-28. http://nbn-resolving.de/urn:nbn:de: 0168-ssoar-207618

Roberts, B. W., Luo, J., Briley, D. A., Chow, P. I., Su, R., & Hill, P. L. (2017). A systematic review of personality trait change through intervention. *Psychological Bulletin, 143*, 117-141. https://dx.doi.org/10.1037/bul0000088

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 Perspectives, 6*, 167-173. https://dx.doi.org/ 10.1111/j.1750-8606.2012.00238.x

Roick, J., & Ringeisen, T. (2017). Self-efficacy, test anxiety, and academic success: a longitudinal validation. *International Journal of Educational Research*, *83*, 84-93. https://dx.doi.org/10.1016/j.ijer.2016.12.006

Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. *Journal of Statistical Software, 48*, 1-36. http://www.jstatsoft.org/v48/i02/

Rutkowski, L., & Svetina, D. (2014). Assessing the hypothesis of measurement invariance in the context of large-scale international surveys. *Educational and Psychological Measurement, 74*, 31-57. https://dx.doi.org/10.1177/ 0013164413498257

Schaafsma, S. M., Pfaff, D. W., Spunt, R. P., & Adolphs, R. (2015). Deconstructing and reconstructing theory of mind. *Trends in Cognitive Sciences, 19*, 65-72. https://dx.doi.org/10.1016/j.tics.2014.11.007

Scherer, K. R. (1984). On the nature and function of emotion: A component process approach. In P. Ekman (Ed.), *Approaches to emotion*. Hillsdale: Erlbaum.

Schwarzer, R., & Jerusalem, M. (1999). *Skalen zur Erfassung von Lehrer- und Schülermerkmalen: Dokumentation der psychometrischen Verfahren im Rahmen der Wissenschaftlichen Begleitung des Modellversuchs Selbstwirksame Schulen*. Retrieved from http://www.psyc.de/

Shulman, L. S. (1987). Knowledge and teaching: foundations of the new reform. *Havard Educational Review, 57*, 1-22. https://dx.doi.org/10.17763/ haer.57.1 .j463w79r56455411

Sinclair, K. E., & Ryan, G. (1987). Teacher anxiety, teacher effectiveness, and student anxiety. *Teaching and Teacher Education, 3*, 249-253. http://dx.doi.org/10.1016/0742-051X(87)90007-2

Singh, N. N., Lancioni, G. E., Winton, A. S., Karazsia, B. T., & Singh, J. (2013). Mindfulness training for teachers changes the behavior of their preschool students. *Research in Human Development, 10*, 211-233. https://dx.doi.org/ 10.1080/15427609.2013.818484

Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (2014). *Standards für die Lehrerbildung: Bildungswissenschaften. Beschluss der Kultusministerkonferenz vom 16.12.2004 i. d. F. vom 12.06.2014, Anlage IV*. Retrieved from https://www.kmk.org/kmk/information-in-english.html

Szafranski, D. D., Barrera, T. L., & Norton, P. J. (2012). Test anxiety inventory: 30 years later. *Anxiety, Stress, & Coping, 25*, 667-677. https://dx.doi.org/ 10.1080/10615806.2012.663490

Tamášová, V. (2015). Professional and career development of vocational subject teachers as a trend in the lifelong learning of teachers. *Acta Technologica Dubnicae, 5*(1), 1-20. https://doi.org/10.1515/atd-2015-0029

Tamášová, V., & Barnová, S. (2011). School climate as the determinant of the relationship between the level of students' resilience and school satisfaction. *Acta Technologica Dubnicae, 1*(1), 19-37. https://dx.doi.org/10.1515/atd-2015-0029

Ütkür, N. (2019). Determination of the empathy levels of prospective classroom teachers: An example of the life skills teaching course. *Acta Educationis Generalis, 9*(3), 89-104. https://dx.doi.org/10.2478/atd-2019-0015

Uitto, M., Jokikokko, K., & Estola, E. (2015). Virtual special issue on teachers and emotions in Teaching and Teacher Education (TATE) in 1985-2014. *Teaching and Teacher Education, 50*, 124-135. http://dx.doi.org/10.1016/j.tate.2015.05.008

U.S. Department of Education (2019). *Every Student Succeeds Act (ESSA)*. Retrieved from https://www.ed.gov/essa?src=rn

Van der Graaff, J., Branje, S., De Wied, M., Hawk, S., Van Lier, P., & Meeus, W. (2014). Perspective taking and empathic concern in adolescence: gender differences in developmental changes. *Developmental Psychology, 50*, 881-888. https://dx.doi.org/10.1037/a0034325

Van Droogenbroeck, F., & Spruyt, B. (2015). Do teachers have worse mental health? Review of the existing comparative research and results from the Belgian Health Interview Survey. *Teaching and Teacher Education, 51*, 88-100. https://dx.doi.org/10.1016/j.tate.2015.06.006

Wigfield, A., & Eccles, J. S. (2000). Expectancy-value theory of achievement motivation. *Contemporary Educational Psychology, 25*, 68-81. https://dx.doi.org/10.1006/ceps.1999.1015

Xu, J. (2017) The mediating effect of listening metacognitive awareness between test-taking motivation and listening test score: An expectancy-value theory approach. *Frontiers in Psychology*, 8:2201. https://dx.doi.org/10.3389/fpsyg.2017.02201

Zainal, N. H., & Newman, M. G. (2018). Worry amplifies theory-of-mind reasoning for negatively valenced social stimuli in generalized anxiety disorder. *Journal of Affective Disorders, 227*, 824-833. https://dx.doi.org/10.1016/j.jad.2017.11.084

Zee, M., & Koomen, H. M. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 years of research. *Review of Educational Research, 86*, 981-1015. https://dx.doi.org/10.3102/0034654315626801

Zeidner, M. (1998). *Test anxiety: The state of the art*. New York: Plenum Press.

Appendix A

A.1 Tests for possible differences between the included longitudinal data and the excluded cross-sectional data

We conducted chi-squared tests to test for possible differences between the included longitudinal data and the excluded cross-sectional data (with respect to the frequencies of the variables for gender and study program). We then employed a multivariate one-way analysis of variance (MANOVA; predictor variables emotionality, worry, grade point average, study semester; outcome variables perspective-taking, self-efficacy) to expose differences between the longitudinal data included in the analysis (i.e., the undergraduates who participated twice) and the cross-sectional data excluded from the analysis (the undergraduates who participated only once).

Of the 935 undergraduates who reported their gender, n=253 undergraduates (79% females) participated at both T1 and T2, while n=682 (65% females) participated at T1 or T2 only, χ^2=17.09, df=3, p=.001. The student teachers were enrolled in several different study programs corresponding to the type of school at which they hoped to teach. Of the n=936 undergraduates who reported their study program and participated twice (once), 25% (19%) aimed to teach at an elementary school, 18% (20%) at a lower or middle-track secondary school, and 34% (35%) at an academic-track secondary school (Gymnasium), 11% (11%) aimed to teach students with special educational needs, and 0.4% (15%) were enrolled in another study program (e.g., law, medicine), χ^2=78.72, df=13, p<.001. Thus, there were statistically significant differences in the distribution of gender and study program between the undergraduates who participated twice and those who participated only once.

The one-way MANOVA with Bonferroni adjusted p-values showed no statistically significant differences between the two groups of students in emotionality Mattend_twice=3.00/Mattend_once=2.98, SDattend_twice=.92/SDattend_once=.95, F(1, 921)=0.05; worry Mattend_twice=3.39/ Mattend_once =3.30, SDattend_twice=.87/SDattend_once=.90, F(1, 921)=1.78; perspective-taking Mattend_twice=3.91/ Mattend_once=3.88, SDattend_twice=.57/S Dattend_once=.70, F(1, 921)=0.89; academic self-efficacy Mattend_twice =3.61/Mattend_once=3.64, SDattend_twice=.53/SD attend_once=.44, F(1, 921) =0.92; or social self-efficacy Mattend_twice=3.65/ Mattend_once=3.67, SDattend_twice=.42/ SDattend_once=.52, F(1, 921)=0.13. There were significant differences in grade point average Mattend_twice=2.09/ Mattend_once=2.18, SDattend_twice=.52/SD attend_once=.56, F(1, 921)=5.61, p<.02, and study semester Mattend_twice=4.83/Mattend_once=6.05, SDattend_twice=2.77/SD attend_once=.3.98, F(1, 921)=19.84, p<.001. These differences between the full sample and subsample used in the longitudinal analyses will be taken up again in the discussion section.

A.2 Complete list of measures used in the longitudinal survey (in alphabetical order for current purposes; in randomized order in survey).

Measure
Current statisfaction (Mittag, 1999)
Experienced sense in study (Schnell & Becker, 2007)
Live satisfaction (Daig et al., 2011)
Neuroticism (Rammstedt et al., 2004)
Personal belief in a just world (Dalbert, 1999)
Procrastination (Schwarzer & Jerusalem, 1999)
Self-efficacy (Schwarzer & Jerusalem, 1999)
Study contents satisfaction (Schiefele & Jacob-Ebbinghaus, 2006; Spörer & Brunstein, 2005)
Subjectively experienced life quality (new developed scales)
Tendency to perspective-taking (Davis, 1980)
Test-anxiety (Hodapp et al., 1982; Schwarzer & Jerusalem, 1999)

Resources
Daig, I., Spangenberg, L., Henrich, G., Herschbach, P., Kienast, Th. & Brähler, E. (2011). Alters- und geschlechtspezifische Neunormierung der Fragen zur Lebenszufriedenheit (FLZM) für die Altersspanne von 14 bis 64 Jahre. *Zeitschrift für Klinische Psychologie und Psychotherapie, 40(3)*, 172-178. Göttingen: Hogrefe.

Dalbert, C. (1999). The world is more just for me than generally: About the Personal belief in a Just World Scale's validity. *Social Justice Research, 12,* 79-98.

Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology, 10*, 85-94. https://www.uv.es/friasnav/Davis_1980.pdf

Hodapp, V., Laux, L., & Spielberger, C. D. (1982). Theorie und Messung der emotionalen und kognitiven Komponente der Prüfungsangst. *Zeitschrift für Differentielle und Diagnostische Psychologie, 3*(3), 169-184.

Mittag, W. (1999). *Skala Augenblickliche Zufriedenheit (SATIS) [Momentary satisfaction scale].* In Schwarzer, R., & Jerusalem, M. (1999). Retrieved from http://www.psyc.de/

Rammstedt, B., Koch, K., Borg, I., & Reitz, T. (2004). Entwicklung und Validierung einer Kurzskala für die Messung der Big-Five-Persönlichkeitsdimensionen in Umfragen. *ZUMA-Nachrichten, 55*, 5-28. http://nbn-resolving.de/ urn:nbn:de:0168-ssoar-207618

Schiefele, U. & Jacob-Ebbinghaus, L. (2006). Lernermerkmale und Lehrqualität als Bedingungen der Studienzufriedenheit. *Zeitschrift für Pädagogische Psychologie*, *20*, 199-212. https://doi.org/10.1024/1010-0652.20.3.199

Schnell, T. & Becker, P. (2007). *Der Fragebogen zu Lebensbedeutungen und Lebenssinn (LeBe).* Göttingen: Hogrefe.

Schwarzer, R., & Jerusalem, M. (1999). *Skalen zur Erfassung von Lehrer- und Schülermerkmalen: Dokumentation der psychometrischen Verfahren im Rahmen der Wissenschaftlichen Begleitung des Modellversuchs Selbstwirksame Schulen*. Retrieved March 24, 2019, from http://www.psyc.de/

Spörer, N., & Brunstein, J. C. (2005). Strategien der Tiefenverarbeitung und Selbstregulation als Prädiktoren von Studienzufriedenheit und Klausurleistung. *Psychologie in. Erziehung und Unterricht*, *52*, 127-137.

Gender Issues in English Language Teaching: Views from Turkey

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Abstract:

Introduction: Research into gender diversity and equality of gender in humanities has been mounting since 1960s, when post-modernism and post-structuralism emerged as a reaction to metanarratives of modernization. Methods and approaches in ELT also arose in the same years. However, queer and LGBT identities were intentionally ignored in ELT discipline and departments, although English as a lingua franca was already hailed in the inner circle. This study aimed to unearth the views of young adult learners of English regarding LGBT. Two data collection instruments were administered. A standard scale composed of 21 items that measure homosexuality attitudes was given to the participants (N= 113). In addition, a semi-structured interview was prepared to elicit the participants' views (N=12). The results of the study show that most of the participants showed a positive attitude towards LGBT. However, they reported that this topic was never addressed in ELT settings.

Methods: The study was qualitatively designed to elicit the views of young adult learners regarding homosexuality. A standard scale developed by Kite and Deaux (1986) and which was psychometrically sound and reliable to identify the attitudes towards homosexuality and a descriptive phenomenographic research method were used to learn the ideas of the participants. Phenomenographic research method aims to elicit lived experiences of individuals by using experiential description. Although there were 600 young adult learners of English, only 113 of them volunteered to participate in the study. The participants studied English as a foreign language at a public university in Turkey. The average age of the participants was 18. A semi-structured interview was conducted with 12 of the participants.

Results: The findings of the study represent that most of the participants ascribed positive attitudes towards homosexuality. Further, a big number of the informants put forward the significance of such concepts as freedom

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and respect for personal preferences. Besides, an average number of respondents attributed homosexuality as a hormonal disorder encountered in society. The majority of the respondents put an emphasis on the taboo of religion. They revealed that homosexuality is a taboo which is strictly forbidden in Islam and such issues should not be voiced explicitly in our daily life.

Discussion: This study dealt with the issue of LGBT and homosexuality in foreign language settings by taking the views of young adult learners of English into consideration. The results show that homosexuality representation is insufficient in ELT textbooks, curriculum and materials. Although most of the participants showed a positive attitude towards the representation of homosexuality, they noted that LGBT was never addressed in classroom settings. Similarly, Gray (2013) also emphasizes that LGBT identity was not represented in ELT, though considerable progress has been legally made in the UK. Nelson (2002) strongly recommends that queering ESL through discourses may help ESL develop a more diverse attitude towards LGBG identity.

Limitations: This study was limited to only young adult learners in English language teaching. In addition, only two collection data tools, a standard homosexuality scale and a semi-structured interview form, were used. Besides, convenience sampling was used. The sampling was confined to 113 participants for the scale and 12 learners for the semi-structured interview form.

Conclusions: The results show that most of the participants have positive attitudes towards acceptance of homosexual identities. Although ELT textbooks and materials tend to discard LGBT identity, teachers and students can queer ELT, EFL and ESL classrooms by using the tenets of progressive education and critical pedagogy. The use of participatory approach can be reinforced and expanded in ELT world encompassing not only inner circle but also outer and expanding circles. Materials, tasks and activities need to be updated in ELT curriculum. The first discussions of equality of gender in post-modernist and post-structuralist theories can be perceptibly seen in ELT by endorsing and developing critical pedagogy.

Introduction
Modernity has largely forgotten or tended to ignore gender issues since it has been engaged in developing metanarratives knowingly or unintentionally. However, two world wars that devastated lives of millions of people showed that the tenets and claims of modernity based on reason and logic should be challenged and transformed. Therefore, post-structuralism and post-modernity have developed opposing discourses against modernity by stressing the importance of plurality and multiplicity of knowledge (Best & Kellner, 1991;

Giroux, 1993b). Although post-structuralism and post-modernity are used interchangeably at times, we would rather use post-structuralism since theoretical debates have been more intensively perpetuated around this term. Considering the ideas discussed above, post-structuralism has enabled gender issues to be raised in cultural studies. Therefore, gender has been a discipline of social sciences only in recent decades dating back to 1960s (Butler, 1990; Lewis & Mills, 2003; Morgan, 2007; Nelson, 1993, 1999; Osaďan, 2012; Osaďan, & Safir, 2014; Peters, 1996). Gender is an umbrella term that includes queer theory and LGBT issues as well. Although some researchers have conceptualized gender within binary logic and essentialism, Butler (1990) has placed gender on a large spectrum by emphasizing that gender is an act that we do each day through language because without discourses and expressions, gender per se does not exist. Therefore, gender is socially and historically constructed, which makes it fictitious. Thus, subjects do not perform gender acts consciously because discourses precede and mold gender. In line with this idea, heteronormativity is created by social dialogue as if it contains essentialist nature. However, when homosexuality is performed in society, they are controlled, otherized and even punished. This radical distinction between heterosexuality and homosexuality is produced under the effect of discourses that have been historically, politically and socially constructed and reinforced. Since this binary logic has been dominant in discussions of gender, queer theory has striven to bring a different perspective to gender by including the idea of multiplicity and plurality within the framework of humanistic psychology (Gáborová, 2011) and post-structuralism (Peters, 1996).

1 Theoretical background

Although some disciplines in humanities expand and develop the horizon of gender issues, the discipline of English language teaching has been delayed to include gender issues and diversity into teaching per se, even if this discipline has produced almost 30 methods to teach English since 1960s (Thornbury, 2017). It is a very clear fact that gender issues have been often ignored in these methods because presence of critical pedagogy has been rarely hailed in English language teaching (therefore ELT). Although Gray (2013) partially supports the idea that capitalism has supported gender diversity, this study rejects this idea because capitalism uses all agents and genders in societies to use and to be used. Thus, gender diversity becomes victims of capitalism. Legal acceptance of non-binary gender in certain countries is not equal to acceptance of the whole society. Capitalism ignores gender equality in ELT market because textbooks, curriculum, syllabi and tasks which include issues regarding equality of gender in countries incorporating outer and expanding circles may not work for the interests of capitalism (Gray, 2013; Thornbury, 2017). Capitalism, in this sense, victimizes LGBT individuals to gain more profits in these outer and expanding circles. Gray (2013) notes the fact that ELT has been the victim of

commercialism. Denial and deliberate rejection of recognizing LGBT identity is based on normalizing heteronormativitiy in ELT (Barozzi & Ojeda, 2010; Nelson, 1999).

In criticisms of post-colonial ideologies and analysis of social constructionist theory, it can be said that gender is socially and culturally constructed (Lewis & Mills, 2003; Walters, 2005). However, cultural politics criticizes practices, particularly educational ones, in certain cultures (Giroux, 1988, 1993a). Thus, ELT programs intentionally have been marginalizing and otherizing LGBT identities (Gray, 2013; Nelson, 1999). They are treated as if they have been excluded from the society. The emergence of post-modernism and post-structuralism has produced fruitful analyses regarding gender diversity from women, feminism to queer bodies and identities (Best & Kellner, 1991; Morgan, 2007; Namaste, 1994; Peters, 1996; Renn, 2010).

In accordance with post-modernist and post-structuralist theories, methods of post-method era in ELT have not been represented in textbooks, curricula and teacher talks (Nelson, 1993, 1999). One of the prominent methods of post-method era is participatory approach that deals with ideology and power relations in ELT (Tollefson, 2007). However, widespread use of this approach has not been seen in ELT discipline. Therefore, gender issues have been deliberately framed and discarded by global textbooks. Genders issues incorporate feminism, LGBT, queer theory and alternative sexes (Gray, 2013). Lack of discussions regarding gender issues in ELT is a manifestation of western hypocrisy in the world arena.

Barış and Esra (2014) report the fact that in the context of Turkey, these issues might be riskier for global market. LGBT in Turkey was able to hold their first pride parade along with almost 30 people only in İstanbul in 2003 (Yılmaz & Göçmen, 2015). The first pride parade in the capital city of Turkey was held in 2006. However, the first official pride parade was organized in Bursa, the fourth biggest city in Turkey where LGBT individuals were attacked on. In 2011, one of the biggest pride parades was held with the support of two leftist political parties in Turkey. However, it is assumed that the most immense pride parade was arranged in 2013. However, since 2015, LGBT parade has been banned by the government on the pretext that this parade could lead to some negative incidents, although almost 13 parades were successfully and uneventfully organized previously. Legally same-sex marriage is not allowed in Turkey. However, an individual can choose to be LGBT individual (Orta & Camgöz, 2018).

This study aims to unravel the views of young adult learners of English about homosexuality in ELT in Turkey. It is important to develop discursive practices in ELT situated in expanding circle. Although the countries in the inner circle tend to avoid this issue owing to commercial anxiety, the countries in outer and expanding circles experience social, cultural and political problems while

endeavoring to represent homosexual identity in ELT disciplines largely shaped by inner circle' global market and commercial aims.

2   Methodology

The study was qualitatively designed to elicit the views of young adult learners regarding homosexuality. A standard scale developed by Kite and Deaux (1986) and which was psychometrically sound and reliable to identify the attitudes towards homosexuality and a descriptive phenomenographic research method were used to learn the ideas of the participants. Phenomenographic research method aims to elicit lived experiences of individuals by using experiential description. This research method stresses the importance of subjectivity and the search for meaning of certain experiences and topics (Feldon & Tofel-Grehl, 2018; Marton, 1981, 1988; Willis, 2018).

2.1 Participants

Although there were 600 young adult learners of English, only 113 of them volunteered to participate in the study. The participants studied English as a foreign language at a public university in Turkey. The average age of the participants was 18. Gender and names were kept confidential because of the nature of the topic investigated. All of the participants described themselves as Muslims. Their mother tongue was only Turkish. The participants had English only at A1.1 level before entering the university because a placement test was conducted before they were placed into classrooms at different levels. Four basic skills composed of reading, writing, listening and speaking were taught in accordance with the curriculum. The participants learned English from global textbooks, MacMillan, Pearson and Their level ranged between A2 and B2. The participants had English teachers from both national and international backgrounds. A semi-structured interview was conducted with 12 of the participants.

2.2 Procedure

The participants were informed about the content of the study. Before conducting the study, brief information regarding LGBT was presented. Later, they were given the questionnaire in one session in 5 different classes. In addition, the participants (N=12) were interviewed and the study was centered on certain themes. Lastly, the consent form was signed by the participants.

2.3 Data collection

The homosexuality scale developed by Kite and Deaux (1986) was used. In addition, the participants were given some interview questions about their attitudes towards and views regarding homosexuality. The interview questions were prepared by adapting the interview questions prepared by Gray (2013). The researchers also formed additional five interview questions by taking the

classification by Gray into consideration by taking two psychologists and experts' opinions specializing in studies on homosexuality and LGBT.

2.4 Data analysis
The data collected from the scale was analyzed through SPSS. The mean value of each item was presented. If the score obtained from the scale is closer to 5, it means that the participants have a more positive attitude towards acceptance of homosexual identity. If the score obtained from the scale is less than 2.40, it means that they have a negative attitude towards acceptance of homosexual identity. In addition to the scale, the views of 12 participants were examined through inductive content analysis.

