

Adaptation of the Classroom Cultural Diversity Climate Scale for Russia

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Abstract: School climate is an underestimated factor for sustainable development and resilience in the educational context. There is a need to develop and implement specific prevention and intervention programs that help maintain a positive school climate in cultural diversity to ensure psychological well-being, successful adjustment, academic achievement, integration of students from diverse cultural backgrounds, and prevention of extremism among youth. The current study tested the Classroom Cultural Diversity Climate Scale (CCDCS) in the context of cultural diversity in Russian schools. Participants included students with and without an immigrant background. Russian students had difficulty answering questions about racism and discrimination because these topics are not covered in the secondary school curriculum. The research results showed that the questionnaire questions effectively provided an impetus to test further the validity and reliability of the CCDCS for Russian participants. The adapted questionnaire will make it possible to examine the descriptive norms of school policies related to diversity. In addition, the questionnaire can be used to identify factors that influence the learning efficiency and adjustment of students from diverse cultural backgrounds, including immigrant students.

Keywords: School climate, cultural diversity, adolescence, immigrant students, equity, cultural pluralism, cross-cultural adjustment.

Globalization processes have led to mass migration to European countries, resulting in greater diversification of European societies. This situation requires immigrants and nonimmigrants of the host society to undergo acculturation to establish positive interethnic relations and long-term adaptation between culturally diverse groups of people (Nguyen et al.,

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2021; Rassolov et al., 2020; Razumovskaya et al., 2019; Tugun et al., 2020). Cultural diversity is also attributed to school climate. School climate significantly impacts personality development, ethnic identity development, and intergroup relationship building, particularly during adolescence. However, schools are often ill-prepared for cultural diversity in classrooms. Schools focus primarily on the academic performance of immigrant students and pay little attention to their intercultural adjustment (Chistyakov et al., 2021; Tikhonov et al., 2021). This situation seems to be particularly dramatic as immigrant students in most countries, including Russia, lag behind their nonimmigrant peers in terms of academic achievement and face psychological barriers in their interactions with classmates and teachers that affect their school life. Against this backdrop, studying a culturally diverse school climate becomes particularly important. It is also important to examine the effects of a culturally diverse school climate on the psychological adjustment of immigrant adolescent students and the building of intercultural relationships in the school environment.

School climate is defined as the combination of norms, goals, values, interpersonal relationships, teaching and learning practices, and the organizational structure of the school day (Eccles & Roeser, 2011). School climate is related to school adjustment policies and practices (Molina & Wittig, 2006; Rubio et al., 2020; Thapa et al., 2013). Overall, a positive school climate contributes to personal safety, the development of positive relationships between students and teachers, students' psychological well-being, and the management of psychological and behavioral problems. Especially for adolescent immigrant students, a positive school climate is critical (Hoti et al., 2017; Thapa et al., 2013). This result is because the development of ethnic identity usually occurs during adolescence (Phinney, 1992). Immigrant students must overcome cultural, socioeconomic, and linguistic barriers and adapt to a new culture (Caliskan et al., 2019). In addition to cultural difficulties, such as language barriers, students may also face discrimination at school. Thus, it becomes difficult to join new groups of peers and establish good working relationships with teachers (Özdemir & Stattin, 2014). Immigrant parents often cannot help their children build solid relationships with school (Turney & Kao, 2009). A positive school climate can mitigate the negative effects of perceived discrimination (Özdemir & Stattin, 2014).

At the same time, the existing research literature seems to lack systematic studies on specific aspects of school climate related to the cultural diversity approach (Horenczyk & Tatar, 2012). Based on existing research in social and cross-cultural psychology (Berry, 1997), two main approaches to diversity can be identified (Ely & Thomas, 2001). These approaches are also normative in organizations. The first approach aims to reduce harmful effects by preventing discrimination and promoting equality and inclusion. The second approach advocates pluralism and diversity of opinion and views diversity as a resource. The manifestation of these norms can be observed in schools (Hachfeld et al., 2015).

