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The “CHARM” Policy Analysis Framework

EVALUATION OF POLICIES TO PROMOTE
IMMIGRANT STUDENTS’ RESILIENCE

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**THE "CHARM" POLICY ANALYSIS FRAMEWORK: EVALUATION OF POLICIES TO PROMOTE
IMMIGRANT STUDENTS' RESILIENCE**

OECD Education Working Paper No. 158

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ABSTRACT

This paper focuses on children with a migration background and conceptualises their migration experience as adversity. The paper adapts the resilience framework to understand how immigrant children can overcome adversity. The paper discusses policy models that can be derived from adopting a resilience approach to the measurement of immigrant students' integration prospects and proposes a policy analysis framework. The "CHARM" framework helps to assess the extent to which destination country policies and practices support the educational and socioemotional well-being of immigrant children. Namely, it evaluates whether policies consider 1) Cumulative adversity; adopt a 2) Holistic approach; consider 3) Adjustment as a dynamic process; identify a 4) Relational development; and implement a 5) Multilevel approach. The paper finally applies the CHARM framework to the education policies of Ontario, Canada and underscores the relevance of applying the CHARM framework across countries and jurisdictions to evaluate education policies that can promote the resilience of immigrant children.

RESUMÉ

Le présent document, qui s'intéresse aux enfants issus de l'immigration, envisage leur expérience migratoire comme une épreuve. Il adapte le cadre de résilience pour comprendre comment les enfants issus de l'immigration peuvent surmonter l'adversité. Il examine les modèles d'intervention qui peuvent découler de l'adoption d'une approche de l'évaluation des perspectives d'intégration des élèves issus de l'immigration fondée sur la résilience, et propose un cadre d'analyse stratégique. Le cadre « CHARM » permet d'évaluer dans quelle mesure les politiques et pratiques du pays d'accueil favorisent le bien-être éducatif et socioémotionnel des enfants issus de l'immigration. Plus précisément, il cherche à déterminer si les politiques 1) tiennent compte des épreuves Cumulées ; 2) adoptent une approche Holistique ; 3) envisagent l'Adaptation comme un processus dynamique ; 4) recherchent un développement Relationnel ; et 5) mettent en œuvre une approche Multiniveaux. Pour finir, le rapport applique le cadre CHARM aux politiques d'éducation de l'Ontario, Canada, et souligne l'importance d'appliquer ce cadre à l'ensemble des pays et territoires afin d'évaluer les politiques d'éducation à même de renforcer la résilience des enfants issus de l'immigration.

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INTRODUCTION

In the majority of OECD member states, the current immigration flows driven by conflict and family migration include a large share of children (OECD, 2017). As a result of this, the total number of immigrant and refugee children in destination countries has significantly increased in the past couple of years. There are more immigrant families and children who are not acquainted with the education system, language and culture of the new countries of settlement (OECD, 2015b; OECD/EU, 2015). In this context, many countries are dealing with the question of how to best support the integration processes of immigrant children. This question can be addressed in two main steps. In the first step, immigrant children need to be enrolled in schools and transit to the mainstream education in the most efficient way. In the second step, once immigrant students become part of an education system, their integration to the school community and the wider society should be supported by effective and well-targeted policies. Adopting a resilience approach to the study of immigrant students' integration processes can shed new light into the understanding of immigrant students' needs and support developing well-targeted educational policies.

Resilience approach aims to study the conditions under which individuals who face adversity reach a high level of well-being against all odds. This paper applies this point of view in the case of immigrant students and adapts the resilience framework to discuss the multidimensional well-being of children in the short-, medium- and long-term considering their experiences related to migration (See Figure 1). Resilience can be defined as immigrant children's ability to withstand stress, overcome personal difficulties and adjust successfully (Garmezy and Rutter, 1983) and observed in different well-being dimensions. Well-being is a dynamic state characterised by immigrant children's ability and opportunity to fulfil their personal and social goals (Borgonovi and Pál, 2016). The way well-being is understood differs across policy jurisdictions, countries and international levels (Ereaut and Whiting, 2008, Pedace, 2008), but generally speaking, child well-being can be understood as follows:

“Child well-being encompasses quality of life in a broad sense. It refers to a child's economic conditions, peer relations, political rights, and opportunities for development. Most studies focus on certain aspects of children's well-being, often emphasising social and cultural variations. Thus, any attempts to grasp well-being in its entirety must use indicators on a variety of aspects of well-being.” (Ben-Arieh and Frones, 2007:1)

Within the variety of aspects of well-being, academic performance, socioemotional well-being and motivational drive for future are compelling for immigrant children. Immigrant children's academic literacy in different topics (math, science and reading) shows how well they do in school today and predicts their preparedness for life as adults. Their social relations, feelings about their (school) life and views for the future are indicative of how adjusted they are now, but also positive and confident for the future. Resilience framework helps assess where children stand in relation to these different dimensions of life and investigate how some children cope better with adversity than others.

Figure 1. Components of resilience framework in migration research



One of the underlying objectives of the resilience approach is to move away from a deficit model of resilience and adjustment (Wong, 2008). This objective is particularly crucial when studying the case of immigrant children who at times are perceived as a liability for host countries. Instead of stressing the weaknesses of immigrant children, resilience approach illustrates the potential of individual students whereby their capabilities are recognised. In the presence of multiple factors that put immigrant children at risk, resilience approach identifies characteristics that help them cope with adversity. Another positive feature of the resilience approach is its wider focus on the social environment that shapes the experiences of children. By paying equal attention to family, school and country characteristics, it permits to identify other contextual and structural factors that explain children's adjustment processes (Ungar, 2011).

This paper has three objectives. First, the paper applies the resilience framework to the migration context in a systematic manner to understand the resilience and adjustment processes of immigrant students. That is to say, children's migration experiences are conceptualised as adversity and the core features of resilience framework, including vulnerability, adjustment, protective and risk factors are introduced. The second objective of the paper is to translate the core features of resilience framework into respective policy objectives for equity in learning and well-being outcomes of immigrant students in school. This discussion leads to the "CHARM" policy analysis framework which focuses on C "cumulative adversity", H "holistic approach", A "adjustment as a dynamic process", R "relational development" and M "multilevel approach". Accordingly, the CHARM framework helps to assess the extent to which destination country policies and practices support immigrant students' resilience. Thirdly and finally, the paper applies the CHARM framework to the education policies of Ontario, Canada and underscores the relevance of applying the CHARM framework to evaluate the policies that can promote the resilience of immigrant children.

MIGRATION AS ADVERSITY

Above and beyond academic and official definitions, migration is a journey in search for a better life. People move to places for many different reasons, but most commonly to seek better life opportunities and improve their living conditions (Castles, de Haas and Miller, 2013). Considering this, one may think that it is counter intuitive to think of migration as adversity, but as documented in academic research and discussed in policy debates, migration comes along with a set of stressors related to settling and adapting to a new country (Berry, 1997). As discussed in this section, the level and depth of adversity related to migration differs also for immigrant children depending on the characteristics of their migration trajectory and experiences.

Migration is a life changing experience that fundamentally reshapes one's life. Immigrant children, as dependents, rarely have much to say about the decision to migrate. With the exception of unaccompanied children, in most cases children follow their families and bear both the positive and negative consequences of migration (Suarez-Orozco and Suarez-Orozco, 2001). For all immigrant and refugee children, migration breeds a set of stressors related to settling and adapting to a new country. These include both rights-based and living conditions related stressors. Rights-based stressors refer to obtaining legal status, having access to education and health care, and receiving targeted support for social inclusion. Immigrant families and their children need to learn their rights and obligations and to navigate through new institutional settings. Even in the most favourable setting where immigrants have full rights as citizens and are welcomed by the society, adapting to a new country is a challenge and a long-term process that requires material and emotional investment on the part of immigrant families and their children.

Living conditions related stressors refer to many other difficulties that may arise in social and cultural environments of immigrant children (Brittain, 2002). Immigrant children need to integrate into school systems that may be significantly different than the one they are used to in their origin country (Constantine and Sue, 2006; Meece and Kurtz-Costes, 2001). Due to language difficulties, they may encounter problems with following courses and engaging with their teachers and peers in the classroom (Boykin, Tyler, and Miller, 2005; Gay, 2000). Moreover, because of the complications in identifying their prior knowledge and skills, immigrant students may not receive the necessary academic support that could help them achieve higher levels of success. Immigrant students may also experience prejudice and perceive discrimination both from teachers and their peers. Finally, for some immigrant children, learning the social codes, norms and values of their new social environment and negotiating these values with their own culture, values and traditions may also be emotionally challenging (Brittain, 2002).

As suggested by the set of examples given, migration is associated with a variety of risks and stressors. All migratory movement has significant effects on immigrant children's life but for some these effects may be more detrimental and unfavourable than for others. These differences may be identified in a more systematic way by looking at the spatiality, temporality, origin, and intensity of the migration experience (See Figure 2).

Figure 2. Level and depth of adversity in migration



The first component is the spatiality of migration. Spatiality refers to the distance of the migratory movement and its relation to national, international and regional borders. The implications of migratory movements that take place within a country versus between countries are significantly different. These can be discussed in terms of free mobility, legal restrictions and also cultural distance and ease of adapting to a new location (Castles, 2000). Put simply in an example, the migratory experiences of an EU national who moves within EU member states may be significantly different than a third country national immigrating to an EU member state (See MIPEX, 2015) and this is different from the migratory experiences within national borders, for example an Italian national moving from Sicily to Piedmont (two Italian regions). While distance *per se* may not directly translate into increased adversity for immigrant children, it is a proxy for the magnitude of the migratory movement, especially when it is combined with crossing of international borders.

Temporality of migration can be discussed in various ways: (intended) duration of migration, immigrant generation, duration of residence and age at migration. First, the ways in which immigrants think about their integration and adaptation to the country of destination may differ significantly if they tend to settle permanently or stay in the country of destination on a temporary basis (Fokkema and de Haas, 2015). For example, a student immigrant who has the objective of returning back to the country of origin upon obtaining a diploma may have different views on integration and return than a permanent immigrant (Bilgili and Siegel, 2015). The duration of migration does not only change the ways in which immigrants themselves think about integration, but also of the countries and the host societies in terms of their policies, expectations and attitudes (Castles, 2000). Consequently, the level and depth of adversity related to migration will be different for immigrant families and their children with temporary and permanent migration intentions.

Second, there are considerable differences between first and second generation immigrants. Second generation immigrants are born, raised and socialised in the destination country and have a link to migration through their foreign born parent(s). Compared to their first generation immigrant peers, they are more likely to be exposed to the host country culture, speak the host country language better, and interact more with the host society (Chiswick and DebBurman, 2004; Harker, 2001). However, the differences between two generations may diminish to a large extent with longer duration of residence (Cortes, 2006). Finally, in terms of temporality, it is important to mention age at arrival for learning and adjustment outcomes (OECD, 2015a; Van Ours and Veenman, 2006). Older child immigrants' level of exposure to the new society may be significantly less and make it thus more challenging for them to integrate. As suggested by these examples, temporality of migration will affect the level and depth of adversity caused by migration.

