CHILD DEVELOPMENT

Child Development, July/August 2017, Volume 88, Number 4, Pages 1139–1155

The title for this Special Section is **Positive Youth Development in Diverse and Global Contexts**, edited by Emilie Phillips Smith, Anne C. Petersen, and Patrick Leman

Adaptation During a Great Economic Recession: A Cohort Study of Greek and Immigrant Youth

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This study examined how Greek and immigrant youth adapted to school life during the economic recession in Greece. Two cohorts of adolescents (M_{age} = 12.6 years) were compared, one assessed before the crisis and the other during the crisis (N = 1,057 and 1,052, respectively). Cohort findings were disaggregated by immigrant status, generation, and ethnic group. Crisis-cohort youth experienced more economic problems, displayed worse conduct, higher levels of absenteeism, and lower self-efficacy than precrisis youth. The cohorts did not differ in well-being, school engagement, and academic achievement. Most crisis-cohort groups showed a pervasive increase in conduct problems compared to the precrisis cohort. However, some of these groups also showed an increase in academic achievement.

During the past few years many countries in the world experienced, and some continue to experience, a great economic recession (UNICEF, 2014). Great economic recessions involve aggregate or systemic shocks that occur in the wider economy of countries or regions. Families experience such shocks through unemployment and a decrease in income, which may become insufficient to meet their financial needs. The resulting economic pressure often increases parental anxiety and depression, and relatedly family conflict, thus altering in a negative direction youth's developmental context (Conger et al., 1992). These changes have the potential to disrupt and do permanent damage to the adaptation and development of young people. What is at stake in the long run is the development of healthy, productive, and effective adults (Lundberg & Wuermli, 2012).

The impact of the current great recession on families and children was felt in many parts of the world. Greece is one of the countries where child poverty increased the most (UNICEF, 2014). The number of children whose families are income poor (income below the poverty line) as well as those who are severely materially deprived (e.g., cannot afford to pay rent, heat their home, eat meat or proteins regularly, etc.) doubled between 2008 and 2012.

Furthermore, the government significantly reduced public education spending after 2010 (UNICEF, 2014), which had an impact on the way schools function. For example, teachers' salaries were drastically cut, and their working hours and class sizes were significantly increased.

The purpose of this study is to examine how well Greek and immigrant youth adapt in the school context during the current major economic crisis. The study is based on data from the Athena Studies of Resilient Adaptation (AStRA) project, conducted in Greece. We compare two cohorts of

Both authors equally contributed to this article.

This study is part of the Athena Studies of Resilient Adaptation (AStRA), a collaborative project focusing on the quality of adaptation of immigrant youth living in Greece. The authors would like to thank Vassilis Pavlopoulos, Nancy Papathanasiou, and Stefanos Mastrotheodoros for their invaluable contributions to the AStRA project. This project is supported by an Excellence grant to Frosso Motti-Stefanidi cofunded by the European Social Fund and Greek National Resources (ESPA-Excellence II).

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 0009-3920/2017/8804-0010
DOI: 10.1111/cdev.12878

adolescents in the first year of middle school, one assessed before the crisis (see Motti-Stefanidi, 2014, 2015) and the other during the crisis. Data were collected in both cohorts from schools in the same socially disadvantaged neighborhoods of Athens with a high proportion of immigrants. Adaptation was measured within a risk and resilience perspective, with respect to core developmental tasks and psychological well-being.

This study contributes to the extant literature in a number of ways. First, the design of the study can be conceived as a natural experiment, where the crisis cohort is exposed to the economic crisis and the precrisis cohort serves as a control group not exposed to the crisis. Second, it includes a wide array of adaptation indexes that have not been examined together before in the context of an economic recession. Third, it allows for the disaggregation of cohort findings by immigrant status, generation, and ethnic group. To the best of our knowledge no other study on the effect of an economic recession on youth's adaptation includes these parameters.

Participants are early adolescents in secondary school. Early adolescence is a period of transition, which exposes youth to new educational and social challenges (Roeser, Eccles, & Sameroff, 1998). In addition to developmental challenges immigrant youth face also acculturative challenges (Motti-Stefanidi & Masten, 2017). Economic crises further tax the adaptive capacity of youth, who may have to face these normative challenges in the context of negative changes in parental employment, family income, and family dynamics, as well as in their teachers, peers, and the learning environment in schools (Lundberg & Wuermli, 2012).