An analysis of Russian scientific literature shows that the socio-psychological climate in teams and collectives has been studied (Kasatkina & Aksenova, 2013). Russian research considers the socio-psychological climate of a team as a stable system of internal connections manifested in the team's emotional climate, public opinions, and produced output (Kasatkina & Aksenova, 2013; Zaitseva et al., 2021). Chirkina and Khavenson (2018) emphasized that school climate is one of the most important factors contributing to students' academic achievement. Unfortunately, school climate has rarely been studied in Russia, and appropriate measurement tools are lacking.

This study aims to fill this gap in Russian research and determine the relationship between school climate in the context of cultural diversity and the psychological adjustment of immigrant children. The study's first phase will pilot the questionnaire developed by German researchers Civitillo et al. (2017). The researchers address several facets of school climate related to cultural diversity. They argue that the management of cultural diversity is reflected

in school climate and can be described as promoting equality and cultural pluralism. The norms that promote equality and inclusion aim to encourage contact, cooperation, and sharing of common goals among members of diverse groups and equal treatment of all groups. In schools, equality and inclusion can be observed among students of different ethnic groups by teaching them together, helping each other, and not discriminating against each other. Teachers who support equality and inclusion treat all students equally and promote collaboration (Pettigrew & Tropp, 2006).

Pluralism goes beyond preventing the negative effects of cultural diversity. It takes a more proactive stance and can mean exploring issues related to cultural diversity and creating a welcoming climate that values cultural diversity. Pluralistic views are reflected in the historical research and current realities of various minority groups. They are also manifested in the culture and traditions of immigrant students' home countries and intercultural relations (Banks, 2015). Previous research confirms that cultural pluralism is associated with less individually perceived discrimination, better psychosocial adjustment, and higher motivation among adolescent immigrant students (Hoti et al., 2017; Vedder & van Geel, 2012).

Civitillo et al. (2017) conceptualized the outlined approaches and used them to develop the Classroom Cultural Diversity Climate Scale (CCDCS) questionnaire to examine students from early adolescence to young adulthood. The researchers found that the above school climate norms positively impact adolescents' interethnic relationships. They demonstrated the association of school climate to cultural diversity with high adjustment scores and uncovered how pluralism and equality are reflected in school artifacts and practices.

Literature Review

Researchers distinguish between the "psychological climate in school" and the "school climate." The former refers mainly to relationships within the school community, while school climate is a broader concept and encompasses various aspects of school life. Although a few studies on school climate in Russia, researchers have recently begun to explore this topic (Alexandrov et al., 2018; Chirkina & Khavenson, 2018; Novikova & Rean, 2019). Chirkina and Khavenson (2018) state that school climate is one of the most important factors affecting students' educational outcomes. However, research in this area is hampered by Russia's lack of measurement tools.

Long-term research shows that school climate is complex, and researchers have developed measurement tools to explore school climate. School climate is composed of a comprehensive set of elements, and there is no universally accepted list of key parameters that constitute school climate. In the 2000s, hundreds of different measurement instruments were presented in international research studies. Cohen et al. (2009) conducted a meta-analysis. They identified the four most common aspects of school climate: 1) safety, 2) teaching and learning, 3) relationships and 4) environment and structure (cleanliness; appropriate space and materials; inviting esthetic quality and size of the school; curricular and extracurricular offerings).

Previously, researchers considered school climate primarily in terms of factors affecting student academic achievement. In this context, it was reported that students' academic achievement increases when they feel safe and supported (Brookover et al., 1977). In the early and mid-1990s, research focused on individual classes and teachers (Griffith, 2000). Griffith (2000) argued that educational attainment depends on a student's self-identity. Thus, if a student has classes in different classrooms with different teachers, the school becomes the unit of measurement for the climate. If students spend most of the day with one teacher (e.g., in elementary school) and in one classroom, that classroom serves as the unit of measurement.

