Current Psychology (2023) 42:22103–22113
https://doi.org/10.1007/s12144-022-03295-5

# School adaptation among immigrant youth from a Dutch integration program: The influence of acculturative stress and bicultural identity integration on academic motivation

**Vanessa K. Weva[1] · Jenilee-Sarah Napoleon[1] · Eva Malkus[2] · Michael Hoover[1] · Lydia Krabbendam[3,4] · Jacob A. Burack[1] · Mariëtte Huizinga[3,5]**

Accepted: 30 May 2022 / Published online: 13 June 2022


## Abstract

Academic motivation represents a psychoeducational construct that is associated with the academic success of youth. For some immigrant youth, however, their academic motivation may be affected by the various challenges that they face during their settlement in a culturally diverse school that promotes different self-construal values and practices. The main goal of this study is to investigate the cultural match or mismatch between non-Western immigrant youth and the self-construal orientation typically promoted in Western schools, as well as how specific challenges associated with migration contribute to the development of different levels of academic motivation during their recent settlement. We hypothesize that non-Western immigrant youth experience cultural mismatch in a Western school, and that greater reports of migration challenges are associated with increases in levels of external motivation and decreases in levels of intrinsic motivation. To test these hypotheses, the present study was conducted among non-Western immigrant youth between 12 and 19 years old in their first year of attending a Dutch academic integration program in The Netherlands. Our findings highlight that non-Western immigrant youth are mismatched with the self-construal orientations typically promoted in Dutch schools, and that there is specificity in the way that migration challenges relate to different levels of academic motivation. These findings should be considered by Western educational stakeholders who aim to foster academic success for immigrant youth early on in their resettlement.

**Keywords** Immigrant youth · Academic motivation · Migration challenges

Global migration has significantly increased over the past decades, with Western Europe considered to be one of the regions in the world with the largest proportion of international migrants in comparison to its total population (International Organization for Migration, 2019; United Nations, 2021). International migrants, referring to individuals living in a country different from the one within which they were born (Statistics Netherlands, 2021), include a relatively large proportion of youth under 20 years of age (United Nations, 2019). Despite the vulnerabilities associated with migration during this developmental period of adolescence, youth can show resilience in their biopsychosocial adaptation to a society with different cultural practices and values (Motti-Stefanidi & Masten, 2017; Suárez-Orozco et al., 2018; Titzmann & Lee, 2018).

The changing demographics of Western Europe are evident in The Netherlands, one of the most culturally diverse countries in the world, with international migrants representing 23% of its total population (Statistics Netherlands, 2018). Approximately half of the immigrants are from non-Western backgrounds, with the largest groups from Turkey, Morocco, Suriname, and the Caribbean, while others include refugees from Iraq, Afghanistan, Iran, Somalia, Syria, and Eritrea. Considerable concerns have been cited because of

✉ Vanessa K. Weva
vanessa.weva@mail.mcgill.ca

1 Department of Educational and Counselling Psychology, McGill University, 3700 McTavish St., Montreal, Quebec H3A 1Y2, Canada

2 Het ABC Onderwijsadviseurs, Amsterdam, Netherlands

3 LEARN! Research Institute, Vrije Universiteit Amsterdam, Amsterdam, Netherlands

4 Department of Clinical and Developmental Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands

5 Department of Educational and Family Studies, Vrije Universiteit Amsterdam, Amsterdam, Netherlands

the academic gap between the immigrant and non-immigrant youth in The Netherlands, as school achievement is a primary indicator of adaptation among immigrant youth because of its contributions to the promotion of cultural integration and wellbeing (Crosnoe & López Turley, 2011; Hernandez, 2012; Nolan, 2012; Suárez-Orozco et al., 2018).

As immigration continues to increase worldwide, the study of culturally diverse academic environments and strategies to promote adaptation among those most vulnerable, including immigrant youth, continue to be essential educational considerations for the long-term wellbeing of these students, as well as the wellbeing of their family and the sociopolitical success of the receiving nation (Motti-Stefanidi, 2019). In this study, we examined the academic adaptation of recently immigrated youth by assessing life expectations pre and post migration, the match or mismatch with the school's cultural practices and values, and how acculturative stress and bicultural identity integration relate to different levels of academic motivation among non-Western immigrant youth who attended a Dutch academic integration program in a secondary school in Amsterdam, The Netherlands, in which the disparity between the academic achievement of native and immigrant youth is consistently large (de Winter-Koçak & Badou, 2020).

## Independent and Interdependent Self-Construal

The risk that is associated with inadequately implementing the multicultural factors of education is addressed in the cultural mismatch theory, in which educational experiences and outcomes are thought to be affected by the incongruity between the ways that cultural minority communities approach education and learning, and the institutionalized educational values of their greater society (Fryberg et al., 2013; Fryberg & Markus, 2007; Stephens et al., 2012). Accordingly, cultural mismatch within an educational setting can be manifested through differences between the dominant self-construal orientation of a student and the orientation promoted within their school. Self-construal is described as the process through which one defines the self (Markus & Kitayama, 1991). It includes two constructs, independent and interdependent self-construal, which are thought to operate by defining the self in terms of perceptions, evaluations, and behaviors (for a review, see Cross et al., 2011). Although patterns of independence and interdependence vary across and within cultures and contexts, cultural groups are thought to differ in the degree to which an independent or interdependent self-construal is dominant (Gardner et al., 1999; Oeberst & Wu, 2015).

An independent self-construal refers to a view of the self that is self-directed, unique, removed from the social environment, and independent of others (Cross et al., 2003; Singelis, 1994). The emphasis is on internal abilities, thoughts, feelings, and the promotion of one's goals (Markus & Kitayama, 1991; Matsumoto, 1999; Singelis, 1994). Western cultures, which include most northern and Western regions of Europe, North America, and Australia, typically place an emphasis on the separateness and uniqueness of an individual (Greif, 1994; Hofstede et al., 2010). In contrast, an interdependent self-construal entails a variable self in which the person is viewed as rooted in a social network where important relationships, group affiliations, social roles, and social positions within their community define them (Kitayama et al., 2017; Markus & Kitayama, 1991). In this view of the self, collective values are prioritized over individual characteristics, beliefs, and attitudes (Cross et al., 2003; Singelis, 1994). This perspective is mostly characteristic of non-Western, collectivist cultures, such as those in Asia, Africa, South America, and the Pacific islands (Juslin et al., 2016; Markus & Kitayama, 1991; Singelis, 1994).

