

# **TEACHER CHARACTERISTICS AND MIGRANT AND REFUGEE ADOLESCENTS' MENTAL WELL-BEING IN SCHOOL**

A CROSS-SECTIONAL STUDY

Word count: 10.898

Eva Spiritus-Beerden  
Student number: 01406587

Supervisor: Prof. Dr. An Verelst

A dissertation submitted to Ghent University in partial fulfilment of the requirements for the degree of  
Master of Education in Behavioral Sciences

Academic year: 2019 – 2020



**Preamble concerning COVID-19**

Data was collected in the late fall of 2019 and January 2020. Therefore, COVID-19 had no significant impact on the original schedule for this study.

### Samenvatting Nederlands

**Doel:** De doelstelling van de huidige studie was het blootleggen van de relatie tussen de culturele competentie van leerkrachten en de veerkracht, het gevoel van verbondenheid met de school, en het algemeen welzijn van leerlingen met een vluchtelingen- of migrantenachtergrond.

**Ontwerp:** Om de hypothesen te testen maakte deze studie gebruik van een cross-sectioneel descriptief correlatie-ontwerp. Doordat deze studie deel uitmaakt van het Europees ‘RefugeesWellSchool’-project werd er data afgenomen bij leerlingen uit verschillende OKAN-klassen in Vlaanderen. Aan de leerlingen werd er gevraagd om drie vragenlijsten in te vullen, namelijk de CYRM voor veerkracht, de PSSMS voor het gevoel van verbondenheid met de school, en de SDQ-self voor het algemeen welzijn. Aan leerkrachten werd gevraagd om de TMAS-vragenlijst (voor culturele competentie) in te vullen. Aan de hand van een multilevel analyse werd de relatie tussen leerkrachten en leerlingen nagegaan. Deze analyse gebeurde in het statistisch programma IBM SPSS Statistics 25.

**Resultaten:** Uit de analyse is geen significante relatie gebleken tussen de culturele competentie van leerkrachten en de verschillende variabelen omtrent het welzijn van hun leerlingen. Wat betreft de beschouwde variabelen van de leerlingen, zijn er significante negatieve correlaties gevonden tussen migratiestatus en zowel veerkracht als het gevoel van verbondenheid met de school. Daarnaast zijn er positieve significante relaties gevonden tussen het gevoel van verbondenheid met de school en zowel veerkracht als algemeen welzijn.

**Implicaties:** De resultaten van deze studie wijzen erop dat de culturele competentie van leerkrachten niet direct gerelateerd is aan de veerkracht, het algemeen welzijn of het gevoel van verbondenheid met de school bij leerlingen. Echter is het belangrijk om in toekomstig onderzoek te blijven focussen op school-gerelateerde factoren die invloed kunnen hebben op het welbevinden van leerlingen met een vluchtelingen- of migrantenachtergrond, aangezien dit helpt om kennis op te bouwen omtrent de mogelijkheden in het beschermen van deze leerlingen tegen post-migratie-stressoren. Daarnaast zou het interessant zijn om manieren te vinden die het gevoel van verbondenheid met de school bij kinderen kan versterken, aangezien dit een beter welbevinden creëert bij vluchtelingen en migranten.

**Sleutelwoorden:** veerkracht, welbevinden, welzijn, verbondenheid met de school, culturele competentie, vluchtelingen, migranten

**Corona preamble**

De data-collectie voor deze thesis gebeurde in het najaar van 2019 en in januari 2020. Corona-maatregelen hebben desbetreft geen invloed gehad op het onderzoek zoals oorspronkelijk gepland.

### **Foreword**

This master thesis was developed in the context of achieving the degree of Master of Education: behavioral sciences.

First, I would like to profusely thank Prof. Dr. An Verelst for her time, guidance, and trust during the writing of this thesis. I am very grateful to have been given the opportunity to be a part of the RefugeesWellProject and to get to know the heart of this valuable project. Second, I would like to thank Caroline Spaas for inviting me to a number of OKAN-classes and letting me help to collect data from the students. It was an inspiring and humbling experience, for which I am very grateful. Third, I would like to thank Ines Devlieger for helping me during the data analysis of this thesis. Thank you for your quick responses and advice. Finally, I would like to thank my family for their support this year. In particular, the support and patience of my brother and my parents, which helped me to keep believing in myself and to deliver the final version of this dissertation.

### Abstract

**Goal:** The current study aims to uncover the relationship between a teacher's cultural competence and the resilience, sense of school belonging and overall well-being of refugee and migrant students in Belgium.

**Design:** A cross-sectional descriptive correlation design was used to test the proposed hypotheses. As a part of the RefugeesWellSchool-project, participants were recruited from various OKAN-classes in Belgium. Students were asked to complete the CYRM (i.e. resilience), PSSMS (i.e. sense of school belonging) and SDQ-self (i.e. well-being) written questionnaires and teachers were asked to complete the TMAS (i.e. cultural competence) written questionnaire. A multilevel analysis was used to study the relation between teachers and their students. The data of the current study was analyzed by using the IBM SPSS Statistics 25 statistical program.

**Results:** The results suggest there is no main effect of cultural competence of teachers on the resilience, sense of school belonging or overall well-being of students. As regards to the student variables, significant negative correlations were found between their migration status and resilience and migration status and sense of school belonging. In addition, a positive correlation between sense of school belonging and both resilience and overall well-being was found.

**Implications:** The findings of the current study suggest that teachers' cultural competence is not directly related to the three considered well-being variables. However, continuing to focus research on which school-related factors influence refugee and migrant students' well-being is important to build the knowledge on how to protect these adolescents from post-migration stressors. In addition, finding ways to create a sense of school belonging in children will help to establish resilience and create better overall well-being for refugee and migrant students.

**Keywords:** resilience, well-being, school belonging, teacher characteristics, refugees, migrants

## Table of contents

<b>Tables.....</b>	<b>IV</b>
<b>Introduction .....</b>	<b>1</b>
<b>Literature Review .....</b>	<b>4</b>
<i>Resilience.....</i>	<i>4</i>
<i>School Belonging.....</i>	<i>5</i>
<i>Well-being.....</i>	<i>7</i>
<i>Teacher characteristics .....</i>	<i>9</i>
<b>Conceptual Model.....</b>	<b>11</b>
<i>Hypotheses overview .....</i>	<i>11</i>
<b>Method.....</b>	<b>12</b>
<i>Design, participants, setting.....</i>	<i>12</i>
<i>Data collection procedure.....</i>	<i>12</i>
<i>Outcome measures.....</i>	<i>13</i>
<b>Results.....</b>	<b>14</b>
<i>Correlations.....</i>	<i>16</i>
<i>Model considerations .....</i>	<i>18</i>
<i>Resilience.....</i>	<i>19</i>
<i>School Belonging.....</i>	<i>20</i>
<i>Well-being.....</i>	<i>20</i>
<b>Discussion .....</b>	<b>25</b>
<i>Limitations.....</i>	<i>26</i>
<i>Implications .....</i>	<i>27</i>



<b>Conclusion .....</b>	<b>27</b>
<b>References .....</b>	<b>29</b>

### Tables

Table 1: Background characteristics students.....	15
Table 2: Background characteristics teachers.....	15
Table 3: Correlation coefficients student data.....	17
Table 4: Correlation coefficients teacher data.....	17
Table 5: Estimates of resilience in different models: multilevel analysis.....	22
Table 6: Estimates of sense of school belonging in different models: multilevel analysis.....	23
Table 7: Estimates of overall well-being in different models: multilevel analysis.....	24

## Introduction

In 2019, international migrants account for 3.5 % of the world's population. That is 272 million people in total (IOM, 2019). Research revealed that 79.5 million people around the world forcefully fled their homes at the end of 2019 and 32 percent of the refugee population is under 18 years of age (UNHCR, 2020). The increasing amount of refugee and migrant children and adolescents worldwide creates a challenge to ensure their adaptation to and integration in their host societies and to better understand how to provide customized mental health care.