The origin of migration refers to the reason and motivation for migration such as employment, education, family formation/reunification or asylum. People immigrate for a wide range of reasons and adversity associated with reasons of migration can be very different (Suárez-Orozco and Suárez-Orozco, 2009). In the context of immigrant children for example, the experiences of an immigrant child who flees from war and violence in their country of origin may be very different than from a child who migrates to reunify with their parents who are working in the country of destination. In the latter case, the stress and challenges associated by migration are also not negligible but are perhaps easier to deal with compared to the first case. In this respect, origin of migration relates in different ways to voluntariness and preparedness for migration and can influence significantly the severity of experiences.

Finally, it is also important to take into account the intensity of migration which refers to the question whether the migratory movement can be considered as a single act that happens in one time or if it coincides with other events and takes place in a longer period. For instance, many immigrants who flee from war and violence take a longer route until they reach their final destination. Immigration is not always as simple as buying a flight ticket and landing on the country of settlement. Many immigrants take

dangerous routes, travel long distances and at times live for long periods in countries of transit (de Vries, Carrera and Guild, 2016). When the migratory movement itself is more challenging, the challenges associated with it can also be greater. In the case of immigrant children, such migration experiences may lead to longer periods without formal education and increased feelings of ambiguity and insecurity about the future, which eventually affect the experiences upon settlement in the destination country (Brown and Miller, 2006; Cassity and Gow, 2005).

In short, it is important to conceptualise migration as adversity due to all the challenges individuals face prior to migration, during migration and in the post-migration period of settlement and integration. Immigrant children compose a very heterogeneous group with very diverse experiences, and for some migration may mean a more severe adversity than for others. When thinking about immigrant children's resilience against these challenges and how they adjust to their new life in the destination country, it is important to take into account all these diverse experiences.

RESILIENCE AND ADJUSTMENT IN MIGRATION RESEARCH

In the past couple of decades the resilience approach has been increasingly used in youth studies, but has been hardly applied to research on international migration and integration (Smith, 2006; Wung, 2008). Very few studies have identified immigrating with family, experiences of forced displacement and coming from a family with a migration background as different types of adversity related migration (Crosnoe, 2005; Perez et al., 2009; Wong, 2008; Van Hook et al., 2013). This section, seeks to fill this gap in the field and revisit and adapt the concepts of resilience and adjustment to the migration context. In particular, three core features of the resilience framework are discussed: the adoption of a holistic approach; the conceptualisation of adjustment as a dynamic process; and considering relational development.

The conceptualisation of resilience, in the sense used in this research, dates back to the post-World War II period. World War II affected millions of people across the world, including children. The war left behind orphaned, injured, sick, traumatised and starving children (Werner, 2000). In fact, the United Nations International Children's Emergency Fund (UNICEF) was founded to address this global emergency (Diers, 2013). Finding ways to assist the recovery of children with multiple adversities was the main focus of researchers at the time. In this regard, resilience research has its roots in research and theory in child development, clinical sciences and the study of individual differences (Cicchetti, 2013; Evans, Li and Whipple, 2013; Luthar, 2006; Masten, 2013).

Resilience is a child's ability to withstand stress, overcome personal difficulties and adjust successfully (Daniel and Wassell, 2002; Howard et al., 1999). However, resilience is not only a personal trait but depends on children's interaction with their environment and, in particular, with their experience of protective and risk factors (Fraser, 1997; Luthar, 2003; Luthar et al., 2000; Seccombe, 2002). In this regard, the relational developmental systems theory has been crucial for resilience research. This theory adopts a holistic and integrative approach when it comes to the understanding of variations in human adaptation over the life course (Lerner et al., 2012; Overton, 2013; Sameroff, 2000). To find out about the coping strategies that help achieve positive functioning, it suggests looking into complex systems and inherently linked factors that affect the ways in which individuals cope with threats, surprises and disasters.

Building upon a strength based perspective, the resilience approach puts more emphasis on support mechanisms and has the underlying objective of mobilising the potential of children and their resources

(Wong, 2008). In other words, it is an attempt to identify personality characteristics as well as environmental resources to moderate the negative effects of stress (Bernard, 1991; Kirby and Fraser, 1997; Masten, 1994; Werner and Smith, 1992). In most cases, researchers identify three sets of spheres within which they investigate the protective and risk factors: 1) attributes of the children themselves, 2) characteristics of their families and 3) attributes of their wider societal environment (Masten and Garmezy, 1985; Werner and Smith, 1982, 1992). The societal environment encompasses the school, the neighbourhood as well as the wider community, and is particularly important for disadvantaged children including children with a migration background. In the remainder of this section, these issues are discussed in more detail.

Holistic approach: Adjustment in multiple life dimensions

Adjustment means to show reduced vulnerability and relatively good outcomes despite exposure to significant risk or negative experiences (Luthar, 2003; Masten, Powell and Luthar 2003; Rutter, 2006). Individuals who overcome adversities and adjust successfully are considered to be resilient. The adoption of a holistic approach suggests that individuals' adjustment capacity should be assessed when considering the whole child and multiple life domains. This means that resilience can be better understood if adjustment is assessed in a comprehensive manner. This perspective has two main implications. Firstly, multiple aspects of resilience co-occur and individuals may have different levels of adjustment in different life domains (Ungar and Liebenberg 2011). Secondly, life domains are interlinked and they are mutually dependent on one another. A holistic approach makes it possible to study how children balance resilience in each area and what kinds of dynamics exist between different life domains.

There is no single way of measuring adjustment in multiple life domains. However, the literature on immigrant integration and multidimensional well-being informs researchers on what dimensions of life are relevant to have a better understanding on immigrant students' adjustment. Researchers define different sets of life domains to define resilience. For example, some commonly mentioned ones are academic achievement, psychosocial adjustment, emotional well-being and physical health (Tusaie and Dyer, 2004). In the case of immigrant students, these dimensions are also relevant.

Academic resilience captures children's skills and foundations that prepare them to participate effectively in today's society, as lifelong learners, effective workers and engaged citizens. Relationships with peers, overall life satisfaction, belongingness to school and test and learning anxiety are equally important to understand socioemotional resilience. Students' engagement with their network helps to understand how they experience their daily life and if they are able to have trustworthy connections and feel protected through these relationships (Gale et al., 2013, Helliwell and Putnam, 2004).

High levels of life satisfaction are associated with positive physical and cognitive development, social and coping skills that lead to more positive outcomes in adulthood (Currie et al., 2012). A sense of belonging in school means children perceive to be accepted and liked by the rest of the group, feel connected to others and their community (Baumeister and Leary, 1995; Maslow, 1943). Moreover, test and learning anxiety can put barriers in front of learning and performance leading to lower academic performance as well as broader consequences related to social, emotional and behavioural development (Ackerman and Heggstad, 1997; Hembree, 1988; Seipp, 1991).

Finally, it is also possible to supplement the list of dimensions by educational motivation and career and educational expectations. These indicators assess students' desire to outperform others, their desire to work hard to master a task or their desire to perform (Elliot and McGregor, 2001; Elliot and Thrash, 2001; Helmreich et al., 1978). They are related to perseverance and their drive can guide their behaviour in school (McClelland, 1958). Student motivation and expectations predict academic performance, career choice and even job performance in the future. All in all, these examples illustrate that immigrant students'

resilience, and adjustment can be assessed in a more comprehensive manner if multiple dimensions of their life are taken into account.

Adjustment as a process: Variation across time and life domains

The study of adjustment requires taking into account variation across time and life domains (Ungar, Ghazinour and Richter, 2013). Adjustment is evaluated on the basis of positive achievements in age-salient development tasks and accomplishments expected for individuals in a given period of development in a given sociocultural context (McCormick, Kuo and Masten, 2011). Therefore, resilience is a dynamic process; and how resilient children are may change over time. As children grow and witness new experiences, they may not be able to continuously cope with adversities. Children may have fluctuations of positive and negative changes in their adjustment outcomes. In this regard, adjustment is about time, process and context (Panter-Brick and Leckman, 2013).

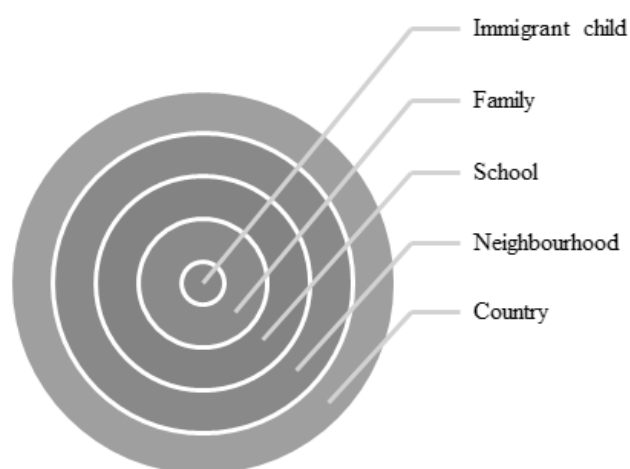
As discussed earlier, adjustment can also show variation across different life domains. By simultaneously evaluating adjustment in different life domains, different combinations of resilience can be observed which lead to the development of typologies to have a better understanding of how resilience presents itself. Moreover, it is valuable to study whether resilience in one life domain competes with or complements resilience in another domain. For example, previous research has shown that in the United States, Black students are more likely to report engagement at school compared to their White peers, but this higher level of sense of belonging does not necessarily translate into higher educational outcomes (Shernoff and Schmidt, 2008).

As commonly discussed in immigrant integration literature, integration of immigrant children is not a straight-line process. The uneven convergence of adjustment in different life domains is a reflection of adjustment as a dynamic “bumpy” process (Gans, 1992). For these reasons, when discussing resilience and adjustment of immigrant students both in and out of school, changes over time, reasons of these changes, and critical points of change should be identified and analysed in a systematic manner.

Relational development: Protective and risk factors

Resilience is a dynamic process that is shaped by multiple protective and risk factors leading to positive outcomes in the long term (Ungar, Ghazinour and Richter, 2013). While risk factors refer to the problems and deficits that hinder individuals to achieve personal growth, protective factors focus on strengths and support mechanisms that help cope with adversity in a successful manner (Michaud, 2006). The latter is especially important because it shifts the focus of research from ‘restoration to a state of equilibrium’ towards strength that instils change and hope (Smith, 2006). Protective and risk factors are multilevel and multidimensional and they differ depending on the adversity under question (Garmezy, 1981; Garmezy and Rutter, 1983; Werner, Bierman and French, 1971; Werner and Smith, 1982).

Resilience requires a multidimensional approach (Lerner, 2006). Without the assessment of environmental conditions, a full understanding of the function protective factors cannot be reached. In the earlier reviews of resilience research from mid-1980, researchers have regularly addressed child attributes, family attributes and extra-familial attributes to identify different dimensions of protective and risk factors. Individual attributes are about children’s characteristics and experiences, the family level refers to socio-economic background and parenting related issues, whereas the extra-familial level includes neighbourhood and school related factors (Fraser, 2004; Luthar and Cicchetti, 2000; Masten, 2001; Rutter, 2000).

Figure 3. Multilevel view on protective and risk factors

The simultaneous consideration of multiple dimensions is called the *ecosystemic perspective* (Waller, 2001) and is particularly important because it moves away from putting emphasis only on individual and family characteristics, but takes into account other contextual, structural and institutional factors (See Figure 3). This systematic view of resilience highlights that coping with adversity requires the complex interaction of individual, familial and community contingencies (Walsh, 1998). For instance, in the case of immigrant children, research indicates that the academic outcomes of immigrant students are shaped not only by the resources and circumstances of their families and the communities they come from, but also the social and education policies of destination countries, and the attitudes towards immigrants that residents in their new communities express (Berry et al. 2006; Levels et al. 2006).