Individuals from interdependent backgrounds who study in Western academic institutions, in which independent values typically dominate, are at-risk of experiencing a cultural mismatch (Stephens et al., 2012). The challenges associated with this type of cultural mismatch in an academic institution affect students across all grade levels (Benner & Graham, 2007; Benner & Yan, 2015; Stephens et al., 2012). As Dutch cultural practices are thought to primarily promote one's independence and autonomy (Hofstede et al., 2010; Leeman, 2008), experiences of cultural mismatch are inevitable for the immigrant populations who come from the non-Western regions of the world that are thought to predominantly value practices associated with interdependence. However, one's academic motivation orientation may buffer the effects of cultural mismatch on the academic achievement of vulnerable immigrant youth during and shortly after their resettlement.

### The Self-Determination Continuum

Academic achievement has been found to be particularly influenced by academic motivation (Guay & Bureau, 2018; Taylor et al., 2014; Vallerand & Ratelle, 2002), which has commonly been conceptualization within the framework of self-determination theory (SDT). According to SDT, the motivation to engage in behaviours and activities, is described as a multidimensional construct along a continuum encompassing three types of extrinsic motivation, – identified, introjected, and external regulations – and intrinsic motivation (Ryan & Deci, 2000b; Vansteenkiste et al., 2006), all of which vary in the degree to which they are self-determined. The constructs of extrinsic and intrinsic motivation are found at the polar ends of the self-determination continuum (Cokley, 2003).

Extrinsic motivation represents behaviour based on external rewards and social pressures to complete uninteresting tasks and assume a range of new responsibilities (i.e., lack of or limited self-determined motivation; Rubenfeld et al., 2007; Ryan & Deci, 2000). This type of motivation tends to be associated with poor academic effort and performance among the general youth population (Becker et al., 2010; Vansteenkiste et al., 2006), and higher levels have been found among non-Western immigrant students compared with their native Western counterparts (Areepattamannil & Freeman, 2008). The effects of extrinsic motivation on academic achievement vary in relation to the degree of extrinsic motivation involved in performing an action (Guay et al., 2008). Specifically, external regulation, defined as the least self-determined form of extrinsic motivation on the continuum, refers to behaviors that are not autonomously driven, but rather are performed to comply with an external demand or reward contingency (Cascio et al., 2014). Introjected regulation involves behavior that has been partially, but not fully, internalized (i.e., to avoid guilt or anxiety), and in which self-control, ego-involvement, and internal rewards and punishments drive the motivation. Whereas introjected regulation is positively associated with exhibiting more effort, it is also associated with greater anxiety and maladaptive coping in the face of challenges (Ryan & Deci, 2002). At the far end of the external regulation continuum, identified regulation is thought to stem from demands that are imposed by internal pressures and is a more independent form of extrinsic motivation in which personal importance and conscious valuing is attributed to one's behavior. Thus, identified regulation is associated with more interest and enjoyment of school activities, practicing adaptive coping styles, and greater effort in the face of demands (Ryan & Deci, 2000a; Vansteenkiste et al., 2010).

Intrinsic motivation, the most self-determined form of motivation found at the end of the continuum, is described as motivation to perform due to inherent task pleasure and satisfaction (Ryan & Deci, 2000b). Among high school students in the general population, intrinsic motivation has been found to be more protective of one's academic achievement than external forms of motivation (for a review, see Taylor et al., 2014). Individuals who are intrinsically motivated have a natural inclination toward integration, mastery, spontaneous interest, and exploration of concepts, which represent various sources of gratification and vivacity that are crucial to healthy cognitive and social development throughout life (Ryan & Deci, 2002). Although individuals are predisposed with intrinsic motivational propensities, the preservation and improvement of this predisposition can be hindered by numerous adverse circumstances (Ryan & Deci, 2000a). Such adverse circumstance may include the challenges associated with migration that migrant youth are at risk of facing during their early settlement (Motti-Stefanidi, 2019; Suárez-Orozco et al., 2018).

### Acculturative Stress and Bicultural Identity Integration

Most immigrants generally seek a better life and are motivated to succeed in their new society (Becker & Ferrara, 2019), and migration is not inevitably associated with the development of psychosocial difficulties (Williams & Berry, 1991). Nonetheless, some migrants are at risk of experiencing challenges in relation to acculturative stress and bicultural identity integration, both of which can influence one's experience of integration and later adaptation within their new society. Acculturative stress is defined by Berry (2006) as a physiological and psychological state that stems from cultural-specific stressors. These stressors can stem from perceptions of discrimination, cultural isolation, and difficult intercultural relations, as well as difficulties in acquiring a second-language (Miller et al., 2011). Notably, when experienced among vulnerable immigrant youth during their early settlement, such challenges may be particularly detrimental to their academic experiences (e.g., Berry et al., 2006).

The construct of bicultural identity involves one's internalization of two cultures, one considered to be mainstream and the other ancestral. Benet-Martinez and Haritatos (2005) proposed a theoretical framework of bicultural identity integration that is the result of variations in the magnitude of dichotomies of cultural compartmentalizing versus blendedness and of cultural conflict versus harmony. Cultural compartmentalizing versus blendedness refers to the subjective level of overlap perceived between two cultural orientations, while cultural conflict versus harmony refers to the level of compatibility. As explained by Huynh et al. (2018), the degree of compartmentalizing versus blendedness is thought to be linked to the cognitive and behavioural aspects implicated in the integration of two cultural orientations (e.g., developing language proficiency and dual cultural identities), while the degree of conflict versus harmony is related to the affective factors that encompass feelings and attitudes. Bicultural identity integration stemming from high levels of both compartmentalizing and conflict, rather than high levels of both blendedness and harmony, is understood as a risk factor that can lead to maladaptive psychosocial outcomes that have been found to be linked to academic underachievement (Benet-Martinez & Haritatos, 2005; Nguyen & Benet-Martínez, 2013).

## Present Study

To better understand the academic adaption of non-Western immigrant youth in their first year of attending a Dutch academic integration program in a secondary school in

Amsterdam, The Netherlands, we identified three objectives in this study that are related to the beliefs and values that they bring to school, and how migration challenges relate to their academic motivation. One, we assessed motivation for success by measuring the differences in students' life expectations in terms of their future possibilities, schooling experiences, and happiness before and after migration. Two, we examined the extent to which the immigrant youth were matched or mismatched with the cultural practices and values that are mainly promoted within Dutch schools. As such, we examined differences in their identification with interdependent compared with independent self-construal processes. Three, we assessed how various acculturation stressors (i.e., language skills, discrimination and prejudice, intercultural relation, and cultural isolation) and components of bicultural identity integration (compartmentalizing and conflict) related to the different types of academic motivation (i.e., external regulation, introjected regulation, identified regulation, and intrinsic).