Youth's Adaptation and Well-Being in the Context of Economic Recession

The crisis cohort was compared to the precrisis cohort on different indices of adaptation in the school context, as well as on two indices of psychological well-being. How well early adolescents do with respect to these indices of adaptation is a harbinger for their adaptation with respect to future developmental tasks (Masten, 2014).

The literature on the effects of poverty and low socioeconomic status (SES) on educational outcomes suggests that youth who live under conditions of socioeconomic disadvantage perform significantly less well than their better off counterparts on multiple indicators of academic achievement (McLoyd et al., 2009; Schoon et al., 2002). Even though economic loss incurred during a great recession may not necessarily push a family into poverty, it may expose its members to circumstances and stressors that usually chronically poor families experience (McLoyd et al., 2009), such as low per capita income, unmet material needs, and difficulty making ends meet (Conger & Donnellan, 2007). It follows that during a period of economic downturn, youth would be expected to have lower academic achievement than their peers who live during more prosperous times. In this line, Elder (1974) reported declines in academic performance in children of the Great Depression whose families experienced economic hardship. However, the evidence regarding the effect of an economic downturn on youth's academic achievement is scarce.

In contrast, economists have extensively studied youth's school enrolment, engagement, and attendance during a period of economic recession, and their results often run counter to expectations. For example, Ferreira and Schady (2009) reviewed on behalf of the World Bank a number of studies that examined the effects of economic shocks on children's schooling. They found that in middle- and high-income countries, such as Latin-American countries and the United States, education outcomes during a major economic crisis are countercyclical. School enrolment, engagement, and attendance increase during recessions. In contrast, in low-income countries, mostly in Africa and low-income Asia, the outcomes are procyclical; that is, school enrolment decreases during economic downturns. Greece, in spite of the current economic crisis, is classified as a high-income country. Thus, we expected that the crisis-cohort's school engagement, measured through teacher ratings of students' behavioral engagement and students' unexcused absences (Fredricks, Blumenfeld, & Paris, 2004) would not worsen, or would even increase, compared to that of the precrisis cohort.

Economic recessions have been shown to undermine youth's mental health. Family economic pressure increases the likelihood of depressed mood and externalizing behavior problems among youth (e.g., Conger et al., 1992; Lempers, Clark-Lempers, & Simons, 1989; Solantaus, Leinonen, & Punamäki, 2004). However, evidence suggests that socioeconomic disadvantage is more strongly linked with externalizing than with internalizing problems (Duncan, Magnuson, & Votruba-Drzal, 2015; Solantaus et al., 2004). Thus, we expected crisis-cohort adolescents to present worse conduct and, to a lesser extent, lower psychological well-being.

During a period of major recession, youth's self-efficacy beliefs may also be challenged. Self-efficacy refers to people's beliefs in their capabilities to regulate their functioning and to manage environmental demands to achieve desired outcomes (Bandura, 1997). Adolescents high in self-efficacy deal more proactively with the demands of their environment, trusting that they have the capacity to bring about desired goals on their own. However, during a recession, adolescents need to manage difficult normative transitions as well to start exploring goals and aspirations for the future and developing their personal identity, in a negative and often unsupportive context (Lundberg & Wuermli, 2012). Their family, which continues to be a strong socializing influence, may have been adversely affected by the crisis. Parents' unemployment, sense of loss of control, and consequently cynical and pessimistic attitude toward life may influence negatively the young person (McLoyd et al., 2009). For these reasons, we expected that the crisis cohort would exhibit lower self-efficacy compared to the precrisis cohort.

Immigrant Youth's Adaptation During an Economic Recession

The current economic recession did not affect equally all social groups within the countries hardest hit. A UNICEF (2014) report revealed that migrant families were among the worst affected. For example, in Greece poverty rates rose by 35 percentage points for children in migrant homes, compared with 15 percentage points for Greek children. Hence, crisis-cohort immigrant youth need to confront normative developmental and acculturative challenges Motti-Stefanidi, Berry, Chryssochoou, Sam, & Phinney, 2012), and contend with significant contextual stressors such as SES adversity and discrimination (Marks, Ejesi, McCullough, & García Coll, 2015) in the context of additional contextual stressors related to the economic crisis, which further tax their adaptive capacity.