Despite the commonality of protective and risk factors between immigrant and native students, two differences may exist between groups. First, immigrant children may experience more strongly some of the risk factors compared to their native peers. For example, immigrant children are significantly more likely to be in schools with poorer material resources (OECD, 2015a). Second, the effects of some protective and risk factors may be even more important for immigrant children. For example, while experiences of bullying negatively affect the socioemotional well-being of all children, the negative effects of such experiences may be even stronger and more harmful for immigrant children (Scherr and Larson, 2009). When applying resilience approach in the context of migration, these are issues that need to be explored further (Lippman et al., 2011).

POLICY ANALYSIS THROUGH A RESILIENCE FRAMEWORK

This section discusses how the resilience framework can be adapted to evaluate specific policy approaches and objectives aimed at promoting the integration of immigrant students. No recent research has attempted to develop a systematic and comprehensive set of policy approaches that are in line with the main principles defined by the resilience framework. Resilience studies tend to focus on one principle rather than a comprehensive policy framework. For example, there are researchers who propose a

“dynamic assessment over time” regarding interactions between different types of influences on resilience (Mohaupt 2008, p.65). Others call for interventions that are multilevel, holistic and integrated (Burchardt and Huerta 2008; Luthar and Cicchetti 2000; Schoon and Bynner 2003). Finally, there are researchers who promote more sophisticated approaches that require a shift towards community development rather than focusing only on individuals (Friedli 2011; Landau 2007; Mguni and Bacon 2010). Moreover, most studies tend to be context specific and do not provide a discussion that is cross-nationally relevant (Bonnell et al., 2010; Daubé et al., 2011). Thirdly and most importantly for this specific paper, policy suggestions do not focus specifically on education policies and immigrant children in particular, and thus remain limited in providing clear guidelines.

There are two major consequences of the lack of discussion on policy approaches and recommendations based on resilience framework in the migration context. First, there is no consensus on what policies promote (immigrant) students’ resilience in different life domains. Second, there is no policy analysis framework that permits assessing to what extent policies and programs take into account issues related to resilience directly or indirectly, and consequently are able to promote (immigrant) children’s resilience. This paper has the objective of filling this gap in the literature. Accordingly, in this section, the “CHARM” policy analysis framework is introduced on the basis of resilience studies with a particular interest of identifying policies for immigrant children (See Table 1). Namely, it evaluates whether policies consider: 1) Cumulative adversity; 2) Holistic approach; 3) Adjustment as a dynamic process; 4) Relational development; and 5) Multilevel approach (CHARM).

Table 1. CHARM Policy analysis framework - Policy approaches

	Resilience framework	Policy approaches
C	Cumulative adversity	Identification of vulnerable groups
H	Holistic approach	Coherent and complementary policies
A	Adjustment as a dynamic process	Immediate and continuous support
R	Relational development	Identification of protective and risk factors
M	Multilevel approach	Family, school and community involvement

Table 1 summarises the main elements of the resilience framework and how they can be translated into policy approaches. The first component of the resilience framework is the idea of “cumulative adversity” characterised by exposure to adversity and probability of adversities to accumulate. According to this idea, the level and depth of adversity may be more for some children than others depending on their experiences, and consequently some children may be more vulnerable than others. Considering this, there are two ways of thinking of cumulative adversity in the case of immigrant children. First, migration as adversity should be considered in combination with other types of adversities that children may experience. A straightforward example for this is the combination of migrant status with socio-economic background. Immigrant children coming from families with low socio-economic status may be more vulnerable than their peers (OECD, 2015a). Other adversities may include sexual orientation, religion, ethnic background and physical or mental ability (Luthar, 2003). Second, policies should distinguish between immigrant children with regards to differences in their migration experience as discussed in the earlier section. For example, policies may differ for first and second generation immigrant children or refugee and unaccompanied children. Consequently, the policy approach based on cumulative adversity should be able to identify these different levels and combinations of adversities to identify the vulnerable groups among immigrant students and develop targeted policies accordingly.

The second component of the resilience framework refers to having a “holistic approach” towards child well-being. This means addressing children’s multidimensional well-being simultaneously and not

focusing on only one dimension. This approach subsequently requires policies regarding multidimensional well-being of immigrant students. Namely, the holistic approach endorses policies that do not only focus on the language training and educational outcomes of immigrant students, but also those that promote their emotional well-being and social relations with their peers and teachers etc. The effectiveness of a holistic approach is dependent on the complementarity and coherence between policies. That is to say, policies targeting one dimension of children's lives should not negatively affect their well-being in another domain, or from a more positive perspective, policies regarding different life domains should enhance each other's positive effects. For instance, policies and programs that address the emotional well-being of immigrant students may have positive consequences also for their educational outcomes. The holistic approach aims to identify such associations.

The third policy approach is based on the idea that "adjustment is a dynamic process" and that children's level of adjustment may change over time and in different life domains. This highlights a policy approach that gives immediate and continuous support to immigrant students. In other words, policies that aim to promote resilience cannot only focus on the immediate responses to the needs of immigrant students. Namely, in migration context it is not sufficient to support immigrant students only within the first period of arrival and making sure that they enrol in schools. It is crucial that there are mechanisms put in place to monitor the educational, social and emotional well-being of immigrant students. This way changes over time can be observed and the needs of immigrant students that appear in the medium and long run can be identified. Policies that have a long-term perspective and are able to adjust to the needs of immigrant students can promote resilience among immigrant students in a more sustainable way.

The framework to study resilience builds on the theory of "relational development". Relational development theory highlights the central role that risk and protective factors play in shaping the likelihood that children will be able to overcome initial disadvantage. Considering relational development in the development of policies and practices that promote resilience requires the identification of risk and protective factors in a systematic manner. Countries with a strong emphasis on evidence based policy making, and those that require policies to undergo an impact assessment and proper evaluation to identify the cost-effectiveness of interventions are better placed to implement a relational development approach in education policies designed to promote the long-term integration and well-being of immigrant students. Policies and practices that explicitly consider the removal of risk factors and the promotion of protective factors at different levels (individual, family, school) as a way to promote the resilience of immigrant students can be considered to score highly on the relational development dimension of the CHARM framework.

Table 2. CHARM Policy analysis framework - Policy goals

	Resilience framework	Policy approaches	Policy goals
C	Cumulative adversity	Identification of vulnerable groups	<ul style="list-style-type: none"> • Identification of migration-related adversities • Combination of migration-induced adversity with other types of adversities • Targeted support for different types of immigrant students
H	Holistic approach	Coherent and complementary policies	<ul style="list-style-type: none"> • Promoting multiple dimensions of student well-being • Identification of associations between different dimensions of well-being
A	Adjustment as a dynamic process	Immediate and continuous support	<ul style="list-style-type: none"> • Immediate support for school enrolment • Continuous support in post-enrolment period • Identify of critical periods of risk • Monitoring of multiple outcomes in the long run
R	Relational development	Identification of protective and risk factors	<ul style="list-style-type: none"> • Identification of individual, family-, school- and community-related protective and risk factors • Identification of specific factors for immigrants and refugees • Documentation of evidence, strategies, measurements • Consideration of broader structural and sociological issues
M	Multilevel approach	Family, school and community involvement	<ul style="list-style-type: none"> • Promotion of student resilience in schools • Encouragement of parental involvement in school • Wider community involvement, including non-immigrants

Finally, scholars working on resilience commonly discuss the importance of having a multilevel approach when it comes to promoting resilience among children. In line with the conceptualisation of protective and risk factors, the adoption of a multilevel approach emphasises the importance of not only focusing on the child but their social network and environment. In this perspective, policies and programs should bring together different stakeholders (such as children, their families, school staff and the wider community) and promote the collaboration between actors involved in the lives of immigrant children. The adoption of a multilevel approach in policy design is best observed particularly when non-immigrant families and the members of the wider community participate in activities that promote the social relations and integration of immigrant children

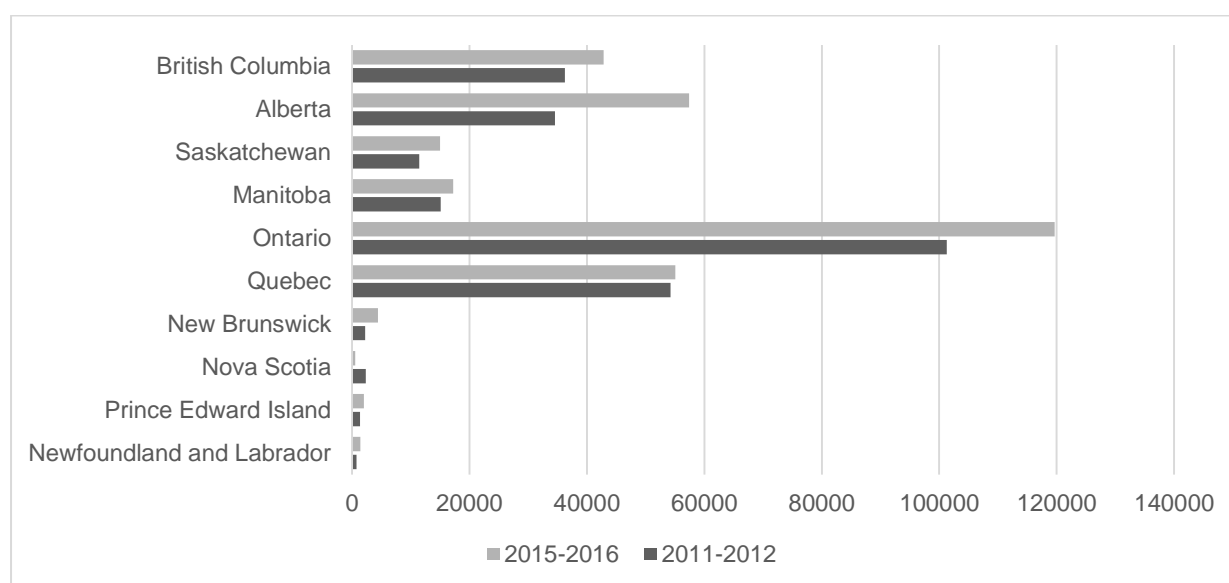
In line with the points made above, each policy approach can be associated with several policy goals (See Table 2). The CHARM policy analysis framework aims to assess to what extent countries and jurisdictions take into account these policy goals. Evaluating how policies are documented, drafted, discussed and implemented is crucial for a systematic CHARM analysis. While CHARM is developed to address the resilience of immigrant students in schools, both mainstream and immigrant specific policies may respond to these issues. It is also important to emphasise that CHARM analysis is about what education systems and schools can do once immigrant students are enrolled. In this regard, CHARM analysis is not about the first level of the equity question in terms of access to education, but the second level of analysis with regards to what happens once immigrant children are schooled. In short, CHARM analysis designates to what extent countries promote the educational and socioemotional resilience of their immigrant populations, and highlights where they can make improvements to address the needs of immigrant students and provide them better opportunities for achieving higher levels of adjustment in their school life and beyond.