### Hypotheses

The following hypotheses were generated for the three research objectives. One, we anticipated that the recently immigrant students would report expecting greater future possibilities, schooling experiences, and happiness post- as compared to pre-migration. Two, we expected that the participants would report greater identification with interdependent self-construal processes compared with independent processes. Three, we predicted that increases in all acculturation stressors and in bicultural compartmentalizing and conflict would be associated with increases in external forms of motivation (i.e., external, introjected, and identified regulation) or decreases in intrinsic motivation.

## Method

### Participants

The participants were 63 recently immigrated youth (29 = male) between 12 and 19 years old ($M_{age} = 15.77$, $SD = 1.64$) from the Middle East ($n = 25$), Africa ($n = 30$), and Eastern Europe ($n = 8$). These youth attended one of the three academic integration programs intended for international adolescent students with a limited Dutch language fluency in a secondary school in Amsterdam, The Netherlands. The youth who attended the integration program for a minimum of 8 weeks were included in this study.

### Measures

**Demographics** A demographic self-report questionnaire was used to obtain personal information about the participants regarding age, gender, country of origin, language spoken at home, and level of education (see Table 1).

**Expectations Pre- and Post-Migration** Six questions were formulated by the researchers to determine life expectations pre-and post-migration to Amsterdam, The Netherlands. The participants were asked to rate the questions with a 5-point scale ranging from 1 (very low) to 5 (very high). The life expectation domains of interest were related to perceptions of future possibilities, schooling experiences, and happiness, pre- (e.g., expectations about schooling, before arriving in The Netherlands) and post- (e.g., expectations about schooling, now) migration. Cronbach's alpha values for the life expectation domains ranged between .75 and .84, indicating high reliability.

**Self-Construal Orientation** The Interdependence-Independence Scale (IIS; Kato & Markus, 1993, 1994) was used to assess the students' level of identification with

**Table 1** Demographic information

| Variable | Frequency | % |
|---|---|---|
| Age | | |
| 12 | 4 | 6.3 |
| 13 | 7 | 11.1 |
| 14 | 12 | 19 |
| 15 | 9 | 14.3 |
| 16 | 12 | 19 |
| 17 | 13 | 20.6 |
| 18 | 3 | 4.8 |
| 19 | 1 | 1.6 |
| value missing | 2 | 3.2 |
| Sex | | |
| Male | 29 | 46 |
| Female | 34 | 54 |
| Emigration Region | | |
| Middle East | 25 | 39.7 |
| Africa | 30 | 47.6 |
| Europe | 8 | 12.7 |
| Language Spoken at Home | | |
| Dutch | 2 | 3.2 |
| English | 5 | 7.9 |
| Other | 56 | 88.9 |
| Education Level | | |
| Secondary | 55 | 87.3 |
| Selective Secondary | 7 | 11.1 |
| International | 1 | 1.6 |

interdependent and independent self-construal processes. The students were asked to rate how well the 31 included statements described them using a 10-point scale ranging from 0 (doesn't describe me at all) to 10 (describes me very much). The ISS is comprised of two scales, both divided into two subscales. The Interdependence scale includes 9 items that are used to measure concern for others (COE; e.g., "I always care about what other people think of me.") and 7 items that are used to measure maintaining self-other bonds (MB; e.g., "I feel guilt when I say "No" when someone asks me for help."). Cronbach's alpha for the interdependence scale for this sample was .60, indicating good reliability. The Independence scale includes 8 items that are used to measure self-other differentiation (SOD; e.g., "Even though people around me hold a different opinion, I stick to what I believe in.") and 7 items that are used to measure self-knowledge (SK; e.g., "I usually make my own decisions by myself."). The variables of interest in the present study were interdependent self-construal and independent self-construal. Cronbach's alpha for the independence scale for this sample was .64, indicating good reliability.

**Motivation** The Academische Zelf-Regulatie Vragenlijst [Academic Self-Regulation Questionnaire] (ZRV-A; Vansteenkiste et al., 2009), a Dutch version of the Academic Self-Regulation Questionnaire (SRQ-A; Ryan & Connell, 1989), was used to assess academic motivation. Rather than asking for the participants' motives to engage in different educational activities, the adjusted version is limited to the question "Why are you studying in general?". The questionnaire included 16 five-point Likert items, ranging from 1 (totally not important) to 5 (totally important), that were used to measure the four types of motivation highlighted in self-determination theory: external, introjected, and identified regulations, as well as intrinsic motivation (Ryan & Deci, 2002). Cronbach's alpha values for the four motivation subscales were .58 (external regulation), .57 (introjected regulation), .51 (identified regulation), and .83 (intrinsic motivation), indicating between good and high reliability.

**Migration Challenges** The Riverside Acculturation Stress Inventory (RASI; Benet-Martinez & Haritatos, 2005) was used to assess challenges associated with the youths' adjustment to the Dutch educational system. The RASI includes 15 items that are intended to tap into the 5 domains of acculturation stressors – language skills (e.g., "It bothers me that I have an accent"), intercultural relations (e.g., "I have had disagreements with people of my own cultural/ethnic group [e.g., friends or family] for liking Dutch ways of doing things."), discrimination/prejudice (e.g., "I have been treated rudely or unfairly because of my cultural/ethnic background."), cultural isolation (e.g., "I feel that there are not enough people of my own ethnic/cultural group in my living environment."), and work challenges. Considering the age of the participants, the work domain was omitted. The participants were asked to rate the items with a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The variables of interest were language skills, intercultural relations, discrimination/prejudice, and cultural isolation. Cronbach's alpha values for these four subscales were .65 (language skills), .84 (intercultural relations), .68 (discrimination/prejudice), and .53 (cultural isolation), indicating between good and high reliability.

The Bicultural Identity Integration Scale –Version 1 (BIIS-1; Benet-Martinez & Haritatos, 2005) was used to assess possible components of bicultural identity organization. The BIIS-1 includes 8 items that are intended to measure perceptions of cultural compartmentalizing (4 items, i.e., perceiving one's two cultural identities as separate and dissociated vs. hyphenate or fused) and cultural conflict (4 items, i.e., feeling torn between one's two identities versus feeling that they are compatible). The participants were asked to rate each item using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). For this study, Cronbach's alpha was computed with the compartmentalizing and conflict subscales having an acceptable to low reliability scores of .45 and .31, respectively.

## Procedure

The participants' parents provided written informed consent for their children to participate in this study. Neither the participants nor the academic professionals received compensation for their participation. The research protocol was approved by the ethical committee of the Faculty of Behavioral and Movement Sciences at Vrije Universiteit Amsterdam, the Netherlands.