In recent decades, a growing body of research has shown that a positive school climate is critical for effective risk prevention, health promotion, and teaching and learning (Juvonen

et al., 2004). School climate also influences students' motivation to learn (Townsend et al., 2017). Researchers have demonstrated the relationship between school climate and student aggression. School and school-student relationships influence adolescent academic achievement and well-being (Shochet et al., 2006) and predict violence, risky sexual behavior, violence, and substance abuse (Catalano et al., 2004). A positive school climate is characterized by a close-knit community and promotes cooperative learning, group cohesion, respect, and mutual trust (Ghaith, 2003). Creating an educational environment that is a safe space is integral to a school's mission. Researchers consider school climate to predict the prevalence of bullying and a starting point to prevent disruptive behavior (Aldridge et al., 2018). Researchers also emphasize that school climate affects teacher satisfaction and quality of work and should become an essential component of modern teacher education (Cohen et al., 2009).

Despite the thorough exploration of the problem of school climate in the foreign literature, further research and consensus are needed in many areas. Although much has already been learned about aspects of school life such as learning, safety, relationships, and instruction that shape learning, school norms, relationship patterns, teaching, and values, many other issues are just beginning to be addressed. Among the many questions are school climate and student retention and graduation rates, changes in achievement gaps due to school climate, and cultural differences related to school climate (Cohen et al., 2009).

In the era of globalization and strong migration, the problem of intercultural relations has gained importance in society. It is a serious challenge for school education in various countries worldwide. In Russia, too, research into the problems of multicultural education is of fundamental importance and necessity. The world research on school climate in cultural diversity does not have systematic studies on specific aspects of school climate. At the same time, foreign scholars argue that "although previous studies have shown the influence of school climate on student achievement, there are differences in perceptions of school climate among students from different cultural backgrounds" (Kuperminc et al., 1997). Such differences have been found among demographically, ethnically, religiously, and racially diverse groups of students. Research shows that students from ethnic, racial, low SES and religious groups do not feel safe and have low academic achievement and psychological discomfort in school (Bradshaw et al., 2010). Therefore, researchers point out the importance of a detailed examination of school climate characteristics such as cultural diversity.

Method

The study builds on multicultural education approaches (Grant & Sleeter, 2006) and intergroup contact theory (Allport, 1954), which states two types of school policy norms: Equality and Cultural Pluralism. The study draws on multicultural education approaches (Grant & Sleeter, 2006) and intergroup contact theory (Allport, 1954). According to this theory, two types of school policy norms can be distinguished: Equality and Cultural Pluralism. This pilot study tested the Classroom Cultural Diversity Climate Scale (CCDCS), which German researchers developed to measure a culturally diverse school climate in Russian schools (Gromova, & Khairutdinova, 2019; Khairutdinova et al., 2019).

Instrument

The Climate of Cultural Diversity in the Classroom Scale consists of five sections with statements about equality, cultural pluralism, polyculturalism, colorblindness, and critical awareness. Responses to the items are on an x-point Likert scale, with responses ranging from 1 = Strongly Disagree to 5 = Strongly Agree.

Equality. The equity measures were adapted for the scale from Green et al.'s (1988) *Interracial School Climate Scale*. The equity and inclusion perspective aims to overcome differences and prevent stereotyping, prejudice, and discrimination (Beelmann et al., 2009). This perspective can be understood in the school context through a climate that promotes intergroup contact and collaboration among culturally diverse students (e.g., through various workgroups, mixed seating arrangements, and cooperative learning, but also through a willingness to engage in interethnic contact and interethnic friendships among students), as well as a climate of equal treatment for all students. The scale included two subscales that reflected teachers' perceptions: *Equal Treatment* (six items) and *Support for Contact and Collaboration* (eight items).

Cultural Pluralism. This scale was developed to measure students' perceptions of descriptive norms about cultural pluralism in school (Civittillo et al., 2017). Cultural pluralism draws on concepts of culturally sensitive teaching and multicultural education (Banks, 2015). A pluralistic perspective aims to address differences by learning about different cultures and communities and addressing (in)justice issues in culturally diverse societies.