CASE STUDY: CHARM ANALYSIS IN ONTARIO, CANADA

This section applies the CHARM analysis framework to the case of Ontario, Canada. The objective is to illustrate how the CHARM analysis framework can be implemented in a given context and to discuss how education policies can be evaluated through a resilience framework. Ontario, Canada is an interesting case to implement the framework for several reasons. Ontario has been the biggest hub for migration in the past five years in Canada (See Figure 4). While Canada is a well-known traditional immigration country, migration flows are relatively concentrated in the country. The most densely populated provinces of the country, Ontario, Quebec, Alberta and British Columbia, receive more migration than other provinces. Considering that education governance is within the jurisdiction of provinces in Canada, it makes sense to analyse the policies in a province that has a big enough immigrant population.

The total population of Ontario was about 12.8 million in 2011 and increased to 13.9 million in January 2016. According to population statistics in 2011, 28.5 per cent of the total population, corresponding to about 3.6 million people, was born outside Canada. More than half of the foreign born population has migrated in the past 20 years. This means that Ontario is a relevant case study not only because of the size of the immigrant population but also because of the absolute increase in the number of non-adult immigrant population size. According to Statistics Canada, the number of child immigrants makes up for 25 per cent of all first generation immigrants, and have increased by more than 10 000 between 2015 and 2016. In this regard, Ontario is a province where the integration of immigrant children will continue to be an important issue.

Figure 4. International immigrants by provinces



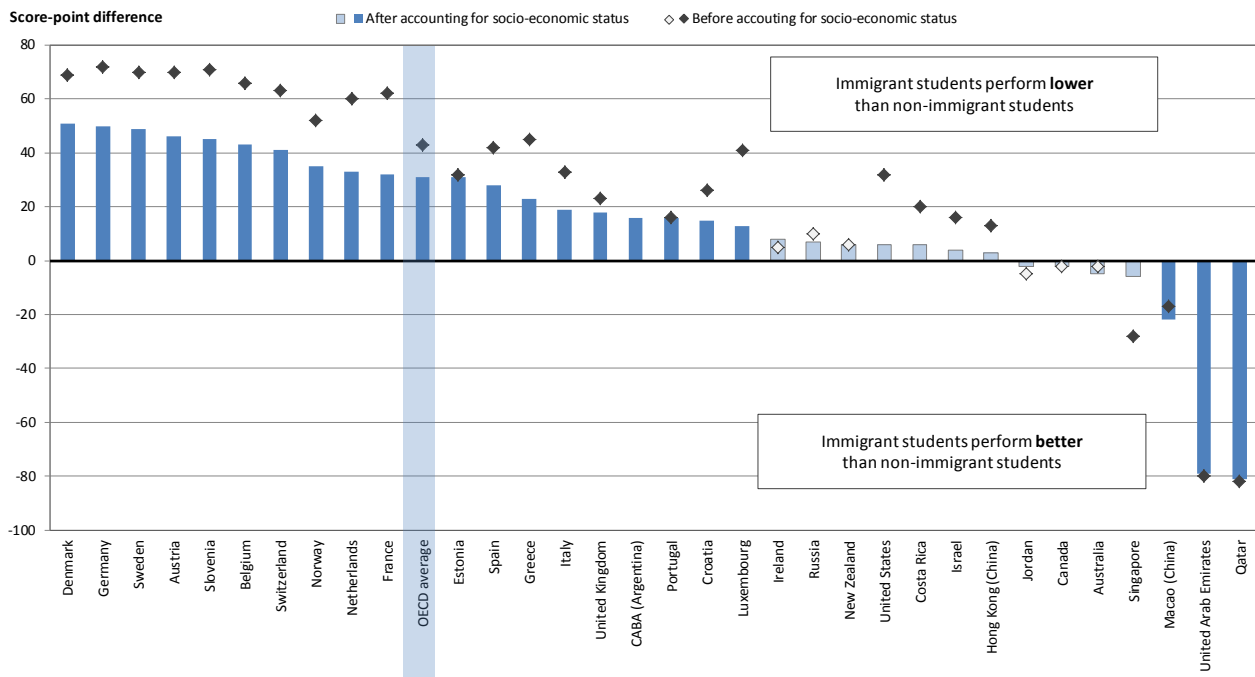
Note: International immigrants refer to new permanent residents in Canada.

Source: Author's calculations based on the Canadian Socioeconomic database from Statistic Canada CANSIM Database 2017

Another reason that makes Ontario a unique case to study is the relative positive educational and socioemotional outcomes of immigrant children compared to their native peers according to PISA 2015 study (OECD, 2016). As Figure 5 illustrates the differences in science performance across OECD countries, Canada already stands out as one of the very few countries where the difference between immigrant and non-immigrant children is almost negligible. However, this does not mean that there are no

provincial differences in Canada. In some provinces immigrant children have better outcomes than in other provinces.

Figure 5. Differences in science performance by immigrant background



Notes: Only countries where the percentage of immigrant students is higher than 6.25% and with available PISA index of economic, social and cultural status (ESCS) data are shown.

Statistically significant differences are marked in a darker tone.

Countries and economies are ranked in descending order of the gap in science performance related to immigrant background after accounting for students' socio-economic status.

Source: OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, <http://dx.doi.org/10.1787/9789264266490-en>, Fig. 1.7.5.

StatLink <http://dx.doi.org/10.1787/888933432915>

Table 3 shows the differences in science performance between non-immigrants and immigrants, by making a distinction between first and second generation immigrants. The overall difference between non-immigrants and immigrants in Ontario illustrate that immigrants have relatively higher average scores in science than their non-immigrant peers. As shown by the second column of results, this difference is even more nuanced when non-immigrants are compared to second generation immigrants. Along with British Columbia, Ontario has the most positive educational outcomes according to PISA 2015 data.

PISA 2015 data also allows discussing non-educational outcomes of children. Namely, Table 4 shows the difference between non-immigrant students and first generation students in the percentage of students who agreed/strongly agreed with the statement “I feel like I belong to school”. According to the results, almost in all provinces first generation immigrant children are more likely to have a higher sense of belonging to school in comparison to their native peers. This result, in combination with the positive educational outcomes in science performance, illustrates well the positive situation in Ontario and calls for an in-depth analysis of the education policies in the province.

Table 3. Differences in science performance

Province/ Region	Difference between non-immigrants and immigrants	Difference between non-immigrants and second generation immigrants	Difference between non – immigrants and first generation immigrants
Alberta	2 (4.8)	-8 (6.5)	11 (5.4)
British Columbia	-7 (6.1)	-9 (7.1)	-3 (7.3)
Manitoba	8 (7.1)	-2 (9.0)	13 (8.4)
New Brunswick	-12 (13.1)	M	-15 (13.5)
Newfoundland and Labrador	M	M	M
Nova Scotia	6 (10.3)	M	7 (14.8)
Ontario	-4 (4.5)	-6 (4.7)	0 (6.0)
Prince Edward Island	M	M	M
Québec	6	-2 (7.6)	15 (8.4)
Saskatchewan	21 (8.5)	-27 (13.6)	30 (9.0)

Note: M means that due to missing values or too small number of cases in one category, the differences between groups cannot be computed.

Source: OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, <http://dx.doi.org/10.1787/9789264266490-enTable B2.1.72>,

StatLink  <http://dx.doi.org/10.1787/888933433235>

Table 4. Difference in sense of belonging

Province/ Region	Difference between non-immigrant students and first generation students in the percentage of students who agreed / strongly agreed with the statement “I feel like I belong to school”
Alberta	-8.2 (2.5)
British Columbia	-3.3 (3.1)
Manitoba	-2.6 (4.0)
New Brunswick	-6.3 (7.6)
Newfoundland and Labrador	C
Nova Scotia	-4.4 (6.2)
Ontario	-6.1 (1.9)
Prince Edward Island	C
Québec	2.7 (4.2)
Saskatchewan	-10.1 (3.9)

Note: C means that the number of cases is too small and unrepresentative according to PISA 2015 rules.

Source: OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, <http://dx.doi.org/10.1787/9789264266490-en, Table B2.III.4.>,

StatLink  <http://dx.doi.org/10.1787/888933473679>

Before moving on to the analysis of education policies in Ontario on the basis of CHARM policy analysis framework, it is important to mention that Canada as a whole receives more permanent migration than temporary migration and has a long history of policy debates about the integration of immigrants (Bloemraad, 2012). Moreover, Canada has a nation building paradigm through migration, which fundamentally values immigrants and welcomes them, while cogitating habitually on issues of discrimination, racism and xenophobia (ibid). In parallel, ideologies over diversity and multiculturalism have been institutionalised and community approach to integration is strong in Canada (ibid). It is within this national context of socio-political traditions the case of Ontario is situated.

The analysis provided in the next section depends on desk research, analysis of older and recent policy documents and in-depth interviews conducted with different stakeholders in Ontario in May 2017. Interviews were conducted with representatives of the Ontario Ministry of Education, Employment and Social Development Canada, Canada Immigration Citizenship, Ottawa-Carleton District School Board, George Manson Welcome Centre, Harmony Movement and academics working in the field.

Vision of education policy in Ontario

The main source of information regarding the current Ontarian education policy is the strategy document published in April 2014 by the Ontario Ministry of Education. “Equity and Inclusive Education in Ontario Schools” sets out the main policy objectives in the education field for a period of five years, and is supported by the “Achieving Excellence: A Renewed Vision for Education in Ontario” report. This recent strategy document that informs education policies and programs in Ontario has its origins in three policy/program memoranda (PPMs) that have been developed between 1989 and 1993. The evolution of the Ontarian educational policy on equity, equality, human rights and social justice cannot be understood well without these PPMs.

The first two PPMs are about the manner and content of opening and closing exercises in schools (PPM No. 108, January 12, 1989) and the teaching of religion in the public elementary and secondary schools without indoctrination in a particular religious faith (PPM No. 112, December 6, 1990). The third PPM, numbered 119 entitled “Development and Implementation of School Board Policies on Antiracism and Ethno-cultural Equity” (July 13, 1993) has been the most influential one in terms of shaping equity and inclusive education policies in Ontario. By this PPM, all school boards were directed to develop a policy on antiracism and ethno-cultural equity. It is crucial to note that PPM No. 119 was updated and replaced in 22 April, 2013 as “Developing and Implementing Equity and Inclusive Education Policies in Ontario Schools”. As will be discussed further on, this change, according to some, undermines the focus on ethnic and racial issues and has implications on practices in schools.

In Ontario over the decades, addressing discriminatory practices and systematic barriers to create a diversity friendly learning environment, and increasing efforts to help students have confidence in their cultural and social identities, have been central education policy objectives. In addition, Ontarian education policies have systematically addressed issues related to student achievement (Ontario Ministry of Education, 2014). The main three policy strategies on this domain can be summarised as follows: 1) Kindergarten to Grade 12 policy for English language learners: English Language Learners / ESL and ELD Programs and Services: Policies and Procedures for Ontario Elementary and Secondary Schools, Kindergarten to Grade 12, 2007; 2) Provincial Aboriginal education strategy: Ontario First Nation, Métis, and Inuit Education Policy Framework, 2007; and 3) Instruction of students with special education needs: Learning for All: A Guide to Effective Assessment and Instruction for All Students, Kindergarten to Grade 12, 2013.