Data collection was performed as part of an assignment in the participants' Dutch language class, during which they filled out the questionnaires pertaining the topics of interest of this study (i.e., life expectations pre- and post-migration, self-construal orientation, acculturation stressors, bicultural identity integration, academic motivation). With the exception of the Dutch version of The Self-Regulation Questionnaire–Learning (ZRV-L; Vansteenkiste et al., 2009), all of the measures were translated into Dutch by native Dutch speaking research students using a back-translation method. The administration of the questionnaires was fully standardized. When a participant had trouble filling out the questionnaires in Dutch, a researcher offered further explanation in Dutch or in English, the original language of the questionnaires as well as the second language spoken at school.

## Results

IBM SPSS (Version 27) was used for the analyses. The skewness of the variables was first examined to determine if the data were normally distributed among each variable of interest. If the skewness of a variable was greater than +.50 or less than −.50, the variable was transformed using a logarithmic (log) transformation or a reflected log transformation, respectively. Four life expectation variables as well as the intercultural relation variable and the discrimination/prejudice variables required a log transformation to reduce skewness (see Table 2). For the future possibilities and the happiness variables pre-migration, a log transformation returned unacceptable skew values off 1.14 and .71, respectively. Therefore, these two variables were subjected to a square root transformation resulting in a skew value of .64 for future possibilities and .40 for happiness. All the statistical analyses were conducted using these transformed variables.

**Table 2** Transformation of Skewed variables

| Variable | Skew of Raw Data | Skew after Log Transformation |
|---|---|---|
| Life Expectations Pre-Migration | | |
| Future Possibilities | −2.20 | 1.14 |
| Schooling | −.96 | .51 |
| Happiness | −1.32 | .71 |
| Life Expectations Post Migration | | |
| Future Possibilities | −1.06 | .43 |
| Schooling | −.61 | .03 |
| Happiness | −1.11 | .34 |
| Acculturation Stressors | | |
| Intercultural Relations | .68 | .03 |
| Discrimination/Prejudice | .97 | .09 |

### Differences in Life Expectations and in Self-Construal Orientations

In terms of the first objective of this study, dependent samples *t*-tests were conducted to measure differences in the participants' life expectations pre- and post-migration (see Table 3). The results of the dependent samples correlation analyses showed significant positive relations among all three life expectation domains. In terms of the *t*-test analyses, statistical differences between the participant's mean scores were significant only in the schooling experiences domain. Consistent with our hypothesis, the results revealed that the students reported greater satisfaction with their schooling post migration compared with pre migration.

The second objective of this study was to measure differences among students' identification with independent and interdependent self-construal orientations during their first year of settlement in the Netherlands. Consistent with our hypothesis, the participants from this study reported greater identification with an interdependent ($M = 102.54$, $SD = 15.02$) compared with an independent ($M = 95.44$, $SD = 14.46$) self-construal orientation ($t_{(60)} = 2.80$, $p < .01$, $R^2 = .01$). Thus, they were considered to be mismatched with the independent values and practices that are typically promoted within Western schools.

### Migration Challenges and Motivation

For the third objective of this study, the effects of the acculturation stressors (language skills, intercultural relations, discrimination/prejudice, and cultural isolation) and components of bicultural identity integration (compartmentalizing and conflict) on each type of academic motivation (external, introjected, identified, and intrinsic regulations) were assessed through four multiple linear regression analyses. The intercorrelation matrix for these variables, along with their means and standard deviations, can be found in Table 4. The regression model for external regulation was statistically significant ($F_{(6,56)} = 2.93$, $p < .05$, adjusted $R^2 = .15$; Table 5), while the model for introjected regulation was statistically non-significant ($F_{(6,56)} = 1.46$, $p = .21$, adjusted $R^2 = .04$; Table 6). The regression models for identified regulation ($F_{(6,56)} = 4.40$, $p = .00$, adjusted $R^2 = .24$;

**Table 3** Results of paired-samples t-test and descriptive statistics for the difference between the life expectations variables pre and post migration to the Netherlands

| Variable | M | SD | n | 95% CI for Mean Difference | | *t* | df | $r^2$ |
|---|---|---|---|---|---|---|---|---|
| | | | | Lower | Upper | | | |
| Future Possibilities | −.00 | .26 | 63 | −.07 | .06 | −.11 | 62 | 28% |
| Schooling | −.10 | .25 | 63 | −.17 | −.04 | −3.24* | 62 | 9% |
| Happiness | −.03 | .25 | 63 | −.03 | .09 | 1.03 | 62 | 36% |

*$p < .01$

**Table 4** Mean, Standard Deviation (SD), and correlation matrix of key variables

| Variable | M (SD) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. External Regulation | 3.79 (.66) | – | .46* | .38* | .59* | −.10 | .00 | −.14 | .27* | .31* | .16 |
| 2. Introjected Regulation | 3.57 (.63) | .46* | – | .65** | .61** | −.01 | .02 | −.04 | .23 | .19 | .26* |
| 3. Identified Regulation | 3.57 (.63) | .38** | .65** | – | .58** | .12 | .09 | .11 | .26* | .45** | .46** |
| 4. Intrinsic Motivation | 3.72 (.70) | .59** | .61** | .58* | – | −.15 | .04 | .08 | .41** | .15 | .29* |
| 5. Language Skills | 7.83 (3.09) | −.10 | −.01 | .12 | −.15 | – | .21 | .20 | .20 | .10 | .31* |
| 6. Intercultural Relations | 8.30 (4.13) | .00 | .02 | .09 | .04 | .21 | – | .43** | .11 | .12 | .07 |
| 7. Discrimination/Prejudice | 6.19 (2.79) | −.14 | −.04 | .11 | .08 | .20 | .43** | – | .31* | .08 | .19 |
| 8. Cultural Isolation | 7.62 (3.06) | .27* | .23 | .26* | .41** | .20 | .11 | .31* | – | .11 | .31* |
| 9. Bicultural Identity Compartmentalizing | 13.73 (3.10) | .31* | .19 | .45* | .15 | .10 | .12 | .08 | .11 | – | .35** |
| 10. Bicultural Identity Conflict | 10.68 (2.91) | .16 | .26* | .46** | .30* | .31* | .07 | .19 | .31* | .35** | – |

$N = 63$

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

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

**Table 5** Multiple linear regression analysis assessing the relationship between migration challenges and external regulation

| Predictor | B | SE B | β | 95% CI | |
|---|---|---|---|---|---|
| | | | | Lower | Upper |
| Language Skills | −.03 | .02 | −.16 | .08 | .01 |
| Intercultural Relations | .24 | .39 | .08 | −.53 | 1.02 |
| Discrimination/Prejudice | −96 | .46 | −.28 | −1.89 | −.02 |
| Cultural Isolation | .07 | .02 | .32 | .01 | .12 |
| Bicultural Identity Compartmentalizing | .06 | .02 | .28 | .00 | .11 |
| Bicultural Identity Conflict | .01 | .03 | .05 | −.04 | .07 |

**Table 6** Multiple linear regression analysis assessing the relationship between migration challenges and introjected regulation

| Predictor | B | SE B | β | 95% CI | |
|---|---|---|---|---|---|
| | | | | Upper | Lower |
| Language Skills | −.02 | .02 | −.11 | −.07 | .03 |
| Intercultural Relations | .16 | .40 | .05 | −.63 | .96 |
| Discrimination/Prejudice | −.52 | .47 | −.16 | −1.48 | .42 |
| Cultural Isolation | .04 | .02 | .21 | −.01 | .10 |
| Bicultural Identity Compartmentalizing | .02 | .02 | .11 | −.03 | .07 |
| Bicultural Identity Conflict | .04 | .03 | .21 | −.01 | .10 |

Table 7) and intrinsic motivation ($F_{(6,56)} = 3.81$, $p = .00$, adjusted $R^2 = .21$; Table 8) were statistically significant. The details of these results are described below.