While this perspective was originally informed by a concern for the needs of ethnic minority students, multicultural education is increasingly recognized as a valuable learning experience for cultural majority students as well (Verkuyten & Thijs, 2013). A fundamental tenet of culturally aware teaching is setting high expectations for all students and actively drawing on the diverse body of knowledge they bring to the classroom. This tenet has been linked to academic success and resilience among at-risk children (Bondy et al., 2007). The student scale included three subscales: *Teacher Interest in Students' Cultural Backgrounds* (six items), *Teaching and Learning about Intercultural Relationships* (three items), and *Teaching and Learning about Multicultural Issues* (five items).

Polyculturalism. The concept of polyculturalism was first proposed by historians and later taken up by psychologists (Morris et al., 2015), inspiring empirical research on polyculture approaches' perceptions and psychological effects. Polycultural approaches were endorsed by members of ethnic majorities and minorities alike, suggesting that a polycultural focus on connectedness is more accessible to members of the cultural majority. In addition, endorsement of polyculturality was related to more positive attitudes toward other groups (Rosenthal et al., 2015) and interethnic communication (Gasanov, 2009; Markova, 2009; Yalalov, 2004), as well as an increase in intergroup friendships among college students (Rosenthal et al., 2015). Some researchers have outlined how polyculturality can theoretically be implemented in schools by teaching the interactions between different ethnic groups throughout history (Rosenthal et al., 2015). The polyculturality subscale included six items.

Colorblindness. Colorblindness and power avoidance may be reflected in teacher beliefs, school policies, and instructional practices (Hachfeld et al., 2015). Research on approaches that neglect cultural group categories and thus adopt a color-blind strategy suggests that they have positive and negative effects. While they predict positive intergroup attitudes and behaviors in the short term, such as helping, they can also interfere with people's need for distinctiveness, meaning that suppressed negative thoughts and behaviors are resurrected in the long term (Sasaki & Vorauer, 2013), and existing discrimination is not recognized (Apfelbaum et al., 2010). In addition, color-discriminatory approaches have been negatively related to ethnic minority students' sense of belonging and school-related outcomes (Byrd, 2017). The current study focused on a form of colorblindness that captures how cultural differences are downplayed and common humanity is emphasized in the classroom. The colorblindness subscale included five items.

Critical Consciousness. The essential concept of consciousness was first formulated by Freire (1974). Freire (1974) advocates for active engagement in the classroom and encourages educators to help students question the world around them and acquire critical thinking skills

to recognize and address oppression. In recent decades, Freire's (1974) essential theory of consciousness has found its way into educational and psychological research, focusing on teacher education (Cross et al., 2018). Teachers who engage critically with the world are often considered part of a culturally relevant pedagogy and are thought to be more likely to foster critical consciousness in their students. Culturally diverse youth in the United States who perceived higher levels of crucial consciousness socialization also reported higher interest levels, importance, a sense of belonging to a school, and better grades (Byrd, 2017). The critical consciousness subscale included five items.

Translation of the Instrument into Russian

The authors provided the Classroom Cultural Diversity Climate Scale 2018 to make it accessible in Russia. A professional translated the scale into Russian, and two professional psychologists who spoke English and Russian evaluated the translation. The translated text needed to be stylistically refined and certain phrases simplified. A philologist and schoolteachers were also involved in preparing the Russian-language text, and they suggested several changes. For example, the term "in the age of globalization" was replaced with "in the age of the erasure of borders" because the teachers felt that the children were unfamiliar with globalization.

Did you also do a pilot test with some students? Or did the teachers say so? We also determined which questions the participants did not understand and which questions could not be answered clearly. For example, some students did not understand words and phrases such as "erasing the borders," "immigrants," or "migration." Many students asked several times, "Do you mean our school or schools in Russia?" Therefore, we decided to always specify "in our school" in future questionnaires.