In general, immigrant youth adaptation has been described to be positive or even better than that of their nonimmigrant peers (Berry, Phinney, Sam, & Vedder, 2006) and first-generation immigrants to be better adapted than later generation immigrants whose adaptation converges to that of their nonimmigrant peers (García Coll & Marks, 2012). However, this immigrant paradox has received mixed support depending on children's age and ethnicity, developmental domain (see Marks, Ejesi, & García Coll, 2014), and host country (e.g., Dimitrova, Chasiotis, & van de Vijver, 2016).

The results of the AStRA study precrisis cohort do not support the immigrant paradox (see Motti-Stefanidi, 2014, 2015). Immigrant youth's academic achievement, conduct in school, and school engagement during the first year of middle school were significantly worse than those of their Greek classmates, even after controlling for social adversity. Neither the social and ethnic composition of classrooms, nor immigrant generation and ethnic group, differentiated these results. Interestingly, they did not report more emotional symptoms.

Thus, immigrant youth living in Greece entered the period of great economic recession at a disadvantage compared to their Greek counterparts regarding prior adaptation in the school context. Therefore, it is expected that the crisis-cohort immigrant youth is even less well adapted in the school context compared to their precrisis counterparts. Whereas it has been found that economic hardship increases both internalizing and externalizing problems in youth, independently of ethnicity and geographic context (McLoyd et al., 2009), the evidence concerning the quality of adaptation of immigrant youth during a major economic crisis is generally scant.

Family Economic Problems and Youth's Adaptation

A major economic recession is a macro level phenomenon concerning the wider economy of a country. How does it come to influence youth's adaptation and well-being? According to the family economic stress model (Conger & Elder, 1994) such a countrywide recession has a negative impact on families' household economy, which adversely affects youth's adaptation, largely through its impact on family process. It logically follows that statistically controlling for family economic problems should reduce the observed cohort differences in adaptation and well-being.

On the other hand, school and classroom social composition also contributes to youth's achievement and behavior (Crosnoe & Benner, 2015; Eccles & Roeser, 2009). For example, students from low-income families have better academic achievement in schools with a higher average socioeconomic composition (e.g., Rangvid, 2007). This relation has been less studied concerning other developmental outcomes. Therefore, we expect that controlling for classroom social composition will account for possible cohort effects in educational outcomes, such as academic achievement and school engagement. Based on extant evidence, we

could not formulate clear hypotheses regarding other outcomes.

The Present Study

Immigrant Groups

Both cohorts included Greek and immigrant students nested in the same classrooms. One immigrant group consists of immigrants from Albania, who entered initially the country as undocumented economic immigrants. In time they were provided with residence and work permits, but they were not easily accorded citizenship, even when born in Greece. The other immigrant group consists of ethnic-Greek immigrants from the former Soviet Union, called Pontic-Greeks, who are considered to be returning natives. These immigrants retained their Greek culture, language, and religion for many centuries but never lived in Greece before migrating. Their language, which is a dialect rooted in Ancient Greek, is incomprehensible to modern Greeks. In both cohorts, the remaining immigrants came mostly from other Eastern European countries such as Bulgaria, Romania, or former states of the Soviet Union such as Russia or Moldavia.

Although they differ in numerous ways, all immigrant groups share a number of commonalities (Motti-Stefanidi & Asendorpf, 2012). First, either they or their parents were not born in Greece. Second, they all came from countries with unstable and poor economic situations to a country that was relatively more affluent. As a result, they perceived their new situation as a vast improvement. Third, they all have to face similar economic and social difficulties in their adaptation to the same host country. Fourth, all immigrant groups experience significant discrimination (Triandafyllidou, 2000).

Research Questions

First, we examined whether and how the crisis cohort, compared to the precrisis cohort, differs in terms of families' economic problems, and adolescents' adaptation and well-being. We expected in the crisis cohort, compared to the precrisis cohort, more family economic problems, lower academic achievement, self-efficacy, and psychological well-being, and worse conduct. We also expected that the crisis cohort would either not differ or even would present an increase in school engagement compared to the precrisis cohort.