On the basis of and as a follow up of these policies and PPMs, in 2014 the Ontario Ministry of Education has come up with four main objectives. Three of these four objectives are a continuation of the strategy developed in 2009. Namely, the policy objectives in 2009 were high levels of student achievement, reduced gaps in student achievement and increased public confidence in publicly funded education (Ontario Ministry of Education, 2009). In 2014, these policy objectives were adapted as achieving excellence, ensuring equity and enhancing public confidence. What is particularly important in the context of this study is that in 2014, another objective has been added to the list: promoting well-being. The strategy document states that “all children and students will develop enhanced mental and physical health, a positive sense of self and belonging, and the skills to make positive choices” (Ontario Ministry of Education, 2014a, p.6). The recognition of the importance of students’ sense of well-being and its relation to equity and inclusive education puts the Ontarian education policy already in a positive light. In the

remainder of this section, the CHARM analysis is provided on the basis of these policy objectives, in combination with input from desk research and in-depth interviews.

Cumulative adversity: Identification of vulnerable groups

Within the context of migration, cumulative adversity is about identifying groups that are vulnerably and recognising the heterogeneity among different types of groups that may have to cope with various levels and types of adversities. In this regard, the objective is to assess the extent to which Ontarian education policies recognise the presence of different types of disadvantaged groups, and if they take into account that some children and students may have multiple disadvantages whereas others' disadvantages may be defined by one significant adversity.

The Ontarian education policy has three strengths when it comes to the issue of cumulative adversity. Firstly, when discussing the systematic barriers that may limit children's prospects for learning and preparing for the future as adults, they recognise that equity and inclusive education need to identify the factors behind it. Secondly, they recognise that potentially these factors may co-exist and intersect with other factors. They particularly recognise that these factors are prohibited grounds of discrimination under the Ontario Human Rights code and should receive particular attention as they may create additional biases and barriers for certain individuals and groups. The following extract from the strategy document illustrates this point of view well:

“Equity and inclusive education aims to understand, identify, address, and eliminate the biases, barriers, and power dynamics that limit students' prospects for learning, growing, and fully contributing to society. Barriers may be related to sex, sexual orientation, gender identity, gender expression, race, ethnic origin, religion, socio-economic background, physical or mental ability, or other factors. It is now recognized that several factors may intersect to create additional barriers for some students. These barriers and biases, whether overt or subtle, intentional or unintentional, need to be identified and addressed.” (Ontario Ministry of Education, 2014a, p. 6)

The third strength of Ontarian education policies is their approach to English learners. English learners are not seen as a singular homogeneous group. It is recognised that English learners come from different backgrounds and may have different assets and exposure to the language than others, affecting the level of adversity they face with regards to English language proficiency. For this reason, the ministry distinguishes two main groups of English language learners: Canadian-born and new comers from other countries. Canadian-born English learners are indigenous students from First Nation, Métis and Inuit communities, children born in immigrant communities and children born in communities that have maintained a distinct cultural and linguistic tradition. Newcomer students include those who have voluntarily planned immigration process, those who have left their home country due to crisis or under conditions of extreme urgency and students with international student visas. Accordingly, depending on their background and needs, students are put into either one of the programmes: English as a Second Language (ESL) and English Literacy Development (ELD).

In addition to these three points, it is worthwhile to mention that two groups of students stand out in targeted programs: newly arrived immigrants and boys. Canada has been actively welcoming to newly arrived immigrants. There are established comprehensive introduction programmes for immigrant children. For example, welcome centres have the objective of fostering a smooth transition for students. They assess English language and math skills, connect students and families with a settlement worker, and give advice on their entrance grade in school. Newly arrived immigrants are particularly targeted and receive additional support for transitioning to school as soon as possible and various opportunities to facilitate their social and cultural integration in their host communities are provided. Another category of students that receive

significant attention is boys. Some national institutions, such as the Education Quality and Accountability Office (EQAO), publish reports on performance data by gender. EQAO, for instance, has illustrated that boys are doing worse in school and they are now defined as a major disadvantaged group (Martino and Rezai-Rashti 2012). A similar approach is observed in the 2015 first results for Canadians aged 15 in PISA. The country report “Measuring up: Canadian Results of the OECD PISA Study” makes a distinction only by gender in explaining the most recent results, rather than focusing on ethnic background for example.

Some researchers argue that the strong focus on new immigrants and boys is a weakness of the equity policy in Ontario. They argue that the increased focus on new immigrants and boys undermine the support that other socially disadvantaged groups should get. For example, Martino and Rezai-Rashti (2013, p. 161) discuss that there is a new and more rigid understanding of equity in Ontario and say that “this reconstitution of equity is most evident with the emergence of boys as the new disadvantaged in Ontario, the erasure of racialised minority students who are replaced by the category of ‘recent immigrant’, and the invisibility of social class and redistributive policy mechanisms.” They particularly argue that treating gender as a vulnerable group as a whole is misleading as it fails to show the variation that can be observed at racial and class levels (see also AAUW, 2008; Gilborn 2008; Mead, 2006)

These discussions highlight some important issues when cumulative adversity and identification of vulnerable groups are in question. Ontario education policies certainly value identification of vulnerable groups and providing them targeted support. It is important that they are able to respond to urgent needs and bring together multiple stakeholders at times when there are large numbers of new arrivals. However, this should not undermine the attention that other minority group students need. When thinking of vulnerable groups through an equity and equality lens, Ontarian policies need to consider broader issues of historical experiences of racism and exclusion and spatial concentrations of poverty. This way the interlocking influences of various adversities can be addressed in a more effective way for all students with a migration background.

Holistic approach: Coherent and complementary policies

Holistic approach in education policy refers to the idea that policies consider students’ not only educational attainment but also well-being in other dimensions of life. Education is not only about cognitive outcomes, but also less measurable objectives such as physical, social and emotional well-being as well as moral, civic and artistic development. In this respect, policies are expected to recognise this multidimensionality and also the inherent linkages between the different dimensions that relate to students’ outcomes that go beyond educational achievement. The 2014 Mission Statement for equity and inclusive education in Ontario schools successfully emphasises the importance of having a holistic approach.

When discussing the renewed goals for education, the ministry affirms that “these four goals are interconnected – success in one contributes to success in the others” (Ontario Ministry of Education, 2014b, p. 3). In the section discussing promoting child well-being, another statement that strongly emphasises the holistic approach is found. This statement is important not only because it recognises different dimensions of well-being but also because it confirms the complementary role of the characteristics of the physical learning environment:

“Developing child and student well-being means supporting the whole child – not only the child’s academic achievement but also his or her cognitive, emotional, social and physical well-being. It also means ensuring that our schools, child care centres and early years programs are safe and welcoming physical environments.” (Ontario Ministry of Education, 2014b, p. 14)

The strategy document goes further on to illustrating the links between emotional well-being and academic success by mentioning the potential negative effects of feeling unsafe in school or being bullied: “Students cannot achieve academically if they feel unsafe at school or are bullied online. They cannot be expected to reach their full potential if they have mental health issues and if we do not provide the support they need (Ontario Ministry of Education, 2014b, p. 15).” It is also emphasised recurrently that promoting well-being of children is important to ensure that they can be better learners and excel in school.

The guidelines provided by the ministry are picked up by district school boards. For example, Ottawa-Carleton District School Board (OCDSB) has made it an objective to enhance the use of resources and supports to improve the well-being of all learners by 2019. They have developed a well-being framework as a guide for schools and the district to support socioemotional, cognitive and physical well-being of students. The director’s annual report to the community affirms that they have also provided trainings to educators in the areas of mental health programs, anxiety intervention, and collaborative problem solving among other programs. Other activities involved bullying prevention and intervention programs. Other goals of the board include equity, learning, stewardship and engagement.

The final strength of Ontarian education policies is linked to holistic approach and cumulative adversity principles together. While a general approach which recognises the multiple dimensions of a child’s well-being is already a good step towards supporting their resilience in general, it may remain limited in addressing the needs of certain groups. In this regard, coherent and complementary policies need to be combined with targeted policies. For example, in Ontario, the key four areas of support of the newcomer immigrants include not only issues such as language support, but also mental health support (Ontario Ministry of Education, 2017). Moreover, a School Mental Health Newcomer Resource Group has been established to support school boards and to respond to the social emotional needs of new immigrants. It is these kinds of targeted support mechanisms that can enhance the positive effects of policies with a holistic approach.

Overall, Ontarian education policy implements a holistic approach in a comprehensive and complementary manner. However, for this holistic approach to be most effective, it is important that the policies pay further attention to a few more issues. Currently, the provincial policy introduces the significance of well-being primarily for its positive impact on school outcomes. This policy could influence school boards more effectively if a more nuanced discourse that recognises the importance of emotional, social and physical well-being for their own sake is established. Even in schools where educational outcomes are relatively positive, students may still need additional support on other dimensions of their lives. It is important that schools are on board with this idea and consider addressing the issue of well-being in general. Moreover, while the effect of well-being on educational outcomes is justly highlighted, other potential linkages between dimensions of well-being are not explicitly mentioned. For example, children may be affected by the pressure to do well in school which may negatively influence their emotional and physical well-being (Macgeorge, Samter and Gillihan, 2005). The strong focus on achieving well in school may have unintended consequences for some children and lead to negative outcomes in other dimensions of well-being. Holistic approach to child well-being requires that these potential two-way relationships are more systematically analysed and recognised in policy approaches.

Adjustment as a dynamic process: Immediate and continuous support

Adjustment as a dynamic process requires a policy vision that encompasses the short-, medium- and long-term. In the case of immigrant children, this refers to addressing the needs of children upon arrival, most likely the first three months upon their arrival, and the period that follows this introductory period. It also means that adjustment is not necessarily linear and changes over time with lower and higher levels of adjustment can be observed. For this reason, immigrant children’s educational and socioemotional outcomes need to be monitored in the long term. In the Ontarian case, the monitoring of students’

academic achievements as well as their socioemotional well-being is highly valued. Multiple examples in policy documents and guidelines provided by the Ministry of Education in Ontario illustrate the importance given to long-term monitoring. In most cases, the significance of monitoring is mentioned for all students, but at times the importance of monitoring of some vulnerable groups at risk of lower achievement is also mentioned:

“Monitor graduation rates and achievement gaps for groups of students such as First Nation, Métis and Inuit students, children and youth in care and students with special education needs.” (Ontario Ministry of Education, 2014b, p.13)

The goal of the ministry with regards to equity emphasises the educational achievement of all students. For this goal, they particularly identify some groups such as Aboriginal students, youth in care and students with special education needs. Immigrant students in particular are not mentioned in this group as the general conception is that immigrant children are doing relatively well in school. However, for all identified groups school boards are encouraged to collect data on achievement continuously and provide focused and targeted support to those in most need. In their plan of action, the ministry suggest the following:

“Monitor children’s success beyond full-day kindergarten through existing mechanisms (e.g., school report card information, ongoing implementation of the Early Development Instrument and EQAO annual assessments) to ensure that children continue to benefit throughout the later grades.” (Ontario Ministry of Education, 2014b, p.16)

Promoting well-being is another policy goal that mentions the importance of monitoring. However, compared to the question of equity in educational outcomes, this is a newer area of investigation. For this reason, in the plan of action, the ministry states that in co-operation with partners, it is necessary to identify the factors that support student well-being and then adopt ways to measure them. Within this, they also include collection of high-quality data concerning the efforts to build safe and accepting schools. For example, school climate surveys that are conducted every two years are seen as a way to continuously monitor the social environment which can promote students’ well-being (Ontario Ministry of Education, 2014a, p.30).