An abundance of studies has documented the copious number of stressors children with refugee and migrant backgrounds encounter (Bronstein & Montgomery, 2011). The context in which these children grow up is often characterized by violence, uncertainty and possible trauma of loss (Correa-Velez, Gifford, & Barnett, 2010). In addition, resettlement stressors such as managing a new language, education system and culture are part of the challenges these children are confronted with (Reed, Fazel, Jones, Panter-Brick, & Stein, 2012). Numerous studies on refugee and migrant children highlight the role of post-migration risk factors and protective factors in the well-being of vulnerable children (Silove et al., 1997; Fazel et al., 2012; Carswell et al., 2013; Goodkind et al., 2014; Chen et al., 2017). In their review on mental health of refugee children, Fazel & Stein (2002) took into account all three different stages of migration, that is (1) when still in their country of origin; (2) during their journey to safety; (3) during resettlement in a host country, and the different stressors migrants are hereby exposed to. In studying various principles underlying the mental health care for children undergoing these stages, they indicate that school context after resettlement can provide significant care. In this regard, studying the interrelationships between various school-related factors and children's mental health can help to identify possibilities in mental health care for refugee and migrant students (Sullivan & Simonson, 2016). In addition, Betancourt (2017) states that post-conflict factors are very important to mental health care, as those factors can be modified, and war settings or previous disturbed experiences of young migrants or refugees cannot. Correa-Velez, Gifford, McMichael, and Sampson (2017) studied various predictors of subjective health and well-being among youth with refugee backgrounds. Their findings suggest that experiences of social inclusion or exclusion have a significant impact on their subjective well-being after migration. For example, whether or not children were frequently bullied had a significant effect on their mental well-being. In addition, they found peer attachment to be

significant when it comes to establishing valuable social relationships. Both of the mentioned predictors can be related to the social school environment, which leads to the assumption that children's mental well-being can be influenced by school context. In addition, a study that focused on conversations with refugee children about their experiences in their new situation found that education was seen as essential for improving one's chances in the future. Teachers were often referred to as impactful to and important in future educational choices and instilling a strong sense of self-belief within students (O'Toole Thomessen, & Todd, 2017). The aforementioned study highlights the role of teachers and the importance of social support and guidance. A school environment seems to offer an optimal setting to implement intervention and prevention strategies, as it can be seen as a critical context in which students can develop meaningful relations between peers and mentors (Berthold, 2000; O'Toole Thomessen, & Todd, 2017). Additionally, the importance of school environment and teachers was considered in multiple studies over the years, with the recurring notion that schools can contribute significantly to the emotional development of children, as they are a main social and cultural institution in their lives (Rutter, 1991; McLaughlin & Clarke, 2010). Again, school seems to provide an ideal context for intervention in post-migration stressors that influence refugee and migrant's well-being.

Due to the multicultural nature of refugee and migrant classrooms, this study chooses to consider different findings on cultural differences and mental health of refugees and migrants in their host society. Baranik, Hurst, and Eby (2018) stated that engaging in multicultural activities and seeking social support were important coping mechanisms among refugees after arrival in their host countries. Additionally, a longitudinal study on psychological distress in resettled refugees in the United States found that culturally appropriate intervention in post-migration stressors resulted in a significant decrease of psychological distress (Goodkind et al., 2014). Acculturation, cultural identity, and the fear of discrimination and rejection were often mentioned in refugee students' post-migration experiences, with maintaining a sense of one's cultural identity while being able to integrate in the host society as an important protective factor of mental health (Liebkind, 1993; Fazel et al., 2012). In this regard, this study aims to highlight possible protective factors and their relation to the well-being of migrant and refugee adolescents in their class. In particular, a teacher's cultural competence is taken into account, as it is found to be of great significance in creating an inclusive learning environment for students (Yang, Cox, & Cho, 2019; Prieto, 2012).

In summary, in order to uncover the relation between a teacher and the well-being of students, the current study aims to analyze how a teacher's cultural competence is related to specific indicators of well-being of students, such as resilience, a sense of school belonging and overall well-being. First, in attempt to shine a light on the complexity of mental health research in culturally diverse populations, the different concepts that are considered for the current analysis will be discussed in the beginning of this study. There will be a specific focus on the clarification of the different considered indicators of the participants' mental health (i.e. resilience, sense of school belonging and overall well-being) and why these variables are chosen to be included in the current study. In addition, an in-depth explanation of the conceptualization and importance of teachers' cultural competence will be provided. Second, the choice of methodology will be explained, followed by the cataloguing of the results. Finally, the discussion segment will clarify the findings and point out possible implications for future research.

## **Literature Review**

### **Resilience**

Resilience is often mentioned in the context of conflict and war, as it is seen as an important coping mechanism to overcome adversity (Masten, Best, & Garnezy, 1991). In general, resilience is known as the ability to cope and achieve positive outcomes in the face of extreme risk or adversity (Fraser et al. 1999). The concept of resilience has been subject to an abundance of studies since the 1970s, which resulted in multiple implementations of the concept (Zolkoski, & Bullock, 2012). Although widely studied, its conceptualization remains to be somewhat ambiguous and often lacks the consideration of context (Barber, 2013). According to Tol, Song, and Jordans (2013) the sociocultural context significantly influences the conceptualization and operationalization of resilience. Akello, Reis, and Richters (2010) found that expressions of resilience and mental health were influenced by social, contextual, and political notions. Therefore, being culturally sensitive when identifying indicators of resilience is essential (Vindevogel Ager, Schiltz, Broekaert, & Derluyn, 2015). While resilience and mental health are often mentioned alongside each other, it is important that they are not used interchangeably, as resilience, characterized by a person's ability to 'bounce back' after experiencing high levels of stress, acts as a protector of negative mental health outcomes (Scandurra, Amodeo, Valerio, Bochicchio, & Frost, 2017). In a meta-analysis conducted by Gheshlagh et al. (2017) that focused on mental health and resilience in students, moderate correlations were found between resilience and mental health. In fact, the found correlations were lower among school groups than among other groups, which may be a result of the challenges they face during this particular period of their lives. Subsequently, this indicates the importance of context in the effect of resilience on mental health. Additionally, a longitudinal analysis of resilience in Canadian military underlines the complexities of resilience and their relation to mental health by identifying the importance of other protective factors (e.g. positive social interactions) (Lee, Sudom, & Zamorsk, 2013). In the same vein, Merrill Weine et al. (2014) propose that underlying resilience, a broad network of protective agents and context-dependent resources exists that will help promote adolescent refugees' mental well-being. This supports the importance of considering resilience as a process or interaction between the individual and context (Ungar, 2012). In addition, Vindevogel (2017) calls for no longer considering resilience solely as a matter of individual potential, but rather a collective venture. Nevertheless, previous research frequently portrayed resilience as an individual trait. This, however, consequently disregards the possible positive impact of interventions or a

supportive context (Vindevogel, 2017; Gray, 2011). In terms of resources that can positively impact resilience, Buckner, Mezzacappa, and Beardslee (2003) made a distinction between inner resources, such as self-esteem or intellectual ability, and external resources, such as social support. In a study on best practices in care and protection of crisis-affected children, participants attached more importance to the external resources (i.e. social support in family, community, and school) in their statements (Ager, Stark, Akesson, & Boothby, 2010). Another study identified indicators for resilience, which included education, physical health, mental health, cultural and social life, and livelihood, covering multiple life domains (Vindevogel et al., 2015). Consequently, indicators of resilience reach beyond psychopathology and the individual's mental health alone (Barber, 2013; Vindevogel et al., 2015).

In summary, resilience appears to be an interesting concept to include in educational research focused on refugees and migrants, as it is a strong indicator of mental health while still susceptible to the influence of many contextual factors. A deep understanding of the concept can lead to the development of useful practices in protecting the mental health of refugee and migrant students when dealing with post-migration stressors and the aftermath of pre-migration stressors during their education and stay in host countries. Following the assumption that resilience is a process influenced by contextual factors, this study proposes that teachers' cultural competence can act as a protective factor and therefore is able to enhance resilience in their refugee and migrant adolescent students.