3 Results

In this section, the results of the study and the findings are described based on the data obtained from the participants by means of the instruments. They are grouped under the titles of the categories from the questionnaire (Table 1).

Table 1

Scale results of EFL students' homosexuality attitudes

Item		Mean
1	Finding out that an artist was gay would have no effect on my appreciation of his/her work.	3.92
2	I would look for a new place to live if I found out my roommate was gay.	3.25
3	I would not mind being employed by a homosexual.	3.22
4	I won't associate with known homosexuals if I can help it.	3.21
5	I would not mind having a homosexual friend.	3.17
6	Two individual of the same sex holding hands or displaying affection in public is revolting.	3.06
7	I would vote for a homosexual in an election for public office.	3.02
8	I would not decline membership in an organization just because it had homosexual members.	2.98
9	The love between two males or two females is quite different from the love between two persons of the opposite sex.	2.96
10	The increasing acceptance of homosexuality in our society is aiding in the deterioration of morals.	2.93
11	If I knew someone were gay, I would still go ahead and form a friendship with that individual.	2.84
12	Homosexuals are more likely to commit deviant sexual acts, such as child molestation, rape, and voyeurism (Peeping Toms), than are heterosexuals.	2.74
13	I do not really find the thought of homosexual acts disgusting.	2.72

14	Homosexuals should be forced to have psychological treatment.	2.68
15	I would not be afraid for my child to have a homosexual teacher.	2.56
16	Homosexuality, as far as I'm concerned, is not sinful.	2.54
17	Homosexuals should be kept separate from the rest of society (i.e. separate housing, restricted employment).	2.52
18	Homosexuality is a mental illness.	2.49
19	Gays dislike members of the opposite sex.	2.48
20	I see the gay movement as a positive thing.	2.38
21	If I were a parent, I could accept my son or daughter being gay.	2.38

By looking at the mean ($\bar{x}$) score 3.92, one can clearly understand that the only item that is agreed by the respondents is the 1st item finding out that an artist was gay would have no effect on my appreciation of his/her work. Besides, it is easily observed from the counted mean scores that the respondents were neutral about the following items: the 2nd item I would look for a new place to live if I found out my roommate was gay ($\bar{x}$=3.25); the 3rd item I would not mind being employed by a homosexual ($\bar{x}$=3.22); the 4th item I won't associate with known homosexuals if I can help it ($\bar{x}$=3.21); the 5th item I would not mind having a homosexual friend ($\bar{x}$=3.17); the 6th item Two individual of the same sex holding hands or displaying affection in public is revolting ($\bar{x}$=3.06); the 7th item I would vote for a homosexual in an election for public office ($\bar{x}$=3.02); the 8th item I would not decline membership in an organization just because it had homosexual members ($\bar{x}$=2.98); the 9th item The love between two males or two females is quite different from the love between two persons of the opposite sex ($\bar{x}$=2.96); the 10th item The increasing acceptance of homosexuality in our society is aiding in the deterioration of morals ($\bar{x}$=2.93); the 11th item If I knew someone were gay, I would still go ahead and form a friendship with that individual ($\bar{x}$=2.84); the 12th item Homosexuals are more likely to commit deviant sexual acts, such as child molestation, rape, and voyeurism (Peeping Toms), than are heterosexuals ($\bar{x}$=2.74); the 13th item I do not really find the thought of homosexual acts disgusting ($\bar{x}$=2.72); the 14th item Homosexuals should be forced to have psychological treatment ($\bar{x}$=2.68); the 15th item I would not be afraid for my child to have a homosexual teacher ($\bar{x}$=2.56); the 16th item Homosexuality, as far as I'm concerned, is not sinful ($\bar{x}$=2.54); and the 17th item Homosexuals should be kept separate from the rest of society (i.e., separate housing, restricted employment) ($\bar{x}$=2.52). On the other hand, there are some items on which the respondents disagree. In the same vein, the mean ($\bar{x}$) scores of these items represent that the 18th item Homosexuality is a mental illness ($\bar{x}$=2.49); the 19th item Gays dislike members of the opposite sex ($\bar{x}$=2.48); the 20th item I see the gay movement as a positive thing ($\bar{x}$=2.38); and the 21st item If I were a parent, I could accept my son or daughter being gay ($\bar{x}$=2.38) are disagreed by the respondents.

3.1 Findings related to representation of LGBT in immediate social environment

The findings of the study represent that most of the participants ascribed positive attitudes towards homosexuality. Further, a big number of the informants put forward the significance of such concepts as freedom and respect for personal preferences. Besides, an average number of respondents attributed homosexuality as a hormonal disorder encountered in society. Excerpts from the informants' views are as follows:

- The preferences of people are none of my business. People can do whatever they want. With a little bit more respect, we could have had a better life. Nobody should interrupt others' life. Nobody knows about what, where, and how people lived before. If people had cared their own business, corrected their mistakes, and been more tolerant, everything would be better. In brief, let's not direct people (P1).
- Having LGBT around would not disturb me. Everyone is free in their preferences. Those who have no respect for LGBT actually disturb me. LGBT people are also humans and they have a place in society. They sometimes protest as they are humiliated and abused by other people. They should not cross the borders of protest, though (P3).
- LGBT people are individuals of the community and they may be different from us. I can show them respect if they do not cross my border. I am not strict about this issue as I suppose, it is a hormonal disorder. They do not disturb me, if they are well behaved (P5).

The participants reported that they had a positive understanding of LGBT people around them. Respect and diversity were emphasized in their remarks. In addition, the participants were aware of the negative attitudes of the larger society in Turkey. Therefore, it can be said that the learners developed a positive attitude towards LGBT individuals.

3.2 Findings related to representation of LGBT in daily life

The majority of the respondents put an emphasis on the taboo of religion. They revealed that homosexuality is a taboo which is strictly forbidden in Islam and such issues should not be voiced explicitly in our daily life. However, such aspects as homosexuality as a social reality of everyday life, tolerance and intolerance towards encountering homosexuality in our daily life were uttered by the informants. The related excerpts are as follows:

- I do not appreciate LGBT formation, but their existence around does not irritate me much. It is ok if they are not close to me or my family. I think this is an illness and it should be cured. I do not say they should be exempted from society, but this is a Muslim country and this formation is against our societal norms. LGBT people should be regained and integrated in the society after the required treatments (P7).

- I think it is a psychological disorder to be a member of LGBT. The next phase of LGBT formation means terror and it will be too harmful for the society. They have no aim apart from destroying Islam. Such formations as LGBT and their activities must be stopped and LGBT people should be exposed to psychological treatment (P8).
- It does not disturb me in daily life. If they do not disturb me, I have respect for them. Besides, I believe they should be tolerated since, as far as I know, it is a hormonal disorder (P9).

Although some participants said that they respect LGBT individuals, they regard LGBT individuals as hormonal disorders that need to be treated. In addition, views in Islam affected their approach towards LGBT individuals.

3.3 Findings related to representation of LGBT in classroom settings

Capturing attitudes based on informants' responses, it was detected that homosexuality or such affaire should be integrated into classroom settings as long as not diverging from the lane of science. However, a number of informants also uttered the harmful effects of mentioning such issues in the classroom setting unlike those hinting on the worthiness of equality in educational settings. Excerpts from the informants' views are as follows:

- I look at the issue of LGBT in a scientific way which is very different from others' point of view. God created every male with 2% female hormone inside, while s/he created every female with 2% male hormone in the body. Sometimes, the percentage of this hormone may be more than 2%, which is an illness that should be tolerated. So, such issues may be integrated into classroom settings (P4).
- In our current era, it is very dangerous to restrict human rights. We are born as free and we live freely. So, those who are against LGBT should be educated, in my point of view. The question is not LGBT, but equality. There should be equality among all people. No one can hinder each other. So, there is no harm in mentioning such issues in educational settings, as long as not exaggerated (P5).

The participants' views regarding LGBT issue in classroom settings are that tolerance can be developed and that equality is the main issue while approaching LGBT individuals. They also emphasize that a scientific approach should be adopted. However, the problem in their views is that LGBT issue is still regarded as a disorder by using pseudo-scientific data. Therefore, a critical approach needs to be developed by enabling them to negotiate this issue and by inviting LGBT individuals into classroom settings or using different tasks such as showing documentary films or critical reading passages.

4   Discussion

This study dealt with the issue of LGBT and homosexuality in foreign language settings by taking the views of young adult learners of English into consideration. The results show that homosexuality representation is insufficient in ELT textbooks, curriculum and materials. Although most of the participants showed a positive attitude towards the representation of homosexuality, they noted that LGBT was never addressed in classroom settings. Similarly, Gray (2013) also emphasizes that LGBT identity was not represented in ELT, though considerable progress has been legally made in the UK. Nelson (2002) strongly recommends that queering ESL through discourses may help ESL develop a more diverse attitude towards LGBG identity. The first remarks regarding queer and LBT identity in ELT started in different contexts around 1990s. Nelson (2008) reports that recognition of LGBT identity is only nascent in ELT that should get rid of heteronormative education. The positive attitudes of females towards homosexuality may have resulted from the fact that females also consider themselves at a disadvantage in the society. Thus, they may have developed the feeling empathy towards homosexual and LGBT groups (Huić, Jelić, & Kamenov, 2016). Nelson (2010) also reports a study on a gay immigrant student in a foreign language class in the USA who could not express himself freely and avoided mentioning issues about gender diversity. Therefore, she suggests that limitations on gay topics need to be addressed in ESL classrooms. Teachers ought to take risks by providing topics that include gender diversity and sexual identities. By expanding on this topic, Paiz (2018) recommends that ESL teachers need to receive queer training to raise awareness of diverse identities and prepare curriculum, syllabus and tasks in accordance with queer topics.

When considering the emerging literature, one can be misled to think that queer and LBGT identity are widespread in ELT (Barozzi & Ojeda, 2010; Nelson, 2002; Tollefson, 2007). However, this literature applies to mostly inner circle countries. In Turkey, this issue is among the taboo topics that may disturb some learners situated in relatively conservative culture (Barış & Esra, 2014). Considering the tenets of critical pedagogy, it can be said that in the context of Turkey, heterosexuality is performatively and socially constructed in ELT departments and classrooms (Barış & Esra, 2014; Sarıçoban & Kazazoğlu, 2012; Tekin, 2011a). Tekin (2011b) conducted a study with Turkish EFL students and concluded that 40% of EFL learners had a positive attitude towards negotiation of homosexuality. Güney (2018) carried out a study with the undergraduates majoring in ELT department and showed that the participants were mentally ready to negotiate queer issues. However, the participants reported that they could avoid discussing queer issues in their future classroom settings with young learners since the cultural setting might not be appropriate because the ministry of Turkish National Education may not allow them to discuss these issues. Indeed, this perspective might prove to be accurate because

Council of Higher Education (CHE) in Turkey banned discussing gender diversity at universities in 2019 by stating that negotiating gender diversity might be a threat to Turkish culture and family culture because those in power in Turkey tend to define almost 95% of Turkish people as Muslims. Therefore, Islamic values are often reinforced in education system of Turkey. However, education encompassing homosexuality is ignored. Halstead & Lewicka (1998) note that Islam is already familiar with topics regarding homosexuality which needs to be included into education system of Muslim countries from the age of 8 on to address minority communities. However, neither national nor international textbooks tend to mention topics of homosexuality because of commercial, social and cultural concerns. Therefore, Halstead & Lewicka (1998) bring a cultural and political criticism towards this understanding. Negotiating identities and gender equality can contribute to emergence and acceptance of these identities in ELT.

Although language is seen as one of the most effective tools in transforming society in ELT where English as a lingua franca should be emancipatory, the potent effect of English is not used in ELT settings. Thus, English as a lingua franca is rendered weak, feeble, pale and an orphan because it cannot use its energia in Aristotelian sense. English as a lingua franca arising from inner circle remains handicapped and experiences solitary confinement by itself with little or no effect on society. Therefore, it is true that Philipson (2017) evaluates the current situation of English as mythologized Lingua franca. Gray (2013) insistently stresses the importance of use of LGBT materials and textbooks in ELT departments because theoretical negotiations and legal acceptance of LGBT in certain countries do not suffice to endorse LGBT identities. Commercialism should not be the only motive to publish ELT textbooks because these textbooks guide minds of participants (teachers, learners, administrators) in a heteronormative way that should be challenged. Ilyas (2017) also mentions the absence of inclusion of homosexuality in ELT textbooks in Indonesia withing the framework of critical thinking paradigm by showing that a Muslim writer in Canada was attacked since homosexuality was addressed and that socio-political context in Indonesia had religious intolerance, which also hindered inclusion of topics of homosexuality in ELT. Mambu (2016) from Java, Indonesia shows that teachers should enable EFL learners from different religious backgrounds to discuss unfavorable issues considering the perspectives of critical interfaith in classroom settings so that their negotiations can produce fruitful discourses. Thus, Mambu's study can be a good model for EFL learners to discuss issues of homosexuality because critical interfaith dialogues are encouraged. In line with these ideas and discussions, Gray (2013) also insistently prioritizes the widespread use of LGBT materials in ELT settings. This study showed that the majority of the participants feel prepared to encounter LGBT individuals at cognitive level. However, it still

remains unclear whether they are ready to experience shared lives in the same environment.

Conclusions

This study intended to elicit the views of young adult learners of English regarding homosexuality. The results show that most of the participants have positive attitudes towards acceptance of homosexual identities. Although ELT textbooks and materials tend to discard LGBT identity, teachers and students can queer ELT, EFL and ESL classrooms by using the tenets of progressive education and critical pedagogy. The use of participatory approach can be reinforced and expanded in ELT world encompassing not only inner circle but also outer and expanding circles. Materials, tasks and activities need to be updated in ELT curriculum. The first discussions of equality of gender in post-modernist and post-structuralist theories can be perceptibly seen in ELT by endorsing and developing critical pedagogy. Otherwise, the gap between theory and practice in ELT may be hard to be bridged. What is more, ELT can be the pioneer to guide societies into a more emancipatory and transformative form. In future studies, ELT should revise and transform its own curricula, textbooks, syllabi and materials in the changing world. Changes in ELT might be commenced through teacher talk, that is, discursive practices that may contribute to the performativity of gender.

References

Barış, E., & Esra, K. (2014). Yeni toplumsal hareketlerin sınıf dinamiği: Türkiye LGBT Hareketi. *Marmara University Journal of Political Sciences, 2*(1), 93-113.

Barozzi, S., & Ojeda, J. R. G. (2016). Sexual identities in EFL at primary school level: A pre-service teachers' perspective from Spain. *Porta Linguarum: Revista Internacional de Didáctica de Las Lenguas Extranjeras*, *25,* 9-20.

Best, S., & Kellner, D. (1991). *The postmodern theory: Critical interrogations.* London: McMillan Educational Ltd.

Butler, J. (1990). *Gender trouble. Feminism and the subversion of identity*. New York: Routledge.

Feldon, D. F., & Tofel-Grehl, C. (2018). Phenomenography as a Foundation for Mixed Models Research. *American Behavioral Scientist*, *62*(7), 887-899.

Gáborová, Ľ. (2011). Humanistic psychology in the university preparation of future teachers. *Acta Technologica Dubnicae*, *1*(2), 1-15. https://doi.org/10.1515/atd-2015-0041

Giroux, H. (1988). Teacher education as cultural politics. In H. Giroux, *Schooling and the struggle for public life* (pp. 188-202). Minneapolis: University of Minnesota Press.

Giroux, H. (1993a). *Living dangerously: Multiculturalism and the politics of difference*. New York: Peter Lang.

Giroux, H. (1993b). *Border crossing: Cultural workers and the politics of education.* New York: Routledge.

Gray, J. (2013). LGBT Visibility and Heteronormativity in ELT Materials. In J. Gray (Ed.), *Critical Perspectives of Language Teaching Materials* (pp.40-63). Basingstoke: Palgrave Macmillan.

Güney, Ö. (2018). *Queering teacher education programs: perceptions of pre-service EFL teachers towards queer issues* (Doctoral dissertation). Ankara: Bilkent University.

Halstead, J. M., & Lewicka, K. (1998). Should homosexuality be taught as an acceptable alternative lifestyle? A Muslim perspective. *Cambridge Journal of Education*, *28*(1), 49-64.

Huić, A., Jelić, M., & Kamenov, Ž. (2016). What predicts the willingness of heterosexual persons to behave in a positive or negative manner towards homosexual persons? *Kriminologija & socijalna integracija: časopis za kriminologiju, penologiju i poremećaje u ponašanju*, *23*(2), 110-141.

Ilyas, H. P. (2017). Historical Perspective: The Development of Critical Thinking in Indonesian ELT. *Journal of ELT Research*, *2*(2), 89-102.

Kite, M. E., & Deaux, K. (1986). Attitudes toward homosexuality: Assessment and behavioral consequences. *Basic and Applied Social Psychology, 7*, 137-162.

Lewis, R., & Mills, S. (Eds.). (2003). *Feminist postcolonial theories: A reader.* New York: Routledge.

Mambu, J. E. (2016). Investigating students' negotiation of religious faiths in ELT contexts: A critical spiritual pedagogy perspective. *Critical Inquiry in Language Studies*, *13*(3), 157-182.

Marton, F. (1981). Phenomenography: Describing conceptions of the world around us. *Instructional Science, 10*, 177-200.

Marton, F. (1988). Phenomenography: Exploring different conceptions of reality. In D. M. Fetterman (Ed.), *Qualitative approaches to evaluation in education: The silent scientific revolution* (pp. 176-205). New York: Praeger.

Morgan, B. (2007). Poststructuralism and applied linguistics: Complementary approaches to identity and culture in ELT. In J. Cummins, & C. Davison (Eds.), *International handbook of English language teaching* (Vol. 2) (pp. 949-968). Norwell, MA: Springer Publishers.

Namaste, K. (1994). The politics of inside/out: Queer theory, poststructuralism, and a sociological approach to sexuality. *Sociological Theory*, *12*, 220-231.

Nelson, C. (1993). Heterosexism in ESL: Examining our attitudes. *TESOL Quarterly, 27*(1), 143-150.

Nelson, C. (1999). Sexual identities in ESL: Queer theory and classroom inquiry. *TESOL Quarterly, 33*(3), 371-391.

Nelson, C. (2002). Why Queer Theory is useful in teaching: A perspective from English as a second language teaching. *Journal of Gay & Lesbian Social Services, 14*(2), 43-53.

Nelson, C. D. (2008). *Sexual identities in English language education: Classroom conversations*. New York and London: Routledge.

Nelson, C. D. (2010). A gay immigrant student's perspective: Unspeakable acts in the language class. *Tesol Quarterly*, *44*(3), 441-464.

Orta, İ. M., & Camgöz, S. M. (2018). Türkiye'de Yapılan Homofobi Çalışmalarına Genel Bir Bakış. (A general perspective towards homophobic studies in Turkey.). *DTCF Journal, 58*(1), 409-439.

Osaďan, R. (2012). Gender Stereotypes and Elementary School Teachers. *Acta Technologica Dubnicae*, *2*(2), 25-29. https://doi.org/10.1515/atd-2015-0057

Osaďan, R., & Safir, Y. (2014). A Cross-Cultural Examination of Curriculum and Sexuality Outcomes in Primary School. *Acta Technologica Dubnicae*, *4*(2), 67-72. https://doi.org/10.1515/atd-2015-0007

Paiz, J. M. (2018). Queering ESL teaching: Pedagogical and materials creation issues. *TESOL Journal*, *9*(2), 348-367.

Peters, M. (1996). *Poststructuralism, Politics, and Education. Critical Studies in Education and Culture*. Bergin and Garvey: Westport.

Phillipson, R. (2017). Myths and realities of 'global' English. *Language Policy, 16*(3), 313-331. https://doi.org/10.1007/s10993-016-9409

Renn, K. A. (2010). LGBT and queer research in higher education: The state and status of the field. *Educational Researcher*, *39*(2), 132-141.

Sarıçoban, A., & Kazazoğlu, S. (2012). Topic preferences of Turkish ELT students and teachers in text books. *Sino-US English Teaching*, *9*(2), 887-892.

Tekin, M. (2011a). Discussing the unspeakable: A study on the use of taboo topics in EFL speaking classes. *Journal of Theory and Practice in Education*, *7*(1), 79-110.

Tekin, M. (2011b). Breaking the shell: A study on Turkish students' reactions towards sexual identity issues in the language classroom. *Gay and Lesbian Issues and Psychology Review*, *7*(3), 216-231.

Thornbury, S. (2017). *Scott Thornbury's 30 language teaching methods Google EBook: Cambridge handbooks for language teachers*. Cambridge University Press.

Tollefson, J. W. (2007). Ideology, language varieties, and ELT. In J. Cummins, & C. Davison (Eds.), *International handbook of English language teaching* (pp. 25-36). New York: Springer.

Walters, M. (2005). *Feminism: a very short introduction*. Oxford: Oxford University Press.

Yılmaz, V., & Göçmen, I. (2015). Summary results of the social and economic problems of lesbian, gay, bisexual and transsexual (LGBT) individuals in Turkey research. *Center for Policy and Research on Turkey*, *4*, 97-105.

Willis, A. S. (2018). The efficacy of phenomenography as a cross-cultural methodology for educational research. *International Journal of Research & Method in Education*, *41*(5), 483-499.

Investigating the Policy-Reality (Mis)Match in IELTS and TOEFL from the Perspectives of Global Englishes

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Abstract:

Introduction: In recent years, the number of test-takers of international tests of English has grown at an exponential rate. Those whose first language is not English, i.e. non-native English speakers (NNES), constitute the predominant majority of these test-takers, largely based in non-Anglophone contexts. Thus, the state of whether the international tests of English are fit for purpose and reflect the current realities of language users, especially in higher education institutions, has become a matter of serious concern recently. Hence, we aim to analyze the websites and language documents of two major international tests of English boards (i.e. IELTS and TOEFL) in relation to the kind of Englishes against which they judge their test-takers' English proficiency - either by implication or by explicit expression.

Methods: To analyse the websites and language policy documents of the major international tests of English boards, we adopted a qualitative research design in which our prime purpose was to collect a blend of textual, visual and audio materials from their websites as well as publicly available documents, such as skill-band-descriptors, sample test materials, and handbooks for test takers. The analysis of the data was multimodal, utilizing a mixture of qualitative frameworks to analyze the websites and documents.