The current picture with regards to long-term monitoring looks promising in the Ontarian case. It is important however that the newly arrived immigrants also take part in this long-term monitoring process. Current policies and practices are well advanced in Ontario to welcome and provide newly immigrants an easy and positive introduction to the school system and the Canadian society. Yet, there is less clarity in terms of what happens afterwards this initial phase. Especially specific groups within this population may need further attention and benefit from long-term monitoring. For example, the adjustment processes of immigrant students who had longer educational gap periods and who arrived at a later age may have more challenges and need to be monitored more intensely over time.

Moreover, adjustment for immigrant students may not be an easy steady process. To date, there is no acknowledgement of potential temporary setbacks that may relate not only to educational achievement, but also to social relations and emotional well-being. School staff and teachers working intensively with refugee students often refer to what they call the “honeymoon effect”. They observe that students who were initially motivated to do well in school tend to go through a period of withdrawal and lack of engagement with school after the first introductory phase. When the intense and focused attention they receive from teachers, peers and organisations diminish over time, the refugee students may face emotional struggles. It is particularly important that refugee students are supported in transitory periods following the so called “honeymoon” period. Recognising adjustment as a dynamic process requires that such challenges are well understood and dealt with to support the resilience of immigrant and refugee students.

Relational development: Identification of protective and risk factors

The success of policies to promote immigrant students' resilience depends on various factors. One of these factors is the extent to which the policies and programs put in place are evidence based. This means that the objectives, tools and implementation procedures need to be well thought through and respond to what previous research and evidence suggests. Resilience approach strongly emphasises that children's resilience and adjustment is context dependent and the characteristics of the social environment that surrounds them are crucial (Luthar and Cicchetti, 2000; Masten, Powell and Luthar, 2003).

The analysis of protective and risk factors, and the different ways in which they relate to educational and socioemotional well-being of immigrant children provides a whole new set of relationships and mechanisms that are relevant for policy makers to explore. Governments and international agencies working towards creating pathways to resistance and recovery for children who face adversity can learn from the evidence provided by resilience research. Ontario promotes academic research and policy impact evaluations to have a better understanding of what works under what conditions in their education policies. They also work with various stakeholders to have a better understanding of students' well-being.

“Ontario has already taken important steps to support the whole child, including the implementation of recommendations from the Safe Schools Action Team, the passage of the Accepting Schools Act and the launch of a comprehensive Mental Health and Addictions Strategy that focuses on children and youth in its first three years.” (Ontario Ministry of Education, 2014b, p.15)

Work on socioemotional well-being is relatively new from the perspective of the ministry. School boards and NGO's working with immigrant and minority students affirm that they have been addressing issues beyond educational achievement for many years. Supporting students' well-being has always been an integral part of their job; but these efforts have gained more visibility by the inclusion of 'promoting well-being' in the policy goals of the 2014 guidelines for policy development and implementation. In this respect, making well-being a primary policy goal has paved the way for more systematic and co-ordinated discussions in terms of how to identify protective and risk factors that may affect all students. For example, the Ottawa-Carleton School District School Board has developed a whole framework of cognitive, socioemotional and physical well-being to set the basis for policies and practices in the field (OCDSB, 2015).

The framework developed by the school board does not explicitly state protective and risk factors to promote resilience among students. However, the framework includes the definitions of the dimensions and sub-dimensions of cognitive, socioemotional and physical well-being and the goals, evidence, sample measures and sample strategies associated with each well-being dimension (OCDSB, 2015, p.6-11). This clear and systematic approach to well-being allows school staff and teachers to understand better what is understood from well-being and provides guidelines in terms of what they should expect from the students, how they can observe these expected outcomes and how they can support children in achieving these outcomes. The majority of strategies suggested to school staff and teachers include positive, active and engaging roles that include relations with peers, teachers and the wider community. Among others, they are encouraged to use diverse resources, promote healthy relationships and build community in the classroom.

In Ontario, there is awareness regarding the importance of identifying factors that positively or negatively affect the educational, socioemotional and physical outcomes of students in Ontario. A way to push forward this awareness is to emphasise protective and risk factors equally. The Ontarian education policies frequently refer to recognition, encouragement, support and promotion of positive behaviours. However, there is less of a clear focus on risk factors. Bullying is a risk factor that receives particular

attention (Accepting Schools Act, 2012). Conversely, the focus on problems such as discrimination, prejudice, racism and exclusion is more implicit. Some argue that the change in PPM No. 119 caused a decline in the attention paid to racial and ethno-cultural issues. The PPM in 1993 required all school boards in Ontario to develop and implement antiracism and ethno-cultural equity policies (Martino and Rezai-Rashti, 2013). However, the PPM's scope is broadened in the recent years to encompass many different identity groups. As much as this inclusionary effort is valued, authors speculate that it has overshadowed the focus on racial and ethnic issues that require more attention. A more systematic and evidence based understanding of risk factors for specific student groups, including those with a migration background, at the school and community level may help address such issues. Consequently, protective and risk factors can inform policy development and implementation in a more effective way.

Multilevel approach: Family, school and community involvement

Multilevel approach is one of the issues that the Ontarian education policies address the best. Resilience research illustrates that immigrant children are highly influenced and can be protected by their family, community and school environment. From a policy perspective, it is interesting to know to what extent families, communities and educational systems help facilitate migrant children's achievement and serve as a protective factor (Suárez-Orozco and Suárez-Orozco, 2001; Zhou, 1997). Ontarian education policy regularly touches upon the idea of community approach and how multiple actors are all responsible for the well-being of students and creating a healthy, safe and caring environment:

“Achieving success in this goal [promoting wellbeing] will depend on the knowledge, wisdom and willingness of students, parents and guardians, community organizations, service providers, government ministries and others to create an environment that is healthy, safe and caring.” (Ontario Ministry of Education, 2014b, p.14)

Inclusion of multiple stakeholders evidently broadens the goal of promoting students' well-being beyond school hours and providing continuous efforts that encompass extracurricular activities and involving the wider community:

“Student well-being is a goal that requires attention and commitment beyond the hours of the school day. Whether this goal is addressed by offering engaging before- and after-school programs or by ensuring that our schools act as community hubs beyond the school day, promoting student well-being requires the focused efforts of the entire community.” (Ontario Ministry of Education, 2014b, p.15)

Enhancing parental involvement is part of creating a multilevel approach and demands that schools create a welcoming environment for parents. Especially in the context of immigrant families, this may require continuous efforts to explain the educational system and culture to inform parents about the importance of parental involvement. As the director of Ottawa-Carleton District School board director states, education and the role of schools “is not just about looking at the instruction, it's connecting with families because we know that dealing with children is only a piece of that puzzle that, for the children to be successful, we actually have to be supporting families.”

A multilevel approach for promoting students' resilience is a commonly supported principle in Ontario. Especially in the case of immigrant and refugee students, parental and community involvement may have positive impacts for students as well as the wider community. Enhancing communication through school activities may support sociocultural acculturation of both immigrant and non-immigrant families. Schools in this regard are considered as a social community hub for enhancing interactions and collaborative actions between community members. The critical point in a multilevel approach is that it needs to be more of a supporting mechanism rather than replacing other official policy efforts put in place

to promote immigrant students' well-being. A multilevel approach is a way to support students, but not the only one. For a multilevel approach to be sustainable, it is crucial that provincial support continues through financial resources as well as training, guidelines and learning opportunities for creative and innovative approaches to family, school and community involvement.

CONCLUSION

In this time of increased global migration flows, immigrant children compose one of the most important groups that require special attention. Immigrant children need well-targeted effective support for their social, emotional and material needs in their new host communities. Failing to identify and to address these needs has strong implications on the future of immigrant children and the wider society of which they are members. Responsive to these societal implications, immigrant receiving countries have been discussing extensively the best ways to support immigrant children's integration in school and beyond. These discussions can be grouped in two. The first group of policy discussions refer to access to education and learning opportunities. The second group is concerned with policies and practices that help immigrant students thrive in school and achieve high levels of academic success and socioemotional well-being. This paper sought to contribute to the latter group of discussions.

Recent research has shown that many immigrant receiving countries have made efforts to assist schools and provided them with tools to effectively meet the needs of immigrant students (OECD, 2017). These efforts, such as providing schools with intercultural school kits, online educational materials for teachers, improving the academic development of bilingual children or changing the minimum age for the academic achievement of the compulsory school leaving certificate, illustrate well the wide range of efforts made by countries (*ibid.*). However, the large majority of policy measures, plans and strategies that are discussed in current research focus primarily on educational achievement, leaving socioemotional well-being in the periphery of research. This paper has argued that equal emphasis need to be given to academic achievement and socioemotional well-being of immigrant students and that it is important to understand the ways in which education systems can do this.

This paper accordingly suggested that applying a resilience framework can help countries and jurisdictions to develop effective and well-targeted policies. Studying the well-being of immigrant children through a resilience lens can ameliorate the understanding of the experiences, vulnerabilities and adjustment processes of immigrant children. After having discussed the resilience approach in the migration context, this paper introduced the CHARM policy analysis framework developed on the basis of core features of resilience framework. This framework can be used as a guideline for policy makers as well as a self-assessment tool to evaluate to what extent education policies in a given context are in line with the policy approaches and goals suggested by the resilience framework. Namely, CHARM framework provides a map to assess to what extent education policies consider 1) Cumulative adversity; adopt a 2) Holistic approach; consider 3) Adjustment as a dynamic process; recognise 4) Relational development; and implement a 5) Multilevel approach (CHARM). Education policies are considered to be compliant with resilience framework to the extent that they are able to identify diverse vulnerable groups among immigrant students; develop coherent and complementary policies regarding multidimensional well-being; provide immediate and continuous support to immigrant students; identify the protective and risk factors that affect their learning and socioemotional outcomes; and involve families, schools and communities simultaneously in their practices and programs.

In this paper, CHARM framework has been adapted to the education policies in Ontario as a case study. The case study had the objective of illustrating how the policy approaches and goals mentioned in CHARM framework can be translated into practice. The analysis demonstrated that Ontarian education policies comply to a large extent with policy approaches and goals in CHARM framework. This analysis was based on concrete evidence from the formulation of education policies and strategies. For example, the explicit emphasis on promoting well-being of students and the provision of guidance to school districts illustrated how education systems can identify, prioritise and help implement policy goals. Furthermore, by discussing the content of the policy goals and the various strategies used to achieve these goals, CHARM analysis was able to assess to what extent and in which ways different factors and actors are incorporated in support strategies for immigrant students. The multilevel and multidimensional analysis of the CHARM framework accordingly allowed for a comprehensive investigation of education policies in Ontario. Furthermore, the analysis also brought into light some policy dimensions where Ontarian policies can improve or adapt more nuanced approaches to promote equity in learning and socioemotional outcomes of their immigrant student populations.