*Hypothesis 1: Teachers' cultural competence positively influences refugee and migrant students' resilience.*

### **School Belonging**

A sense of belonging finds its conceptualization to be aligned with other concepts, such as connectedness or attachment. Consistent between these concepts is the human desire to form meaningful social relationships, characterized by frequently pleasant interactions and stable interpersonal bonds (Baumeister & Leary, 1995). Belonging has been operationalized in numerous settings and repeatedly found to be beneficial for various health-related outcomes, such as greater self-esteem, self-efficacy and life satisfaction (Jetten et al. 2017). Allen & Bowles (2012) provided an overview of studies on belonging to groups (e.g. family, friends or school) and how it contributes to and positively affects the overall health and wellbeing of people, together with its protective role

in relation to psychopathology and stress. The study specifically emphasizes the additional benefits of a sense of belonging in school context, combining different research outcomes. For example, school belonging has found to positively influence academic outcomes, motivation and academic effort and to significantly decrease disruptive behavior and emotional distress (Lonczak, Abbott, Hawkins, Kosterman & Catalano, 2002; Sanchez, Colon, & Esparza, 2005; Allen & Bowles, 2012). According to Libbey (2004), who reviewed previous research and their use and measurement of the feeling of belongingness to school, a student's sense of belonging in school is related to several aspects: whether they like school or not, the level of support and care their teacher provides, the presence of good friends and their level of engagement in their academic progress. All of which can be divided in functional measurement attributes (i.e. grades and participation) and affective measurement attributes (i.e. liking and belonging). Given the above, Libbey (2004) found that these factors, although measured differently, showed significant and positive correlations with student outcomes. School context and its importance in the development of children cannot be denied, as it is an important socializing institution in every country and, together with family context, a major source of cultural experiences in the adolescents' lives (Sujoldžić, Peternel, Kulenović, & Terzić, 2006). In a comparative study of Bosnian adolescents in different cultural contexts, Sujoldžić et al. (2006) found school connectedness to be significantly associated with self-rated health. In particular, low connectedness to school was correlated significantly with somatic stress, anxiety, depression and self-esteem. Walton & Cohen (2007) studied sense of belonging in school context and the difference between White and Black students regarding academic achievement. The results of this study show that when doubts of social belonging in school context are mitigated, academic achievement of Black students was elevated. Interestingly, mitigating doubts of school belonging for White students had little to no effect on their academic results. This is in line with previous mentioned studies where belonging seemed to be important to academic achievement and it adds the notion that this is especially important to members of historically excluded ethnic groups. As a result, the question of how belonging effects migrant and refugee children in their new educational context is raised. Since these students are often members of socially stigmatized groups, their uncertainty about their social belonging in institutions, such as school or other social institutions, may be stronger in comparison to nonminority students. According to Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak (2002), uncertainty about belonging, even more so when the uncertainty is chronic, harms minorities' performance and mental health. Subsequently, this will create a ripple

effect, where students who feel less assured of their belongingness may also initiate fewer social interactions and therefore further undermining their mental health and performance (Walton & Cohen, 2011). Due to these findings, including a sense of school belonging in mental well-being and educational research, especially when focused on minorities, seems particularly important.

To summaries, the feeling of belongingness in a certain group has shown to be beneficial to mental health and academic outcomes in numerous studies, hence the decision to include a sense of school belonging in this study. Specifically, the relation between refugee and migrant students' sense of school belonging and the cultural competence of their teacher will be studied. The thought process behind the proposed hypothesis is as follows: inherent to the situations migrant and refugee students encounter in their host countries, major cultural differences will unavoidably lead to difficulties in feeling belongingness to a certain group. Teachers that are sensitive to the cultural differences in a classroom and that possess knowledge of cultural customs might have a positive influence on their students' sense of belongingness in school, as they might feel less isolated and more accepted.

*Hypothesis 2: Teachers' cultural competence positively influences refugee and migrant students' sense of school belonging.*

## **Well-being**

For the last dependent variable, this study chose to include the overall well-being of refugee and migrant students. General mental health is important to be considered separately, as it is heavily influenced by experienced stressors, both prior and post migration (Pumariega, Rothe, & Pumariega, 2005). The psychological impact of these experiences can be substantial, as children and parents need to navigate a considerable amount of changes and challenges (Fazel & Betancourt, 2018). Well-being encompasses both internalizing or emotional problems (i.e. depression, anxiety and post-traumatic stress disorder) and externalizing or behavioral problems (Fazel, Reed, Panter-Brick, & Stein, 2012). According to research conducted by Iversen, Sveaass, & Morken (2014), the well-being problems of refugee children as a result to traumatic experiences may interfere with a refugee student's ability to acquire a new language and their ability to adjust in school. In turn, this may lead to negative consequences, such as the limited ability to establish a social support network after resettlement. Fazel & Betancourt (2018) provided a clear overview of previous research on mental



health in refugee children, stating that mental health difficulties, such as depression, anxiety, sleep disturbance and post-traumatic stress disorder are more common in refugee children. Similarly, Jakobsen, Demott, & Heir (2014) measured high levels of psychological distress and posttraumatic stress upon the arrival of refugees. In contrast to previously documented results, however, they found that these levels stayed relatively stable over a short period of time. The presence of these severe mental health symptoms upon arrival ultimately present considerable challenges for the host countries to meet the complex needs for support among refugee and migrant children. The period of time after arrival is crucial to the future development of these children, as they are highly susceptible to additional stressors and provided support (or lack thereof) (Fazel et al., 2012). According to Silove, Sinnerbrink, Field, Manicavasagar, & Steel (1997), the absence of specialized assistance after migration exacerbated the initial anxious, depressive and post-traumatic symptoms, leading to even more difficulty in facing their emotional and social challenges. In addition, a study on mental health in migrant adolescents in Australia carried out by Chen, Hall, Ling, & Renzaho (2017) found that post-migration resettlement-related stressors significantly modified the relationship between pre-migration traumatic events and mental health outcomes. Further evidence shows post-migration problems, specifically adaptation difficulties and loss of culture, to be associated with PTSD symptoms and emotional distress respectively (Carswell, Blackburn, & Barker, 2011). As stated, migration is accompanied by many, and often strong and extensive, effects on the well-being of students. However, many of the stressors experienced post-migration are modifiable. Therefore, host countries are given the opportunity to intervene directly in post-migration experiences and to provide an extensive support system and subsequently enhancing mental health outcomes of sensitive youth (Fazel, Reed, Panter-Brick, & Stein, 2012). Consequently, documenting which post-migration factors in particular positively influence the overall well-being of these vulnerable adolescents will help to uncover the possibilities for host countries in supporting them after their resettlement. As the main focus of this study will be on refugee and migrant students in school context, particularly on the effect of teacher characteristics, it is proposed that the overall well-being of these students will benefit from being educated by teachers with higher cultural competence.

*Hypothesis 3: Teachers' cultural competence positively influences refugee and migrant students' well-being.*

To summarize, the previous mentioned dependent variables are carefully selected to provide a clear indication about the mental state of these students. All three indicators have shown a strong linkage with positive mental health outcomes and a decrease in negative mental health outcomes and are therefore expected to correlate with each other, resulting in the last three proposed hypotheses.

*Hypothesis 4a: Resilience and school belonging of refugee and migrant students are significantly correlated.*

*Hypothesis 4b: Resilience and overall well-being of refugee and migrant students are significantly correlated.*

*Hypothesis 4c: School belonging and overall well-being of refugee and migrant students are significantly correlated.*

### **Teacher characteristics**

The current study tends to highlight the importance of school, and teachers specifically, as a social and cultural institution and its role in supporting refugee and migrant children during their stay in a host country. As previously mentioned, these children are often exposed to cumulative risk, due to a combination of socioeconomic adversity, exposure to violence, a period of migration, and finally the adjustment to a new context (Fazel & Stein, 2002). These risks may cause restrictions in the psychological and emotional development of these students, as they can severely affect their well-being (Reed et al., 2012). Navigating the complexities of post-migration environment requires the students to deal with matters such as school, discrimination and a modified family life (Fazel & Betancourt, 2018). This is where protective initiatives installed by host countries have the opportunity to create positive experiences of post-migration.

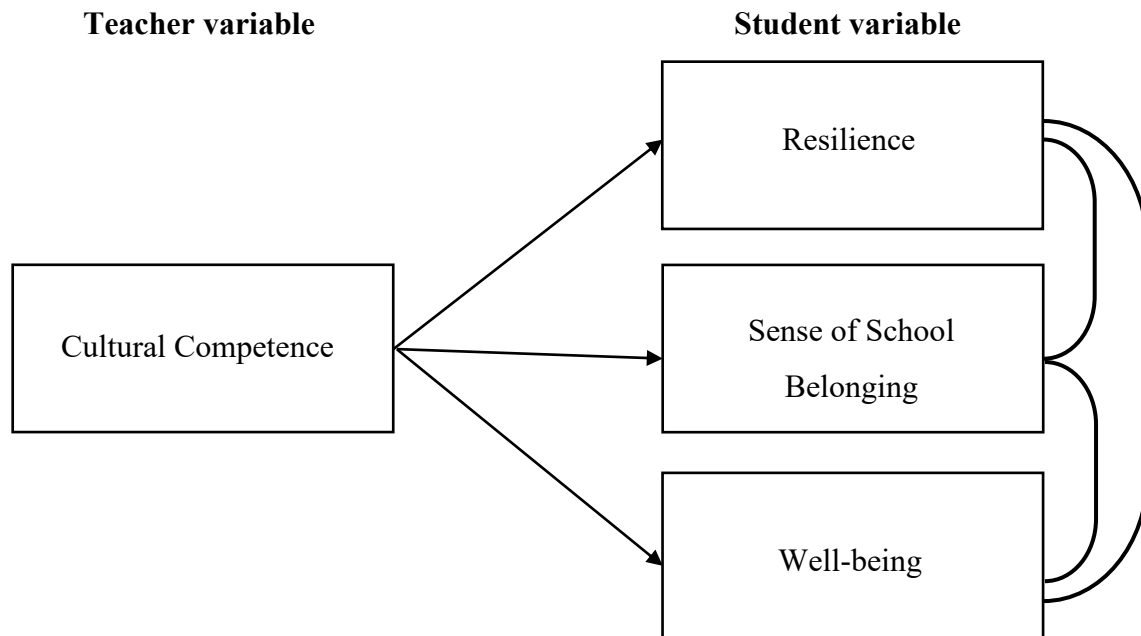
In studying risk and protective factors of post-migration health, Fazel et al. (2012) found that maintaining a sense of one's cultural identity acts as a protective factor for forcibly displaced student's mental health. However, this is not an easy task, as these children are navigating between the identification with one's cultural identity and the search of meaningful relationships with groups outside their own cultural identity, unavoidably resulting in a form of acculturation (e.g. integration, separation, assimilation or marginalization) (Berry, 1991). According to a Swedish study, acculturation often happens within young refugees and is found to create significant stress in the