Results: The findings reveal that IELTS and TOEFL promote themselves as welcoming international test takers, while in practice, most of the contents in their examinations still draw on NES norms based on what is considered standardized English. Visual portrayals on their websites indicate that these tests are aware of English diversity and aim to embrace multicultural clients. However, no remedial measures seem to have been taken in practice as can be understood from their test and measurement criteria as regards writing and speaking.

Discussion: Drawing on the results, it may be argued that the visual portrayals are merely the tools to attract NNES test takers and the covert message is that those who are NNESs should take these proficiency

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examinations. Moreover, many listening exams employ NESs to produce the voices or simulate the conversations. Although the tests claim that the voices are from diverse accents, including Australia, Canada, New Zealand, the UK, and the USA; they fail to recognize that many more English varieties exist within the Outer and Expanding Circle countries.

Limitations: This research has only dealt with two major international tests of English, namely IELTS and TOEFL. There are other major tests of English available in the market. Therefore, sufficient caution should be exercised while generalizing the results to other tests as there may have been some rethinking and awareness in other tests with respect to their future test-takers' profile and linguistic diversity.

Conclusion: The findings illustrate a degree of recognition of Global Englishes (WE and ELF) at a "theoretical level" in the international tests of English, but at the "practical level", many crucial principles are absent as the tests, judging international test takers, remain confined within the native-norm territory. In short, the phenomenon demonstrates a theoretical level of awareness, but such awareness is not further applied at the practical level.

Key words: global Englishes, world Englishes, English as a lingua franca, assessment, (non)native English speakers, standard English.

Introduction

During the past decade, the number of individuals taking standardized English proficiency tests has risen steeply. Most of these test-takers are from countries where English is not spoken as the first language. To survive in the globalized world in which "language and intercultural competences have become core employability skills in many fields" (Luka & Seniut, 2019, p. 1), many non-native English speakers (NNES) resort to taking English proficiency tests, designed by renowned international examination boards, such as TOEFL and IELTS, to provide clear proof to education institutions, particularly those of higher education, and employers that their English qualifications are adequate. The fact that most test-takers are non-native is a reflection to a larger sociolinguistic phenomenon, which is that most English speakers are also the non-natives who reside in the Expanding and the Outer Circles (Kachru, 1986) and use English as a lingua franca (ELF). Consequently, the roles of English have shifted in the grand scale and more global Englishes have merged. Considering the test-taking demographic and the use of ELF, implementing standardized English proficiency tests on non-native test-takers has raised a suitability controversy which is whether it is justified to primarily measure non-native test-takers with the native linguistic norms. While most non-native test-takers mainly use English as a lingua franca in cross-cultural interactions with minimal number of native English interlocutors, "the legitimacy of using standardized tests, which take Inner Circle varieties of English as the norm for

local institutions, has been highly criticized in recent years." (Arik & Arik, 2014, p. 8) Contrary to Lowenberg's (1993) assertion that global-scale measurements of English proficiency should be standardized using common English norms approved by highly educated native English speakers, Jenkins (2014) argues that testing institutions should not employ British or American English conventions in assessing international test-takers' English whose English-application purposes are tied to English diversity and intercultural communication. Moreover, English tests, such as IELTS and TOEFL, are too broad to be a reliable indicator and too insensitive to forecast future academic outcomes for specific English user groups (Leung, Lewkowicz, & Jenkins, 2016). Backing the argument, Davies, Hamp-Lyons, and Kemp (2003) noted that these tests neglect English diversity, discriminate speakers of other English varieties, and force all English users to adopt English nativeness through score deduction and penalization. To understand this test-taking phenomenon better, this study aims to analyze websites and language documents of major international tests boards of English proficiency to reveal the English varieties used to measure the test-takers; compare the measurements with the explicit marketing expressions; and confirm whether the claims favor any specific English variety over the others.

1   Global Englishes: World Englishes and ELF

Global Englishes is a sociolinguistic paradigm broadly invented to accommodate linguistic and sociocultural issues which occurred among global English users (Centre for Global Englishes, 2018). While the term is aimed to minimize geographic, linguistic boundaries and differentiation of language varieties, it is also expected to enhance the importance of English pluricentricity and fluidity (Galloway & Rose, 2015). Many studies view "Global Englishes" as a term for a larger conceptual classification containing World Englishes (WE) and ELF ideologies (e.g. Galloway & Rose, 2015; Jenkins, 2011; Jenkins, Cogo, & Dewey, 2011; Widdowson, 2015). While WE deals with "the identification and codification of national varieties of English", ELF "examines English use within and across such borders, as well as focusing on the global consequences of English's use as a world language." (Galloway & Rose, 2015, p. xii) Despite the similarities they share, both ideologies deal with different aspects of English pluricentricity. Galloway and Rose (2015) consider both terms similar as they share a widespread pluricentricity, non-native focus for English interactions, liberation of English ownership, and transformation for English language teaching.

However, WE differs from ELF as WE emphasizes the codification of national varieties which is mainly in the Outer circle of Kachru's (1986, 1992) model whereas, ELF emphasizes the uses of English in all the three circles: Inner, Outer, and Expanding with the Expanding Circle being its special interest. Nonetheless, as ELF is about linguistic accommodation where English norms can be linguistically negotiated and reshaped by the users according to

situational demands, it does not seek to codify emergent English use among speakers (Galloway & Rose, 2015). Based on the abovementioned differences and similarities, we produced the following figure to highlight the overlaps and divergences between the research paradigms.
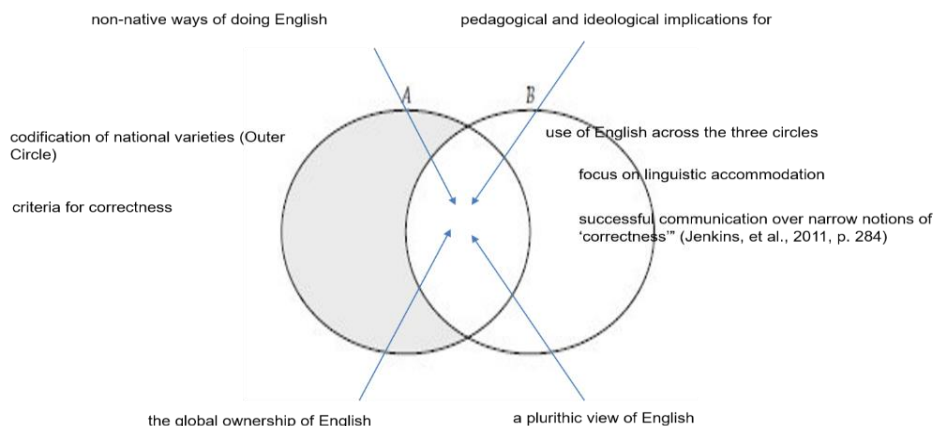

Figure 1. Differences and similarities between WE and ELF.

Combining the similarities and differences between WE and ELF, the collective concept of Global Englishes comprises the following ideological characteristics: 1) most English speakers are non-native and they should not be perceived as "eternal learners" or "failed native speakers" but "successful communicators"; 2) linguistic diversity and divergence should not be viewed as problematic in communication; 3) native English speakers should not be considered an ideal model or target for language learning; and 4) English, currently, belongs to the global community, and native English speakers should no longer claim the ownership (Galloway, 2013; Galloway & Czarnecki, 2014; Galloway & Rose, 2015; Jenkins, 2011; Jenkins et al., 2011).

2 Global Englishes: English language assessment

Since the current ELT practices do not conform to the discussed ideological characteristics of Global Englishes, it is essential to reconsider the teaching direction. In an ELF perspective, English users should receive a performance assessment that is ELF oriented, e.g. accounting ELF awareness and factors. Specifically, standardized English tests neglect the fact that English is a pluricentric language and employ nativeness; the monocentric English features, such as phonological and syntactic norms, to measure how well an ELF user uses the pluricentric language. Consistently, Davies et al. (2003, p. 571) indicate that these standard tests take "an International English (IE) view [which] insists that the only acceptable norms are those of native English speakers (NES)." To

solve the issue, Hu (2012) determines the linguistic testing norms and the choice of English variety based on the intended use and social preferences.

Although many English encounters would involve NESs, many more occasions would involve other interlocutors with different English varieties. Hence, an ELF- and WE-friendly test should measure test-takers based on intercultural and communicative competence. As Canagarajah (2007) insists, such tests should determine how well a test-taker can understand communicative intents, behaviors, and expectations that other English speakers from different linguistic and cultural backgrounds attempt to convey. In his words, test-takers should be scored based on their "strategies of negotiation, situated performance, communicative repertoire and language awareness" rather than grammatical accuracy (p. 936). Furthermore, Jenkins (2007) also agrees that accommodation skills should be prioritized in ELF proficiency tests and any linguistic divergence commonly produced EFL and ELF users should not be viewed as mistaking. In short, such users should not be penalized as long as the divergent language is intelligible and does not lead to a communication breakdown. Consistently, Khan (2009) supports that an English proficiency assessment should be adaptive to suit all the requirements of intercultural communication as these interactions occur among members of global communities whose language backgrounds are not always mutual.

Likewise, replacing the measurements for English nativeness, Harding (2012) maintains that the following determining factors should be the new focuses of English competence: 1) English varieties: accents, syntactic forms, and discourse styles; 2) meaning negotiation; 3) phonology for meaningful intercultural communication; 4) intercultural pragmatics; 5) target audience and communicative priority and; 6) strategic competence to avoid communication breakdowns. Practically, forcing a paradigm shift in the test arena could take time as WE and ELF measurements are in the ongoing process of development. Matsuda (2012) believes that the concepts are still new to teachers and not many are equipped to teach their learners every English variety. Depending on limited learning resources on English diversity, learners will still struggle. Since most of the formal English learning materials are distributed from a few British and American firms (Dewey, 2015; Jenkins, 2007; McKay, 2002; Methitham, 2009), many WE and ELF educational stakeholders will continue to feel influenced by a false value implicating that proficient English users are the ones who know native Englishes well whereas the incompetent ones are those who do not (Jindapitak & Teo, 2012).

3   Research methodology

This study employed a qualitative approach to examine the major international examination boards, TOEFL and IELTS, through their websites and test policies. The data were collected from diverse and publicly available sources of textual, audio, and visual data, especially those indicating skills, bands, test samples, and testing guidelines. In general, the investigation looked for policy and examination materials that could indicate some links to specific English-test designs, directions, and decisions (Blaxter, Hughes, & Tight, 2010). From many pages of the TOEFL and IELTS websites, textual (e.g. assessment criteria and rubrics, test formats, score calculation, teachers' guides, practices, and test samples); visual (e.g. advertised images and videos of potential test-takers and test-taking experiences); and audio data (e.g. listening test-samples) were collected. The data were then analyzed to determine these examination boards' accommodations for diverse test-takers with different English backgrounds; uses of specific English varieties in media and assessment; and pressure on users of diverse English backgrounds towards a few English varieties deemed standard.

Knox's (2007) three-dimension model, i.e. Macro-Theme-Rheme, Head-Tail, and Primary-Secondary was employed for the visual (website) analysis. Knox's (2007) groupings are useful in identifying the degree of importance attached to the visual materials on the websites. For example, according to Johnson, Milani and Upton (2010, p. 231), on websites, the primary emphasis is placed on "the left-top corner of the screen immediately below the browser window" as it is "the guaranteed viewing area on any computer screen and is therefore a strategic location" for visitors. The Macro Theme-Rheme dimension deals with this location in the main. With reference to the head-tail dimension, it requires visitors to navigate through a web page on a certain website by scrolling up and down through text or graphics on the website. The point behind this is that "the hierarchy of information is typically indexed according to a continuum of diminishing salience." (p. 230) That is, a visitor can easily check over imperative information in a comparatively short time as they appear in areas straightforwardly accessible whilst less important information is dispersed towards the bottom of the page, thereby reachable by visitors in a longer period of time. The final dimension, Primary-Secondary, relates to whether information is positioned in the middle of the webpage or the right- or left-hand columns of it. As Knox (2007) notes, the middle column is apportioned to important information whereas the left- and right-hand columns are subordinate in terms of information they circulate.
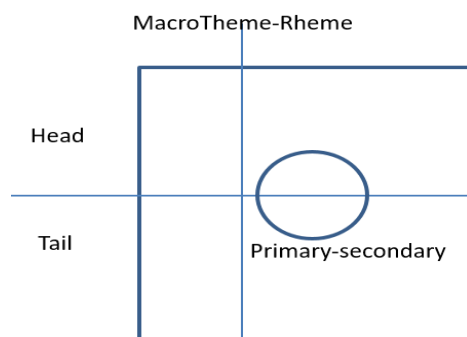
Figure 2. Three-dimensional model for website analysis.

To analyze the textual (documentary) data, qualitative content analysis (Schreier, 2012) and negative analysis) were employed. In our analytical framework, we followed a four-step process: "finding, selecting, appraising (making sense of), and synthesising data contained in documents." (Bowen, 2009, p. 28) While engaged in this process, we were interested in "the deep structural meaning conveyed by the message" rather than the surface level meaning of the message (Berg, 2001, p. 242). We consolidated the qualitative content analysis with "negative analysis", particularly paying mind to "meaningfully absent" mentions as regards to some issues of language use and assessment in the documents (Pauwels, 2012, p. 253). Additionally, to ensure validity, thorough extracts from related policy statements and documents, together with accessible links to the relevant pages were given in the footnotes so as to show that our analysis is "solid", "comprehensive" and is "presented in a transparent way, allowing readers, as far as possible, to test the claims [and interpretations] made." (Jørgensen & Phillips, 2002, p. 173)

4   Findings and discussion

4.1 Multimodal website analysis

The first step of the website analysis was to examine the visual data. The primarily derived visual data were images of people displayed at the homepages of both examination boards. The purpose of this visual investigation was to identify which of Kachru's (1986) concentric circles are the origins of these displayed people. The findings revealed that the people displayed on these websites' homepages tend to be from Outer- and Expanding-Circles. The images were strategically placed immediately at the beginning of the homepages to catch attention. The images were placed to ensure to be the very first elements the websites' visitors will digest. More importantly, none of the images represented an Inner-Circle speaker. Specifically, the images primarily featured East and South Asian individuals presumably to indicate the major groups of

test-takers in the world. Featuring non-native English speakers (NNESs) on the examination boards' webpages implicates the awareness of the dominating sociolinguistic profiles of English speakers which are those from the Outer and Expanding Circles speaking English as a non-first language.

The second step involves negative analysis. Featuring no native English speakers (NESs) or Inner-Circle speakers could be interpreted that these examination boards mainly aimed to communicate with NNESs as they are the group that is desirous to measure English proficiency and use these proofs to acquire various professional and personal gains, e.g. education, work, and migration. As most Inner-Circle speakers do not need to take these tests to prove their English proficiency, the major applicant group of these examinations remains primarily non-native. Consequently, the websites of these international examination boards incorporate images of non-Inner-Circle citizens conveying that the tests are opened to them as prospective test-takers.

Figure 3. An image displayed on the IELTS homepage.

Figure 4. An image displayed on the TOEFL homepage.

The third step was an in-depth investigation of the visual and textual data in Head-Tail and MacroTheme-Rheme areas. Both homepages were browsed by scrolling down, left, and right to inspect visual and textual elements. After scrolling down the IELTS homepage, the web banner immediately appeared right below using the image of Figure 1 describing that "IELTS is the high-stakes English test for study, migration or work." (What is IELTS[1], 2019) Following the banner towards the left column was a video, "Filip's IELTS story" which seems to have been given some priority based on Knox's (2007) MacroTheme-Rheme analysis. The video is 1:31 minutes long depicting some scenes in London and University College London as Filip was accepted for the university's admission for passing IELTS. It is noteworthy to mention that, in the video, Filip spoke English with his Bulgarian accent depicting that he was a successful non-native test-taker and that he could speak English his way without being forced to adopt pronunciations and accents of standard Englishes.

In the final step, areas at the end of the homepages were investigated. For the IELTS homepage, five out of six images displayed the Inner-Circle landscapes taken in countries, such as Australia, Canada, New Zealand, UK, and USA, in

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[1] https://www.ielts.org/

response to the bold red caption, "Travel the world with IELTS" whereas the remaining image displayed a world map with country dots indicating that the test is globally recognized and accepted by governments, organizations, and universities paired to a question, "Where can IELTS take you?" as demonstrated in Figure 3. From the Primary-Secondary and Head-Tail concepts, the images of the top destinations are positioned in all the prime positions whereas the world-map one was located further to the right and way bottom. This could be interpreted as the world map was perceived as less significant than those top destinations in the eye of IELTS. Another assumption was that IELTS believes test-takers take its test because they want to enter an Inner Circle destination. Nonetheless, recent studies spoke otherwise. More test-takers sit for an IELTS examination to acquire a proof of English proficiency for academic purposes, e.g. to satisfy an admission requirement of a university. As many universities that employ English as a Medium of Instruction (EMI) require such proof, prospective students are forced to take IELTS. These universities are not only situated in the mentioned Inner-Circle destinations. Conversely, many of them are within the countries where the non-native test-takers reside. As a result, prioritizing displays of Inner-Circle destinations on the IELTS homepage indicated examination board's misconception of the new reality. It was why the board decided to position itself as a road to Inner Circle countries.
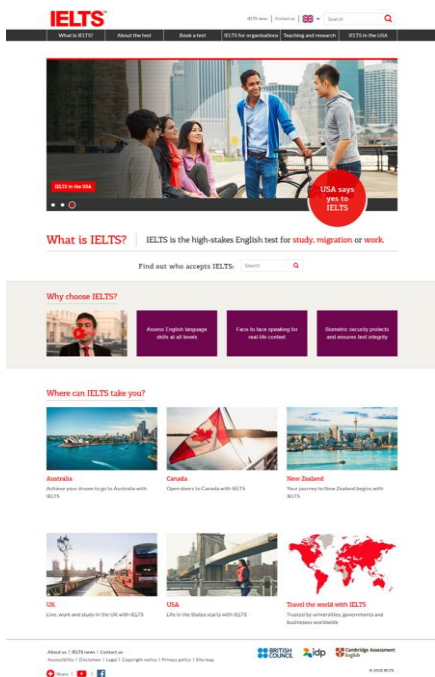

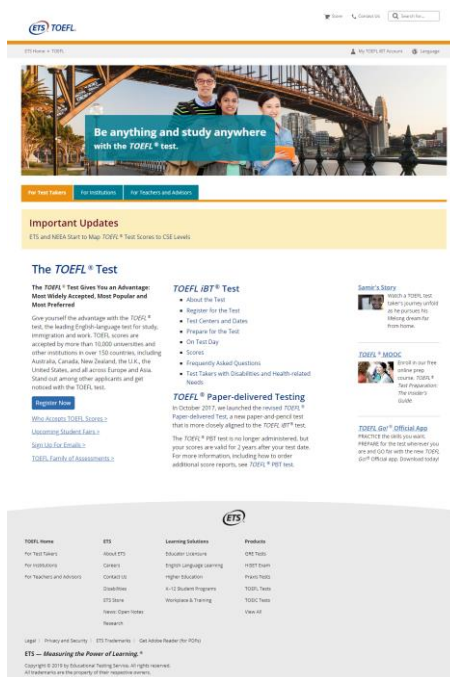*Figure 5.* First screen of IELTS home page.

Figure 6. TOEFL homepage.

Moving on to the TOEFL homepage[2] and basing the observation on the MacroTheme-Rheme perspective, the examination board uses the left side of the page column to display figures of institutions which utilize TOEFL scores. Quite consistently with the IELTS homepage, TOEFL firstly states names of Inner Circle countries, secondly mentions Europe and Asia, and lastly reports countries recognizing the scores. Towards the left in a promotional message, the examination board states:

TOEFL scores are accepted by more than 10,000 universities and other institutions in over 150 countries, including Australia, Canada, New Zealand, the U.K., the United States, and all across Europe and Asia (The TOEFL Test, 2019).

The statement indicates that TOEFL is aware that most of its test-takers would be using their scores in countries that are not English-speaking, i.e. in Europe and Asia. Despite being aware of the countries accepting TOEFL scores, the examination board's homepage was primarily about some Inner-Circle countries whereas others are mentioned collectively in continents. This action could be viewed as the board's attempt to communicate to its audience that TOEFL is a gateway to the Inner Circle. The left column of the page contains three rows which are arranged vertically from top to bottom. The top row contains a short TOEFL story of Samir with a link to a more detailed one on a separate page. This detail page comprises a video at its central area illustrating scenes of Samir's life from his childhood through his adulthood. One of the scenes shows Samir holding a TOEFL preparation book during his teenage days, and another scene shows his later days saying "Thank You" on his graduation day at some English-speaking university. According to the way in which he sounds, Samir is an English speaker who seems to have some Indian background.

Right below Samir's is "TOEFL MOOC" and a video link section[3] introducing "The Insider's Guide to the TOEFL Test Course." The video section begins with images of NNESs, a native English speaker giving a brief course description, and some test designers talking about the creations of TOEFL tests.

The rationale of why TOEFL opts to showcase images of test-takers from the Outer and Expanding Circles could be because most of its clients are genuinely from these non-Inner-Circle regions who wish to be tested by Inner-Circle language experts and acquire their TOEFL scores to prove the language proficiency levels. To support the notion that these clients need to be tested by native language experts, some concrete evidence is available towards the end of the TOEFL test preparation webpage[4]. In this page, most of the instructors are

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[2] https://www.ets.org/toefl
[3] https://www.edx.org/course/toeflr-test-preparation-insiders-guide-etsx-toeflx-4
[4] https://www.edx.org/course/toeflr-test-preparation-insiders-guide-etsx-toeflx-4

NESs except one, i.e. the listening instructor who looks rather Chinese. Moreover, the publicly available listening samples are NES-produced[5].

4.2 Documentary data analysis

The document data, especially those on speaking, writing and listening, derived from the examination boards were analyzed to determine the following questions: 1) whether both of these tests have been mainly developed or their test-takers are being judged based on a specific English variety; 2) whether there has been any accommodation of WE and ELF (as suggested by Harding, 2012; Hu, 2012; Jenkins, 2007; McNamara, 2012; Widdowson, 2012) in the tests; and 3) whether there has been a recognition of WE and ELF along with traces of deviant and non-normative English in the tests.

Initially, the documents on speaking were investigated. In relations to speaking, the analysis looked for a scoring mechanism, assessment, and traces of implicit or explicit requirements with a possible tie with a specific variety of English. To answer the questions, content analysis was employed on these documents, e.g. speaking rubrics, speaking test sample, and test-taker handbooks. In general, the examination boards employ matrices, e.g. fluency and coherence, lexical resource, grammatical range and accuracy, and pronunciation in the tests.