Participants

The Republic of Tatarstan is one of the largest multicultural regions in Russia. More than 190 ethnic nationalities live in Tatarstan. The republic ranks 6th in the number of migrants, mainly from post-Soviet countries: Uzbekistan, Kyrgyzstan, Tajikistan, Azerbaijan, Armenia, and Georgia. High schools in the Tatarstan region were selected as the participants. Schools from different cultural backgrounds were chosen by the method of purposive sampling. Before applying the scale, the approval of the school administration was obtained. The scale was conducted under the supervision of teachers during classes. High schools in the Tatarstan region were selected as the participants. Schools with different cultures were determined using the purposive sampling method. Before applying the scale, the approval of the school administration was obtained. The scale was conducted under the supervision of teachers during class time. Three hundred seventeen students completed the survey. After subtracting outliers, 308 participants remained in the sample. Among the participants, 203 are female, and 105 are male students. The age of the students ranges from 13 to 16 years, with a mean of 14.6+0.67. There are 98 Tatars, 133 Russians, 25 Azerbaijanis, 14 Tajiks, 12 Uzbeks, 6 Armenians, 5 Georgians, 4 Mari, and 11 students of undetermined ethnicity.

Ethical Considerations

The survey was anonymous, participants took part voluntarily, and school administrators and parents signed written consent forms.

Data Analysis

Before exploratory analyzes, we reviewed and adjusted for outliers. We checked whether the measured values had a normal distribution. According to Kim (2013), for large participants ($n > 300$), skewness should be less than two and kurtosis less than 7. Bartlett's Test of Sphericity and KMO values were calculated for factor analytic fit of the data. Bartlett's test of sphericity p should be < 0.05 , and the KMO value should be above 0.5 (Williams et al., 2010). The 'maximum likelihood algorithm was used to determine the factor structure. Varimax was used for the rotation. In determining the number of factors, those with an eigenvalue greater than one were calculated (Deng et al., 2017; Hayton et al., 2004). Then, confirmatory factor analyzes were performed. CFI and TLI should be above 0.9, and SRMR and RMSEA should be less than 0.8 (Yu, 2002). Cronbach's alpha coefficient and composite reliability are calculated in the final stage. Both should be greater than 0.6 (Fraenkel et al., 2012; Kline, 2005; Taber, 2018).

Results

Factor Analysis

Cross-cultural Learning

Bartlett's test of sphericity ($\chi^2=470$, $df=21$, and $p < 0.001$) and KMO= 0.706, making the participants sufficient for factor analysis. The factor loadings for the Intercultural Learning scale are shown in Table 1.

Table 1

Factor Loading for Intercultural Learning

Items	Factor 1	Uniqueness
1IL	0.544	0.704
2IL	0.328	0.892
3IL	0.343	0.882
4IL	0.708	0.499
5IL	0.309	0.904
6IL	0.567	0.678
7IL	0.834	0.305

The loading factors of all items are above 0.3, and all items are in factor 1, so the intercultural learning scale has a one-dimensional structure.

Color Deviation

Bartlett's sphericity test ($\chi^2=465$, $df=10$, and $p < 0.001$) and KMO= 0.728, so the participants are sufficient for factor analysis. The factor loadings for the color avoidance scale are shown in Table 2.

The loading factors of all items are above 0.3, and all items are in factor 1, so the color avoidance scale has a one-dimensional structure.

Table 2*Factor Loading for Color Evasion Scale*

Items	Factor 1	Uniqueness
1C	0.588	0.655
2C	0.682	0.535
3C	0.570	0.675
4C	0.646	0.583
5C	0.804	0.353

Polyculturism

Bartlett's sphericity test ($\chi^2=570$, $df=15$ and $p < 0.001$) and KMO= 0.694, so the participants are sufficient for factor analysis. The factor loadings for the polyculturality scale are shown in Table 3.

Table 3*Factor Loading for Plyculturism Scale*

Items	Factor 1	Uniqueness
2P	0.591	0.651
3P	0.411	0.831
4P	0.603	0.636
5P	0.804	0.353
6P	0.772	0.403
1P		0.942

Except for the first item, the loading factors of all items are above 0.3, and all items are in factor 1, so the Polyculturality scale has a one-dimensional structure. In this dimension, item 1P is removed from the scale.

Support for Contact by Students

Bartlett's sphericity test ($\chi^2=297$, $df=3$ and $p < 0.001$) and KMO= 0.577, so the participants are sufficient for factor analysis. The factor loadings for the student support for the contact scale are shown in Table 4.