family (Hjern, Angel, & Jeppson, 1998). Regarding the mental health of these adolescents, losing touch with attributes of their homeland (i.e. cultural bereavement) includes feelings of survivor guilt, anger and doubt (Lustig et al., 2004; Eisenbruch, 1991). Therefore, protecting the connections to one's culture of origin might function as a protective factor in post-migration mental health.

According to Bronfenbrenner's Ecological System Theory (1979), each student belongs to a broader network of groups, with school being one of the more important networks. Previous research found supporting evidence for Bronfenbrenner's focus on the importance of school environment in students' lives. Review studies on this topic found that emotional well-being of adolescents can be enhanced by the support and care of teachers and school staff (Roeser et al., 2000; McLaughlin & Clarke, 2010). A study on school adjustment and child-teacher relationships conducted by Buyse et al (2009) found that in early elementary classes, a close child-teacher relationship was related to better psychological adjustment. Finally, multiple studies found that a closeness in teacher-child relations is important for the emotional and behavioral adjustment of children, specifically for those that struggle with behavioral problems (Breeman et al., 2015, Buyse et al., 2008; Hamre et al., 2008). Continuing along that line, teacher roles might be particularly important in supporting vulnerable students, such as migrant and refugee youths, and in creating a safe multicultural environment. As stated by Montgomery (2005), teachers occupy a significant role in providing compensatory or additional support after migration when parents are unable to. Moreover, teachers are an important factor in the application of school-based mental health interventions for refugee children, as they reflect the schools' consideration of multicultural perspectives in their teaching, which has found to be beneficial to their SDQ scores (i.e. well-being measurement) (Fazel, Doll & Stein, 2009). In addition, Mendoza et al. (2002) found a beneficial effect in African American students' sense of belonging when schools supported race-positive events to diminish expected race-based rejection. Assessing the preparedness of teachers in creating an inclusive environment by embracing student diversity and multicultural education will help to create a better insight in a teacher's share in their student's well-being (Yang, Cox & Cho, 2019).

To conclude, many studies described the impact teachers have on the mental well-being of their students. However, the specific association, between teachers, multiculturalism in students, and the well-being of these students had yet to be studied. In this regard, this study aims to highlight the specific interactions between teachers' cultural competence and the well-being of refugee and migrant adolescents in school context.

### Conceptual Model



### Hypotheses overview

*Hypothesis 1: Teachers' cultural competence positively influences refugee and migrant students' resilience.*

*Hypothesis 2: Teachers' cultural competence positively influences refugee and migrant students' sense of school belonging.*

*Hypothesis 3: Teachers' cultural competence positively influences refugee and migrant students' well-being.*

*Hypothesis 4a: Resilience and school belonging of refugee and migrant students are significantly correlated.*

*Hypothesis 4b: Resilience and overall well-being of refugee and migrant students are significantly correlated.*

*Hypothesis 4c: School belonging and overall well-being of refugee and migrant students are significantly correlated.*

## Method

### Design, participants, setting

For the current study, cross-sectional data of a teacher's cultural competence and the mental health of their students was analyzed by using a multilevel correlational design.

***RefugeesWellSchool.*** This study is part of an ongoing project named RefugeesWellSchool, which is a European funded Horizon2020 project carried out by seven different partners in six European countries (i.e. Norway, Finland, Sweden, Denmark, Belgium and the United Kingdom). The overall objective of RefugeesWellSchool is to further evidence-base the role of preventive, school-based interventions in advancing refugee and migrant adolescents' mental well-being, and how they can be implemented in diverse educational settings. In order to be eligible for participation, certain requirements are mandatory for schools, teachers and students. Schools are required to give their written consent, to be multi-ethnic (i.e. 30% with a non-Belgian background) and to be a secondary or upper secondary school. Teachers and students are required to give their written consent as well, which for students younger than fifteen needs to be given by their legal guardian. The current study focuses on data collected from Belgian OKAN-classes (i.e. 'onthaalklas voor anderstalige nieuwkomers', translated: 'Reception education for non-Dutch speaking newcomers') where non-Dutch speaking pupils who only recently arrived in Belgium receive extra support through reception education. The goal of these classes is to teach them Dutch and give them the opportunity to practice their new language, with an emphasis on the practical use of said language.

### Data collection procedure

***Students.*** First, students were informed about the project and the research procedure. Information sheets were distributed, as well as informed consent sheets. Students were given the choice whether or not to participate and were free to decline if unwilling to join. Students younger than fifteen years old needed their parents' or guardian's permission to partake. Consideration time was granted before researchers collected the written consent sheets and distributed the questionnaire. Participants were asked to complete the questionnaire, for which one teaching hour was reserved. Questionnaires were distributed in the participant's language of choice to minimize interpretation differences and, if required, interpreters were appointed. The questionnaire was available in 26 languages. All participants were given an identity number to secure anonymity.

**Teachers.** For teachers, information meetings were held where participants received written information about the study. After receiving their informed consent, participants were asked to fill out the printed survey. Important for this study was the targeting of entire classes and their teacher, which helps to assess the relationship within these classes.

### Outcome measures

**Resilience.** To measure resilience, the *Child and Youth Resilience Measure (CYRM)* was used. The CYRM is a 12-item self-report measure of youth resilience. An important added value of this questionnaire is that it explicitly accounts for the cultural and contextual diversity that characterizes youth populations. The CYRM-12 is a reduced version of the CYRM-28 and has shown to have sufficient content validity when used as a screener for resilience among adolescents. It utilizes a Likert-scale, ranging from 1 (not at all) to 5 (a lot), where higher scores reflect a higher degree of resilience (Liebenberg, Ungar, & LeBlanc, 2013).

**School belonging.** The feeling of belonging at school was measured by using 9 items with a 5-point Likert response scale (1 = not at all true, 5 = completely true) derived from the 18-item *Psychological Sense of School Membership Scale (PSSMS)* (Goodendow, 1993). The PSSMS represents caring relationships, acceptance or belongingness at school and disrespect or rejection within school as components of school membership (You, Ritchey, Furlong, Shochet, & Boman, 2011). Research conducted by Hagborg (1998) demonstrates that this measure demonstrates high internal consistency and criterion validity.

**Mental well-being.** For assessing the overall mental health of these students, the *Strengths and Difficulties Questionnaire-self (SDQ-self)* was used. The self-reporting questionnaire covers five subscales (i.e. emotional problems, peer problems, behavioral problems, hyperactivity and prosocial behavior) over 25 items. The sum of four subscales (i.e. emotional, peer, behavioral problems and hyperactivity) results in the *SDQ total difficulties score*, ranging from 0 to 40 (Goodman, 1997; Goodman, Lamping, & Ploubidis, 2010). Research shows SDQ to have good criterion and construct validity (Bentley, Hartley, & Bucci, 2019).

**Cultural competence.** The (multi)cultural competence of teachers is measured by the *Teacher Multicultural Attitude Scale (TMAS)*, which is designed to determine teachers' attitudes and competence regarding multiculturalism. This measure includes 20 self-reporting items, each on a scale from 1 (strongly disagree) to 5 (strongly agree) (Ponterotito, Baluch, Greig, & Rivera, 1998).

Comparing two separate studies has demonstrated both construct and criterion validity of TMAS scores (Ponterotito et al., 1998).

***Socio-demographic characteristics.*** This study includes items to gather demographic information, such as age, gender, and migration status of the participating students, and age and gender of the participating teachers, to include in the analyses.

## **Results**

To test the proposed hypotheses, data analyses were carried out in IBM Statistics version 25 (IBM Corp., 2017).