**External Regulation** The multiple regression for external regulation (see Table 5), revealed a positive association with perceptions of cultural isolation ($\beta = .32$, $t_{(61)} = 2.56$, $p = .01$) and bicultural identity compartmentalizing ($\beta = .28$, $t_{(61)} = 2.25$, $p = .02$), and a negative association with perceptions of discrimination and prejudice ($\beta = -.28$, $t_{(61)} = -2.06$, $p = .04$). These findings suggest that greater reports of cultural isolation and bicultural identity compartmentalizing among the youth are associated with motivation that becomes more externally driven. Moreover, increases in reports of experiences of discrimination and prejudice were associated with a decrease in their levels of external regulation.

**Identified Regulation** The multiple regression (see Table 7) for identified regulation revealed a positive association with reports of bicultural identity compartmentalizing ($\beta = .32$, $t_{(61)} = 2.72$, $p < .01$) and bicultural identity conflict ($\beta = .31$, $t_{(61)} = 2.47$, $p = .01$), although this last result should be interpreted with care given the low reliability for this scale in this group. As the participants reported greater difficulty in both their cognitive and affective bicultural identity integration, their identified regulation for academic motivation increased

**Table 7** Multiple linear regression analysis assessing the relationship between migration challenges and identified regulation

| Predictor | B | SE B | β | 95% CI | |
|---|---|---|---|---|---|
| | | | | Upper | Lower |
| Language Skills | −.00 | .02 | −.04 | −.05 | .04 |
| Intercultural Relations | .10 | .35 | .03 | −.60 | .80 |
| Discrimination/Prejudice | −.09 | .42 | −.02 | −.93 | .75 |
| Cultural Isolation | .03 | .02 | .14 | −.02 | .07 |
| Bicultural Identity Compartmentalizing | .06 | .02 | .32 | .01 | .11 |
| Bicultural Identity Conflict | .06 | .02 | .31 | .01 | .12 |

in that they reported greater motivation stemming from personal commitments that are partly self-determined.

**Intrinsic Motivation** The multiple regression (see Table 8) for intrinsic motivation revealed a negative association with reports of language challenges ($\beta = -.31$, $t_{(61)} = -2.57$, $p = .01$) and a positive association with perceptions of cultural isolation ($\beta = .40$, $t_{(61)} = 3.25$, $p < .01$). These results demonstrate that reports of greater difficulty in acquiring the Dutch language are associated with a decrease in self-determined academic motivation, or academic motivation that stems from inherent task pleasure and satisfaction. Conversely, reports of cultural isolation contributed to an increase in self-determined motivation among the recently immigrated youth.

## Discussion

In this study, we identified three objectives to investigate the academic adaptation of a group of non-Western immigrant students between 12 and 19 years old in their first year of attending a Dutch academic integration program in a secondary school in the Netherlands. The findings provide insight into the consistent reports over the past two decades of the academic struggles experienced by non-Western immigrant youth in the Netherlands (Statistics Netherlands, 2018; Vasta, 2007), and specific migration challenges that can be targeted in interventions aimed at fostering academic success among immigrant youth more generally.

In our examination of the differences among the levels of satisfaction in relation to the life expectations reported by the youth post- as compared with pre-migration, the finding on the development of students' perception of their school experiences is consistent with our hypothesis that they would report experiencing an increase in their level of satisfaction post migration. Regarding the development of students' perceptions of future possibilities and feelings of happiness, no statistical differences were reported among these domains. This absence of statistical difference can be expected given the mean scores related to both the future possibilities and happiness domains which were found to be consistently high ($M = 4$) pre- and post-migration, thus indicating that the youth experienced persistent levels of satisfaction before and after arriving to the Netherlands.

In terms of the examination of the reported levels of independent and interdependent self-construal orientations, our findings highlight the potential for recently immigrated youth from non-Western countries to face being culturally mismatched with the practices and values that are typically promoted within Western schools. For example, the finding that the participants from this study reported greater identification with interdependent values than with the independent values that characterize Western schools is consistent with our prediction and suggests that these students are at-risk for academic underachievement (Stephens et al., 2012). Our findings also support the notion that individuals from non-Western regions of the world predominantly adopt interdependent practices and values over independent one's (Hofstede et al., 2010; Kitayama et al., 2017; Oeberst & Wu, 2015; Stephens et al., 2012).

With regard to the development of the different levels of motivation, external regulation was found to be associated with three migration challenges. One, consistent with our hypothesis, reports of higher levels of cultural isolation contributed to the development of external regulation. This finding is also consistent with the essential notion of cultural mismatch theory that cultural isolation places students at-risk for academic maladaptation (Fryberg et al., 2013). Two, self-reports of discrimination/prejudice were unexpectedly associated with a decrease in students' levels of external regulation. This unexpected finding may be linked to a moderating factor, such as utilizing resources associated with resilience to become less externally regulated to learn, despite facing discriminatory and prejudicial injustices during their recent immigration. These types of resources may be associated with a strong sense of belonging to one's ancestry and trust in significant others, both of which have been found to moderate the relationship between discrimination and mental health problems among youth and adult immigrants (Straiton et al., 2019). Three, the finding that higher levels of bicultural identity compartmentalizing were associated with the development of external regulation is consistent both with our prediction and with the notion that processes of identity compartmentalizing are linked to knowledge about mainstream cultural practices (Huynh et al., 2018). For students who are not yet acquainted with the mainstream school culture, they may be more inclined to attend to academic tasks out of fear of external repercussions rather than acting in line with their personal values and interests.