Table 4*Factor Loading for Support for Contact by Students*

Items	Factor 1	Uniqueness
1SGC	0.697	0.51423
2SGC	0.516	0.73421
3SGC	0.997	0.00500

The loading factors of all items are above 0.3, and all items are in factor 1, so the scale for student support of contacts has a one-dimensional structure.

Equal Treatment

Bartlett's sphericity test ($\chi^2=350$, $df=10$, and $p < 0.001$) and KMO= 0.573, so the participants are sufficient for factor analysis. The factor loadings for the equal treatment scale can be found in Table 5.

Table 5
Factor Loading for Equal treatment

Items	Factor 1	Factor 2	Uniqueness
1ET	0.996		0.00500
3ET		0.626	0.60635
4ET	0.680		0.50782
5ET		0.631	0.59757
2ET		0.655	0.53883

The loading factors of all items are above 0.3 and two items in factor 1, and three items in factor 2, so the Equal Treatment scale has a two-dimensional structure.

Critical Consciousness

Bartlett's sphericity test ($\chi^2=350$, $df=10$, and $p < 0.001$) and KMO= 0.745, so the participants are sufficient for factor analysis. The factor loadings for the Critical Awareness scale can be found in Table 6.

Table 6
Factor Loading for Critical Consciousness

Items	Factor 1	Uniqueness
1CC	0.698	0.512
2CC		0.936
3CC	0.505	0.745
4CC	0.800	0.360
5CC	0.686	0.530

Except for the second item, the loading factors of all items are above 0.3, and all items are in factor 1, so the critical consciousness scale has a one-dimensional structure. In this dimension, item 2CC is removed from the scale.

Confirmatory Factor Analysis

A separate model was created for each dimension (Table 7). First, the values of the fit indices for the created models were checked. If the values of the fit indices in the original models are not acceptable, the covariance compounds proposed by the software are added to the models. The connections created for each model are shown in the path diagrams in Figure 1. Subsequently, the index values for the final models were checked. It was found that the indices obtained in the new models are higher than the expected value.

We then examine the factor loading and the relationship of each item to the relevant dimensions. The p-values for all items are at the level of $p < 0.001$. According to the confirmatory factor analysis result, no item should be removed from the scale (Table 8 & 9).