The sample for this study consisted of 270 female (44,6%) and 335 male (55,4%) students with an average age of 15,16 ( $SD= 1,843$ ). The total number of participating students is 605. Additionally, a total of 71 teachers, of which 59 female (83,1%), 11 male (15,5%) and 1 other (1,4%) with an average age of 36,45 ( $SD=8,400$ ), participated in the study. All considered background characteristics are summarized in Table 1 and Table 2.

Table 1

*Background characteristics students*

	Value	Label	N
Age		[11-14]	213
		[15-17]	341
		[18-21]	51
Gender	0	Male	335
	1	Female	270
	2	Other	0
Migration status	1	Citizen/born in this country	22
	2	Residence documents (long period)	258
	3	Residence documents (short period)	86
	4	Awaiting decision on documents	59
	5	No documents	32
	6	“I don’t know”	116
	7	Other	32
Total			605

Table 2

*Background characteristics teachers*

	Value	Label	N
Age		[23-33]	31
		[34-44]	29
		[45-60]	11
Gender	0	Male	11
	1	Female	59
	2	Other	1
Total			71



## Correlations

Table 3 and Table 4 show the correlation coefficients between measured variables for the current study. Regarding the students' data, Pearson correlations were calculated between sociodemographic characteristics and the mental health outcomes (i.e. resilience, school belonging and overall well-being). In addition, Pearson correlations were calculated between sociodemographic characteristics and cultural competence regarding the teachers' data. In doing so, the connection between these variables can be used for further examination. According to the student results, resilience is positively correlated with sense of school belonging ( $r = .279, p < .01$ ). Further, a positive correlation was found between overall well-being and school belonging ( $r = .166, p < .01$ ) and overall well-being and age ( $r = .131, p < .01$ ). These results implicate that students who score high on sense of school belonging, will also score high on overall well-being and resilience. Additionally, according to these results, older students are more likely to score high on overall well-being. Moreover, negative correlations between migration status and age ( $r = -.167, p < .01$ ), migration status and resilience ( $r = -.137, p < .01$ ) and migration status and school belonging ( $r = -.139, p < .01$ ) were found significant as well. This indicates that a student with a less secure migration status (e.g. awaiting the decision on residence documents, no documents or unsure about their current migration status) scores lower on sense of school belonging and resilience and is significantly younger than a student with a more secure migration status (e.g. born in Belgium, a citizen of Belgium or in possession of residence documents for a long period). The correlation between these variables might be strong, however, it is of importance to mention that this has to be interpreted with caution, as this solely shows a correlational connection and not in any way a causal relationship. No correlation between resilience and overall well-being was found in this study. Finally, regarding the teacher data, no significant correlations were found between the considered sociodemographic variables and the teachers' cultural competence.

Table 3

*Correlation coefficients student data*

	Variable	1	2	3	4	5	6
1	Age	-					
2	Gender	-.064	-				
3	Migration status	-.167**	-.016	-			
4	Resilience	.040	.067	-.137**	-		
5	School belonging	.036	.033	-.139**	.279**	-	
6	Overall well-being	.131**	.044	-.031	-0.34	.166**	-

Note: Gender (male=0, female=1).

\*p&lt;.05

\*\*p&lt;.01

Table 4

*Correlation coefficients teacher data*

	Variable	1	2	3
1	Age	-		
2	Gender	-.190	-	
3	Cultural competence	.092	.110	-

Note: Gender (male=0, female=1, other=2).

\*p&lt;.05

\*\*p&lt;.01

### Model considerations

First, during the multilevel analyses of the models, Restricted Max Likelihood (REML) was used by default. Second, due to the multilevel design of this study, centering options should be considered prior to testing the hypotheses. Effectively separating within-subject relationships from between subject relationships will help to prevent generalization of within-subject effects to between subject effects (Van de Pol & Wright, 2009). In order to eliminate any between-subject variation of the level 1 covariate 'age', group centering of 'age' (i.e. subtracting the subject's mean value from each observation value) was conducted and a new variable (i.e. 'Age\_CWC') was derived. This variable, 'age centered within cluster', was used in the following analyses. Henceforth, when mentioning the variable 'age', the centering within cluster is implied. In addition, the Level 2 predictor 'teacher's cultural competence' is of substantive interest in this study, which subsequently makes grand mean centering (i.e. subtracting the mean of all teachers from each teacher's mean) for this variable a method of choice (Enders & Tofighi, 2007). A new variable (i.e. CultComp\_CGM) was conducted and used as a Level 2 predictor in the following analyses and is implied when teacher cultural competence is mentioned in the following sections of this study. Third, before starting the multilevel approach, it was determined whether there is evidence of substantial clustering in this data with respect to the dependent variables. To do so, a test of Level 2 variance components or null model is considered. If the variance estimate is significant, one can assume that significant clustering is present in the data, which identifies the importance of a multilevel analysis (Heck, Thomas, & Tabata, 2014). For overall well-being (i.e. SDQ-self) as dependent variable, no significance of the Level 2 variance component was reported (Wald  $Z = 1.671, < 2$ ). In addition, no significance was found using the model for school belonging (i.e. PSSMS) as dependent variable (Wald  $Z = 1.730, < 2$ ). With respect to resilience (i.e. CYRM) as dependent variable, however, significance of the Level 2 variance component was reported (Wald  $Z = 2.675, > 2$ ). The analyses of the three separate null models result in the conclusion that solely for the dependent variable 'resilience' a multilevel approach is interesting and consequently that there is no significant difference between classes (and thus teachers) regarding the students' overall well-being and sense of school belonging. More specifically, adding random slopes to the model will only be useful with resilience as dependent variable. To further support this conclusion, the ICC (i.e. intraclass correlation coefficient) was calculated for all three dependent variables. The ICC is an outcome variable explained by the grouping structure of our hierarchical model (Heck, Thomas, & Tabata, 2014). For overall well-

being, it is found that 5.2 % ( $ICC = 0.052$ ) of the variation occurs between classes. Additionally, when considering school belonging as dependent variable, 5.16 % ( $ICC = 0.051$ ) of the variation occurs between classes. Both of these ICC outcomes are low, which means that the values for overall well-being and school belonging are not so similar for students in the same class. In conclusion, analyzing a teacher's impact on these variables would be redundant. The respective null models and their estimates can be found in Table 5, Table 6 and Table 7 below.

## Resilience

The first model (i.e. Random Intercept Model Level 1) for resilience as dependent variable focused specifically on level 1 variables, with age, migration status, and gender as possible predictors. This model showed only a significant fixed effect of migration status on resilience ( $F(7,532) = 2.089$ ,  $p = .043$ ) and no significant effect of gender or age. When further checking the estimates of the migration status variable effect, no significant difference between migration status value 7 (i.e. "other") and migration status value 1 to 6 was found, concluding that the difference between these categories lies between values 1 and 6.

Running the second model (i.e. Random Intercept Model Level 1 + Level 2), the level 2 predictor (i.e. teacher's cultural competence) was added as a fixed variable, while controlling for all level 1 predictors. The results of this model show a negative, but non-significant effect of cultural competence on resilience ( $\beta = -.004$ ,  $p = .501$ ), controlling for level 1 predictors. In addition, all other predictors showed no significant impact.

According to the null model analysis, it is encouraged to conduct a multilevel analysis for resilience as dependent variable, resulting in a third model where random slopes for level 1 predictors are added to the previous model (i.e. Random Slope Model Level 1). Due to the excessive number of parameters needed to be estimated when including string variables 'gender' and 'migration status', continuous variable 'age' will be the only variable for which a random slope is added. The results of the analysis show no significant effect of cultural competence of the teacher on the resilience of students ( $\beta = -.005$ ,  $p = .427$ ) in the random slope model.

Last, an interaction model (i.e. Including Level 2 variation in slopes) was run to consider the effect of an interaction between level 1 predictor 'age' and level 2 predictor 'cultural competence'. The interaction showed no significance ( $\beta = .005$ ,  $p = .181$ ) and again, no other significant estimates

were found in this model. In Table 5, a summary of the estimated effects in all models with resilience as dependent variable can be found.

### **School Belonging**

Next, sense of school belonging was considered as a dependent variable. The first model (i.e. Random Intercept Model Level 1) was run to calculate the effects of the considered level 1 variables ‘age’, ‘gender’, and ‘migration status’. The result of this analysis shows a significant fixed effect of migration status on sense of school belonging ( $F(7,597) = 2.089$ ,  $p = .001$ ) and again no significant effect of the other level 1 variables. The calculated estimates for this model, however, show no further significance of the considered student characteristics on sense of school belonging. Regarding the estimates of migration status, it is important to mention that ‘migration level 7’ (i.e. ‘other’) was used as dummy variable in the calculations.