As predicted, increased identified regulation was associated with higher levels of both bicultural identity

**Table 8** Multiple linear regression analysis assessing the relationship between migration challenges and intrinsic motivation

| Predictor | B | SE B | β | 95% CI | |
|---|---|---|---|---|---|
| | | | | Upper | Lower |
| Language Skills | −.07 | .02 | −.31 | −.12 | −.01 |
| Intercultural Relations | .22 | .40 | .07 | −.57 | 1.03 |
| Discrimination/Prejudice | −.24 | .47 | −.06 | −1.20 | .71 |
| Cultural Isolation | .09 | .02 | .40 | .03 | .14 |
| Bicultural Identity Compartmentalizing | .01 | .02 | .04 | −.04 | .06 |
| Bicultural Identity Conflict | .06 | .03 | .25 | −.00 | .12 |

compartmentalizing and bicultural identity conflict. While increased levels of identified regulation can lead to academic achievement, intrinsic motivation has been found to be even more protective in the long-term development of academic achievement among high school students from Western countries (e..g, Canada and Sweden; Taylor et al., 2014). Thus, for the vulnerable recently immigrated high school students from this study, academic motivation that stems from identified regulation may not be sufficient to foster long-term academic success in the face of academic cultural mismatch.

Intrinsic motivation, the most self-determined form of motivation, was found to be associated with two migration challenges. One, contrary to our expectations, higher levels of cultural isolation were associated with the development of intrinsic motivation. This unexpected finding may be explained by factors that have been found to moderate experiences of social isolation among youth. For example, among adolescents from interdependent and collectivist regions of the world, close friendships have been found to moderate experiences of social isolation (Sauter et al., 2020). The quality of friendships during adolescence has also been associated with academic achievement (Crosnoe et al., 2003). Thus, our findings may highlight the importance of specificity in terms of clarifying from what or from whom youth feel isolated when measuring the impact of cultural isolation on academic motivation. Two, increases in reports of language challenges contributed to decreases in levels of intrinsic motivation among the participants who were Dutch second language learners. This finding is consistent with our hypothesis and Tsuchiya's (2006) finding that a low level of English language proficiency was associated with demotivation among second language learners in Japan. Conversely, successful acquisition of a second language is known to positively contribute to the development of one's motivation in a learning environment (Gardner, 2007; Wu et al., 2011). Thus, our findings add to the literature on the benefits of language proficiency, specifically in predicting one's intrinsic motivation to learn, and in this case, among immigrant youth from non-Western societies who have been learning Dutch for less than a year.

### Limitations of the Study

The primary limitation of this study is that the abilities of many of the participants to understand the questions may have been compromised as the questionnaires were in Dutch and many expressed experiencing difficulties in learning Dutch as a second language. As questionnaires could not be provided for each of the primary languages spoken by all the participants, their Dutch language difficulties were mitigated by offering the students who requested support further explanations in English, which was their second language of instruction and was more familiar to some. Another limitation concerns the number of participants which in turn limited the number of variables that could be entered into the multiple regression analyses, and therefore our demographic variables could not be included. More participants would also provide more power to detect subtle associations between the migration challenges and the different levels of academic motivation. While our statistically significant findings can be generalized, no conclusions should be drawn from any statistically non-significant result.

## Conclusion and Implications

This study contributes to the literature on academic adaptation of vulnerable immigrant youth from different non-Western cultural backgrounds during their early settlement, which represents a critical period during which integration experiences can influence the remainder of the adaptation trajectory. The findings have practical implications for educational stakeholders in Western countries who continue their endeavors to foster the optimal integration of vulnerable non-Western immigrant youth from around the world (Solano & Huddleston, 2020; Statistics Netherlands, 2018), whose adaptation depends both on personal efforts (Motti-Stefanidi & García Coll, 2018) and on community wide efforts aimed at creating welcoming academic contexts (Vedder & Motti-Stefanidi, 2016). Specifically, the findings from this study highlight the potential for non-Western immigrant youth to benefit from a multicultural curriculum that includes interdependent cultural values and practices, and a welcoming and inclusive school environment that fosters cultural contact, non-discriminatory or prejudicial attitudes, second language fluency, and the promotion of bicultural identity integration that stems from identity blendedness and harmony, rather than identity compartmentalizing and conflict.

**Funding** This research was supported in part by a grant from Netherlands Organization for Scientific Research 453–11-007, awarded to Lydia Krabbendam. Vanessa K. Weva's work on this project was supported by a Joseph-Armand Bombardier Canada Graduate Scholarships – Doctoral Scholarship 752–2019-1912.

**Data Availability** The dataset analysed during the current study are available from the corresponding author on reasonable request.

### Declarations

**Conflict of Interest** On behalf of all authors, the corresponding author states that there is no conflict of interest.

## References


Areepattamannil, S., & Freeman, J. G. (2008). Academic achievement, academic self-concept, and academic motivation of immigrant adolescents in the greater Toronto area secondary schools. *Journal of Advanced Academics, 19*(4), 700–743.

Becker, M., McElvany, N., & Kortenbruck, M. (2010). Intrinsic and extrinsic reading motivation as predictors of reading literacy: A longitudinal study. *Journal of Educational Psychology, 102*(4), 773–785. https://doi.org/10.1037/a0020084

Becker, S. O., & Ferrara, A. (2019). Consequences of forced migration: A survey of recent findings. *Labour Economics*, *59*, 1–16. https://doi.org/10.1016/j.labeco.2019.02.007

Benet-Martinez, V., & Haritatos, J. (2005). Bicultural identity integration (BII): Components and psychosocial antecedents. *Journal of Personality, 73*(4), 1015–1050. https://doi.org/10.1111/j.1467-6494.2005.00337.x

Benner, A. D., & Graham, S. (2007). Navigating the transition to multi-ethnic urban high schools: Changing ethnic congruence and adolescents' school-related affect. *Journal of Research on Adolescence, 17*(1), 207–220. https://doi.org/10.1111/j.1532-7795.2007.00519.x

Benner, A. D., & Yan, N. (2015). Classroom race/ethnic composition, family-school connections, and the transition to school. *Applied Developmental Science, 19*(3), 127–138. https://doi.org/10.1080/10888691.2014.983028

Berry, J. W. (2006). Acculturative stress. In Wong, P. T. P., Wong, L. C. J. (eds.), *Handbook of multicultural perspectives on stress and coping* (pp. 287–298). Springer, https://doi-org.proxy3.library.mcgill.ca/10.1007/0-387-26238-5_12

Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (2006). Immigrant youth: Acculturation, identity, and daptation. *Applied Psychology, 55*(3), 303–332. https://doi.org/10.1111/j.1464-0597.2006.00256.x

Cascio, M. I., Magnano, P., Elastico, S., Costantino, V., Zapparrata, V., & Battiato, A. (2014). The relationship among self-efficacy beliefs, external locus of control and work stress in public setting schoolt teachers. *Open Journal of Social Sciences, 02*(11), 149–156. https://doi.org/10.4236/jss.2014.211021