Second, we examined whether and how differences between the two cohorts hold equally for Greeks, first- and second-generation immigrants, and specific immigrant groups. We expected that crisis-cohort immigrant youth would be generally less well adapted in the school context compared to their precrisis counterparts.

Finally, we examined whether and how controlling for families' economic problems, particularly related to unemployment and income at the individual and classroom levels of analysis, changes any of these cohort differences. We expected that classroom-level social composition would account for possible cohort differences in academic achievement and school engagement.

Method

Samples

Students in both cohorts were assessed after the first trimester in secondary school. Cohort 1 was assessed before the onset of the crisis (early in 2005) and Cohort 1 amid the crisis (early in 2013).

Cohort 1

Assessed were 1,057 students who attended 49 secondary-school Grade 1 classes in 12 schools (M_{age} = 12.7 years, SD = .65; 53% male). Of these students, 50% were immigrants (59% first generation, 41% second generation); first-generation immigrants had spent 65% (range = 13%–99%) of their lifetime in Greece. The proportion of immigrants in class varied between 20% and 100%.

Cohort 2

Schools were selected for Cohort 2 following a stepwise selection procedure. First, the nine schools of Cohort 1 that had cooperated until the end of the longitudinal study of Cohort 1 were asked to cooperate again; seven of these schools accepted. Six additional schools were recruited that were located near schools of Cohort 1. Thus, all 13 schools of Cohort 2 were located in the neighborhoods of the schools of Cohort 1.

Assessed were 1,052 students who attended 54 secondary-school Grade 1 classes in 13 schools (M_{age} = 12.6 years, SD = .58; 53% male). Of these, 65% were immigrants (22% first generation, 78% second generation); first-generation immigrants had spent 60% (range = 8%–99%) of their lifetime in Greece. The proportion of immigrants in class

varied between 19% and 100%. Thus, Cohort 2 was virtually identical with Cohort 1 regarding sample size, neighborhood, type of school, timing of assessment in the first school year, age, gender proportion, and lifetime spent in Greece of first-generation immigrants. However, major differences concerning ethnicity were found (see Results).

Measures

The following measures were assessed in both cohorts with identical items.

Ethnicity was assessed in terms of the place of birth of students' mother and father. Students were defined as being Greek when both parents were born in Greece. All other students were classified as immigrants. For both cohorts, more than 88% of the immigrants had parents who were both non-Greek, and < .5% had Greek parents but were not born in Greece. Thus, families with only one Greek parent were rare.

In both cohorts, the largest group consists of immigrants from Albania, and the second-largest group of Pontic-Greeks. Students were classified as Albanian or Pontic-Greek if at least one parent was of Albanian or Pontic-Greek origin. In both cohorts, the remaining immigrants came mostly from other Eastern European countries such as Bulgaria, Romania, or former states of the Soviet Union such as Russia or Moldavia. Because a differentiation by nationality yielded in both cohorts only small groups, they were classified together as "other."

Immigrant status was assessed in terms of being Greek or immigrant; immigrant students were either first-generation immigrants not born in Greece or second-generation immigrants born in Greece. In addition, percentage of lifetime spent in Greece was used in the analyses.

Family Context

Economic problems in the family were assessed with a cumulative risk index based on four yes/no items (father unemployed, mother unemployed, parent working occasionally, and financial problems of the family; scores thus ranging from 0 to 4).

Parental education was assessed on a 5-point scale (primary school degree to university degree) for both parents and then averaged.

Adaptation Outcomes

Four domains of adaptation were studied using multiple methods and informants:

Academic performance was obtained from school records. Grade points in Greek secondary schools are rated by teachers on a 20-point scale, with higher points indicating better performance. The grade point average (GPA) of each student was based on the judgments of at least four different teachers and five core subjects for the first trimester (Mathematics, Ancient Greek, Modern Greek, Physics, and History). GPA was the mean across these subjects on the 20-point scale.

School absences were obtained from school records in terms of days of unexcused absence during the first trimester (absence due to illness confirmed by a doctor was not included).