4.2.1   Speaking assessment and scoring

Beginning with IELTS, the "IELTS Speaking - How it's marked[6]" section indicates that test-takers must be able to talk using normal continuity, rate, and effort; and use ideas and language to create coherent and connected speeches through key indicators of fluency, speech rate, and speech continuity." ("IELTS test format", 2019) For grammatical range and accuracy, IELTS requires the grammatical range to cover spoken sentences with proper length and complexity, appropriate subordinate clauses, and adequate knowledge of sentence structures to be able to switch around elements for different communicative emphases with the key indicators being "the number of grammatical errors in a given amount of speech and the communicative effect of error." ("IELTS test format", 2019) In terms of pronunciation, speakers are judged on the basis of "the amount of strain caused to the listener, the amount of the speech which is unintelligible and the noticeability of L1 influence." ("IELTS test format," 2019) Clearly, some substantial criteria are not provided as to how normal is deemed reasonable, how continued the talking continuity should be, which variety of English is the correct English, and why traces of first languages in speech could be determined as flawed or mistaking.

As for TOEFL, its "Independent Speaking Rubrics" assess speakers using a 4-point rating scale covering delivery, language use, topic development, and

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[5] https://www.examenglish.com/TOEFL/toefl_listening.htm
[6] https://www.ielts.org/about-the-test/test-format

general description. To obtain 4 points, which is the highest score of the speaking section, the following criteria must be met:

- Delivery: Generally well-paced flow (fluid expression). Speech is clear. It may include minor lapses, or minor difficulties with pronunciation or intonation patterns, which do not affect overall intelligibility.
- Language use: The response demonstrates effective use of grammar and vocabulary. It exhibits a fairly high degree of automaticity with good control of basic and complex structures (as appropriate). Some minor (or systematic) errors are noticeable but do not obscure meaning (our italics).

Apparently, TOEFL values intelligibility and is willing to tolerate minor errors as long as such mistakes do not alter meanings in communication. Nonetheless, it also expects "effective use of grammar" and "a fairly high degree of automaticity." When looking subjectively into the descriptions, many descriptors could be controversial. For instance, when TOEFL expects production of clear speeches, clarity can be the controversy as listeners can have different opinions about how clear is clear. Specifically, speeches that a non-native speaker produces could be comprehensible to NNES- but unclear to NES-listeners. The decision to use clarity without defining subjectivity indicates that TOEFL neglects to take test-takers' sociolinguistic backgrounds into consideration. Although it is willing not to penalize minor errors, as previously discussed, it fails to recognize that, in real communicative encounters among the non-native audience, ELF speakers often employ communication strategies to facilitate their limited English, e.g. shortening sentences and using long pauses.

Evidently, TOEFL will penalize test-takers and give them 1 out of 4 scores when they fail to provide "consistent pronunciation stress and intonation difficulties" and "cause considerable listener effort." (TOEFL Speaking Rubrics[7], 2014, p. 1) This means that when a test-taker deviates from standard stresses and intonations or give listeners a hard time trying to understand the communication, such a speaker will get 1 score as a penalty. Nonetheless, since communication is a two-way effort requiring both parties (i.e. speakers and listeners) to try to achieve a mutual understanding, listeners should also be responsible for ensuring that the communication is carried out effectively. Especially in ELF contexts, conversations will not always be smooth so both parties should take an equal share of responsibility to facilitate the communication.

4.2.2 Writing assessment and scoring

According to the IELTS test format[8], test-takers' writing skills are assessed and scored based on their completion of tasks involving a short description of a graph or chart and a long academic passage on a designated topic. The

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[7] https://www.ets.org/s/toefl/pdf/toefl_speaking_rubrics.pdf
[8] Academic Writing at https://www.ielts.org/about-the-test/test-format

completeness is measured through the following criteria: task response, coherence and cohesion, lexical resource, and grammatical range and accuracy. Dimensionally, lexical resource requires test-takers to possess a "range of vocabulary used and its accuracy and appropriacy in terms of the specific task" ("IELTS test format", 2019) whereas grammatical range and accuracy requires a "range and accurate use of grammar as manifested in their sentence writing." However, what IELTS expects for coherence and cohesion is rather unanticipated: "overall clarity and fluency of the message." Apparently, this test matrix requires a level of conformity with standard English norms where grammatical correctness and accuracy is paramount. In other words, writers with knowledge of academic writing conventions in standard English will most likely be the ones earning high scores in coherence and cohesion and lexical resource. Similar notions are stated in the IELTS guide for teachers[9] indicating that test-takers achieving Band 9, described as Expert English Users, are those who can use "a wide range of structures with full flexibility and accuracy; rare minor errors occur only as 'slips'." (IELTS guide for teachers, 2017, p. 23) This means that errors, deemed as slips, might be ignored but the use of non-standard English, such as WE and ELF, in writing could hurt the assessment outcomes and scores.

In the TOEFL writing examination, "Independent Writing Rubrics[10]" were among the first analyzed. These rubrics determine test-takers writing proficiency and score them on a 5-point rating scale: from 0 to 5. Evidently, the scores are measured through the criteria on grammatical correctness using native lexical norms. To get 5 point which is the highest score, test-takers must demonstrate "consistent facility in the use of language, demonstrating syntactic variety, appropriate word choice, and idiomaticity, though it may have minor lexical or grammatical errors." (TOEFL Writing Rubrics, 2014, p. 1) Not only the writing test requires the clients to demonstrate their repertoires of native English norms through writing; it also tells the world that Standard English is exclusive to any of the native-English varieties. Since NESs are more comfortable with idiomaticity, most NNESs might not always use them appropriately. Often, NNESs would either avoid, find a workaround, or reinvent new ways of saying things rather than employing the existing idioms, and these solutions are perceived incorrect in testing.

4.2.3 Speaker profiles in listening exams

In the analysis of listening-related documents, speaker profile was, instead, the prime analytical focus, and as a result, listening criteria and assessment were not of the essence. Specifically, the analysis aimed to inspect the origins of the

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[9] https://www.ielts.org/-/media/publications/guide-for-teachers/ielts-guide-for-teachers-2017-uk.ashx

[10] https://www.ets.org/s/toefl/pdf/toefl_writing_rubrics.pdf

voices implemented in the listening-test materials. Initially, relevant webpages were inspected, and vital data shared with the test-takers were gathered. After the inspection, TOEFL iBT Test Content[11] revealed the following information on listening and speaking:

-   Native-speaker English Accents - The Listening and Speaking sections of the TOEFL iBT test include other native-speaker English accents in addition to accents from North America. You may hear accents from the U.K., New Zealand or Australia. ETS added these accents to better reflect the variety of native English accents you may encounter while studying abroad ("TOEFL iBt: Test Content", 2019).

The provided information also confirms the notion that TOEFL is not open to other English varieties from Outer- and Expanding-Circle countries. This means that TOEFL only accepts a few English varieties within the Inner Circle. The findings support the assumption that test-takers are required to demonstrate native-English capacity within the contexts of English as a Native Language (ENL). Nonetheless, such discriminative pressure is implemented with a weak association to the current sociolinguistic reality where most English communicative encounters are produced among NNESs in non-native contexts.

Consistently, IELTS's "Listening Test Format" plays "four recordings of NESs" to its test-takers ("IELTS Test format", 2019) whereas its "Paper Format" states that these recordings, produced with various English accents (e.g. British, Australian, New Zealand, American, and Canadian), will only be played once during the test. The statements indicate that IELTS does not accommodate ELF test-takers in two extents. A) a one-time playback is harsh and unrealistic when in real-world communication, ELF interlocutors help each other implement many communication strategies including repetition, self-repair, and other repair to ensure the communication is smooth. B) Despite the fact that these recordings are produced in many contexts (e.g. monologue, dialogue, group discussions, and educational speeches) ("Test Format", 2019), IELTS makes sure that these recordings are natively made.

Conclusion

English is now widely used as an intercultural tool for communication. Its expansion as a lingua franca introduces many new English varieties collectively called as world Englishes (WE). English is spoken mostly by NNESs who have become the dominant group of test-takers of English proficiency examinations (e.g. TOEFL and IELTS). The significant increase in number varies positively with educational and professional requirements. However, testing NNESs using native Englishes has raised a legitimacy concern as the action could discriminate NNESs who prefer different Englishes by being tested using strict NES norms. To reflect the reality of English becoming a lingua franca, English proficiency

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[11] https://www.ets.org/toefl/ibt/about/content/

tests should acknowledge that English is a pluricentric language and implement less NES, more performance-based, and more WE- and ELF-friendly measurement items. In this study, the producers of the examined standardized proficiency tests market that international test-takers are a key target group due to significant growth in number. For instance, their homepages show evidence that the communication is meant for the Outer and Expanding Circle audience because non-native models are used throughout the contents to convey a friendly message to the non-native group of English speakers that the tests are designed to suit them. However, the examined tests practically speak otherwise as most test items are dominantly NES-oriented. Nativeness is employed as a test matrix as it is perceived to be the standard of English. In short, these tests acknowledge the sociolinguistic profiles of their clients who are largely from a non-inner circle. Yet, the tests fail to take such sociolinguistic profiles seriously and assess them using strict NES grammar, vocabulary, and idioms. The tests neglect to measure linguistic accommodation, meaning negotiation, or intercultural communication performance.

Furthermore, NNESs are found in the displayed testimonials and success stories whereas NESs (e.g. British and American) are found in the introductory videos. This signifies that the tests understand English diversity and seek to accommodate multicultural clients. Nonetheless, the tests show no sign of such accommodation in practice as NES norms dominate the test contents. The phenomenon implicates that the visual presentations are their marketing tools to attract non-native test-takers suggesting that the proficiency tests are suitable for NNESs. However, the suitability claim remains unjustified as many listening exams contain native-English voices. Many tests claim that the voices are from diversified sources of accents including Australia, Canada, New Zealand, the UK, and the USA. Nevertheless, the claim signifies a severe misunderstanding that these accents represent all the Englishes of the world when there are many more English varieties from the Outer and Expanding Circles. Hence, these standardized tests are wrong about their claims over the coverage of English diversity as their test contents remain limited to a few Inner-Circle Englishes.

In conclusion, this study discovered some theoretical recognition of WE and ELF in the standardized English proficiency tests, but the practical implementation remained weak, if not missing. International test-takers' proficiencies are still measured using native norms. The phenomenon can be interpreted that these tests are only trying to attract non-native clients and are not willing to make any adjustment to accommodate them as the scoring criteria will only judge international test-takers how well they can adopt the English nativeness. In a simple sense, theoretical awareness is extant, but the practical application is missing. As Hamp-Lyons & Zhang (2001) stated two decades ago, "the question of which English(es) should be privileged on tests is particularly problematic and interesting in academic contexts where traditionally 'standard' forms of English are the only ones accepted." (as cited in Davies et al., 2013, p.

524). Unfortunately, the issue is likely to remain unsettled for more decades to come, but is it for sure that these international tests will face more challenges mostly likely to come from the fields of World Englishes and ELF.

References

Arik, B. T., & Arik, E. (2014). The role and status of English in Turkish higher education. *English Today*, *30*(4), 5-10. https://doi.org/10.1017/S02660 78414000339

Berg, B. L. (2001). *Qualitative Research Methods for the Social Sciences* (4th ed.). Boston: Allyn and Bacon.

Blaxter, L., Hughes, C., & Tight, M. (2010). *How to Research* (4th ed.). London: Open University Press.

Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, *9*(2), 27-40.

Canagarajah, A. S. (2007). Lingua franca English, multilingual communities and language acquisition. *The Modern Language Journal*, *91*(Focus Issue), 923-939.

Centre for Global Englishes Webpage (2018). *About us | Centre for Global Englishes | University of Southampton*. *Southampton.ac.uk*. Retrieved from http://www.southampton.ac.uk/cge/about/index.page

Davies, A., Hamp-Lyons, L. I. Z., & Kemp, C. (2003). Whose norms? International proficiency tests in English. *World Englishes*, *22*(4), 571-584.

Dewey, M. (2015). Time to wake up some dogs! Shifting the culture of Language in ELT. In Y. Bayyurt, & S. Akcan (Eds.), *Current perspectives on pedagogy for English as a Lingua Franca. Developments in English as a Lingua Franca Franca [DELF] (5)* (pp. 121-134). De Gruyter Mouton, Berlin.

Galloway, N. (2013). Global Englishes and English language teaching (ELT) - Bridging the gap between theory and practice in a Japanese context. *System*, *41*(3), 786-803. http://doi.org/10.1016/j.system.2013.07.019

Galloway, N., & Czarnecki, M. (2014). I get paid for my American accent: The journey of one multilingual English teacher (MET) in Japan. *Englishes in Practice*, *1*(1), 1-30. http://doi.org/10.2478/eip-2014-0001

Galloway, N., & Rose, H. (2015). *Introducing Global Englishes*. Abingdon: Routledge.

Hamp-Lyons, L., & Zhang, W. B. (2001). World Englishes: Issues in and from academic writing assessment. In J. Flowerdew, & M. Peacock (Eds.). *Research Perspectives on English for Academic Purposes* (pp.101-116). Cambridge: Cambridge University Press,

Harding, L. (2012). *Language Testing, World Englishes and English as a Lingua Franca: The Case for Evidence-Based Change.* Invited key note address Centre for Internationalisation and Parallel Language Use Symposium 2012. Denmark: University of Copenhagen.

Hu, G. (2012). Assessing English as an international language. In L. Alsagoff, S. L. McKay, G. Hu, & W. A. Renandya (Eds.), *Principles and Practices for Teaching English as an International Language* (pp. 123-143). New York: Routledge.

Jenkins, J (2014) *English as a Lingua Franca in the International University*. Oxford, New York: Routledge.

Jenkins, J. (2006). Points of view and blind spots: ELF and SLA. *International Journal of Applied Linguistics*, *16*(2), 137-162. http://doi.org/10.1111/j.1473-4192.2006.00111.x

Jenkins, J. (2007). *English as a Lingua Franca: Attitude and Identity*. Oxford: Oxford University Press.

Jenkins, J. (2009). English as a lingua franca: Interpretations and attitudes. *World Englishes, 28*(2), 200-207.

Jenkins, J. (2011). Accommodating (to) ELF in the international university. *Journal of Pragmatics*, *43*(4), 926-936. http://doi.org/10.1016/j.pragma.2010.05.011

Jenkins, J., Cogo, A., & Dewey, M. (2011). Review of developments in research into English as a lingua franca. *Language Teaching*, *44*(03), 281-315. http://doi.org/10.1017/S0261444811000115

Jindapitak, N. & Teo, A. (2012). Thai tertiary English majors' attitudes towards and awareness of World Englishes. *Journal of English Studies*, *7*, 74-116.

Johnson, S., Milani, T. M., & Upton, C. (2010). Language ideological debates on the BBC "Voices" website: Hypermodality in theory and practice. In S. Johnson, & T. M. Milani (Eds.). *Language Ideologies and Media Discourse: Texts, Practices, Politics* (pp. 223-251). London: Continuum.

Jørgensen, M. W., & Phillips, L. (2002). *Discourse Analysis as Theory and Method*. London: Sage.

Kachru, B. (1992). *The Other Tongue: English Across Cultures* (2nd ed.). Urbana: University of Illinois Press.

Kachru, B. B. (1986). *The Alchemy of English: The Spread, Functions and Models of Non-Native Englishes*. London: Pergamon.

Khan, S. (2009). Imperialism of international tests: An EIL perspective. In F. Sharifian (Ed.), *English as an International Language: Perspectives and Pedagogical Issues* (pp. 190- 205). Multilingual Matters.

Knox, J. (2007) Visual-verbal communication on online newspaper home pages. *Visual Communication*, *6*(1), 19-53.

Leung, C., Lewkowicz, J., & Jenkins, J. (2016). English for Academic Purposes: A need for remodelling. *Englishes in Practice*, *3*(3), 55-73.

Lowenberg, P. (1993). Issues of validity in tests of English as a world language: Whose standards? *World Englishes, 12*(1), 95-106.

Luka, I., & Seniut, I. (2019). Developing students' language competence and essential 21st century skills for future employability: The case of Latvia and Lithuania. *Acta Educationis Generalis*, *9*(2), 1-23. https://doi.org/10.2478/atd-2019-0006

Matsuda, A. (2012). *Principles and Practices of Teaching English as an International Language*. Bristol, UK: Multilingual Matters.

McKay, S. L. (2002). *Teaching English as an International Language: Rethinking Goals and Approaches.* Oxford University Press.

McNamara, T. (2012). English as a lingua franca: The challenge for language testing. *Journal of English as a Lingua Franca, 1*(1), 199-202. https://doi.org/10.1515/jelf-2012-0013

Methitham, P. (2009). *An Exploration of Culturally-Based Assumptions Guiding ELT Practice in Thailand, a Non-Colonized Nation* (unpublished dissertation). Indiana University of Pennsylvania, Indiana.

Pauwels, L. (2012). A multimodal framework for analyzing websites as cultural expressions. *Journal of Computer-Mediated Communication 17*(3), 247-265.

Schreier, M. (2012*). Qualitative Content Analysis in Practice*. London: Sage.

Widdowson, H. (2012). ELF and the inconvenience of established concepts. *Journal of English as a Lingua Franca*, *2*(1), 187-193.

Widdowson, H. G. (2015). ELF and the pragmatics of language variation. *Journal of English as a Lingua Franca*, *4*, 359-372.

Investigating the Empathic Skills of Physical Education Teachers

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Abstract:

Introduction: As one of the most important requirements for healthy communication, empathy is vital in a great many occupations. Various studies have investigated the importance and level of empathy in various occupation groups. One of the leading occupations requiring strong empathic skills is teaching. Teachers need empathy to create an effective learning environment, develop good communication with their students, and understand them well. The current study investigates the empathic skills of physical education teachers to evaluate various variables.

Methods: The research participants comprised 152 physical education teachers in Turkey, 39 women (25.7%) and 113 men (74.3%), who completed the Interpersonal Reactivity Index (IRI). Descriptive statistical methods and the Kolmogorov Smirnov test were used to determine whether the data were normally distributed. The data were analysed using ranking t-test and correlation methods as well as descriptive statistical models (α=0.05). The total internal consistency coefficient of the scales, measured by Cronbach's Alpha, was .56.

Results: Regarding the IRI scores for the physical education teachers, the highest mean score was for emphatic concern, followed by perspective taking and fantasy. Teaching duration was associated with higher empathic skill scores. Empathic skills were also positively correlated with higher educational level. Finally, the mean fantasy scores were statistically higher for participants who were not training a school team.

Discussion: Physical education courses contribute to the physiological, sociological, psychological, and moral development of students. For this reason, physical education and sports is a compulsory component of the education system from an early age all around the globe. This makes it essential that physical education teachers have appropriate characteristics that they exhibit in their teaching. In the first place, it is necessary to have healthy communication between the physical education teacher and students.

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Limitations: The current study gathered data from one specific region in Turkey, from physical education teachers in the city of Kütahya. Consequently, the demographic data were evaluated only for statistically significant variables. Other variables that were not numerically equal, were not investigated.

Conclusions: Physical education teachers should adopt an empathic approach to teacher-student relationships. Educational institutions should organise activities to develop these empathic skills in teachers.

Key words: empathy, empathic skills, physical education teachers.

Introduction

Empathy plays a key role in establishing healthy communication in various professions. Various studies have demonstrated the importance and level of empathy in various occupation groups. One of the leading occupations requiring strong empathic skills is teaching. Teachers need empathy to create an effective learning environment, develop good communication with students, and understand them well.

There are various definitions of empathy. According to Tettagah and Anderson (2007), "teacher empathy is the ability to express concern and take the perspective of a student, and it involves cognitive and affective domains of empathy." Dökmen (2015) defines empathy as putting oneself in someone else's shoes and understanding their feelings and thoughts accurately, while Mehrabian and Epstein (1972) define it as being able to respond to the emotional experience of others. Davies (1980), who considers empathy as multi-dimensional, defines it as the reactions of one person to the observed experiences of another person. For Rogers (1975), empathy is the process of understanding someone else from their perspective, accurately understanding their thoughts, feelings, and conveying them back. Hoffman (1977) identifies three components in empathy: cognition, emotions, and motivation. Empathic relations are necessary for healthy communication.

In education, empathy is important as a tool for establishing healthy communication between educators and students (Ütkür, 2019), and in preparing and implementing educational programs. Empathy is thus a characteristic that individuals aiming to work in education must acquire (Akyol & Çiftçibaşı, 2005). As teachers' empathic skills increase, they become more likely to understand and respond appropriately to their students. Such teachers feel that their school environment is more positive than those who are unable to understand and respond appropriately to their students (Barr, 2011). In their studies of pre-service teachers' empathy for classroom victims and problem-solving strategies, Tettegah and Anderson (2007) prioritized the importance of empathy in education. They emphasized that teachers with empathic skills are more effective in reducing peer-bullying, aggression, and antisocial behaviours in schools. Closely related to empathic skills, Doll, Song and Siemers (2004)

showed that students who find that their teachers are fair and caring, also trust that they will protect them from in-class victimization and intimidation.

Many studies have shown that empathic skills can be improved through education, whether described as empathy training or empathy communication skills (Dökmen, 1990). Physical education teachers that adopt a holistic approach to developing their students in terms of cognitive, perceptual, and psychomotor skills require strong empathic skills.

The dynamic structure of physical education courses means that students may encounter different cases. These could include frequent experience of negative student behaviour like mocking another student, which cannot perform an action during a lesson or a game, always making one student responsible for equipment, always choosing the strongest students in forming teams or groups, deprecating student successes, and mocking losers (Yıldıran, 2004). An empathic teacher is critical in solving the problems that result from such behaviours. However, if physical education teachers want to develop their students' empathic skills, they must also possess empathic skills themselves in order to provide empathy training.

This study evaluates the empathic skills of Turkish physical education teachers in relation to several factors.

1 Method

1.1 Participants

The 152 participants were found through convenience sampling under the principle of voluntarism. The sample comprised 39 male (25.7%) and 113 female (74.3%) physical education teachers in Turkish city of Kütahya. Table 1 presents demographic data regarding the sample.