Cokley, K. (2003). What do we know about the motivation of African American students? Challenging the "anti-intellectual" myth. *Harvard Educational Review, 73*(4), 524–558. https://doi.org/10.17763/haer.73.4.3618644850123376

Crosnoe, R., Cavanagh, S., & Elder, G. H. (2003). Adolescent friendships as academic resources: The intersection of friendship, race, and school disadvantage. *Sociological Perspectives, 46*(3), 331–352. https://doi.org/10.1525/sop.2003.46.3.331

Crosnoe, R., & López Turley, R. N. (2011). K–12 educational outcomes of immigrant youth. *The Future of Children, 21*(1), 129–152. https://doi.org/10.1353/foc.2011.0008

Cross, S. E., Gore, J. S., & Morris, M. L. (2003). The relational-interdependent self-construal, self-concept consistency, and well-being. *Journal of Personality and Social Psychology, 85*(5), 933–944. https://doi.org/10.1037/0022-3514.85.5.933

Cross, S. E., Hardin, E. E., & Gercek-Swing, B. (2011). The *what, how, why, and where* of self-construal. *Personality and Social Psychology Review, 15*(2), 142–179. https://doi.org/10.1177/1088868310373752

de Winter-Koçak, S., & Badou, M. (2020). School careers of young people with a migration background (No. 1; pp. 1–37). Knowledge Platform Integration & Society. https://docplayer.nl/185844904-Auteurs-suzan-de-winter-kocak-mariam-badou-schoolloopbanen-van-jongeren-met-een-migratieachtergrond-januari-2020.html

Fryberg, S. A., Covarrubias, R., & Burack, J. A. (2013). Cultural models of education and academic performance for native American and European American students. *School Psychology International, 34*(4), 439–452. https://doi.org/10.1177/0143034312446892

Fryberg, S. A., & Markus, H. R. (2007). Cultural models of education in American Indian, Asian American and European American contexts. *Social Psychology of Education, 10*(2), 213–246. https://doi.org/10.1007/s11218-007-9017-z

Gardner, R. C. (2007). Motivation and second language acquisition. *Porta Linguarum, 8*, 9–20. [http://hdl.handle.net/10481/31616.

Gardner, W. L., Gabriel, S., & Lee, A. Y. (1999). "I" value freedom, but "we" value relationships: Self-construal priming mirrors cultural differences in judgment. *Psychological Science, 10*(4), 321–326. https://doi.org/10.1111/1467-9280.00162

Greif, A. (1994). Cultural beliefs and the organization of society: A historical and theoretical reflection on collectivist and individualist societies. *Journal of Political Economy, 102*(5), 912–950. https://doi.org/10.1086/261959

Guay, F., & Bureau, J. S. (2018). Motivation at school: Differentiation between and within school subjects matters in the prediction of academic achievement. *Contemporary Educational Psychology, 54*, 42–54. https://doi.org/10.1016/j.cedpsych.2018.05.004

Guay, F., Ratelle, C. F., & Chanal, J. (2008). Optimal learning in optimal contexts: The role of self-determination in education. *Canadian Psychology/Psychologie Canadienne, 49*(3), 233–240. https://doi.org/10.1037/a0012758

Hernandez, D. J. (2012). Resources, strengths, and challenges for children in immigrant families in eight affluent countries. In A. S. Masten, K. Liebkind, & D. J. Hernandez (Eds.), *Realizing the potential of immigrant youth* (pp. 17–40). Cambridge University Press. https://doi.org/10.1017/CBO9781139094696.003

Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind*. McGraw-Hill.

Huynh, Q.-L., Benet-Martínez, V., & Nguyen, A.-M. D. (2018). Measuring variations in bicultural identity across US ethnic and generational groups: Development and validation of the bicultural identity integration scale—Version 2 (BIIS-2). *Psychological Assessment, 30*(12), 1581–1596. https://doi.org/10.1037/pas0000606

International Organization for Migration. (2019). *World migration report 2020*. UN. https://doi.org/10.18356/b1710e30-en.

Juslin, P. N., Barradas, G. T., Ovsiannikow, M., Limmo, J., & Thompson, W. F. (2016). Prevalence of emotions, mechanisms, and motives in music listening: A comparison of individualist and collectivist cultures. *Psychomusicology: Music, Mind, and Brain, 26*(4), 293–326. https://doi.org/10.1037/pmu0000161

Kato, K., & Markus, H. (1993). *Development of the interdependence/independence scale: Using American and Japanese samples*. Poster presented at the American Psychological Society Meetings.

Kato, K., & Markus, H. R. (1994). Independence–interdependence scale. In E. Hatfield, J. T. Cacioppo, & R. L. Rapson (Eds.), *Emotional Contagion* (p. 153). Cambridge University Press.

Kitayama, S., Yanagisawa, K., Ito, A., Ueda, R., Uchida, Y., & Abe, N. (2017). Reduced orbitofrontal cortical volume is associated with interdependent self-construal. *Proceedings of the National Academy of Sciences*, *114*(30), 7969–7974. www.pnas.org/cgi/doi/10.1073/pnas.1704831114

Leeman, Y. (2008). Education and diversity in the Netherlands. *European Educational Research Journal, 7*(1), 50–59. https://doi.org/10.2304/eerj.2008.7.1.50

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*(2), 224–253. https://doi.org/10.1037/0033-295X.98.2.224

Matsumoto, D. (1999). Culture and self: An empirical assessment of Markus and Kitayama's theory of independent and interdependent self-construals. *Asian Journal of Social Psychology, 2*(3), 289–310. https://doi.org/10.1111/1467-839X.00042

Miller, M. J., Kim, J., & Benet-Martínez, V. (2011). Validating the riverside acculturation stress inventory with Asian Americans. *Psychological Assessment, 23*(2), 300–310. https://doi.org/10.1037/a0021589

Motti-Stefanidi, F. (2019). Resilience among immigrant youths: Who adapts well, and why? *Current Directions in Psychological Science, 28*(5), 510–517. https://doi.org/10.1177/0963721419861412

Motti-Stefanidi, F., & García Coll, C. (2018). We have come a long way, baby: "Explaining positive adaptation of immigrant youth across cultures." *Journal of Adolescence*, *62*, 218–221. https://doi.org/10.1016/j.adolescence.2017.09.012.