Following the proposed order, a second model (i.e. Random Intercept Model Level 1 + Level 2) was run to include the level 2 predictor (i.e. teacher’s cultural competence). While still including all level 1 variables for control, the effect of a teacher’s cultural competence is estimated in this model. The estimated effect of cultural competence of teachers on sense of school belonging is slightly negative, however, not significant ( $\beta = -.0004$ ,  $p = .504$ ).

As previously reported, the null model for sense of school belonging as dependent variable showed no significant variation between classes, which leads to the conclusion that adding random slopes to the current models would be redundant and no further analysis is needed. All estimated effects for sense of school belonging can be found in Table 6.

### **Well-being**

Finally, a multilevel analysis was conducted with well-being as dependent variable. Following the null model, all level 1 predictors were considered with well-being as dependent variable, resulting in the ‘Random Intercept Model Level 1’. The results for this model show a significant fixed effect of ‘age’ on student well-being ( $F(1,460) = 4.860$ ,  $p = .028$ ), but no significant effect of the other level 1 variables. Looking further at the reported estimates, a positive effect of ‘age’ on students’ overall well-being is found ( $\beta = .344$ ,  $p = .028$ ), leading to the conclusion that older students scored score higher on self-reported well-being.

The second model, ‘Random Intercept Model Level 1 + Level 2’, adds the level 2 predictor ‘teacher’s cultural competence’ to the previous model. Controlling for all considered level 1 predictors, the effect of teacher’s cultural competence on the well-being of students was found to be slightly negative, but not significant ( $\beta = -.001$ ,  $p = .821$ ).

Continuing on the results of the null model, any further addition of random slopes is deemed unnecessary, ending the analysis for this study here. To conclude, a summary of all estimates for well-being as dependent variable is presented in Table 7.

Table 5

*Estimates of resilience in different models: multilevel analysis*

	Null Model	Random Intercept Model Level 1	Random Intercept Model Level 1 + Level 2	Random Slope Model Level 1 ( <i>Age_CWC</i> )	Including Level 2 variation in slopes
Intercept		48.370	48.119	48.265	48.217
Age_CWC		.255	.329	.299	-.864
Gender		-.899	-1.678	-1.709	-1.694
Migration status		.035	10.48	10.571	10.774
Teacher's cultural competence			-.004	-.005	-.005
Age*Cultural competence					.005
Log likelihood	1842.872	3678.739	1815.627	1815.116	1822.486
Residual variance	46.709**	46.501**	45.401**	44.561**	44.388
Intercept variance	5.716*	4.560*	6.667*	.653	.590
Wald Z	2.675	2.345	2.005	.548	.499
ICC	.109	.089	.128	.014	.013

\*p &lt; .05

\*\*p &lt; .01

Table 6

*Estimates of sense of school belonging in different models: multilevel analysis*

	Null Model	Random Intercept Model Level 1	Random Intercept Model Level 1 + Level 2
Intercept		3.051	3.151
Age_CWC		.010	-.008
Gender		-.046	-.110
Migration status		.066	.017
Teacher's cultural competence			-.0004
Log likelihood	1103.752	1106.323	511.795
Residual variance	.354**	.347**	.269**
Intercept variance	.019	.014	.047*
Wald Z	1.730	1.374	2.131
ICC	.052	.039	.149

\*p &lt; .05

\*\*p &lt; .01



Table 7

*Estimates of overall well-being in different models: multilevel analysis*

	Null Model	Random Intercept Model Level 1	Random Intercept Model Level 1 + Level 2
Intercept		15.771	18.062
Age_CWC		.344*	.254
Gender		-.524	-.907
Migration status		.601	-2.944
Teacher's cultural competence			-.001
Log likelihood	3060.364	3036.147	1483.830
Residual variance	21.307**	21.054**	19.921 **
Intercept variance	1.174	1.179	2.295
Wald Z	1.671	1.684	1.843
ICC	.052	.053	.103

\*p &lt; .05

\*\*p &lt; .01

### Discussion

The overall results of the current study suggest that teachers' cultural competence does not necessarily enhance resilience, sense of school belonging, or overall well-being in students, in turn rejecting the first three hypotheses. A possible explanation for these results could be that a certain gap between teacher beliefs and teacher practice regarding cultural competence exists, as it is not clear to what extent teacher views and beliefs regarding their own cultural competence reflect their class practice. Tatto (1996) stated that, although ideas of social justice and fairness are part of the education teachers receive, it is not clear how these views are translated in the classroom. Secondly, a study conducted by Lawrence (2010) revealed that school climate influences the implementation of multicultural practices by teachers. That is, teachers who received support and encouragement to further their multicultural competence felt confident to strive for more equitable teaching. In addition, the implementation of explicit school-wide intercultural approaches has shown to be beneficial for student's well-being, resilience, school climate perception, and moral identity (Read, Aldridge, Ala'I, Fraser & Fozdar, 2015). This leads to the assumption that there might be an existing effect of school climate on the chosen teaching approach regarding multiculturalism in these classrooms. Next, the results reported significant associations between student variables. Participants' migration status was significantly and negatively correlated with both resilience and school belonging, indicating that a more secure status of migration was associated with a higher score on resilience and sense of school belonging. Similar results were found in research on migrants in Germany and Latino immigrants in the United States, stating that uncertainty regarding legal status caused significant morbidity and even mortality among immigrants (Kuehne, Huschke, & Bullinger, 2015; Cavazos-Rehg, Zayas, & Spitznagel, 2007). In addition, the results show a positive correlation between age and overall well-being, suggesting that older participants have higher scores on overall well-being. This supports findings documented in the systematic review by Gheshlagh et al. (2017), where 'older age' was found to be one of the most important protective factors of mental health in difficult situations. Finally, this study prompted that the student variables regarding their well-being would strongly correlate. However, contrary to previous research, no correlation between resilience and overall well-being was found in this study (Merrill Weine et al., 2014). Whereas for sense of school belonging, a correlation with both resilience and overall well-being was found. These findings support previous studies regarding the effect of sense of school belonging. For

instance, a research review on resilience in refugee children conducted by Pieloch, McCullough, and Marks (2016) found that sense of school belonging was a repeated theme in previous resilience literature and that sense of school belonging was one of the main factors that has shown to promote resilience among refugee children. In addition, Hagerty, Lynch-Sauer, Patusky, Bouwsema, and Collier (1992) claimed that sense of belonging is a vital mental health concept and later research supported this claim by finding significant benefits of sense of belonging in numerous contexts. For instance, Stebleton, Soria, and Huesman (2014) reported that sense of belonging had a positive effect on the mental health of university students.

### **Limitations**

There are a number of limitations to this study that need to be mentioned. First, the dataset used for this study consisted of multiple classes, and thus teachers, per school. This leads to the assumption that some groups are not completely unrelated. Although no significant teacher-effect was found, a higher-level effect of school was not considered. Second, despite distributing individual questionnaires, completing them occurred during class hours. If necessary, students were able to help each other with difficult questions and teachers, as well as researchers, occasionally went around to check if the participants needed any help. Consequently, biased findings due to social desirability is a possibility. For future reference, social desirability can be detected and statistically controlled during data analysis using partial correlations (Van de Mortel, 2008; Pallant, 2005). Third, the complexity of a concept such as mental health in a multicultural context needs to be taken into account. Psychopathology is defined by Western models of illness, which often leads to other manifestations of mental illness to be overlooked. To illustrate, a study by Lustig et al. (2004) showed that, although participants had no specific mental health complaints, chronic physical complaints may indicate underlying psychological distress in refugees. In addition, to what extent one feels comfortable to be vocal about mental health complaints is often influenced by cultural norms (Akello et al., 2010). For instance, research has shown that it could be important to take into account facets such as gender relations, the individual's place in their families, and level of acculturation in multicultural assessment of mental health (Al-Krenawi, & Graham, 2000). Including more culturally sensitive sociodemographic characteristics in future research models could help account for these cultural differences. Last, the current study used a cross-sectional observational design and baseline data to analyze the proposed relationships, prohibiting any strong

conclusions on the direction of association or causality (Tol et al., 2013). In fact, mental health problems are the result of complex causal chains of interacting factors, which requires research to pay careful attention to the role of mediators and moderators in order to make valuable statements about their interrelations (Kraemer, Stice, Kazdin, Offord & Kupfer, 2001).