Table 7
Fit Indices for Each Dimensions' Model

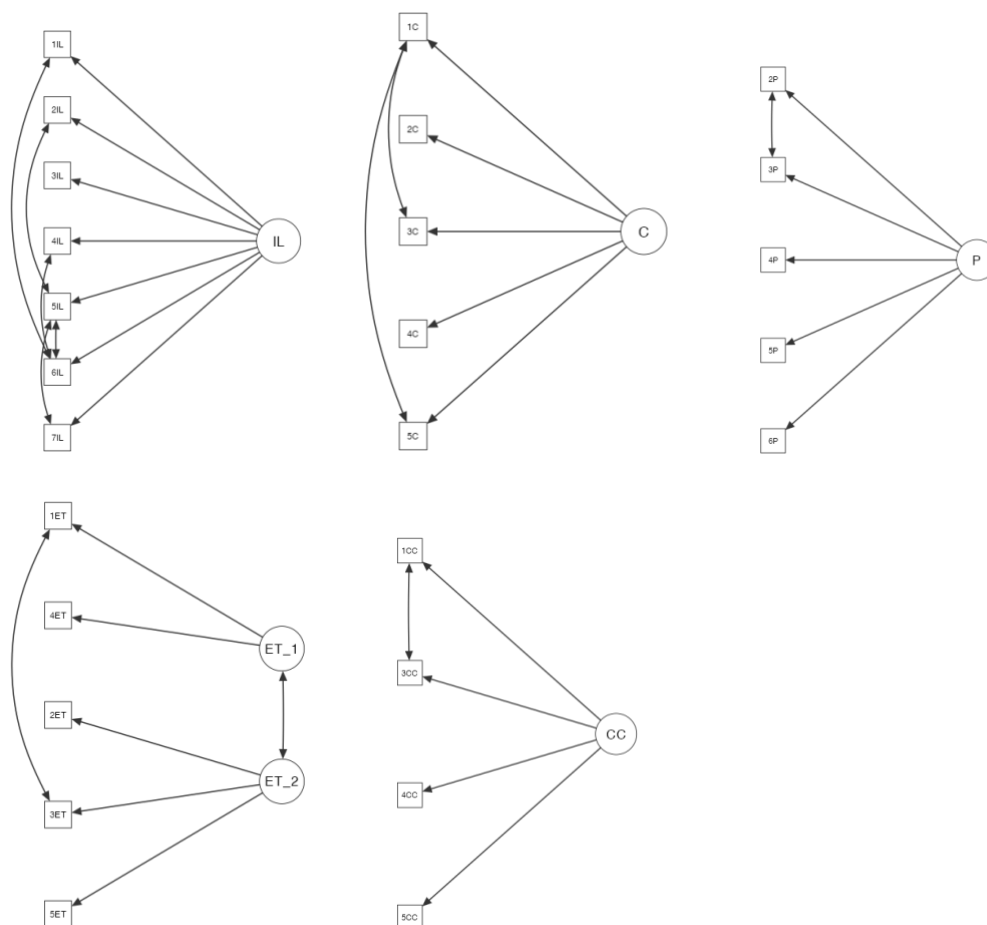
Fit indices		χ^2/df	CFI	TLI	SRMR	RMSEA	RMSEA 90% CI	
Cut-off criteria		≤ 3 : good	>0.90	>0.90	<0.08	<0.08	Lower	Upper
Intercultural learning	Initial	101/14=7.2	0.812	0.719	0.0687	0.142	0.116	0.168
	Final	15.2/9=1.69	0.986	0.968	0.0293	0.0474	0.00	0.0873
Color evasion	Initial	60.4/5=12.8	0.880	0.759	0.0556	0.190	0.149	0.234
	Final	3.14/3=1.05	1.00	0.999	0.0134	0.0123	0.0	0.0977
Polyculturism	Initial	40.1/5=8.02	0.918	0.836	0.0550	0.151	0.110	0.196
	Final	10.0/4=2.5	0.986	0.965	0.0223	0.0700	0.0139	0.126
support for contact by students	Initial	-	1.00	1.00	0.0001	0.0	0.0	0.0
Equal treatment	Initial	16.4/4=4.1	0.963	0.908	0.0399	0.101	0.0541	0.154
	Final	4.54/3=1.51	0.996	0.985	0.0251	0.0408	0.0	0.112
Critical Consciousness	Initial	8.20/2=4.1	0.980	0.941	0.0264	0.100	0.0365	0.176
	Final	2.69/1=2.69	0.995	0.968	0.0136	0.0741	0.00	0.187

Note. Chi-square goodness (χ^2), Degree of freedom(df), Comparative fit index (CFI), Tucker-Lewis index (TLI), Standardized root mean square residual (SRMR), root means squared error of approximation (RMSEA).

Table 8
Factor Loading Values, Z, and p Values

Dimension	Indicator	Estimate	SE	Z	p
Intercultural learning	1IL	0.554	0.0609	9.11	<.001
	2IL	0.412	0.0789	5.22	<.001
	3IL	0.426	0.0780	5.46	<.001
	4IL	0.828	0.0655	12.63	<.001
	5IL	0.366	0.0742	4.94	<.001
	6IL	0.784	0.0820	9.55	<.001
	7IL	1.136	0.0749	15.16	<.001
Color evasion	1C	0.773	0.0779	9.92	<.001
	2C	0.454	0.0383	11.85	<.001
	3C	0.464	0.0531	8.73	<.001
	4C	0.537	0.0507	10.59	<.001
	5C	0.945	0.0582	16.24	<.001
Polyculturism	2P	0.647	0.0727	8.89	<.001
	3P	0.380	0.0655	5.79	<.001
	4P	0.802	0.0758	10.58	<.001
	5P	1.056	0.0695	15.21	<.001
	6P	0.913	0.0602	15.17	<.001
Support for contact by students	1SGC	0.603	0.0576	10.46	<.001
	2SGC	0.474	0.0589	8.05	<.001
	3SGC	1.064	0.0704	15.11	<.001
Equal treatment	1ET	0.715	0.1618	4.42	<.001
	4ET	1.375	0.2906	4.73	<.001
	2ET	0.764	0.0775	9.86	<.001
	3ET	0.683	0.0794	8.60	<.001
	5ET	0.750	0.0803	9.34	<.001
Critical Consciousness	1CC	0.746	0.0681	10.96	<.001
	3CC	0.550	0.0731	7.53	<.001
	4CC	0.926	0.0637	14.54	<.001
	5CC	0.875	0.0729	12.01	<.001