1.2 Measures

Interpersonal Reactivity Index: IRI

The Interpersonal Reactivity Index (IRI) was used as to measure the empathic inclinations of the physical education teachers. The IRI was developed by Davis (1983) while the Turkish version was made by Engeler (2005). The questionnaire consists of 28 items that form 4 relatively independent sub-dimensions. The current study included 21 items to measure 3 dimensions (Fantasy, Perspective Taking, and Empathic Concern), which are considered to have the strongest structures. Responses to the statements in the questionnaire were measured on a five-point Likert-type scale (0 = It never defines me; 4 = It defines me). Perspective Taking represents the level of acceptance of others' perspectives (e.g. "I sometimes try to understand my friends better by imagining how things look from their perspective."). Empathic Concern represents the warmth, closeness, interest, etc. that a person has for others and feelings felt for a person in trouble specifically (e.g. "I often have tender,

concerned feelings for people less fortunate than I am".). Fantasy represents the ability to feel the same as imaginary characters in books, films, plays, etc. (e.g. "I really get involved with the feelings of the characters in a novel.") (Davis, 1980, 1983). The Cronbach's Alpha values in this study for the three dimensions were 0.80, 0.75, and 0.70, respectively.

1.3 Procedure

The participants voluntarily completed the IRI and demographic form. The researchers evaluated the completed questionnaires to exclude inappropriately completed ones. Normality tests were first conducted on the data using SPSS software. This analysis used descriptive percentages and frequency statistics, assessment of skewness and kurtosis values, and Kolmogorov Smirnov tests. The data were found to have a normal distribution. According to Jondeau and Rockinger (2003), data are considered as normally distributed when the skewness and kurtosis value coefficients of the sub-dimensions vary between +3 and -3. The overall internal consistency coefficient for the scales, as measured by Chronbach's Alpha, was .56. Further statistical analyses were conducted using complementary statistical models, t-tests, and correlation analysis ($\alpha=0.05$).

2 Results

As Table 1 shows, a majority of participants were men with nearly a third of participants aged 41 years old or above. Nearly all participants were bachelors of physical education colleges or equivalents with only a few having postgraduate degrees. About three-quarters had specialized in team sports at college. Just over one half of them were teaching in secondary schools, with a clear majority in state schools. Nearly two-thirds had gymnasiums in their schools, and most of them were training a school team while nearly three-quarters were also training a non-school team.

Table 1

Demographic information of participants

	Variables	*f*	*%*
Gender	Female	39	25.7
	Male	113	74.3
	Total	*152*	*100*
Age	21-25 years	6	3.9
	26-30 years	19	12.5
	31-35 years	28	18.4
	36-40 years	45	29.6
	41+ years	54	35.5

	Total	*152*	*100*
Education level	Undergraduate	131	86.2
	Postgraduate	21	13.8
	Total	*152*	*100*
Work experience	1-5 years	23	15.1
	6-10 years	35	23.0
	11-15 years	36	23.7
	16-20 years	32	21.1
	21+ years	26	17.1
	Total	*152*	*100*
Bachelor's degree	PESC (Phys. ed. and sports college) or equivalent	147	96.7
	Other	5	3.3
	Total	*152*	*100*
Undergraduate specialization	Team sports	112	73.7
	Individual sports	40	26.3
	Total	*152*	*100*
Level of courses taught	Primary	3	2.0
	Secondary	89	58.6
	High school	60	39.5
	Total	*152*	*100*
School Type	State school	130	85.5
	Private school	22	14.5
	Total	*152*	*100*
Do you train a school team?	Yes	134	88.2
	No	18	11.8
	Total	*152*	*100*

Table 2 shows the mean IRI scores. Empathic concern had the highest score whereas the lowest was fantasy.

Table 2

Distribution of scale sub-dimension scores

Sub-dimensions	Number of items	N	Mean	S.D.	Skewness	Kurtosis
Perspective taking	7	152	3.65	.537	.125	-.014
Empathic concern	7	152	3.86	.547	-.480	.428
Fantasy	7	152	2.91	.549	-.486	-.372

As Table 3 shows, IRI dimensions were not correlated with job experience and education level.

Table 3

Correlations of IRI dimensions with education and job experience

		Job experience	*Education level*	*Perspective taking*	*Empathic concern*	*Fantasy*
Job experience	R	1				
	P					
	N	152				
Education level	R	.255**	1			
	P	.002				
	N	152	152			
Perspective taking	R	-.113	-.008	1		
	P	.166	.920			
	N	152	152	152		
Empathic concern	R	.012	.077	.392**	1	
	P	.886	.345	.000		
	N	152	152	152	152	
Fantasy	R	-.118	.025	.202*	.294**	1
	P	.149	.762	.013	.000	
	N	152	152	152	152	152

Table 4 shows mean scores for IRI sub-dimensions in relation to training a school team status. The only significant difference was for perspective taking ($p<0.05$) in that training a school team was associated with a higher perspective taking score.

Table 4

Relationship of IRI sub-dimension scores and undergraduate specialization

IRI Sub-dimensions	*Variable*	*Mean*	*S.D.*	*t*	*P*
Perspective taking	Team sports	3.7015	.52814	1.983	.049*
	Individual sports	3.5071	.54321		
Empathic concern	Team sports	3.8329	.58223	-1.055	.293
	Individual sports	3.9393	.43390		
Fantasy	Team sports	2.9222	.54268	.395	.694
	Individual sports	2.8821	.57315		

Table 5 shows IRI sub-dimension scores in relation to a bachelor degree in the given specialization. A significant difference was found for fantasy depending on specialization ($p < 0.05$).

Table 5

Relationship of IRI sub-dimension scores and training a school team

IRI Sub-dimensions	Variable	Mean	S.D.	t	P
Perspective taking	Yes	3.6652	.53770	.931	.354
	No	3.5397	.53577		
Empathic concern	Yes	3.8486	.55058	-.754	.452
	No	3.9524	.53227		
Fantasy	Yes	2.8689	.55648	-2.673	.008*
	No	3.2302	.36713		

3 Discussion

Physical education courses contribute to the physiological, sociological, psychological, and moral development of school students. Physical education and sports are compulsory in education systems from an early age, which makes it different from other educational courses. Thus, physical education teachers should be empathetic and show it in their teaching. This requires healthy communication between the physical education teacher and students. The source of healthy communication is to understand the other side and make them feel that you understand them. Physical education teachers should be able to see things from the perspective of students, understand what they feel, and tell it to them. The current study investigated the empathic skills of PE teachers in relation to their educational background and work experience.

The physical education teachers participating in the study had the highest scores for empathic concern. This occurs when an individual exhibits sadness and discomfort from witnessing the sadness of others. Empathic concern reflects interest and sensitivity to others (Davis, 1994). Empathy is crucial for physical education teachers in approaching their students because it includes such aspects as concern for people, protecting them, and pitying them.

Perspective taking involves taking the perspective of others. According to Hoffman (1990), perspective taking is the pre-requisite for understanding an individual in need, cognitively and affectively, and responding appropriately. Physical education teachers need strong perspective taking skills.

The participants in this study scored lowest for fantasy. This comprises such skills as being able to think and dream about events likely to happen to them regularly, being able to put themselves in the place of a character in a play, film, or book, and being interested in the feelings of fictional characters. The teachers

in this study demonstrated medium empathic skills (Table 2), which indicates a need to implement empathy training programs to improve their level. The way to raise healthy individuals requires healthy communication. Given that empathy is a skill that can be developed through education, teachers should be trained from the very beginning of their undergraduate education to use empathy, which is in line with the findings that both experience and education levels are not associated with higher empathic skills (Table 3). Similarly, Rogers (1975) noted that empathic skills develop through education as well as from empathic people. That is, empathic skills can be developed through education programs for candidate teachers while they are still students (Sezen-Balçıkanlı, 2009).

In perspective taking, teachers who were teaching team sports achieved higher scores than those teaching individual sports (Table 4). Sport interactions particularly rely on coordinating movements in team sports. They, therefore, require the skill to understand the play from multiple sources. For example, a player should predict what their team mate will do (Shields, 1994). On the other hand, teachers who were not training a school team acieved significantly higher IRI scores in fantasy than those who did (Table 5). For empathic concern, those training a school team achieved slightly, but non-significantly higher scores. This suggests that competition prevents empathy since an empathic manner is not appropriate for competitive environments.

When people are taught communication skills and shown their prejudice and fears, they can easily empathize with others, develop a trust for rehabilitative skills, and become a rehabilitative being for others (Davis, 2005). Thus, strong empathic skills are important for physical education teachers for establishing good relationships with their students. Aktaş and Sezen-Balçıkanlı (2018), for example, found that empathy affects social problem-solving skills of physical education teachers. This highlights the need for empathy education while preparing for the teaching occupation and while working as a teacher during in-service training. In short, physical education teachers should care about their relationships with their students in terms of empathic understanding. They should also more frequently undertake activities to improve their empathic skills.

Conclusions

This study examined the empathic skill levels of 152 physical education teachers in Turkey in relation to several factors as measured by a three-dimension version of the Interpersonal Reactivity Index (IRI) questionnaire. The findings indicate that the participants achieved the highest scores in empathic concern, followed by perspective taking and fantasy. Both teaching experience and educational level were positively associated with stronger empathic skills. Teachers who did not train a school team had significantly higher scores for Fantasy.

The current study was conducted in one particular city in Turkey. Future studies could investigate other variables affecting IRI scores that were excluded from the current study. This could include evaluating the empathic skills of teachers in

different cities or those working in private and state schools, the relationship between empathic skills and specific sport branches, or the differences between physical education teachers and other teachers.

Certain recommendations can be made based on the presented findings as on how empathy can be developed during pre-service and in-service education of physical education and sports teachers. First, pre-service teachers must be provided with opportunities to experience empathy themselves during their training courses. They should also certainly focus on how to develop empathy with their future students. Secondly, in-service teachers who are experiencing empathy and emotions related to it need to bring these cases into in-service training seminars to teach about practical solutions to problems related to a lack of empathy.

References

Aktaş, İ., & Sezen-Balçıkanlı, G. (2018). The levels of empathy and social problem solving skills of physical education and sports teacher candidates. *i-manager's Journal on Educational Psychology, 11*(4), 8-14.

Akyol K. A., & Çiftçibaşı K. H. (2005). Okul öncesi öğretmen adaylarının empatik beceri düzeylerinin belirlenmesi. *Eurasian Journal of Educational Research, 21*, 13-23.

Barr, J. J. (2011). The relationship between teachers' empathy and perceptions of school culture. *Educational Studies*, *37*(3), 365-369.

Davis, C. M. (2005). Empati nedir, empati öğretilebilir mi? *İnönü University Journal of Eğitim Bilimleri Fakültesi*, *6*(9), 77-88.

Davis, H. M. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology, 10*, 85.

Davis, H. M. (1983). Measuring individual differences in empathy: evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, *44*(1), 113-126

Doll, B., Song, S., & Siemers, E. (2004). Classroom ecologies that support or discourage bullying. In D. L. Espelage, & S. M. Swearer (Eds.), *Bullying in American Schools: A Social Ecological Perspective on Prevention and Intervention* (pp.161-183). New Jersey: Lawrence Erlbaum and Associates.

Dökmen, Ü. (1990). Yeni bir empati modeli ve empatik becerinin iki farklı yaklaşımla ölçülmesi. *Psikoloji Dergisi, 7*(24), 42-50.

Dökmen, Ü. (2015). *Sanatta ve günlük yaşamda iletişim çatışmaları ve empati* (53rd edition). İstanbul: Remzi.

Engeler, A. (2005). *Psikopati ve antisosyal kişilik bozukluğu* (Unpublished doctoral thesis). İstanbul: İstanbul University, Institute of Forensic Medicine Social Sciences Department.

Hoffman, M. L. (1990). The contribution of empathy to justice and moral judgment. In N. Esinberg, & J. Strayer (Eds.), *Empathy and Its Development* (pp. 47-80). New York: Cambridge University Press.

Hoffman, M. L. (1977). Empathy, its development and prosocial implications. *Nebraska Symposium on Motivation, 25,* 169-217.

Jondeau, E., & Rockinger, M. (2003). Conditional volatility, skewness, and kurtosis: existence, persistence, and comovements. *Journal of Economic Dynamics & Control*, *27*, 1699-1737.

Köksal-Akyol, A., & Koçer-Çiftçibaşı, H. (2005). Okul öncesi öğretmen adaylarının empatik beceri düzeylerinin belirlenmesi. *Eurasian Journal of Education Research*, *2*, 13-23.

Mehbarian, A., & Epstein, N. (1972). A measure of emotional empathy. *Journal of Personalty, 40*, 523-543.

Rogers, C. R. (1975). Empathic: An unappreciated way of being. *The Counseling Psychologist*, *5*(2), 2-10.

Sezen-Balçıkanlı, G., & Yıldıran, İ. (2018). Elit salon hokeyi oyuncularında empatik beceri ile prososyal davranışlar arasındaki ilişki. *Gazi Beden Eğitimi ve Spor Bilimleri Dergisi*, *23*(1), 1-8.

Sezen-Balçıkanlı, G. (2009). Fair play and empathy: A research study with student teachers. *Journal of US-China Public Administration, 6*(4), 79-84.

Shields, L. L. D., & Bredemeier, L. J. B. (1994). *Character development and physical activity*. USA: Human Kinetics.

Tettegah, S., & Anderson, C. J. (2007). Pre-service teachers' empathy and cognitions: Statistical analysis of text data by graphical models. *Contemporary Educational Psychology*, *32*(1), 48-82.

Ütkür, N. (2019). Determination of the empathy levels of prospective classroom teachers: An example of the life skills teaching course. *Acta Educationis Generalis, 9*(3), 89-104. https://doi.org/10.2478/atd-2019-0015

Yıldıran, İ. (2005). Fair play eğitiminde beden eğitiminin rolü. *Gazi Beden Eğitimi ve Spor Bilimleri Dergisi*, *10*(1), 3-16.

Quality of Life and Value Orientation of University Students in Middle-Adulthood

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Abstract:
Introduction: Every person needs to define their own parameters of values and quality of life as there is a range of life circumstances and objective or subjective factors which force individuals to make decisions and select from available solutions depending on their personalities and other determinants. Currently, these notions have been broadly discussed and the authors of the presented study believe, that in the context of value orientation and life quality, there are new interactions, correlations and new truth to be revealed.

Methods: The presented research aimed to find out about the respondents' perception of their quality of life and value orientation using WHOQOL-BREF 1996 questionnaire and Vonkomer's HO-PO-MO questionnaire and unrevealing the relations between them. The research sample consisted of 300 in their middle-adulthood involved in external university study programs.

Results: The results presented in this study indicate that from the aspect of the subjective perception of the quality of life by individuals, external factors such as age or place of residence are not decisive. The most important finding of the research is that, as well as value orientation focusing on the values of knowledge, education and economic aspects leads to a better quality of life; a better quality of life is determined by a value orientation focused on the fields of knowledge, education and economic values.

Discussion: The attention of professionals from various fields of science and their research activities is given mostly to the relatively small population of young generation, the process of the creation of their value orientation and thus, their subjective quality of life. The presented study is focused on productive generation of middle-aged adults involved in tertiary education, which has experienced several massive changes in the society and received primary and secondary education in an educational context different from the present situation.

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Limitations: The conducted research into the respondents' quality of life is limited by the applied methods as it focuses on four basic areas of quality of life and quantitative methods are used. The advantages of this approach lie in exactly defined fields and quantitative data which enable comparison. One of its shortcomings is that it does not find out anything about the qualitative, dynamic aspects of the respondents' reflections about their own quality of life.

Conclusion: The findings show that quality of mental life correlates with educational value orientation as well as quality of social relationships with social value orientation. It can be stated that, as well as value orientation focusing on the values of knowledge, education and economic aspects leads to a better quality of life; a better quality of life is determined by a value orientation focused on the fields of knowledge, education and economic values.

Key words: quality of life, values, value orientation.

Introduction

Following a thorough literature review, it can be assumed that values and quality of life are among the frequently discussed issues both by professional and lay public and so, acquire a multidimensional and interdisciplinary character (Krásna, 2014). There has been done a lot of research on the relations between these two phenomena and, e.g. Rokeach's (1979) findings proved that values are an important indicator of quality of life.

It is indisputable that individuals need to define their own parameters of values and life quality as there is a range of life circumstances and objective or subjective factors which force individuals to make decisions and select from available solutions depending on their personalities and other determinants. The choices and decisions people must make throughout their lives contribute to finding their sense of life, which is closely connected with the determination of values and value orientation in these individuals. As stated by Kováč (2007), the sense of life is among the important components of quality of life. Moreover, he considers the sense of life a broad spectral principle of quality of life. Therefore, it is important to improve the quality of life by means of the development of positive and socially acceptable values. Moreover, it must be considered that individuals' sense of life is reflected in values.

During the last decades, especially in the developed countries, it has come to certain changes in the value orientation of people, as well as in the parameters of quality of life in the context of the changing social reality. So, it is evident that value orientation and quality of life are not stable characteristics (Vomáčková, 2015). The perceived quality of life changes throughout individuals' lives because people modify their values, attitudes and opinions regarding happiness, satisfaction or health depending on the circumstances, time and their experience.

For example, in the case of health issues, people tend to appreciate health most; or when exposed to stressful situations or harsh circumstances at home, in school or at work, well-being represents a high value. As for values, we prefer those spheres of life in which we have problems or the things we miss. Based on the above, we can state that the perception of quality of life is influenced by many occurring situations, and its evaluation is determined by factors such as age, personality traits, gender, system of values, coping with negative phenomena, etc.

1   Values and value orientation

Values represent an interdisciplinary notion which is studied by professionals from many fields of science. It is dealt with by philosophy, pedagogy, sociology, ethics, or psychology, but it is often used in everyday life by lay public as well.

Most axiologists assign a value to everything which satisfies people, what people consider necessary, useful, what they try to achieve, or what they appreciate. Kučerová (1996) accentuates that while objects and phenomena can exist without a subject, values are dependent on its existence as they become values only if they can satisfy - or dissatisfy - its needs. Values arise in the mutual relationship between the quality of an object and the quality of the evaluating subject.

Certain values can be assigned not only to individuals, but also to social groups. Social values are accentuated as they allow higher and broader social units to integrate. The vision of integrated Europe is linked to value tolerance and diversity, and protection of cultural and national identities - even of small ethnic groups.

Values represent one of the most important components of individuals' mental development, mental maturity and mental health (see e.g. Mehešová, 2017). They play an important formative role in personality development and take part in the organization of personality structure. Participation in creating values and experiences related to them deepen and widen individuals' life satisfaction, regulate their perception of and attitudes to success and loss, and also creates the basis for human sense.

In Slovak scholarly literature, value orientation is often terminologically operationalized based on the work of Grác (1979), which is still used as the starting point for many empirical studies on value orientation. He defines value orientation as the way how and why certain phenomena and objects are reflected in individuals' values and systems of values navigating human behaviour in a certain direction. Based on available resources (see also Salbot & Kačáni, 2007; Brožík, 2004), it can be assumed that value orientation represents the tendency to prefer certain values to other ones and, at the same time, it is a continuous and stable system of values which regulates individuals' behaviour.

Theoretical value orientation can be characterized as placing emphasis on searching the truth by means of empirical, critical and rational approaches. At

this level, people usually know what to do; they can give advice to others, but cannot help themselves because it is much easier to evaluate other people's behaviour. In the case of others, the occurring problems are much clearer, more visible and there is a range of solutions for them as we can observe them from the outside and keep distance. Theoretically, everything can be easily explained and also appropriate behaviour is precisely defined.

Practical value orientation accentuates the practical application of values in the real life with a focus on their persistence. In this case, theory is neglected as being strictly bound by various regulations, rules or principles can become an obstacle in achieving goals.

A particular value orientation is not purely the result of a combination of personality traits, but it is affected by a person's mental activities, too. Value orientation is a factor having a significant impact on individuals' manifestations. In individuals' values, the values of their social environments are reflected, as well as the gained life experiences, lifestyle, and the value orientation of their social class, social groups that they have ever belonged to, and people, who they appreciate and who represent authorities, role models, for them, etc. Value orientation as a hierarchy of values and the existing relations among them are decisive from the aspect of a person's individuality, maturity and integrity.

Values are not unalterable, they change in time and they are influenced by a rage of external factors. Value orientation is strongly influenced by long-term education in families and other social institutions, as well as by self-education. It is generally accepted that the primary role in the formation of a person's values and value orientation is played by two institutions - family and school. Families contribute to the formation of individuals' values and value orientation by means of family education/uprbringing. In the process of value orientation formation, education becomes the regulative force, but also a mediator of experiences focusing on the development of independent, responsible and socialized individuals. Schools attempt to achieve this goal by means of school education.

There is a general consensus regarding such values as humanism, democracy, human rights and freedoms, people usually tolerate but do not share values which contradict them. Eyre and Eyre (2000) - according to whom happiness of individuals depends on their value preferences - tried to define the "universal" values, which should form the basis for upbringing and education. They claim that broadly respected and universally acceptable values are beneficial not only for individuals sharing them, but also for those who they approach and who they treat in the spirit of these values. The above authors divided universal values into two groups - "values of being" (who we are) and values of giving (what we are giving to others). In the first one, honesty, courage, peaceability, self-reliance and potential, self-discipline and moderation, fidelity and chastity are included. In the second one, there are loyalty and dependability, respect, love, unselfishness and sensitivity, kindness and friendliness, justice and mercy. A

positive correlation between values and happiness was observed by Schwartz (1992) as well.

2   Quality of life

As the notion of quality is broadly discussed from many aspects in a range of contexts at the society-wide level - quality of social life, quality of air, quality of products, quality of production, quality of management, etc. - the need for the definition of the quality of life arises. During the process of quality assessment, its relations with a variety of phenomena and circumstances must be considered.

In general, quality represents an assigned value expressed on the scale from excellent to poor - it is a feature which distinguishes a phenomenon from another one - i.e. the life of a person from the life of another person (Křivohlavý, 2002). In his definition of quality of life, Křivohlavý (2001) focuses on the extent of individuals' satisfaction with achieving their goals determining the direction of their lives. It means that if individuals work on the fulfilment of their goals and they can also achieve them, they evaluate their quality of life as better than less successful persons do. Similarly, Rosa (1999) defines quality as excellence, a kind of perfectionism, readiness and the ability to fulfil requirements, and to achieve goals.

Other authors, in their definitions, pay more attention to the link between the quality of life and happiness or well-being. Pelikán (1997) defines happiness as subjective experiencing of life satisfaction which can be characterized by repeated and intensive positive emotions.

According to the World Health Organization, quality of life is a multidimensional notion integrating subjective well-being. From this aspect, quality of life is a subjectively perceived life situation, related to a particular culture and in the context of the system of values in relation to individual goals, interests, expectations and assessment criteria.