In conclusion, CHARM framework helps to assess education policies through a new lens and highlight policy challenges that would not have been identified otherwise. When applied to different contexts, CHARM framework also gives an opportunity for cross-country comparisons and creates a platform for countries to share knowledge, experiences, and different ways of approaching policy goals related to promoting the resilience of immigrant students. CHARM framework therefore is a relevant tool to support and to assess education policies for a more comprehensive and inclusive adaptation of equity and equality of opportunity principles in the case of immigrant students. Future research that simultaneously implements the CHARM framework through concrete indicators and examples based on the policy approaches and goals will bring into light both existing practices but also policy areas that need more emphasis to promote the long-term multidimensional well-being of immigrant students.

REFERENCES

- Ackerman, P.L. and E.D. Heggstad (1997), "Intelligence, personality, and interests: Evidence for overlapping traits", *Psychological Bulletin*, Vol. 121/2, pp. 219-245, <http://dx.doi.org/10.1037/0033-2909.121.2.219>.
- Ansems de Vries, L., Carrera, S., and Guild, E. (2016), "Documenting the Migration Crisis in the Mediterranean: Spaces of Transit, Migration Management and Migrant Agency", *CEPS Paper in Liberty and Security in Europe*, No. 94 / September 2016.
- Baumeister, R.F. and M. R. Leary (1995), "The need to belong: Desire for interpersonal attachments as a fundamental human motivation", *Psychological Bulletin*, Vol.117/3, pp. 497–529, <http://dx.doi.org/10.1037/0033-2909.117.3.497>.
- Benard, B. (1991). "Fostering resiliency in kids: Protective factors in the family school and community", West Ed Regional Educational Laboratory, San Francisco.
- Ben-Arieh, A. and I. Frønes (2007a), "Indicators of Children's Well being: What should be Measured and Why?", *Social Indicators Research*, Vol. 84, pp. 249-250.
- Berry, J. W. (1997), "Immigration, acculturation, and adaptation", *Applied psychology*, Vol. 46/1, pp. 5-34.
- Berry, J.W. et al (2006), "Immigrant Youth: Acculturation, Identity and Adaptation", *Applied Psychology: An International Review*, Vol. 55/3, pp. 303-332.
- Bilgili, Ö. and M. Siegel (2015), "To return permanently or to return temporarily? Explaining migrants' intentions", *Migration and Development*, Vol 6/1, pp. 14-32.
- Bloemraad, I. (2012), "Understanding "Canadian exceptionalism" in immigration and pluralism policy", *Migration Policy Institute*, July 2012, Washington DC.
- Bonnell, J. et al (2011), *Teaching approaches that help to build resilience to extremism among young people*, UK Department for Education Publications.
- Borgonovi, F. and J. Pál (2016), "A Framework for the Analysis of Student Well-Being in the PISA 2015 Study: Being 15 In 2015", *OECD Education Working Papers*, No. 140, OECD Publishing, Paris, <http://dx.doi.org/10.1787/5jlpszwghvzb-en>.
- Boykin, A. W., K.M. Tyler, and O. Miller, (2005), "In search of cultural themes and their expressions in the dynamics of classroom life", *Urban Education*, Vol. 40/5, pp. 521-549.
- Brittain, C. (2002), *Transnational Messages: Experiences of Chinese and Mexican Immigrants in American Schools. The New Americans: Recent Immigration and American Society*, LFB Scholarly Publishing LLC, 2472 Broadway, Suite 251, New York, NY 10025.
- Brown, J., J. Miller, and J. Mitchell (2006), "Interrupted Schooling and the Acquisition of Literacy: Experiences of Sudanese Refugees in Victorian Secondary Schools", *Australian Journal of Language and Literacy*, Vol. 29/2, pp. 150-162.

- Burchardt, T. and M.C. Huerta (2008), “Introduction: Resilience and Social Exclusion”, *Social Policy and Society*, Vol. 8(1), pp. 59–61.
- Cassity, E. and G. Gow (2005), “Making Up for Lost Time: The Experiences of Southern Sudanese Young Refugees in High Schools”, *Youth Studies Australia*, Vol. 243, pp. 51-55.
- Castles, S. (2000), “International Migration at the Beginning of the Twenty-First Century: Global Trends and Issues”, *International Social Science Journal*, Vol. 52/165, pp. 269-281.
- Castles, S., H. De Haas, and M.J. Miller (2013), *The age of migration: International population movements in the modern world*, Palgrave Macmillan.
- Chiswick, B. R. and N. DebBurman (2004), “Educational attainment: analysis by immigrant generation”, *Economics of Education Review*, Vol. 23/4, pp. 361-379.
- Cicchetti, D. (2013), “An overview of developmental psychopathology”, in P. D. Zelazo (ed.), *The Oxford handbook of developmental psychology*, Vol. 2. Self and other, (pp. 455–480, Oxford University Press, New York, NY.
- Constantine, M. and D.W. Sue (2006), “Factors contributing to optimal human functioning in people of color in the United States”, *The Counseling Psychologist*, Vol. 34(2), pp. 228-244.
- Cortes, K. E. (2006), “The effects of age at arrival and enclave schools on the academic performance of immigrant children”, *Economics of Education Review*, Vol 25(2), pp. 121-132.
- Crosnoe, R. (2005), “Double disadvantage or signs of resilience? The elementary school contexts of children from Mexican immigrant families”, *American Educational Research Journal*, Vol. 42, pp. 269–303.
- Currie, C. et al. (eds.) (2012), *Social Determinants of Health and Well-Being among Young People - Health Behaviour in School-Aged Children (HBSC) Study: International Report from the 2009/2010 Survey*, World Health Organization Regional Office for Europe, Copenhagen, Denmark.
- Daniel, B. and S. Wassell, (2002), *Adolescence: Assessing and Promoting Resilience in Vulnerable Children 3*, Jessica Kingsley, London.
- Daubé, J. et al (2011), *The Pathways to Resilience Project*, The Resilience Research Centre Publications.
- Diers, J. (2013), “Why the world needs to get serious about adolescents: A view from UNICEF”, *Journal of Research on Adolescence*, Vol. 23, pp. 214–222, <http://dx.doi.org/10.1111/jora.12042> .
- Elliot, A.J. and H.A. McGregor (2001), “A 2 x 2 achievement goal framework”, *Journal of Personality and Social Psychology*, Vol. 80/3, pp. 501-519, <http://dx.doi.org/10.1037/0022-3514.80.3.501>.
- Elliot, A.J. and T.M. Thrash (2001), “Achievement goals and the hierarchical model of achievement motivation”, *Educational Psychology Review*, Vol. 13/2, Springer, New York, NY, pp. 139–156. <http://dx.doi.org/10.1023/A:1009057102306>.
- Ereaut, G. and R. Whiting (2008) *What do we mean by ‘wellbeing’? And why might it matter?* DCSF Research Report DCSF-RW073.

- Evans, G. W., D. Li, and S.S. Whipple (2013), "Cumulative risk and child development", *Psychological Bulletin*, advance online publication, <http://dx.doi.org/10.1037/a0031808>.
- Fokkema, T. and H. Haas (2015), "Pre-and Post-Migration Determinants of Socio-Cultural Integration of African Immigrants in Italy and Spain", *International Migration*, Vol. 53(6), pp. 3-26.
- Fraser, M. (1997) *Risk and Resilience in Childhood: An Ecological Perspective*, NASW Press, Washington, DC.
- Fraser, M. W., J.M. Richman, and M.J. Galinsky (1999), "Risk, protection, and resilience: Toward a conceptual framework for social work practice", *Social Work Research*, Vol. 23(3), pp. 131–43.
- Fraser, M. (2004), "The ecology of childhood: A multisystems perspective", in Fraser, M. (ed), *Risk and resilience in childhood. An ecological perspective*, National Association of Social Workers, Washington DC.
- Friedli, L. (2011), *What We Know About: Mental Health and Wellbeing, What Makes us Healthy? The Asset Approach in Practice: Evidence, Action, Evaluation*, London: Local Government Group.
- Gale, C.R, I.J. Deary and M. Stafford (2013), "A life course approach to psychological and social wellbeing", in D. Kuh et al. (eds.), *A Life Course Approach to Healthy Ageing*, Oxford University Press, Oxford, UK, pp. 46–62.
- Gans, Herbert J. (1992), "Comment: Ethnic Invention and Acculturation: A Bumpy-Line Approach.", *Journal of American Ethnic History*, Vol. 11 (1), pp. 42-52.
- Garbarino, J. (2005), "Lost boys: Why our sons turn violent and how we can save them", *Social Work Diagnosis in Contemporary Practice*, 360.
- Garnezy, N. and M. Rutter, (eds.) (1983), *Stress, coping, and development in children*, Washington, DC, McGraw-Hill, Washington, DC.
- Garnezy, N. (1981), "Children under stress: Perspectives on antecedents and correlates of vulnerability and resistance to psychopathology", in A. I. Rabin et al (eds.), *Future explorations in personality*, Wiley Interscience,.
- Gay, G. (2000), *Culturally responsive teaching: Theory, research, and practice*, Teachers College Press, New York.
- Harker, K. (2001), "Immigrant generation, assimilation, and adolescent psychological well-being", *Social forces*, Vol. 79(3), pp. 969-1004.
- Helliwell, J.F. and R.D. Putnam, (2004), "The social context of well-being", *Philosophical Transactions of the Royal Society B: Biological Studies*, Vol. 359, pp. 1435–1446.
- Helmreich, R.L, et al (1978), "Achievement motivation and scientific attainment", *Personality and Social Psychology Bulletin*, Vol. 4/2, pp. 222–226, <http://dx.doi.org/10.1177/014616727800400209>.
- Hembree, R. (1988), "Correlates, causes, effects, and treatment of test anxiety", *Review of Educational Research*, Vol. 58/1, pp. 47–77, <http://dx.doi.org/3102/00346543058001047>.