Figure 1
 Path Diagram for Each Dimension



Reliability Analyses

Table 9
 Cronbach's α and McDonald's ω Values

Dimensions	Cronbach's α	McDonald's ω
<i>Intercultural learning</i>	0.726	0.737
<i>Color evasion</i>	0.784	0.796
<i>Polyculturism</i>	0.774	0.780
<i>Support for contact by students</i>	0.757	0.789
<i>Equal treatment I</i>	0.800	0.800
<i>Equal treatment II</i>	0.671	0.673
<i>Critical Consciousness</i>	0.759	0.770

Note. Cronbach alpha coefficient and composite reliability are more than 0.6 for each scale so that the scale is reliable and valid.

Discussion and Conclusion

In the current study, the Classroom Cultural Diversity Climate Scale questionnaire items were tested for reliability and validity for Russian participants. The process of questionnaire adaptation follows a certain logic and rules, which have been explained in detail by experts in this field (Oryol & Senin, 2008). Nevertheless, the process of adaptation may also differ. For example, Khanin (1977) emphasized that a standardization procedure and data collection can be done right after the translation of a questionnaire. We decided to use a different guideline. A questionnaire should be presented as a newly developed method after translation and comparison with the Russian language version of the text. It is also necessary to distinguish between the specifics of the curricula in different countries. Many items of this questionnaire are hardly discussed in schools and therefore are largely unknown among Russian young people. For example, these questions touch on equality and critical thinking issues concerning race, ethnic minorities, and discrimination embedded in high school and college curricula.

In the study conducted to adapt the Cultural Diversity Climate Scale to the context of Russia, schools with very diverse cultures at the secondary level were initially selected as the sample. In the first phase of the study, language translations of the scale were first made. For the validity and reliability studies of the scale, exploratory factor analysis and confirmatory factor analysis were conducted for each dimension. In the exploratory factor analysis, the dimensions "Intercultural Learning," "Color evasion," and "Student Support for Contact" were unidimensional, and all items were retained. One item in each dimension, "Polyculturalism" and "Critical Awareness," was excluded from the scale because their factor loadings were less than 0.3.

On the other hand, the dimension "Equal Treatment" became two-dimensional. In the third stage, confirmatory factor analysis was conducted. The dimensions identified in the exploratory factor analysis were tested in the confirmatory factor analysis. In the confirmatory factor analysis, the structures were supported by the data, and the values of the fit indices were within acceptable values. In the fourth stage, reliability coefficients were calculated. The Cronbach's alpha coefficient and the McDonald's ω were calculated. As a result, the fit of the scale was obtained.

This study indicates that researchers now have an instrument to determine the relationship between school climate in the context of cultural diversity and the psychological adjustment of immigrant children. Although the instrument in this study is reliable for researchers' use, we believe there is still a need to apply the instrument in different educational contexts. To this end, the instrument should be used in further studies in other schools or academic contexts. We hope that further research using the instrument we developed will provide more detailed information about school climate in a cultural diversity context. In addition, we suggest that using this instrument in different cultures would provide researchers with more accurate information about immigrant children's cultural diversity and psychological adjustment.

Limitations and Continuation of the Study

A limitation of the study is that the data were collected only in six schools in the Republic of Tatarstan. However, it should be noted that this study is a pilot study. The selection of schools was determined by the diversity of the student body, which consists of students with different sociocultural experiences and migration backgrounds. This study was conducted only with international students in Russia. However, this study can also be undertaken worldwide to obtain more accurate and general results.

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