### **Implications**

The findings of the current study suggest that teachers' cultural competence is not directly related to the three considered well-being variables. However, continuing to focus research on which school-related factors influence refugee and migrant students' well-being is important in order to build the knowledge on how to protect these adolescents from post-migration stressors. In addition, finding ways to create a sense of school belonging in children will help to establish resilience and create better overall well-being for refugee and migrant students. A prospective study on school connectedness reported a strong and predictive link between school connectedness and mental health problems (Shochet, Dadds, Ham, & Montague, 2006). Future research should try to identify modifiable factors related to this sense of school belonging. Establishing clear knowledge on what affects students' well-being has implications for the ability of schools to organize their classes and create a nourishing environment for vulnerable children and adolescents. In addition, since migration status was found to be significantly correlated with resilience and sense of school belonging, it seems interesting to investigate further the dynamic between the different legal statuses among migrants and what their differences implicate regarding well-being.

### **Conclusion**

The mental health of refugee and migrant youth becomes more and more important in a diverse modern world. Schools specifically, are met with great diversification and as such, can benefit immensely from finding ways to cultivate these students' well-being. This master thesis was conducted to determine the relationship between teachers and refugee and migrant students in Belgium. More specifically, whether teachers' cultural competence relates to students' resilience, sense of school belonging and overall well-being. Unfortunately, the results of this study have shown no significant baseline effect of teachers' cultural competence on resilience, nor on sense of school belonging, or on overall well-being of refugee and migrant students in Belgian OKAN-classes. However, there was found a significant correlation between individual predictors and well-

being outcomes. Migration status, specifically less secure levels of migration status, is negatively correlated with reported resilience and school belonging. In addition, the results show that older students are likely to score higher on overall well-being.

In conclusion, the overall result of this study showed no significant effect of cultural competence of the educator on resilience, sense of school belonging and overall well-being of refugee and migrant adolescents in school.

## References

- Ager, A., Stark, L., Akesson, B., & Boothby, N. (2010). Defining best practice in care and protection of children in crisis-affected settings: A Delphi study. *Child development*, 81(4), 1271-1286.
- Akello, G., Reis, R., & Richters, A. (2010). Silencing distressed children in the context of war in northern Uganda: An analysis of its dynamics and its health consequences. *Social Science & Medicine*, 71(2), 213-220.
- Al-Krenawi, A., & Graham, J. R. (2000). Culturally sensitive social work practice with Arab clients in mental health settings. *Health & Social Work*, 25(1), 9-22.
- Barber, B. K. (2013). Annual research review: The experience of youth with political conflict—challenging notions of resilience and encouraging research refinement. *Journal of Child Psychology and Psychiatry*, 54(4), 461-473.
- Baranik, L. E., Hurst, C. S., & Eby, L. T. (2018). The stigma of being a refugee: A mixed-method study of refugees' experiences of vocational stress. *Journal of Vocational Behavior*, 105, 116-130.
- Baumeister, R. F., & Leary, M. R. (1995). The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation. *Psychological Bulletin*, 117(3), 497-529.
- Bentley, N., Hartley, S., & Bucci, S. (2019). Systematic review of self-report measures of general mental health and wellbeing in adolescent mental health. *Clinical Child and Family Psychology Review*, 22(2), 225-252.
- Betancourt, T. S., Borisova, I., Williams, T. P., Meyers-Ohki, S. E., Rubin-Smith, J. E., Annan, J., & Kohrt, B. A. (2013). Research review: Psychosocial adjustment and mental health in former child soldiers - A systematic review of the literature and recommendations for future research. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 54(1), 17-36. <https://doi.org/10.1111/j.1469-7610.2012.02620.x>

- Berry, J. W. (1991). Refugee adaptation in settlement countries: An overview with an emphasis on primary prevention. *Refugee children: Theory, research, and services*, 20, 38.
- Berthold, S. M. (2000). War traumas and community violence: Psychological, behavioral, and academic outcomes among Khmer refugee adolescents. *Journal of multicultural social work*, 8(1-2), 15-46.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Harvard university press.
- Bronstein, I., & Montgomery, P. (2011). Psychological distress in refugee children: a systematic review. *Clinical child and family psychology review*, 14(1), 44-56.
- Buckner, J. C., Mezzacappa, E., & Beardslee, W. R. (2003). Characteristics of resilient youths living in poverty: The role of self-regulatory processes. *Development and psychopathology*, 15(1), 139-162.
- Carswell, K., Blackburn, P., & Barker, C. (2011). The relationship between trauma, post-migration problems and the psychological well-being of refugees and asylum seekers. *International Journal of Social Psychiatry*, 57(2), 107-119.
- Cavazos-Rehg, P. A., Zayas, L. H., & Spitznagel, E. L. (2007). Legal status, emotional well-being and subjective health status of Latino immigrants. *Journal of the National Medical Association*, 99(10), 1126.
- Chen, W., Hall, B. J., Ling, L., & Renzaho, A. M. (2017). Pre-migration and post-migration factors associated with mental health in humanitarian migrants in Australia and the moderation effect of post-migration stressors: findings from the first wave data of the BNLA cohort study. *The Lancet Psychiatry*, 4(3), 218-229.
- Cicchetti, D., & Curtis, W. J. (2006). In D. Cicchetti, & D. Cohen. *The developing brain and neural plasticity: Implications for normality, psychopathology, and resilience (2nd ed.)*. *Developmental psychopathology: Developmental neurosciences*, 2, 710-741.

- Correa-Velez, I., Gifford, S. M., & Barnett, A. G. (2010). Longing to belong: Social inclusion and wellbeing among youth with refugee backgrounds in the first three years in Melbourne, Australia. *Social science & medicine*, 71(8), 1399-1408.
- Correa-Velez, I., Gifford, S. M., McMichael, C., & Sampson, R. (2017). Predictors of Secondary School Completion Among Refugee Youth 8 to 9 Years After Resettlement in Melbourne, Australia. *Journal of International Migration and Integration*, 18(3), 791–805. <https://doi.org/10.1007/s12134-016-0503-z>
- Eisenbruch, M. (1990). Cultural bereavement and homesickness. *On the move: The psychology of change and transition*, 191-205.
- Enders, C. K., & Tofighi, D. (2007). Centering predictor variables in cross-sectional multilevel models: a new look at an old issue. *Psychological methods*, 12(2), 121.
- Fazel, M., & Betancourt, T. S. (2018). Preventive mental health interventions for refugee children and adolescents in high-income settings. *The Lancet Child & Adolescent Health*, 2(2), 121-132.
- Fazel, M., & Stein, A. (2002). The mental health of refugee children. *Archives of disease in childhood*, 87(5), 366-370.
- Fazel, M., Doll, H., & Stein, A. (2009). A school-based mental health intervention for refugee children: An exploratory study. *Clinical Child Psychology and Psychiatry*, 14(2), 297-309.
- Fazel, M., Reed, R. V., Panter-Brick, C., & Stein, A. (2012). Mental health of displaced and refugee children resettled in high-income countries: risk and protective factors. *The Lancet*, 379(9812), 266-282.
- Gheshlagh, R. G., Sayehmiri, K., Ebadi, A., Dalvandi, A., Dalvand, S., Maddah, S. S. B., & Tabrizi, K. N. (2017). The relationship between mental health and resilience: a systematic review and meta-analysis. *Iranian Red Crescent Medical Journal*, 19(6).



- Goodenow, C. (1993). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools*, 30(1), 79-90.
- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: a research note. *Journal of child psychology and psychiatry*, 38(5), 581-586.
- Goodman, A., Lamping, D. L., & Ploubidis, G. B. (2010). When to use broader internalising and externalising subscales instead of the hypothesised five subscales on the Strengths and Difficulties Questionnaire (SDQ): data from British parents, teachers and children. *Journal of abnormal child psychology*, 38(8), 1179-1191.
- Goodkind, J. R., Hess, J. M., Isakson, B., LaNoue, M., Githinji, A., Roche, N., ... & Parker, D. P. (2014). Reducing refugee mental health disparities: A community-based intervention to address postmigration stressors with African adults. *Psychological Services*, 11(3), 333.
- Hagborg, W. J. (1998). An investigation of a brief measure of school membership. *Adolescence*, 33(130), 461.
- Hagerty, B. M., Lynch-Sauer, J., Patusky, K. L., Bouwsema, M., & Collier, P. (1992). Sense of belonging: A vital mental health concept. *Archives of psychiatric nursing*, 6(3), 172-177.
- Heck, R. H., Thomas, S. L., & Tabata, L. N. (2014). *Multilevel and longitudinal modeling with IBM SPSS* (2<sup>nd</sup> ed). Routledge: New York.
- Hjern, A., Angel, B., & Jeppson, O. (1998). Political violence, family stress and mental health of refugee children in exile. *Scandinavian journal of social medicine*, 26(1), 18-25.
- IBM Corp. (2017). *IBM SPSS Statistics for Windows*. Armonk, NY: IBM Corp. Retrieved from <https://hadoop.apache.org>
- IOM. (2019). *World Immigration Report 2020*. Geneva, Switzerland: International Organization for Migration (IOM). Retrieved from [https://www.un.org/sites/un2.un.org/files/wmr\\_2020.pdf](https://www.un.org/sites/un2.un.org/files/wmr_2020.pdf)