Murgaš claims that an individual's quality of life consists of mental, somatic, religious, social and economic qualities, which lead to subjective well-being or happiness. These are confronted with health, social-pathological, economic and environmental issues in the external environment, which form a part of the current reality. The quality of "good" is understood as prosperity expressed by a sum of positive values - both of material and immaterial character. The quality of "bad" can be characterized as deprivation which represents a more progressive stage based on a long-term depression. It can be expressed as a sum of all the negative material and immaterial values. The above author further states that bi-polar scales are insufficient as life is not only "good" or "bad" and, therefore, aiming to express the complexity of quality of life, suggests to complete the scale from prosperity to deprivation by the value of human capital (Murgaš, 2007).

Hlásna (2006) defines quality of life as subjective experiencing of objective life circumstances, where not only what individuals experience is important, but also

the factors having an impact on such experiencing, are decisive. A high degree of subjectivity is given by the particular personality type and life experience of the individual as individuality often prevails over general frameworks and conclusions of any kind.

As OECD (2011) research suggest, the quality of life can be measured by the following indicators:

1. quality of life and health status;
2. quality of life and work and life balance;
3. quality of life and education and skills;
4. quality of life and social connections;
5. quality of life and civic engagement and governance;
6. quality of life and environmental quality;
7. quality of life and personal security;
8. quality of life and subjective well-being.

Some of these indicators are reflected in Kostelnik's (2006) definition who claims that there is a link between the quality of human life and mental and physical health, with the ability to develop positive relationships with others, with the capacity to perceive beauty and enjoy it, and useful and successful work activities.

Based on the above definitions, the quality of life can also be understood as the expression of life happiness.

3   Research goals

The purpose of the presented research on value orientation can be seen in unrevealing trends in the current development. People cannot be perceived as passive individuals who, in the process of socialization, only uncritically take over their heritage and learn to accept biological and social norms and principles. Professionals should have in mind that values are based on emotional experiencing of the reality and needs and requirements represent will, volition and recognition of values.

The presented research aimed to find out about the respondents' perception of their quality of life and their value orientation by means of selected methods. The main goal was divided into two partial goals - to find out about the relations between variables on the side of respondents' quality of life and on the side of their value orientation and to carry out a comparative analysis of the above variables based on the age and residence of the respondents.

In our case, the carried out investigation into quality of life is limited by the applied methods as it focuses on four basic areas of quality of life and quantitative methods are used. The advantages of this approach lie in exactly defined fields and quantitative data which enable comparison. One of its shortcomings is that it does not find out anything about the qualitative, dynamic aspects of the reflections about the own quality of life by respondents.

4   Methods and research tools

In the study, ex post facto research was used with the aim to learn about the respondents' opinions about the quality of their lives and their value preferences. Gathering information about their subjective perception of two important personality components - quality of life and value preferences - enables researchers not only to gain knowledge about their respondents' perception, but also to make comparisons and study the differences in the score distribution based on selected characteristics of the research sample.

As quantitative approach is the basic methodological paradigm of the presented research, its focus is on the issues of the relations between value orientation and quality of life by means of correlation calculations. In this study, not causality, the causes and effects of phenomena are investigated, but the tightness of their relationships expressed by correlation coefficients. Correlation coefficients do not answer the question whether a particular value orientation is the result of the quality of life, or the quality of life is significantly influenced by the individual's value orientation.

For investigating into the quality of life, the WHOQOL-BREF 1996 questionnaire was used, which was developed for the purposes of international comparative studies on inhabitants' health. It has been translated to more than 20 languages.

WHOQOL- BREF 1996 questionnaire consists of 26 items and its parts focus on 4 areas – physical quality of life (energy, tiredness, pain, discomfort, sleeping and resting); mental quality of life (physical well-being, positive and negative experiencing - feelings, emotions, self-evaluation, cognition, learning, memory, concentration); social relationships (interpersonal relationships, social support, sexual activity); and environment (financial security, freedom, safety and security, the quality of family and work environment, career opportunities, opportunities to gain new information, participation in social life, leisure, smoking, environment, mobility). In the questionnaire, the respondents indicate their subjective opinions, attitudes, and feelings. It means that the questionnaire does not work with objective data which can bring certain limitations.

The second research tool applied in the study is Vonkomer's (1991) HO-PO-MO questionnaire focusing on the issues of value orientation, attitudes towards values, and performance motivation. For the purposes of the presented research, only the first scale on value orientation was used. By means of this scale, information about individuals' educational, aesthetic, moral, economic and social orientation can be gathered. These fields are in accordance with Spranger's typology.

In the questionnaire, there are 11 real life situations and the respondents' task is to put the provided alternatives into order according to their preferences (on the scale from 5 points to 1 point).

There are four available variables in the field of quality of life and five variables of value orientation, so, a correlation matrix can be worked out, which helps to

interpret mutual relations. As for quality of life, the scores achieved in physical, social, mental health and the perception, and the score for the perception of individuals' environments can be added up and the total score for the quality of life can be calculated. Unfortunately, this process cannot be realized.

5   Research results

5.1 Quality of life
As the gathered data show, a majority of the research participants have an average quality of life and only a small part of them evaluates it as poor. It can be assumed that as many as 36.8% of respondents' answers indicate a quality of life better than the average, which is a positive finding. A poor quality of life was indicated by 1.78% of respondents.
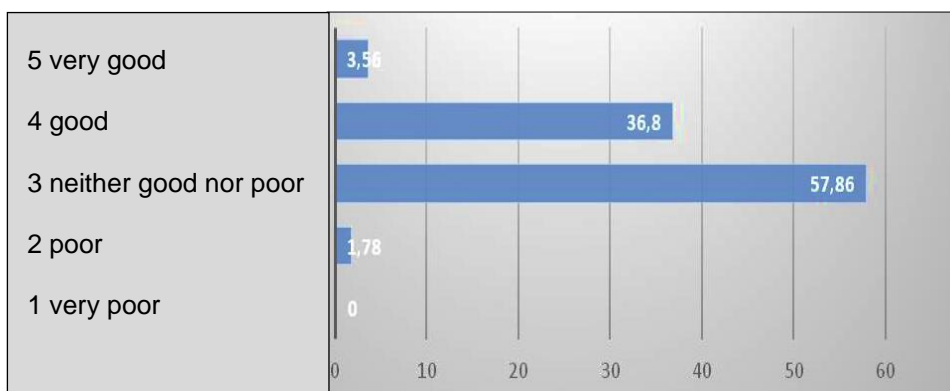

Figure 1. Perception of quality of life.

During the research, certain age-based differences occurred. The younger the respondents were; the better quality of life was indicated. The same relationship was found between the answers of older respondents - with increasing age, a higher occurrence of poor quality of life can be observed. While in the youngest group of respondents, 43.52% of them subjectively perceived their quality of life as good or very good, in the second group, it was 38.05% and in the group of the oldest respondents, it is was only 26.67%. Such results could be caused by younger respondents' optimistic world view but also by other objective factors in the context of the older respondents' self-realization.

In the next step, individual fields of quality of life - physical quality of life, mental quality of life, social relationships and the environment - were evaluated based on data obtained from WHOQOL-BREF 1996 questionnaire.

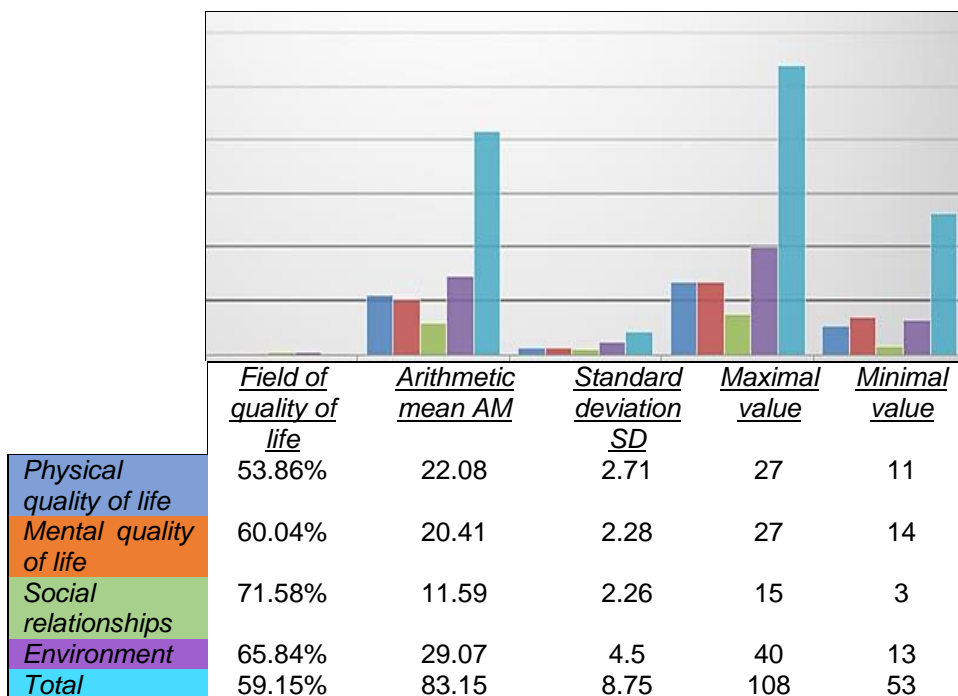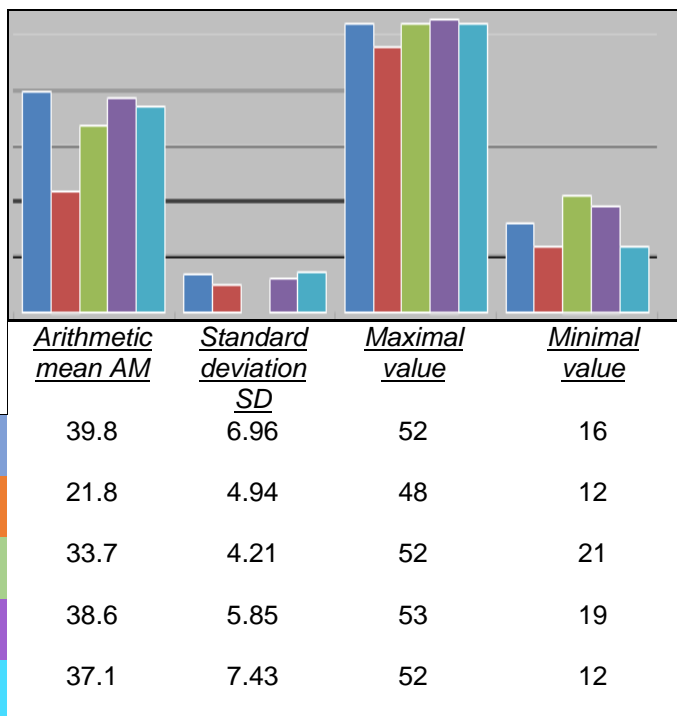| Field of quality of life	Arithmetic mean AM	Standard deviation SD	Maximal value	Minimal value
Physical quality of life	53.86%	22.08	2.71	27	11
Mental quality of life	60.04%	20.41	2.28	27	14
Social relationships	71.58%	11.59	2.26	15	3
Environment	65.84%	29.07	4.5	40	13
Total	59.15%	83.15	8.75	108	53

Figure 2. Fields of quality of life.

The respondents achieved the highest scores in the field of quality of social life. The average score was 11.59 (SD=2.26). Social relationships were followed by the environment with the average score 29.07 (SD=4.5) and by mental quality of life with the average score 20.41 (SD=2.28). The lowest scores were achieved in the field of the physical quality of life with the average of 22.08 points (SD=2.71). The total average score was 83.15 points (SD=8.75). In the field of quality of life, no statistically significant differences were found in respondents based on their age or place of residence.

5.2 Value orientation
Value orientation of the respondents (N=300) and their scores in individual fields of value orientation are displayed in Figure 3.

	Arithmetic mean AM	Standard deviation SD	Maximal value	Minimal value
Educational value orientation	39.8	6.96	52	16
Aesthetic value orientation	21.8	4.94	48	12
Moral value orientation	33.7	4.21	52	21
Economic value orientation	38.6	5.85	53	19
Social value orientation	37.1	7.43	52	12

Note: AM = arithmetic mean; SD = standard deviation; VO = value orientation

Figure 3. Respondents' value orientation.

The highest scores were achieved by our respondents in the field of educational values - the average score was 39.8 points (SD=6.96), which means that, in the research sample, the highest value was assigned to education and knowledge. Education was followed by economic values with the average score of 38.6 points (SD=5.85). In the field of social values, the average score was 37.1 (SD=7.43) and with moral values it was 33.7 (SD=4.21). The lowest value was assigned to moral values - 21.8 points (SD=4.94). It follows from the above that the respondents consider educational, economic and social values the most important, moral and aesthetic values are less appreciated. It is an interesting finding that social values are ranked third in value orientation, although in the field of quality of life, they are ranked first. This indicates certain instability in the field of social relationships and factors related to it, and vagueness as for the quality of a person's social relationships. On one hand, one part of the respondents considers values and quality of life the same as good interpersonal relationships, but on the other hand, there is a group of respondents who are not aware of the positive impact of personal relationships in the context of their value orientation. As for the age and place of residence of the respondents, no significant differences were found in their value orientation.

Table 1

Respondents' ranking of the fields of quality of life and value orientation

Quality of life	Value orientation
1. quality of social relationships	1. educational values
2. quality of the environment	2. economic values
3. mental quality of life	3. social values
4. physical quality of life	4. moral values
	5. aesthetic values

5.3 Relations between respondents' quality of life and value orientation

Kostelijk (2016) claims that if we consider values as guidelines to a higher quality of life, then the different values in the individual's value system form alternative ways to attaining a hiher quality of life. One of the goals of the research was to find out about the relations between the respondents' quality of life and value orientation. For this purpose, correlation analysis was applied.

Table 2

Correlation matrix for the fields of value orientation

Value orientation	Educational	Aesthetic	Moral	Economic	Social
Educational		-.190	-.227	-.042	-.221
Aesthetic			.421	-.229	-.314
Moral				-.120	-.296
Economic					-.271

Similarly, correlations between the respondents' perceived quality of life and their value orientation were calculated. Spearman's rank correlation was opted for because not all the data were normally distributed.

Table 3

Correlation matrix for quality of life and value orientation

Value orientation	Educational	Aesthetic	Moral	Economic	Social
Quality of life					
Physical	.029	-.052	.067	-.015	-.018
Mental	.072	.009	-.072	.030	-.056
Social	-.054	-.027	-.033	.010	.079
Environmental	.024	-.046	.000	.000	.008
Total	.026	-.044	-.006	.006	.004

Data in the correlation matrix show that none of the factors of value orientation correlates significantly positively or negatively with the factors of quality of life.

Conclusions

A lot of research has been done in the fields of value orientation and quality of life. Their results suggest that the factors determining the quality of individuals' life are mainly related to their personality - e.g. self-regulation, experiencing, emotional intelligence, extroversion, introversion, neuroticism, motivation, creativity, spiritual factors of the sense of life, etc. (e.g. Kováč, 2007) and external factors do not have such a big role to play. So, it follows that in the context of research on subjective perception of quality of life, researchers must distinguish between objective indicators of quality of life - income, physical health, social background, etc.; and subjective indicators of quality of life - self-satisfaction, satisfaction with own social relationships, with own health condition, etc. (see also Lukášová, 2017). Also the research results presented in this study indicate that from the aspect of the subjective perception of the quality of life by individuals, external factors such as age or place of residence are not decisive.

The data obtained during the research show that quality of mental life correlates with educational value orientation, as well as quality of social relationships with social value orientation. As the correlation calculations neither show the direction of the relationship nor identify the cause and effect relationship, it can be stated that, as well as value orientation focusing on the values of knowledge, education and economic aspects leads to a better quality of life, a better quality of life is determined by a value orientation focused on the fields of knowledge, education and economic values. This can be considered the most important finding of the presented research.

References

Brožík, V. (2004). *Hodnotenie a hodnoty*. Nitra: UKF.

Eyre, L., & Eyre, R. (2000). *Jak naučit děti hodnotám*. Praha: Portál.

Grác, J. (1979). *Pohľady do psychológie hodnotovej orientácie mládeže*. Bratislava: SPN.

Hlásna, S. et al. (2006). *Úvod do pedagogiky*. Nitra: Enigma.

Kováč, D. (2007). *Psychológiou k metanoi*. Bratislava: VEDA.

Kostelijk, E. (2016). *The Influence of Values on Consumer Behaviour: The value compass*. London: Routledge.

Kostelnik, M. (2006). *Guiding Children's Social Development*. Clifton Park, NY: Thomson Delmar Learning.

Krásna, S. (2014). Subjective understanding and individual interpretation of the life value "HEALTH" by the second-year students of lower secondary schools and of the first- and second-year students of upper secondary

schools in Slovakia. *Acta Technologica Dubnicae, 4*(2), 1-18. https://doi.org/10.1515/atd-2015-0001

Křivohlavý, J. (2002). *Psychologie nemoci*. Praha: Grada Publishing.

Křivohlavý, J. (2001). *Psychologie zdraví.* Praha: Portál.

Kučerová, S. (1996). *Človek. Hodnoty. Výchova.* Prešov: ManaCon.

Lukášová, H. (2017). A study of conceptualisation of quality of life by Czech fifth-graders. *Acta Technologica Dubnicae, 7*(1), 59-81. https://doi.org/ 10.1515/atd-2017-0004

Mehešová, M. (2017). Social-emotional health of university students and the importance of its research. *Acta Educationis Generalis, 7*(2), 79-85. https://doi.org/10.1515/atd-2017-0015

Murgaš, F. (2007). Index kvality života v krajoch Slovenska a jeho indikátory. In P. Nováček (Ed.), *Udržitelný rozvoj. Nové trendy a výzvy* (pp. 127-139). Olomouc: Univerzita Palackého.

OECD. (2011). *Compendium of OECD Well-Being Indicators.* Retrieved from https://www.oecd.org/sdd/47917288.pdf

Pelikán, J. (1997). *Výchova pro život*. Praha: ISV.

Rokeach, M. (1979). From the individual to institutional values with special reference to the values of science. In M. Rokeach (Ed.), *Understanding human values* (pp. 47-70). New York, NY: Free Press.

Rosa, V. (1999). Hodnotenie kvality vzdelávania. In *K problematike kvality vzdelávania* (pp.14-20). Bratislava: Metodické centrum.

Salbot, V., & Kačáni, V. (2007). Hodnoty a výchova adolescentnej mládeže. In *Psychologické dny 2006: "Prožívání sebe a měnícího se světa"*. Praha: Univerzita Karlova v Praze, Filozofická fakulta.

Schwartz, S. H. (1992). Universals in the content and structure of values: Theory and empirical tests in 20 countries. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 1-65). New York: Academic Press. http://dx.doi.org/10.1016/S0065-2601(08)60281-6

Vomáčková, H. (2015). Differences in the value orientation of Czech and Slovak pupils. *Acta Technologica Dubnicae, 5*(2), 31-50. https://doi.org/ 10.1515/atd-2015-0063

Vonkomer, J. (1991). *Dotazník na zisťovanie hodnotových orientácií, postojov k hodnotám a motivácie výkonu.* Bratislava: Psychodiagnostika.

Teaching Professional Technical Subjects Accepting Current Trends in Field Didactics

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Abstract:
Introduction: In the theoretical study, the authors describe current approaches enriching the theory of field didactics concerning teaching technical subjects. They focus on developing the psychomotor dimension of students' personalities, which they consider to be an important part of the modern young generation's culture concept. In order to ensure this role in vocational-technical education, it is necessary to innovate the pedagogical preparation of teachers of technical subjects with a focus on achieving the required teaching competences. A part of the presented study deals with the determination, analysis, and representation of individual teaching competences in the doctoral study plan in the conditions of DTI University in Dubnica nad Váhom, Slovakia.

Methods: The theoretical study is based on a theoretical analysis of the issues of teaching technical subjects in vocational schools. For the purposes of theoretical analysis, the following research methods have been implemented:
- content analysis of the issues of teaching vocational subjects (current innovative trends in field didactics; theories of psychomotor learning; vocational subject teachers);
- logical operations (analysis, synthesis, comparison);
- generalization and recommendations for the school practice of field didactics.

Results: For the development of specialized didactics, it is necessary to take into account the newest results of scientific investigation in general didactics and field didactics; and to apply them in the existing and also

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new teacher training programs under development as only these facts create new possibilities for improving the quality of education in vocational schools. A consistent development of vocational subject teachers' teaching competences in the process of their preparation for the teaching profession following current trends and intentions in the field of didactics can become the carrier of positive changes.

Discussion: The authors of the study consider it extremely important to accept the latest trends in educational theory in the training programs for teachers of technical subjects. The result of this is the current doctoral study program offered by DTI University in Dubnica nad Váhom, Slovakia, which is organically linked to the master study program Teaching Technical Subjects. In the current academic year, DTI University has been granted the right to conduct habilitation and inauguration procedures in the field of study Didactics based on continuous and successful research activities in the above field with results comparable to the results at an international level and accepted by the professional international community.

Conclusions: In the conclusion, the authors of the theoretical study point out that a teacher developing students' personalities in all directions is the decisive factor in the educational process oriented on efficiency and high-quality results of students. To achieve this effect in the context of vocational schools, it is necessary to reform the training programs for future teachers of technical subjects.

Key words: general didactics, field didactics, technical subjects, trends in field didactics, psychomotor skills, teaching competences.

Introduction

Vocational school teachers need to be equipped with a wide range of behavioural models, heuristic rules and best practices (Zelina, 2006), but, above all, they should teach well. In vocational schools, we often encounter situations when teachers do not teach properly. They have difficulties in communicating with students or evaluating their educational results (Čapek, 2015). We think that the above facts are directly related to the increasing number of apathetic, non-working, academically weak and undisciplined students.

Didactics is often underestimated in schools and, somehow, teachers have lost their interest in developing their skills in didactics. We do not claim that teachers in schools do not want to learn, but they prefer education in their vocational subjects. It is said that it is not the knowledge from a particular field which makes a good teacher, but his/her pedagogical-didactic skills.

In order to fulfil their basic task - which is to educate - teachers of vocational subjects must develop their students' personalities. They must possess deep knowledge from their fields, but in particular, they must receive good

pedagogical-didactic training. What can field didactics offer to vocational subject teachers?