- Howard, S., J. Dryden and B. Johnson (1999) "Childhood resilience: Review and critique of literature", *Oxford Review of Education*, Vol. 25, pp. 307–23.
- Huddleston T. et al (2015), *MIPEX 2015*, Migration Policy Group, Brussels.
- IOM, (2015), IOM and UNICEF Data Brief: Migration of Children to Europe, IOM, http://www.iom.int/sites/default/files/press_release/file/IOM-UNICEF-Data-Brief-Refugee-and-Migrant-Crisis-in-Europe-30.11.15.pdf
- Kirby, L.D. and M.W. Fraser (1997), "Risk and resilience in childhood", in M. W. Fraser (ed.), *Risk and resilience in childhood: An ecological perspective*, NASW, Washington, DC, pp. 10-33.
- Landau, J. (2007), "Enhancing Resilience: Families and Communities as Agents for Change", *Family Process*, Vol. 46(3), pp. 351–365.
- Lerner, R. M. (2006), "Developmental science, developmental systems, and contemporary theories of human development", in W. Damon & R. M. Lerner (series eds.) & R. M. Lerner (Vol. Ed.), *Handbook of child psychology: Vol 1. Theoretical models of human development (6th ed.)*, Wiley, Hoboken, NJ, pp. 1-17.
- Lerner, R. et al. (2012), "Resilience across the life span", in B. Hayslip Jr. & G. C. Smith (eds.), *Emerging perspectives on resilience in adulthood and later life*, Springer, New York, NY, pp. 275–299.
- Levels, M., J. Dronkers, and G. Kraaykamp (2008), "Immigrant children's educational achievement in western countries: origin, destination, and community effects on mathematical performance". *American Sociological Review*, Vol. 73(5), pp. 835-853.
- Lippman, L.H., K.A. Moore and H. McIntosh (2011), "Positive indicators of child well-being: A conceptual framework, measures, and methodological issues", *Applied Research in Quality of Life*, Vol. 6/4, pp. 425-449, <http://dx.doi.org/10.1007/s11482-011-9138-6>.
- Luthar S. S. (2003), *Resilience and Vulnerability: Adaptation in the Context of Childhood Adversities*. Cambridge University Press, Cambridge.
- Luthar, S. S. (2006), "Resilience in development: A synthesis of research across five decades", in D. Cicchetti & D. J. Cohen (eds.), *Developmental psychopathology: Vol. 3. Risk, disorder, and adaptation (2nd ed)*, Wiley, Hoboken, NJ, pp. 739–795.
- Luthar, S. and D. Cicchetti (2000), "The construct of resilience: Implications for interventions and social policies" *Development and psychopathology*, Vol. 12(4), pp. 857-885.
- Luthar, S. S., D. Cicchetti, and B. Becker, (2000), "The construct of resilience: A critical evaluation and guidelines for future work", *Child Development*, Vol. 71, pp. 543–562, <http://dx.doi.org/10.1111/1467-8624.00164>.
- Macgeorge, E. L., W. Samter, and S.J. Gillihan (2005). "Academic Stress, Supportive Communication, and Health", A version of this paper was presented at the 2005 International Communication Association convention in New York City. *Communication Education*, 54(4), 365-372.
- Maslow, A.H. (1943), "A theory of human motivation", *Psychological Review*, Vol. 50/4, pp. 370–396, <http://dx.doi.org/10.1037/h0054346>.

- Masten, A. S. (1994), “Resilience in individual development: Successful adaptation despite risk and adversity”, in M. C. Wang & E.W. Gordon (eds.), *Educational resilience in inner-city America: Challenges and prospects*, Lawrence Erlbaum, Hillsdale, NJ, pp. 3-25.
- Masten, A. S. (2001), “Ordinary magic: Resilience processes in development”, *American Psychologist*, Vol 56, pp. 227–238, <http://dx.doi.org/10.1037/0003-066X.56.3.227>.
- Masten, A. (2011), “Resilience in children threatened by extreme adversity: Frameworks for research, practice, and translational synergy”, *Development and Psychopathology*, Vol. 23, pp. 493–506.
- Masten, A. S. (2013), “Risk and resilience in development”. In P. D. Zelazo (ed.), *Oxford handbook of developmental psychology*, Oxford University Press, New York, pp. 579–607.
- Masten, A. S., J.L. Powell, and S.S. Luthar (2003), “A resilience framework for research, policy, and practice”, *Resilience and vulnerability: Adaptation in the context of childhood adversities*, pp. 1-25.
- McClelland, D.C. (1958), “Methods of measuring human motivation”, in J.W. Atkinson (ed.), *Motives in fantasy, action, and society*, Van Nostrand Company Inc., Princeton, NJ, pp. 7–42.
- McCormick, C. M., S.I-C. Kuo, and A.S. Masten. (2011), “Developmental tasks across the lifespan”, in K. L. Fingerman et al (eds.), *The handbook of lifespan development*, Springer, New York, NY.
- Meece, J. L. and B. Kurtz-Costes (2001), “Introduction: The schooling of ethnic minority children and youth”, *Educational Psychologist*, Vol. 36(1), pp. 1-7.
- Mguni, N. and N. Bacon (2010), *Taking the Temperature of Local Communities, the Wellbeing and Resilience Measure (Warm)*, London: The Young Foundation Local Wellbeing Project.
- Michaud, P-A (2006), "Adolescents and risks: Why not change our paradigm?", *Journal of Adolescent Health*, Vol. 38, Issue 5 (May 2006), pp. 481-483.
- Mohaupt, S. (2008), “Review Article: Resilience and Social Exclusion”, *Social Policy and Society*, Vol. 8(1), pp. 63–71.
- OCDSB (2015), *Framework for Student Well-being*, OCDSB Communications and Information Services and Inclusive, Safe and Caring Programs, Ottawa.
- OECD (2015a), *Helping immigrant students to succeed at school – and beyond*, PISA, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264249509-en>.
- OECD (2015b), *International Migration Outlook 2015*, OECD Publishing, Paris, http://dx.doi.org/10.1787/migr_outlook-2015-en.
- OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264266490-en>.
- OECD (2017), *International Migration Outlook 2017*, OECD Publishing, Paris, http://dx.doi.org/10.1787/migr_outlook-2017-en.
- OECD/European Union (2015), *Indicators of Immigrant Integration 2015: Settling In*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264234024-en>.

- Ontario Ministry of Education (2009), *"Equity and Inclusive Education in Ontario Schools"*, Ontario Ministry of Education Publications.
- Ontario Ministry of Education (2014a), *"Equity and Inclusive Education in Ontario Schools"*, Ontario Ministry of Education Publications.
- Ontario Ministry of Education (2014b), *"Achieving Excellence: A Renewed Vision for Education in Ontario"*, Ontario Ministry of Education Publications.
- Ontario Ministry of Education (2017), *Welcoming Immigrant and Refugee Students Mobilizing Support in Ontario*, Ministry Power Point Presentation, Toronto.
- Overton, W. F. (2013), "A new paradigm for developmental science: Relationism and relational-developmental systems", *Applied Developmental Science*, Vol. 17, pp. 94–107, <http://dx.doi.org/10.1080/10888691.2013.778717>.
- Panter-Brick, C. J. and Leckman (2013), "Editorial commentary: resilience in child development–interconnected pathways to wellbeing", *Journal of Child Psychology and Psychiatry*, Vol. 54(4), pp. 333-336.
- Pedace L. (2008), "Child wellbeing in England, Scotland and Wales: comparisons and variations", Research paper, Family and Parenting Institute, London.
- Perez, W. et al. (2009), "Academic resilience among undocumented Latino students", *Hispanic Journal of Behavioral Sciences*, Vol. 31(2), pp. 149-181.
- Rutter, Michael (2000), "Resilience Reconsidered: Conceptual Considerations, Empirical findings, and Policy Implications", in J.P. Shonkoff and S.J. Meisels (eds) *Handbook of Early Childhood intervention*, Cambridge University Press.
- Rutter, M. (2006), "Implications of resilience concepts for scientific understanding", *Annals of the New York Academy of Sciences*, Vol. 1094(1), pp. 1-12.
- Rutter, M. (2012a), "Resilience: Causal pathways and social ecology", in M. Ungar (ed.), *The social ecology of resilience: A handbook of theory and practice*, Springer, New York, pp. 33–42.
- Rutter, M. (2012b), "Resilience as a Dynamic concept", *Development and Psychopathology* 24 (2012), Cambridge University Press 2012, pp. 335–344, <http://dx.doi.org/10.1017/S0954579412000028>.
- Sameroff, A. J. (2000), "Developmental systems and psychopathology", *Development and Psychopathology*, Vol. 12, pp. 297–312, <http://dx.doi.org/10.1017/S0954579400003035>.
- Scherr, T. and J. Larson (2009), "Bullying dynamics associated with race, ethnicity, and immigration status", in Jimerson S.R., Swearer S.M. and Espelage D.L. (Ed.) *Handbook of bullying in schools: An international perspective*, Routledge, New York, pp. 223-34.
- Schoon, I. and J. Bynner (2003), "Risk and Resilience in the Life Course: Implications for Interventions and Social Policies", *Journal of Youth Studies*, Vol 6(1), pp. 21–31.
- Secombe, K. (2002), "Beating the odds" versus "changing the odds": Poverty, resilience, and family policy", *Journal of Marriage and Family*, Vol. 64(2), pp. 384–94.

- Seipp, B. (1991), "Anxiety and academic performance: A meta-analysis of findings", *Anxiety Research*, Vol. 4/1, pp. 27–41, <http://dx.doi.org/10.7899/JCE-13-20>.
- Shermoff, D. J. and J.A. Schmidt (2008), "Further evidence of an engagement–achievement paradox among US high school students", *Journal of Youth and Adolescence*, Vol. 37(5), pp. 564–580.
- Smith, T. W. (2006), "Personality as risk and resilience in physical health", *Current directions in psychological science*, Vol. 15(5), pp. 227–231.
- Statistics Canada (2017), *International immigrants by provinces*, <http://www.statcan.gc.ca/eng/start>, Accessed on 15 June 2017.
- Suarez-Orozco, C. and M. Suarez-Orozco (2001), *Children of immigration*, Harvard University Press, Cambridge, MA.
- Suárez-Orozco, C. and M.M. Suárez-Orozco (2009), "*Children of immigration*", Harvard University Press.
- Tusaie, K. and J. Dyer (2004), "Resilience: A historical review of the construct", *Holistic nursing practice*, Vol. 18(1), pp. 3–10.
- Ungar M, M. Ghazinour and J. Richter (2013), "What is resilience within the social ecology of human development?" *The Journal of Child Psychology and Psychiatry*, Vol. 54, pp. 348–366.
- Ungar, M. and L. Liebenberg (2011), "Assessing Resilience Across Cultures Using Mixed Methods: Construction of the Child and Youth Resilience Measure", *Journal of Mixed Methods Research*, Vol. 5(2), pp. 126–149.
- Ungar, M. (2011), "Community resilience for youth and families: Facilitative physical and social capital in contexts of adversity", *Children and Youth Social Services Review*, Vol. 33, pp. 1742–1748.
- Van Hook, J., Landale, N., & Hillemeier, M.M. (2013) "Is the United States bad for children's health? Risk and Resilience among young people and immigrants", Washington, DC, Migration Policy Institute.
- Van Ours, J. C. and J. Veenman (2006), "Age at immigration and educational attainment of young immigrants", *Economics Letters*, Vol. 90(3), pp. 310–316.
- Waller, M. A. (2001), "Resilience in ecosystemic context: Evolution of the concept", *American Journal of Orthopsychiatry*, Vol. 71(3), pp. 290–297.
- Walsh, F. (1998), "Beliefs, spirituality, and transcendence: Keys to family resilience", in F. Walsh, & Goldrick, M. (eds.), *Revisioning Family Therapy: Race, Culture, and Gender in Clinical Practice*, Guildford Press, New York, pp. 62–77.
- Werner, E. E. (2000), *Through the eyes of innocents: Children witness World War II*, Westview Press, Boulder, CO.
- Werner, E. E. , J.M. Bierman, and F.E. French (1971), *The children of Kauai: A longitudinal study from the prenatal period to age ten*, University of Hawaii Press, Honolulu.
- Werner, E.E. and R.S. Smith (1982), *Vulnerable but invincible: A longitudinal study of resilient children and youth*, New York: McGraw-Hill, New York.

- Werner, E.E. and R.S. Smith (1992), *Overcoming the odds: High-risk children from birth to adulthood*, Cornell University Press, New York.
- Wong, D. F. K. (2008) 'Differential impacts of stressful life events and social support on the mental health of mainland Chinese immigrant and local youth in Hong Kong: A resilience perspective', *British Journal of Social Work*, 38(2), pp. 236–52.