- Iversen, V. C., Sveaass, N., & Morken, G. (2014). The role of trauma and psychological distress on motivation for foreign language acquisition among refugees. *International Journal of Culture and Mental Health*, 7(1), 59-67.
- Jakobsen, M., Demott, M. A., & Heir, T. (2014). Prevalence of psychiatric disorders among unaccompanied asylum-seeking adolescents in Norway. *Clinical practice and epidemiology in mental health: CP & EMH*, 10, 53.
- Jetten, J., Haslam, S. A., Cruwys, T., Greenaway, K. H., Haslam, C., & Steffens, N. K. (2017). Advancing the social identity approach to health and well-being: Progressing the social cure research agenda. *European Journal of Social Psychology*, 47(7), 789-802.
- Kraemer, H. C., Stice, E., Kazdin, A., Offord, D., & Kupfer, D. (2001). How do risk factors work together? Mediators, moderators, and independent, overlapping, and proxy risk factors. *American journal of psychiatry*, 158(6), 848-856.
- Kuehne, A., Huschke, S., & Bullinger, M. (2015). Subjective health of undocumented migrants in Germany—a mixed methods approach. *BMC public health*, 15(1), 926.
- Lawrence, S. M. (2005). Contextual matters: Teachers' perceptions of the success of antiracist classroom practices. *The Journal of Educational Research*, 98(6), 350-365.
- Lee, J. E., Sudom, K. A., & Zamorski, M. A. (2013). Longitudinal analysis of psychological resilience and mental health in Canadian military personnel returning from overseas deployment. *Journal of occupational health psychology*, 18(3), 327.
- Libbey, H. P. (2004). Measuring student relationships to school: Attachment, bonding, connectedness, and engagement. *Journal of School Health*, 74(7), 275-283.
- Liebenberg, L., Ungar, M., & LeBlanc, J. C. (2013). The CYRM-12: a brief measure of resilience. *Canadian Journal of Public Health*, 104(2), e131-e135.
- Liebkind, K. (1993). Self-reported ethnic identity, depression and anxiety among young Vietnamese refugees and their parents. *Journal of Refugee Studies*, 6(1), 25-39.

- Masten, A. S., Best, K. M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and psychopathology*, 2(4), 425-444.
- McLaughlin, C., & Clarke, B. (2010). Relational matters: A review of the impact of school experience on mental health in early adolescence. *Educational and Child Psychology*, 27(1), 91.
- Mendoza-Denton, R., Downey, G., Purdie, V. J., Davis, A., & Pietrzak, J. (2002). Sensitivity to status-based rejection: implications for African American students' college experience. *Journal of personality and social psychology*, 83(4), 896.
- Merrill Weine, S., Ware, N., Hakizimana, L., Tugenberg, T., Currie, M., Dahnweih, G., ... & Wulu, J. (2014). Fostering resilience: Protective agents, resources, and mechanisms for adolescent refugees' psychosocial well-being. *Adolescent Psychiatry*, 4(3), 164-176.
- Pallant, J. (2005). SPSS Survival Manual, 2nd edn, Maidenhead.
- Pieloch, K. A., McCullough, M. B., & Marks, A. K. (2016). Resilience of children with refugee statuses: A research review. *Canadian Psychology/psychologie canadienne*, 57(4), 330.
- Ponterotito, J. G., Baluch, S., Greig, T., & Rivera, L. (1998). Development and initial score validation of the teacher multicultural attitude survey. *Educational and psychological measurement*, 58(6), 1002-1016.
- Prieto, L. R. (2012). Initial factor analysis and cross-validation of the Multicultural Teaching Competencies Inventory. *Journal of Diversity in Higher Education*, 5(1), 50.
- Pumariega, A. J., Rothe, E., & Pumariega, J. B. (2005). Mental health of immigrants and refugees. *Community mental health journal*, 41(5), 581-597.
- Read, K., Aldridge, J., Ala'i, K., Fraser, B., & Fozdar, F. (2015). Creating a climate in which students can flourish: A whole school intercultural approach. *International journal of whole schooling*, 11(2), 29-44.

- Reed, R. V., Fazel, M., Jones, L., Panter-Brick, C., & Stein, A. (2012). Mental health of displaced and refugee children resettled in low-income and middle-income countries: risk and protective factors. *The Lancet*, 379(9812), 250-265
- Roeser, R. W., Eccles, J. S., & Sameroff, A. J. (2000). School as a context of early adolescents' academic and social-emotional development: A summary of research findings. *The elementary school journal*, 100(5), 443-471.
- Rutter, M. (1991). Pathways from childhood to adult Life; the role of schooling. *Pastoral Care in Education*, 9(3), 3-10.
- Sánchez, B., Colón, Y., & Esparza, P. (2005). The role of sense of school belonging and gender in the academic adjustment of Latino adolescents. *Journal of youth and Adolescence*, 34(6), 619-628.
- Scandurra, C., Amodeo, A. L., Valerio, P., Bochicchio, V., & Frost, D. M. (2017). Minority stress, resilience, and mental health: A study of Italian transgender people. *Journal of Social Issues*, 73(3), 563-585.
- Silove, D., Sinnerbrink, I., Field, A., Manicavasagar, V., & Steel, Z. (1997). Anxiety, depression and PTSD in asylum-seekers: associations with pre-migration trauma and post-migration stressors. *The British Journal of Psychiatry*, 170(4), 351-357.
- Shochet, I. M., Dadds, M. R., Ham, D., & Montague, R. (2006). School connectedness is an underemphasized parameter in adolescent mental health: Results of a community prediction study. *Journal of Clinical Child & Adolescent Psychology*, 35(2), 170-179.
- Stebbleton, M. J., Soria, K. M., & Huesman Jr, R. L. (2014). First-generation students' sense of belonging, mental health, and use of counseling services at public research universities. *Journal of College Counseling*, 17(1), 6-20.
- Sujoldžić, A., Peternel, L., Kulenović, T., & Terzić, R. (2006). Social determinants of health—a comparative study of Bosnian adolescents in different cultural contexts. *Collegium antropologicum*, 30(4), 703-711.

- Sullivan, A. L., & Simonson, G. R. (2016). A systematic review of school-based social-emotional interventions for refugee and war-traumatized youth. *Review of Educational Research*, 86(2), 503-530.
- Tatto, M. T. (1996). Examining values and beliefs about teaching diverse students: Understanding the challenges for teacher education. *Educational evaluation and policy analysis*, 18(2), 155-180.
- Tol, W. A., Song, S., & Jordans, M. J. (2013). Annual research review: Resilience and mental health in children and adolescents living in areas of armed conflict—a systematic review of findings in low-and middle-income countries. *Journal of Child Psychology and Psychiatry*, 54(4), 445-460.
- UNHCR. (2020). *Figures at a glance*. Retrieved from <https://www.unhcr.org/figures-at-a-glance.html>
- Van de Mortel, T. F. (2008). Faking it: social desirability response bias in self-report research. *Australian Journal of Advanced Nursing*, 25(4), 40.
- Van de Pol, M., & Wright, J. (2009). A simple method for distinguishing within-versus between-subject effects using mixed models. *Animal behaviour*, 77(3), 753.
- Vindevogel, S. (2017). Resilience in the context of war: A critical analysis of contemporary conceptions and interventions to promote resilience among war-affected children and their surroundings. *Peace and conflict: journal of peace psychology*, 23(1), 76.
- Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students. *Science*, 331(6023), 1447-1451.
- Walton, G. M., & Cohen, G. L. (2007). A question of belonging: race, social fit, and achievement. *Journal of personality and social psychology*, 92(1), 82.
- Yang, Y., Cox, C., & Cho, Y. (2020). Development and Initial Validation of Cultural Competence Inventory—Preservice Teachers. *Journal of Psychoeducational Assessment*, 38(3), 305-320.

- You, S., Ritchey, K. M., Furlong, M. J., Shochet, I., & Boman, P. (2011). Examination of the latent structure of the psychological sense of school membership scale. *Journal of Psychoeducational Assessment*, 29(3), 225-237.
- Zolkoski, S. M., & Bullock, L. M. (2012). Resilience in children and youth: A review. *Children and Youth Services Review*, 34(12), 2295–2303. <https://doi.org/10.1016/j.childyouth.2012.08.009>