In agreement with Podlahová (2012), we state that among the reasons for studying the theory of field didactics the following can be included:

- to succeed in a vocational school not only as an expert but also as a good teacher who can communicate subject knowledge to students;
- to increase self-esteem;
- to build the reputation of a good teacher;
- to get a sense of well-done work;
- to develop relationships with students as future professionals, with partners and colleagues;
- to facilitate students' understanding of the educational content and to manage their learning activities;
- to popularize their field in an accessible and comprehensible form;
- to clarify the key elements of the mediated educational content, the links, the system, and the importance of it;
- to acquire skills in the process of curriculum selection, to create the content (curriculum) of the subjects and to understand how teachers should proceed in their pedagogical activities.

1   Current trends in field didactics in technical subjects

The developmental tendencies in field didactics, more particularly in teaching technical subjects, aim to strengthen the development of students' psychomotor skills. In fact, it is nothing new, but there is a problem in the background. Some aspects of contemporary life - e.g. consumer lifestyle, modern transportation, achievements of the information society, passive spending of leisure time, etc. - largely limit the spheres in which students can develop their motor skills. The motorics of the whole body develops in the process of handling objects, during game and physical work as such (Bajtoš, 2007). The whole above field should be perceived by the educational science from a new and thematic perspective as an important part of the concept of modern human culture trying to find a suitable aspect of transformation and educational content in schools. It is documented in a number of theoretical analyses and research in foreign pedagogical and didactic literature as a pedagogical-didactic issue, which helps students develop competences compatible with the requirements of the modern information society. Psychomotor skills can be developed by means of different forms of teaching - manual work, working with various materials, assembly and dismantling activities, designing, implementation of experimental activities, simulations, practical project work, various types of work activities at school and during practical training, performing social tasks, systematic work practice, etc. In the developed countries of Europe and the world, subjects focusing on the development of students' psychomotor skills have a firm place between

compulsory subjects. In the past, the main objectives of vocational subjects in vocational schools were to acquire a sum of knowledge and skills by the students. Vocational subjects differ from other subjects. One among their specific features is the focus of the teaching goals on the acquisition of the required motor skills. Vocational subjects belong to those subjects in which the cognitive processes have a distinct instrumental function, or possibly a procedural character. This means that knowledge is the basis for action, but it is not only about memorizing it but, above all, acquiring it and being able to apply it in practical activities (Švec, 2002).

Activities performed in vocational subjects, as well as the skills acquired by students, can have different character and focus. For example, in the lower grades of schools, practical activities prevail where the manual aspect of these activities is substantially represented. Practical activities in higher grades are rather characterized by intellectual activities (Kropáč, 2002).

The main function of vocational subjects is to teach students to perceive tasks and problems associated with the modern society, to establish their relationships to technology and the field of study as a part of vocational education. Alongside with the penetration of the world of technology, it is expected that young people get a basic overview of economic, ecological and ethical issues, too. The importance of creative work is also emphasized in vocational subjects as well as that of practical learning, which reinforces the individual experience of students.

Psychomotor skills form an integral part of our lives; they can affect education, but have an impact on the development of students' personalities, too. The term psychomotor qualification refers to movement qualification associated with mental activity, which, in the context of educational practice, is associated with thinking and professional activity.

Acquisition of psychomotor skills is one of the priorities in teaching vocational subjects. For teachers of vocational subjects, it is not only important to know about the general requirements for theories of training, perceptual-motor learning theories, and theories of sensorimotor development in ontogenesis, but it is extremely important to be able to adjust these theories to a variety of learning conditions (Bajtoš, 2007). Theories of training are based on the assumption that the acquisition of psychomotor skills takes place in a dialectical combination of knowledge and practical activities and they intertwine, complement and enrich each other. The process of the development of psychomotor skills and habits undergoes, in principle, three stages in school conditions: the stage of theoretical knowledge of the activity (students acquire the necessary knowledge and visual knowledge of the activity but do not carry out the activity itself); the phase of the first experiments with the activity (it involves application of theoretical knowledge in practice and new temporal connections from the kinaesthetic analyser are established as a result of students' activity during the initial direct activity); and the training phase (i.e. a multiple, purposeful and planned repetition of the activity). Theories of perceptual-motor

learning are applied in the process of acquiring psychomotor elements, the formation of sensory perception, the formation of the ability to sensitively distinguish between the characteristics of objects and the relationships between them, the formation of temporal and spatial ideas. This type of learning and teaching forms the basis for sensorimotor development, for the development of motoric trainability and the realization of training (psychomotor). They rely on sensory perception, so, students' direct contact with the reality is preferred. In theories of perceptual-motor learning and teaching, the methods of practice and repetition are used. These learning theories are relatively neglected in schools, despite the advocated need to improve the movement culture of students. Perceptual-motor learning results in motor skills. An analysis of motor skills clearly suggests that not all motor manifestations can be referred to as motor skills. They are especially movement skills if their qualitative characteristics – the temporal-spatial structure of movement - as well as quantitative traits, and the basal performance reach the desired level.

The theory of sensorimotor development in ontogenesis deals with the field of action of the individual, in search of a connection with sensory perception and movement. First, the individual learns to perform basic movements, acquires communication and also a range of professional skills. The development of psychomotor skills is influenced by the available tools and aids as well. From the theories of sensorimotor development in ontogenesis, two periods are decisive (Čáp & Mareš, 2001):

- the period of puberty (in this period, there is physical disproportionality, which causes the clumsiness and inconsistency of movements) and
- the period of adolescence (characterized by balanced movement behaviour, good coordination of movements and excellent physical performance).

In the context of the pedagogical work of vocational subject teachers, we also consider Erikson's (1968) conception of the developmental stages of individuals. Erikson claims that people are exposed to a range of learning tasks in their evolution from childhood to an old age. Each task must be sufficiently mastered before an individual can successfully deal with the next one. This concept encompasses eight stages of development in which the individual goes through a crisis, understanding it as a turning point with markedly increasing vulnerability and potential. It is based on the assumption that individuals, at each stage of development, must resolve a certain psychosocial conflict. If they succeed, they can go on. At each stage, a new quality of personality develops, a struggle occurs in which the positive quality of the ego must outweigh in order to develop a new virtue. From the very beginning of an individual's life, it is determined what quality will develop at which stage because the whole development is subject to the principle of epigene (the theory of underestimation of the importance of inheritance in development), but at the same time, the development of the ego is determined by internal forces as well as by cultural

and social influences (Erikson, 1968). The importance of Erikson's theory lies in the fact that it has gone beyond the biological and maturation factors by emphasizing the social and cultural impact on the development throughout the entire life. A successful completion of each of these eight developmental stages also brings something that Erikson called "vital power" or an essential adaptive feature of the ego. Vocational school students are in the developmental stage of adolescence, in which individuals establish and build their identities.

2 Vocational subject teachers as a determining factor in the implementation of current trends in field didactics

Concerning vocational education, currently, constant efforts are made to improve the quality of provided education and to modernize vocational schools. A modern vocational school should teach students to think critically, develop their problem-solving skills as well as entrepreneurial skills, and strengthen their links with professional practice. Some tools and approaches of the European Union - such as mobility support schemes for vocational training, building vocational school partnerships, etc. - aim to help modernize vocational schools. Modern vocational schools can be characterized as keeping up with technological development, which has an impact on cooperation between schools realized in electronic form (e-mail communication or other forms of on-line data transfer). It can be characterized as faster, more efficient, cost-saving, and popular among the current generation of students often referred to as the "net-generation".

Modern vocational schools are characterized by such features as openness and accessibility; flexibility; diversity; high quality; cooperation with public administration or the private sector; innovation; engagement and cooperation with local or regional communities; competitiveness; measurability; and presence - which means to be where the applicants, students, or graduates are - e.g. on Facebook, Twitter, etc. (Slavík, 2012; Duffy & Bruns, 2006).

Throughout the teaching process in vocational schools, more emphasis should be placed on developing students' critical and creative thinking, which is the basis for their ability to find their place in the labour market. In the current labour market, it is necessary to adapt to rapidly changing conditions of the economy and production, the ability of self-education throughout the productive age, as well as the ability of social interaction. The future graduates of vocational schools need to be prepared in such a way that they can solve various tasks, face the requirements of modern times, find original solutions, have a systemic approach and be able to cooperate in working teams.

If there is an insufficient space for and there is no emphasis on the development of reflection, critical thinking, and experiential learning during the preparation of future vocational subject teachers, changes in pedagogical approach under the influence of the school environment only rarely come. These teachers do not feel

like introducing innovations into their teaching practice, and thus, their views are resistant to any changes (Kubányiová, 2005). They remain traditional teachers who consider the blackboard and chalk their most important tools, they have a dominant position among their students and they only struggle with the overloaded curriculum every day. Teaching approaches that place students in the centre of the educational process are perceived by teachers as a general cliché, without any significant impact on the learning process. They do not realize that these approaches take into account the individual needs, interests, goals or diverse learning styles of learners and the fact that learners should be active partners in the schools' decision-making processes (Marks, 2014, p. 46). As a result, it can be presumed that the students can take over the responsibility for their education and they can influence the learning process. In the spirit of this philosophy, the goal of education is not only the cognitive, psychomotor but also the affective development of students, the promotion of their creative potentials, critical thinking, and social skills.

On one hand, it is a good signal that people lead discussion about the work of teachers, but, on the other hand, it is alarming that they speak about their insufficient qualifications, education based on encyclopaedic knowledge, their inability to develop their students' creativity or doing only what they have learned at school. Therefore, there is a need for a change in the current trends in school policy in Slovakia and it is necessary to focus both on increasing the quality of the preparation for the teaching profession and the quality of further training of teachers, as well as for creating a space for their systematic development. We believe that more attention needs to be paid to creating conditions for teachers to enable them to carry out the teaching process in the spirit of modern approaches in field didactics.

According to Turek (2004) and Bajtoš (2013), current approaches to the preparation of future vocational subject teachers following the newest trends in field didactics should ensure that future teachers develop the following competences and teaching abilities:

The ability to plan and prepare teaching units (planning, organizational and managerial competences). Vocational school teachers should be familiar with the conditions and processes within the school as a public institution, as well as the current school legislation and other standards and regulations related to the performance of the teaching profession and the profession they are preparing students for; and be able to apply this knowledge in their teaching work.

Teachers must be capable to carry out some basic administrative tasks connected with the registration of students and their educational results, as well as keeping their records and statements. They should manage their students' work and create conditions for effective cooperation in groups but also for institutional cooperation, including international projects. The achievement of this capability can be measured using the following indicators:

- Knowledge of students, their peculiarities, possibilities, and assumptions.
- Didactic transformation of scientific facts from the objective logic of the relevant science into the subjective logic of their acquisition by the student.
- Earmarking of the basic and expanded curriculum.
- Setting specific goals of the teaching process.
- Designing curriculum subjects.
- Planning individual teaching units - written lesson plans.
- Selection of appropriate teaching aids and didactic techniques, including multimedia.

The ability to teach professional subjects (psycho-didactic competences). Teachers should master a whole range of teaching and learning strategies on theoretical and practical levels in conjunction with the knowledge of psychological, sociological and causal aspects. Teacher trainees should develop a basic methodical repertoire for teaching a given subject and be able to adapt it to the individual needs of students.

Teachers must possess sufficient knowledge and have the abilities to create educational programs and courses, and use them in the process of lesson planning. They should apply information and communication technologies to promote students' learning. In the process of evaluation and assessment, they must be aware of the psychological aspects of various theories and apply appropriate tools respecting the individual peculiarities of students, as well as the requirements of a particular school. The achievement of this ability can be measured by the following indicators:

- Motivating students to learn.
- Didactic transformation of the teaching objectives into the students' language.
- Creating a favourable classroom climate.
- Permanent implementation of feedback.
- Selecting the optimal structure for each teaching unit.
- Activating all students in the classroom, application of a differentiated and individual approach to students.
- Using optimal teaching methods and organizational forms depending on the educational content, students' goals, abilities, and their learning styles.
- Using appropriate teaching aids and didactic techniques.
- Using information and communication technologies to promote students' learning.
- Assigning differentiated and appropriate homework for students.
- Using lesson time effectively.
- Flexibility - adjustment of the planned teaching activities to the current situation.

- Operative and effective solution of unpredicted problems occurring during the teaching unit (e.g. behavioural problems).

The ability to objectively evaluate students' performance (diagnostic competences). Teachers should be able to use the available means of pedagogical diagnostics based on the knowledge of students' predispositions, to diagnose social relationships in the classroom and reflect on the educational needs and interests of students.

Teachers must identify both students with special educational needs and gifted students, and adapt the selection of teaching methods to their needs and abilities. Moreover, they are in charge of solving behavioural issues, demanding pedagogical situations and problems. The achievement of this ability can be measured by the following indicators:

- Creating a favourable climate for testing the students.
- Regular monitoring of the students' learning progress.
- Selecting the optimal methods of testing and assessing students with adequate validity and reliability.
- Activating and involving all students in the assessment and evaluation processes.
- Taking appropriate measures to improve any unsatisfactory performance of students.
- Determining the students' attitudes towards the methods used in their examination and evaluation.
- Utilizing the results of the examination and screening of students with the aim to improve their teaching practices.

The willingness to devote to their students also in non-teaching time (counselling and consultative competences). Teachers of vocational subjects should possess sufficient organizational skills to assist students in their extracurricular activities as well. The achievement of this ability can be measured by the following indicators:

- Tutoring poorly performing students.
- Addressing extremely gifted students.
- Discussing school problems with students.
- Active participation in extracurricular student activities.

The capability to communicate with students, their parents, colleagues, and school partners effectively (communication and social competences). Teachers are responsible for creating a favourable socio-emotional classroom climate and for the promotion of professional socialization of students. For them, orientation in demanding social situations and mediating their solutions is important. Good teachers apply suitable means of pedagogical communication and effective communication strategies with their students and the school's social partners.

Communication and social competences can be perceived on four levels (Slavík, 2012):

Grammar competences - the knowledge of the language in which the teacher teaches correct pronunciation, knowledge of grammar rules and structures, language functions, vocabulary and the choice of appropriate language elements and styles.

Discourse competences - teachers must possess sufficient skills to combine words and their grammatical forms, to create oral and written texts suitable for various purposes (teaching texts, professional and popular articles, scientific texts, etc.). Rhetorical abilities (knowledge of the strategy of writing, ability to apply rhetorical figures, etc.) and knowledge of communication styles (private, artistic, administrative, journalistic, scientific, etc.) are also included.

Sociolinguistic competences - this is the extent to which teachers can create texts and understand them in various sociolinguistic situations (differences in communication between students, teachers, and scientists). This includes the ability to communicate in a variety of settings and situations (in and outside the school environment), the ability to communicate in different relationships (communication with students, co-workers, the public, media) and the ability to respond adequately across communication skills (speaking, listening, writing, reading).

Strategic competences - the ability to apply various communication techniques and their combinations in order to achieve the set educational goals. The achievement of this ability can be measured by the following indicators:

- Effective communication and establishing positive relationships with students, colleagues, students' parents, and other school partners.
- Providing true and tactful information to parents about the welfare and behaviour of their children.
- Creating harmonious relationships among the school staff, solving the occurring interpersonal problems and conflicts at the workplace non-violently.
- Effective collaboration with colleagues.

The willingness to systematically reflect on their teaching work and participate in improving the quality of their school's work (self-reflective and assessment competences). Teachers should engage in self-reflection based on self-evaluation and evaluation by others. They should also be capable of self-reflection based on qualified objective evaluation. Self-reflection can be characterized as the awareness of own (i.e. teaching) knowledge, experience, pedagogical experiences, and activities, especially from solving specific pedagogical situations. Self-reflection is a fundamental part of teacher training; it is one of the ways of developing the didactic thinking of teachers, which significantly affects the quality of their teaching activities. Self-reflection includes description

and analysis of the results of evaluation, organization and generalization of teachers' pedagogical experiences and knowledge.

Self-reflection allows teachers to anticipate certain challenging educational and learning situations, to find out about the efficiency of the applied procedures, to correct some forms and methods of work and leads to higher job satisfaction. Teachers most often engage in self-reflection when facing problem situations, evaluating the results of their activities over some time, trying new teaching methods, comparing their work with the work of their colleagues, or when encountering new knowledge in the field of educational science.

Self-reflection requires some maturity on the side of teachers, a sincere effort to perform well. Carrying out self-reflection is very important for teachers' professional development; therefore, it is necessary to recall its basic methods and techniques. These include self-reflecting questions, self-monitoring, audio and video records, observations, teachers' mutual observations, interviews with students, questionnaires for teacher evaluation by students, pedagogical diary, students' learning outcomes, etc. (Švec, 2002; Turek, 2008). The achievement of this ability can be measured by the following indicators:

- Systematic evaluation of one's own teaching experience.
- Monitoring and responding to changes, new requirements, and adapting to them.
- Active involvement in in-service teacher training.
- Improving one's own philosophy of education.
- Developing and implementing a plan for professional development.
- Enriching own knowledge by observing colleagues, attending various educational events, gathering feedback on their work from students, self-study, etc.
- Obtaining information from school partners regarding the level of their satisfaction.
- Active involvement in and support of joint projects aimed at improving the quality of education.
- Permanent improvement of the quality of own teaching activities by applying modern and effective means of teaching and conducting action research.
- Performing self-assessment regularly and improving teaching experience.

The willingness to perceive and respond to the innovations in the field (subject-specific competences). Teachers of vocational subjects should possess systematic knowledge and skills related to their specialization in the field in the extent and depth corresponding to the needs of the study program. They should be able to apply practical experiences from their fields in the teaching process, to transform the knowledge from relevant disciplines into the educational content, to integrate interdisciplinary knowledge and research results into school subjects, and to create cross-curricular links. Teachers should be able to search and process information, have user skills in the field of information and communication

technologies and be able to transform the methodology of knowledge from the field to the students' way of thinking. The achievement of this ability can be measured using the following indicators:
- Thorough mastery of one's own field of interest to the extent and depth appropriate to the needs of the curriculum in vocational schools.
- Orientation in related areas.
- Monitoring of material, technological and economic innovations in the given field.
- Applying practical experiences from a particular field in the teaching process.
- Transforming knowledge from relevant fields into the educational content.
- Integrating interdisciplinary knowledge and research results in the teaching process and establishing cross-curricular relationships.
- Providing ICT user skills.
- Integration of scientific methods into students' ways of thinking.

Cultivated behaviour (competences cultivating teachers' personalities). Teachers should have a general outlook (philosophy, culture, politics, legislation, economy, etc.) as they have an impact on the formation of their students' attitudes and value orientation. Teachers should act as representatives of a profession to prepare students by adopting the principles of professional ethics and patterns of professional behaviour. They can advocate certain didactic procedures and should cooperate with their colleagues. Teachers should be morally irreproachable and physically fit. The achievement of this ability can be measured by the following indicators:
- A general outlook in the fields of philosophy, culture, politics, legislation, and economy.
- Forming students' attitudes and value orientation.
- Being a representative of the profession for which the teacher prepares students.
- Respect for the principles of professional ethics and patterns of professional behaviour.
- Advocating selected didactic teaching methods.
- Moral integrity, physical fitness, and endurance.

3   Reflection on the current trends in the field of didactics in the study plan of the doctoral study program in the conditions of DTI University in Dubnica nad Váhom

Study program Didactics of Technical Vocational Subjects in the field of study Field Didactics organically follows the master study program Teaching Technical Subjects. It contributes to the development of knowledge in field didactics and innovations in trade-technical specializations, as well as to improving the quality of the national school system and increasing its efficiency.

In this study program, an emphasis is placed on the acquisition of knowledge about the modern trends in field didactics and current trends in professional specialization, theory, and policy of vocational education, technology and humanization, educational psychology, and also the acquisition of knowledge and skills to implement valid and reliable pedagogical research. The qualitative requirements for successful completion of doctoral studies ensure that the students acquire knowledge about the latest trends of development in field didactics and also skills for a creative application of these trends both in the educational process and also in the field of scientific research.

After successful completion of the program, the graduates will be able to independently and competently teach technical vocational subjects and field didactics (i.e. to conduct an educational process through lectures, seminars, exercises, practices, pedagogical practice, and other educational activities). They will also become experts in field didactics, which can contribute to its development, and in scientific research in the field of teaching technical subjects for the second and third levels of higher education. Doctoral students learn about the standards, principles, and methods of scientific work in the field of pedagogical research and get an overview of the latest scientific knowledge in the above field of study in an international context. Graduates acquire skills in designing research projects and gain experiences in interdisciplinary cooperation on international level as well. Based on their research activities and findings, they will be able to design, verify and implement new educational procedures into teaching vocational subjects. The curriculum of Didactics of Technical Vocational Subjects, includes study courses, upon completion of which students in doctoral studies develop the teaching competences mentioned above - doctoral students develop their teaching competences in individual courses included in the study plan, but their improvement is not identical in each of the courses mentioned above and, therefore, we try to indicate the link between study courses and particular teaching competences in the text bellow:

- Planning, organizational and managerial competences are primarily covered by the study course "Current Issues of School Management". The main goal of the course is that after its successful completion, doctoral students can describe the essence and peculiarities of school management; characterize school management models; explain school management as a system; apply the legislative frameworks for school management; define levels of pedagogical management and the subjects of pedagogical management.
- Psycho-didactic competences are mainly developed in the course "Modern Trends in Didactics" and "Neurodidactic Aspects of Education". During these courses, students master new trends in general didactics; get to understand the current tendencies of education; become able to compare traditional and new ways of managing the teaching process; learn about the links between education and neuropedagogical and neuroblastic aspects of teaching; become familiar with the principles of the evaluation of education

and apply it in connection with self-reflection in the context of their own educational activities; master current teaching concepts and present their contribution to the efficiency of education; learn to manage the educational process following the principles of neuroscience, which accentuate a strong involvement of brain in the processes of learning and cognition.

- Diagnostic competences are developed mainly in the courses "Methodology of Educational Research" and "Research in Field Didactics". The objectives of these courses are to develop students' ability to describe and characterize basic research methods and techniques in the area of streamlining the teaching process. After successful completion, doctoral students should be capable of carrying out student diagnostics and assess their students' performance; they should be ready to apply research methods and techniques in solving specific educational problems; plan, organize and evaluate research in didactics of technical vocational subjects; propose methodology of their own research projects, create own research tools, carry out quantitative pedagogical research, analyse and interpret obtained research results and propose recommendations for theory and practice.

- Counselling and consultative competences are in the centre of attention of the study course "Theory and Policy of Vocational Education" and "Vocational Education and the Labour Market". The main objectives of these subjects are: to describe the nature of school policy concerning vocational training; characterize the tasks, objectives, and problems of current vocational training in Slovakia and the EU; define the role of the state and school curricula in vocational training; analyse the basics of employment policy; know the principles of partnership and cooperation between employers and vocational education; to explain the role and importance of the National Qualifications Framework and the importance of certification in vocational training.