Motti-Stefanidi, F., & Masten, A. S. (2017). A resilience perspective on immigrant youth adaptation and development. In N. J. Cabrera & B. Leyendecker (Eds.), *Handbook on positive development of minority children and youth* (pp. 19–34). Springer International Publishing. https://doi.org/10.1007/978-3-319-43645-6_2

Nguyen, A.-M. D., & Benet-Martínez, V. (2013). Biculturalism and adjustment: A meta-analysis. *Journal of Cross-Cultural Psychology, 44*(1), 122–159. https://doi.org/10.1177/0022022111435097

Nolan, B. (2012). Promoting the well-being of immigrant youth. In A. S. Masten, K. Liebkind, & D. J. Hernandez (Eds.), *Realizing the potential of immigrant youth* (pp. 413–438). Cambridge University Press. https://doi.org/10.1017/CBO9781139094696.021

Oeberst, A., & Wu, S. (2015). Independent vs. interdependent self-construal and interrogative compliance: Intra- and cross-cultural evidence. *Personality and Individual Differences, 85*, 50–55. https://doi.org/10.1017/CBO9781139094696.021

Rubenfeld, S., Sinclair, L., & Clément, R. (2007). Second language learning and acculturation: The role of motivation and goal content congruence. *Canadian Journal of Applied Linguistics*, *10*(3), 309–323. https://journals.lib.unb.ca/index.php/CJAL/article/view/19748

Ryan, R. M., & Connell, J. P. (1989). *Academic self-regulation questionnaire. SRQ-A*.

Ryan, R. M., & Deci, E. L. (2000a). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68–78. https://doi-org.proxy3.library.mcgill.ca/10.1037/0003-066X.55.1.68

Ryan, R. M., & Deci, E. L. (2000b). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology, 25*(1), 54–67. https://doi.org/10.1006/ceps.1999.1020

Ryan, R. M., & Deci, E. L. (2002). Overview of self-determination theory: An organismic-dialectical perspective. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 3–33). University of Rochester Press.

Sauter, S. R., Kim, L. P., & Jacobsen, K. H. (2020). Loneliness and friendlessness among adolescents in 25 countries in Latin America and the Caribbean. *Child and Adolescent Mental Health, 25*(1), 21–27. https://doi.org/10.1111/camh.12358

Singelis, T. M. (1994). The measurement of independent and interdependent self-Construals. *Personality and Social Psychology Bulletin, 20*(5), 580–591. https://doi.org/10.1177/0146167294205014

Solano, G., & Huddleston, T. (2020). *Migrant integration policy index 2020*. Barcelona Centre for International Affairs (CIDOB) and Migration Policy Group. https://www.mipex.eu/education

Statistics Netherlands. (2018). *Annual report on integration 2018: Summary*. Textcetera, The Hague. https://www.cbs.nl/en-gb/publication/2018/47/annual-report-on-integration-2018

Statistics Netherlands. (2021). *International migration*. https://www.cbs.nl/en-gb/onze-diensten/methods/definitions/international-migration

Stephens, N. M., Fryberg, S. A., Markus, H. R., Johnson, C. S., & Covarrubias, R. (2012). Unseen disadvantage: How American universities' focus on independence undermines the academic performance of first-generation college students. *Journal of Personality and Social Psychology, 102*(6), 1178–1197. https://doi.org/10.1037/a0027143

Straiton, M. L., Aambø, A. K., & Johansen, R. (2019). Perceived discrimination, health and mental health among immigrants in Norway: The role of moderating factors. *BMC Public Health, 19*(1), 325. https://doi.org/10.1186/s12889-019-6649-9

Suárez-Orozco, C., Motti-Stefanidi, F., Marks, A., & Katsiaficas, D. (2018). An integrative risk and resilience model for understanding the adaptation of immigrant-origin children and youth. *American Psychologist, 73*(6), 781–796. https://doi.org/10.1037/amp0000265

Taylor, G., Jungert, T., Mageau, G. A., Schattke, K., Dedic, H., Rosenfield, S., & Koestner, R. (2014). A self-determination theory approach to predicting school achievement over time: The unique role of intrinsic motivation. *Contemporary Educational Psychology, 39*(4), 342–358. https://doi.org/10.1016/j.cedpsych.2014.08.002

Titzmann, P. F., & Lee, R. M. (2018). Adaptation of young immigrants: A developmental perspective on acculturation research. *European Psychologist, 23*(1), 72. https://doi.org/10.1027/1016-9040/a000313

Tsuchiya, M. (2006). Profiling of lower achievement English learners at college in terms of demotivating factors. *ARELE: Annual Review of English Language Education in Japan, 17*, 171–180. https://doi.org/10.20581/arele.17.0_171

United Nations (2019). *Population Facts*. https://www.un.org/en/development/desa/population/migration/data/estimates2/estimates19.asp

United Nations (2021). *International migration 2020 highlights*. United Nations. https://www.un.org/development/desa/pd/news/international-migration-2020

Vallerand, R. J., & Ratelle, C. F. (2002). Intrinsic and extrinsic motivation: A hierarchical model. In E. L. Deci & R. M. Ryan (Eds.), *The motivation and self-determination of behaviour: Theoretical and applied issues* (pp. 37–63). University of Rochester Press.

Vansteenkiste, M., Lens, W., & Deci, E. L. (2006). Intrinsic versus extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation. *Educational Psychologist, 41*(1), 19–31. https://doi.org/10.1207/s15326985ep4101_4

Vansteenkiste, M., Niemiec, C. P., & Soenens, B. (2010). The development of the five mini-theories of self-determination theory: An historical overview, emerging trends, and future directions. In T. C. Urdan & S. Karabenick (Eds.), *The decade ahead: Theoretical perspectives on motivation and achievement* (Vol. 16, pp. 105–165). Emerald Group Publishing Limited.

Vansteenkiste, M., Sierens, E., Soenens, B., Luyckx, K., & Lens, W. (2009). Motivational profiles from a self-determination perspective: The quality of motivation matters. *Journal of Educational Psychology, 101*(3), 671–688. https://doi.org/10.1037/a0015083

Vasta, E. (2007). From ethnic minorities to ethnic majority policy: Multiculturalism and the shift to assimilationism in the Netherlands. *Ethnic and Racial Studies, 30*(5), 713–740. https://doi.org/10.1080/01419870701491770

Vedder, P., & Motti-Stefanidi, F. (2016). Children, families and schools. In D. L. Sam & J. W. Berry (Eds.), *The Cambridge handbook of acculturation psychology* (2nd ed., pp. 464–482). Cambridge University Press. https://doi.org/10.1017/CBO9781316219218.027

Williams, C. L., & Berry, J. W. (1991). Primary prevention of acculturative stress among refugees: Application of psychological theory and practice. *American Psychologist, 46*(6), 632–641. https://doi.org/10.1037/0003-066X.46.6.632

Wu, W. V., Yen, L. L., & Marek, M. (2011). Using online EFL interaction to increase confidence, motivation, and ability. *Journal of Educational Technology & Society, 14*(3), 118–129.