- Communication and social competences, as well as self-reflective and evaluative competences, are mainly covered by the courses "University Didactics" and "Educational Psychology". The main objectives of these courses are to critically assess and apply innovations from higher education didactics to the educational practice; identify, analyse and solve challenging field didactic problems of both empirical and conceptual nature; improve (modify) educational approaches in terms of teaching vocational subjects; master the theoretical concepts of educational psychology; understand the processes of education in emotional, motivational, communication, socializing, value, self-regulatory and creative areas. In practice, teachers should be able to implement and evaluate educational programs, including preventive programs, based on the gained theoretical knowledge.

- Vocational subject competences are developed in the courses "Innovations in Technical Specializations" and "ICT in Vocational Education". By a successful completion of these courses, students gain an overview of innovations in the areas of component base, modern materials, equipment,

technologies and their use concerning a specific teaching subject; improve their existing knowledge and skills in the use of ICT in vocational training; broaden their knowledge and skills in the fields of network applications and database usage; master the basics of efficient communication in Internet applications and e-learning environments; and improve their work with selected graphic CAD software.

- Personality competences are included in the courses "Developing Critical and Creative Thinking" and "Technology and Humanization". Throughout these courses, doctoral students master the basics of critical and creative thinking; learn to analyse and subsequently identify identical and different factors of critical and creative thinking; to explain which strategies contribute to the development of critical and creative thinking in the conditions of the educational process; can apply creative and critical thinking development strategies in the teaching process; recognize the importance and the content of the most important human parameters for technical equipment as well as the aims and methods of their research and their usage in teaching technical subjects; they can theoretically and practically manage the ways of optimizing working systems - people versus technology.

The scientific part of the study program is based on the realization of pedagogical research on selected current scientific issues from the field of didactics. The obtained research results are presented at scientific conferences and are published in domestic and foreign scientific monographs, journals or books of conference proceedings. Doctoral students also actively participate in solving research projects as research team members. The requirement for fulfilling the study program in science can be divided into two parts: the scientific part of the study program (in the study course Dissertation Project) and creative activities in the field of science (in this case the system of allocation of credits for individual subjects of research work in the doctoral study is followed).

DTI University in Dubnica nad Váhom permanently supports and conducts research activities focusing on the current issues of international importance, participates in research projects and achieves high-quality results accepted in the professional community. DTI University has also been awarded grants for research and for presentation of the results of research activities. Based on the above, in the current academic year, DTI University has been granted the right to conduct habilitation and inauguration procedures in the field of study Didactics.

Conclusion

Recently, an increasing interest in studying field didactics can be observed. This is because it is closely linked to vocational training significantly supported by the state education policy, which is reflected in the strong emphasis placed on practical training activities in vocational education. Another important factor is

that currently, the role of lifelong learning in the context of vocational training is accentuated, which contributes to an increase in the graduates' adaptability to the requirements of the labour market. Knowledge of the above facts necessarily leads to the need for innovation of teacher training, which we are trying to satisfy by our educational and research activities at DTI University in Dubnica nad Váhom, Slovakia, especially by implementing the latest knowledge from field didactics in the creation of relevant new teacher training programs. Only high-quality teacher training, development of individual teaching competences, and their application in everyday educational practice can provide the basis for a change in the quality of teaching at our schools (Bajtoš & Orosová 2011; Petty, 2013).

In the pedagogical-didactic preparation of teachers of vocational subjects, it is necessary to use teaching approaches which can improve the acquired teaching competences of future teachers and to follow the current trends in field didactics. We believe that it is the highest time to focus our attention more vigorously on the development of the personality of vocational subject teachers based on the teacher education reform.

References

Bajtoš, J. (2007). *Kapitoly zo všeobecnej didaktiky.* Košice: Equilibria.

Bajtoš, J., & Orosová, R. (2011). *Mikrovyučovanie v pregraduálnej príprave učiteľov.* Košice: UPJŠ.

Bajtoš, J. (2013). *Didaktika vysokej školy.* Bratislava: Iura Edition.

Čáp, J., & Mareš, J. (2001). *Psychologie pro učitele.* Prague: Portál.

Čapek, R. (2015). *Moderní didaktika.* Prague: Grada Publishing, a.s.

Duffy, P., & Bruns, A. (2006). The use of blogs, wikis and RSS in education: A conversation of possibilities. *QUT ePrints.* Retrieved from http://eprints.qut.edu.au/archive/0005398/01&ú5398.pdf

Erikson, E. H. (1968). *Identity: Youth, and Crisis*. New York: Norton and Company.

Kropáč, J. (2002). Dovednost – základní pojem didaktiky technických předmětů. *E-Pedagogium, 2*(2), 13-18. Retrieved from http://epedagog.upol.cz/ eped2.2002/clanek02.htm

Kubányiová, M. (2005). Sústreďme reformu na učiteľa. *SME*, April 16,12.

Marks, I. (2014). Formative (classroom) assessment techniques. *Acta Technologica Dubnicae, 1*(4), 46-50. https://doi.org/10.1515/atd-2015-0012

Petty, G. (2013). *Moderní vyučování. Prague: Portál.*

Podlahová, L. et al. (2012). *Didaktika pro vysokoškolské učitele. Prague:* Grada Publishing, a.s.

Slavík, M. et al. (2012). *Vysokoškolská pedagogika. Prague*: Grada Publishing, a.s.

Švec, Š. (2002). *Základné pojmy v pedagogike a andragogike*. Bratislava: IRIS.

Turek, I. (2004). Kompetencie a štandardy učiteľského povolania v informačnej spoločnosti. *Acta humanica*, *1*, 9-26.

Turek, I. (2008). *Didaktika.* Bratislava: Iura Edition.

Zelina, M. (2006). *Kvalita školy a mikrovyučovacie analýzy.* Bratislava: Vydavateľstvo Poľana.

Homeschooling in Secler Region, Romania

*Kinga Magdolna Mandel**

Abstract:
Introduction: In the presented article, we are looking for the solutions and challenges of homeschooling in terms of further education and labour market inclusion.
Purpose: The purpose of the paper is to discuss the conceptual framework of a research-initiative on homeschooling. What are the consequences? Because of a lack of adequate state language usage, is there a forced migration in the pupils' career paths? To what extent are homeschoolers included into traditional compulsory education, lifelong learning, the labor market, and the society?
Methods: This is a paper with the conceptual framework of a research, where snowball sampling based qualitative interviews are planned.
Results: From the research to be conducted, the authors expect a reliable picture of the causes, challenges and consequences of homeschooling on lifelong learning, the labour market and social inclusion.
Discussion: It seems that homeschooling in the Seclerland is a de-schooling solution, because it is usually opted by parents dissatisfied with the quality of education. It helps them avoid Romanian language tests of skills and maturity examinations. We assume that those with outstanding competencies (e.g. in music or sports) or those with a certain handicap (e.g. health problems), as well as those temporarily living abroad are choosing it. It can be a sort of forced solution, a self-defense strategy that protects students from increasing school conflicts, and a reaction to the lack of satisfactory educational offers, commuting, or school segregation.
Limitations: Limitations of research are due to the snowball sample method and time/money limits.
Conclusions: We hope that, above all, the results will help parents to take a wise decision on whether to choose this option or not, but also schools and decision makers in education to assess their roles in the process and make changes if they want to and can do so.

Key words: homeschooling, inclusion, lifelong learning, higher education, labour market, Secler-region.

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1   Homeschooling

According to the definition, homeschooling is a parent-led home-based education, sometimes also called home-education (Ray, 2017). Domestic education, home based education and home education are synonyms used for homeschooling. The lay public sometimes confuses homeschooling with private education or extracurricular private classes. The difference is that in homeschooling, mainly the parents play the role of a teacher - whether with or without a pedagogical background, while in private education, professional teachers are involved. Similarly, in the case of private classes (tutoring), professional teachers are giving classes in addition to that offered by the schools. In the case of homeschooling, children do not attend schools on a daily basis, they only do so at the end of a semester or for end of year examinations. However, homeschooled students also often take private classes in music, sports or other sciences that their parents are not confident in, or they better ask for professional assistance. Homeschooling is sometimes confused with unschooling. The difference is in the approach towards learning. In homeschooling, parents act like teachers in the classroom. Unschooling in based on children's natural curiosity and follows their interests in their own way (Miller, 2014), sometimes using the natural intergenerational learning possibilities (Simándi, 2018). In this study, we focus on homeschooling.

2   Reasoning

Studying homeschooling is important because already the 2001 report issued by the OECD Secretariat on the future of education, in Scenario 5, portrayed the future school as a school without a school, replaced by student networks and profound dissatisfaction with institutionalized education. In the description of the scenario, special attention was paid to the undergoing expansion of home education (OECD, 2001, p. 93).

In 2016, there were over 2.3 million homeschooled students in the United States. One decade ago, it was perceived as an "alternative" but now, it is bordering on "mainstream" in the United States. Home-based education has also been growing around the world in many other countries (e.g., Australia, Canada, France, Hungary, Japan, Kenya, Russia, Mexico, South Korea, Thailand, and the United Kingdom) (Ray, 2015).

This phenomenon is spreading in Central and Eastern European (CEE) countries as well, with Romania being amongst them. Based on the 2015 data by the Romanian Association of Homeschoolers, 300 families were involved in homeschooling in Romania, amongst them 30 being Hungarian families.

During our previous studies on the Romanian minority education (Mandel 2007, Mandel 2016), we encountered this phenomenon to be spreading in the Secler region in Romania - among Hungarian families as well. This made us curious to detect the causes of homeschooling and possible consequences regarding higher

education or lifelong learning opportunities, the labour market and social inclusion.

Ray (2017), after analysing the American scientific literature on homeschooling, recommended to examine adults who were homeschooled in terms of their array of knowledge, attitudes and behaviours regarding lifelong learning, rates of public welfare dependency, and the degree of personal agency or self-efficacy. Similarly, in our research, alongside with the causes of homeschooling, we focus on its consequences on inclusion.

3   Research questions

What are the causes of homeschooling in Romania and in the Secler-region? How measurable is this phenomenon? Is it spreading over time? Who are choosing it? What are the costs of it? What are the consequences? What lifelong learning, labour market and life opportunities does homeschooling background provide? What are the perceptions of individuals that were homeschooled and their parents, grandparents regarding inclusion?

4   Hypotheses

We expect that the causes include dissatisfaction with the quality of education, lack of private and alternative education offers in the educational market, a systematic disadvantage of Hungarian students in state language exams, struggling and unhappy kids and families because of the school system, and the state of arts in compulsory education.

Probably, it is difficult to estimate and measure the total population involved. Based on the growing number of articles that we encounter on Internet related to the issue, we deem that the phenomenon is spreading.

Regarding the group of people involved, we suppose that there are two different groups of people involved. There are those that sociologically could be described as highly educated, wealthy families, with postmodern ethics (conservative - Christian, liberal), dissatisfied with the educational offers and quality, trying to offer their kids the best education possible, with gifted or talented kids (in sport, music or other fields), and trying to protect their kids from possible school conflicts, bullying.

The group at the other end of the spectrum is, that carry out homeschooling not because they want to, but because they have to, they have no other choice, they are pushed out from school because of their child's behaviour or educational issues, they do not have sufficient resources and live in poverty. We suppose that homeschooling is requires higher investments as the mainstream one, if the aim of the family is to provide their children with a higher education career. Otherwise, it is less costly and less efficient.

We presume that homeschooling offers two different learning and career paths. For those living in wealthy conditions, homeschooling leads to a higher

education institution usually in a foreign country, which is probably the same country or at least a same language speaking country, where the children were taking exams regularly to finish the compulsory schools. Furthermore, we suppose that because of the lack of Romanian language knowledge, they follow a career in the country - or a same language speaking country - where they finished their universities.

In the case of socially disadvantaged children, we presume that the homeschooling is not leading to any further lifelong learning. Those students remain disadvantaged in the labour market as well; they earn their living from casual work.

Regarding the perceptions, we expect that the children and parents who opted for homeschooling voluntarily, are satisfied with its results, whereas those who had no other choice, are not.

5 Research methods

In the planned research, individual and group interviews with homeschooling families, parents, grandparents, children, teachers and schoolmasters involved in the process will be carried out.

We will use the snowball method of sampling, starting from the Romanian Homeschooling Association and its members. We suppose that it would be difficult to study homeschoolers from poor families, therefore, we intend to reach them through schools and social institutions.

6 History of homeschooling from religious roots to postmodern lifestyle

The history of homeschooling goes back to the ancient times. However, in medieval ages, it was a privilege of the rich and of gifted (e.g. Edison), and it remained so for a long time. In the United States, it was common in the 1600s and 1700s. During the colonial period in the United States, the family - i.e. parents and siblings - was the normal, foundational, and predominant educational environment for most children (Gordon & Gordon, 1990).

7 Laws regarding homeschooling

There is no private student status in the Romanian educational system. Only children with disabilities have the right to study at home. However, a home-educated student could be registered at a foreign educational institution (usually in Hungary or the USA) and the diploma issued by those institutions can be accredited in Romania. The European Free Education Forum supports homeschooling (Romanian Homeschooling Association, 2019).

8   Target group: Who are opting for homeschooling?

A wide variety of people choose to homeschool their children. People with different beliefs (atheists, Christians, and Mormons), with a range of political orientations (conservatives, libertarians, and liberals), with different income (low-, middle-, and high-income families), of different origins (Black Hispanic, and White), with different educational backgrounds (parents with Ph.D., GEDs, and no high-school diplomas). One study shows that in the USA, 32% of homeschooled students are Black, Asian, Hispanic, etc. (i.e., not White/non-Hispanic) (Noel, Stark, & Redford, 2013; as cited in Ray, 2019).

In the USA the majority (62%) of students live in cities and suburban areas, 20% of students were categorized as "poor" and the other 80% were classified as "non-poor." Regarding their parents' highest education level, 32% had a high school diploma or lower, while 14% had attended graduate or professional schools. According to a national survey, the majority of homeschooling families are very close to median income (Ray, 2017).

9   Causes of homeschooling - push and pull factors

In the USA, most parents mentioned among the causes of homeschooling "safety", "drugs", or "negative peer pressure" in schools (91%). Others indicated "a desire to provide moral instruction" (77%), "a dissatisfaction with academic instruction at other schools" (74%) and "a desire to provide religious instruction" (64%) (Redford et al., 2017).

In other research, Montes (2006) found out that parents believe they can provide their children with a better education (47%) and others opted for homeschooling for religious reasons (41%).

As much as 40% of African-American parents choose homeschooling in order to "give the child more instruction on African-American/black culture and history" and 20% indicated the "desire to avoid racism in public schools." (Ray, 2015).

Fields-Smith and Kisura (2013) reported that parents opted for it because "homeschooling also allowed them to 'slow down' their children's exposure to what could be deemed as unsavoury elements of school socialization (e.g. racism, violence, drugs, etc.)".

There are several benefits that homeschooling brings - e.g. parental responsibility, control in character-formation of children, direct value transfer, protection of children from the effects that they are not prepared for, etc. Among other advantages, overpassing the generational gap, possibility to give personalized, differentiated education, and more emphasis placed on the interest of children can be mentioned. Furthermore, effective and real evaluation of performance, competence based education, real world settings, more results in shorter time devoted to learning, flexibility - i.e. educational freedom - can be observed (Szász, 2015). Studies also accentuate that homeschooling leads to a

lifestyle change, causing less time devoted to learning (where learning is not only happening at home, but in the shop, museum, cultural and other events) and more to playing, better results are achieved, children experience a better, happier childhood with reduced stress, more creativity, more personal fulfilment, and a new postmodern life-style (https://www.calverteducation.com/ should-i-homeschool/homeschooling-pros-and-cons).

Parents opt for homeschooling to customize or individualize the curriculum and learning environment for each child, to accomplish more academically than in schools, to use pedagogical approaches other than those typical in institutional schools, to enhance family relationships between children and parents and among siblings. Furthermore, to provide guided and reasoned social interactions with youthful peers and adults, to provide a safer environment for children and youth, because of physical violence, drugs and alcohol, psychological abuse, racism, and improper and unhealthy sexuality associated with institutional schools, and teach and impart a particular set of values, beliefs, and worldview to children and youth (Ray, 2019).

Ray (2017) stated that the majority of peer-reviewed studies on academic achievement reveal a positive effect for the homeschooled students compared to institutionally-schooled students, while a few studies show mixed or negative results. Regarding social and emotional development, a majority of studies show clearly positive outcomes for the homeschooled compared to those in conventional schools. A majority of the studies on the relative success of the home educated in their adulthood show positive outcomes for the homeschooled compared to those who had been in conventional schools.

Numerous studies today proved, especially in the American context, that homeschooled students are not behind their peers in terms of learning or social skills, and in many cases are ahead of them (Nelsen, 1998; Ray, 1997; Romanowsky, 2006; Rudner, 1998).

The cons of homeschooling mentioned in several studies and among the lay public are that it requires more time and money investment from the parents that could have less time for work and themselves. In the USA, homeschooling families spend an average of $600 per student annually on their education (Ray, 2019). Others include difficulties in social interactions, or the challenge to connect or relate with others, the problems arising from the mixture of parent-teacher roles, the ban on join the school sport teams. However, some studies get contrary results regarding some of those elements as well.

"The home-educated are doing well, typically above average, on measures of social, emotional, and psychological development: peer interaction, self-concept, leadership skills, family cohesion, participation in community service, and self-esteem. Homeschool students are regularly engaged in social and educational activities outside their homes and with people other than their nuclear family members. They are commonly involved in activities such as field trips, scouting, political drives, church ministry, sports teams, and community

volunteer work." (Ray, 2019) "Homeschooled adolescents are less likely to drink alcohol and, if they do, less likely to get drunk than their public and private high school counterparts." (Thomson & Jang, 2016).

10 Consequences of homeschooling

According to available studies, home-educated students score 15 to 30 percentile points above public-school students on standardized academic achievement tests. Furthermore, a 2015 study found Black homeschool students to be scoring 23 to 42 percentile points above Black public school students (Ray, 2015).

Other researchers found out that children from structured homeschool settings outperformed their conventional school peers, while children from unstructured homeschooling underperformed the institutional school students (Martin-Chang, Gould, & Meuse, 2011).

Curcubet (2015) claims that homeschooled children have the same opportunities to follow studies in higher education than their peers. They also perform well in their higher education studies, according to Cogan (2010). College students who were homeschooled earned higher first-year and fourth-year results. Further, there were no differences between homeschooled students' fall-to-fall retention and four-year graduation rates when compared with conventionally educated students.

What is interesting, Cheng (2014) also found that "those with more exposure to homeschooling relative to public schooling tend to be more politically tolerant."

11 Expected results of the research

Through the research results, we expect to get a more scientifically sustained and reliable picture of the causes, challenges and consequences of homeschooling. We hope that that the findings will above all help parents to take a wise decision on whether to choose this option or not, then schools and decision makers in education to assess their roles in the process and make changes if they want to and can do so.

References

Ray, B. D. (2017). A systematic review of the empirical research on selected aspects of homeschooling as a school choice. *Journal of School Choice. International Research and Reform, 11*(4): School Choice: Separating Fact from Fiction, 604-621. Retrieved from https://www.tandfonline.com/doi/full/10.1080/15582159.2017.1395638?src=recsys

Ray, B. D. (2019). *Facts on homeschooling.* Retrieved from http://www.nheri.org/research/research-facts-on-homeschooling.html

Cheng, A. (2014). Does homeschooling or private schooling promote political intolerance? Evidence from a Christian university. *Journal of School Choice: International Research and Reform, 8*(1), 49-68.

Cogan, M. F. (2010). Exploring academic outcomes of homeschooled students. *Journal of College Admission, 208*, 18-25.

Curcubet, D. (2015). *Egyetemre? Hogyan?* Retrieved from https://www.youtube.com/watch?v=WW5-VcnAV3c

Curcubet, G. (2015). *Akadályok és nehézségek az otthonoktatásban.* Retrieved from https://www.youtube.com/watch?v=vlZE4aDHUkw

Gordon, E. E., & Gordon E. H. (1990). *Centuries of tutoring: A history of alternative education in America and Western Europe.* Lanham, MD: University Press of America.

Fields-Smith, C., & Kisura, M. W. (2013). Resisting the status quo: The narratives of black homeschoolers in Metro-Atlanta and Metro-DC. *Peabody Journal of Education, 88*(3), 265-283.

Mandel, K. M. (2007). *A román felsőoktatás-politika 1990-2003 között.* Cluj: Presa Universitară Clujeana.

Mandel, K. M. (2015). Előny a hátrány? Székelyföldi képességvizsga és érettségi eredmények az elmúlt években. *Pedacta, 5*(2). 23-34. Retrieved from http://padi.psiedu.ubbcluj.ro/pedacta/article_5_2_3.pdf

Mandel, K. M. (2016). *Kihívások. Középpontban a székelyföldi oktatás kérdései.* Budapest: Gondolat kiadó.

Martin-Chang, S., Gould, O. N., & Meuse, R. E. (2011). The impact of schooling on academic achievement: Evidence from homeschooled and traditionally schooled students. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences Du Comportement, 43*(3), 195-202.

Montes, G. (2006). Do parental reasons to homeschool vary by grade? Evidence from the national household education survey, 2001. *Home School Researcher, 16*(4), 11-17.

Miller, T. (2014). *How Is Unschooling Different from Homeschooling?* Retrieved from https://www.noodle.com/articles/how-is-unschooling-different-from-homeschooling

Ray, B. D. (2015). African American homeschool parents' motivations for homeschooling and their Black children's academic achievement. *Journal of School Choice, 9*, 71-96.

Redford, J., Battle, D., & Bielick, S. (2017). *Homeschooling in the United States: 2012.* Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Retrieved from https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2016096rev

Romanian Homeschooling Association (2019). *Otthonoktatás.* Retrieved from https://homeschooling.ro/otthonoktatas/

Simándi, Sz. (2018). Intergenerational Learning – Lifelong Learning. *Acta Educationis Generalis, 8*(2), 63-71. https://doi.org/10.2478/atd-2018-0012

Szász, A. (2015). Bevezetés az otthonoktatásba. Retrieved from https://www.youtube.com/watch?v=4auTBUsLgBY

Thomson, R. A., Jr., & Jang, S. J. (2016). Homeschool and underage drinking: Is it more protective than public and private schools? *Deviant Behavior, 37*(3), 281-301.