School engagement was rated by Greek language teachers on six items, each rated on a 5-point scale, ranging from 1 (*not at all*) to 5 (*very much*). These items assessed the degree to which the student was motivated and engaged in schoolwork. Sample items are as follows: "concentrates in class," "participates in class," and "is cooperative." The scale had a high internal consistency (in both cohorts, Cronbach's α above .85 for both immigrants and Greeks).

Conduct. Greek language teachers rated the disruptiveness of each student in the classroom on five items, each rated on a 5-point scale, ranging from 1 (*not at all*) to 5 (*very much*). The items assessed the degree to which the student disturbed the class or was aggressive toward peers. Sample items were as follows: "makes fun of other kids in class," "gets involved in fights." Thus they were all related to externalizing problems. The items were reversely coded such that high scores indicate good conduct. The scale had high internal consistencies (in both cohorts, Cronbach's α above .88 for both immigrants and Greeks).

Self-efficacy. Global self-efficacy was assessed with a 24-item scale representing eight domains of functioning, namely, enlisting social resources, self-regulated learning, leisure time skills, self-regulation, meeting others' expectations, social efficacy, self-assertive efficacy, as well as enlisting (parental) social support (Bandura, 1990). This was a shorter version of the original 44-item version used in Cohort 1 (see Motti-Stefanidi, Asendorpf, & Masten, 2012). Sample items were as follows: "How well can you resist peer pressure to drink beer, wine or liquor?" "How well can you study when there are other interesting things to do?" Students rated their beliefs in their level of capability to manage the designated activities on a 7-point scale ranging from 1 (*not good at all*) to 7 (*very good*). The scale had high internal consistencies (in both cohorts,

Cronbach's α above .88 for both immigrants and Greeks).

Emotional Well-Being Outcomes

Self-esteem was self-rated by the students on the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965). The scale demonstrated good reliability and validity for adolescents of different ethnic groups (Robins, Hendin, & Trzesniewski, 2001). Adolescents rated their agreement to items (e.g., "On the whole I am satisfied with myself") on a 5-point scale (1 = *strongly disagree* to 5 = *strongly agree*; in both cohorts, Cronbach's alphas above .75 for both immigrants and Greeks).

Emotional symptoms were self-rated by the students on the five items of the emotional symptoms subscale of the Strengths and Weaknesses Questionnaire that all refer to internalizing problems (Goodman, Meltzer, & Bailey, 1998), each rated on a 3-point scale, ranging from 0 (*not true*) to 2 (*certainly true*). The scale had relatively low internal consistencies (in both cohorts, Cronbach's α above .60 for both immigrants and Greeks).

Results

First we present descriptive data on the ethnic composition of the cohorts, within-cohort correlations of the variables, and group means both at the level of individual students and at the level of classrooms. Subsequently we explain how we controlled for long-term trends in the neighborhood with propensity score matching at both levels (students and classrooms). Then we present cohort differences in economic problems, adaptation, and well-being based on these controls. Finally, we examine whether and how controlling for families' economic problems changes the cohort effects found.

Cohort Differences in Ethnicity and Immigrant Generation

The composition of Cohort 1 and Cohort 2 samples in terms of ethnicity and immigrant generation is presented in Table 1, including the results of significance tests. The crisis cohort had fewer Greeks, more second-generation immigrants, and more other immigrants compared to the precrisis cohort. Percentage of life spent in Greece was close to 100% for Greeks and second-generation immigrants; first-generation immigrants had spent on average 62% of their life in Greece in Cohort 1 and 60% in Cohort 2 (a nonsignificant difference, $t < 1$). In Table 2, the resulting classroom characteristics in terms of ethnic composition are presented for the two cohorts.

Intercorrelations of the Main Variables Within Cohorts

Table 3 presents the intercorrelations of the main variables within each cohort. Correlations in the pooled cohorts are less informative because they confound within- and between-cohort relations. The correlations were sufficiently low and highly similar across the two cohorts.

Table 1
Ethnicity and Immigrant Generation by Cohort

	Cohort 1 (2005)		Cohort 2 (2013)		Difference	
Ethnicity	*n*	% of Cohort	*n*	% of Cohort	$\chi^2(df = 1)$	*p*
Greek	525	49.7	369	35.1	45.98	.001
Immigrant	532	50.3	683	64.9	45.98	.001
First generation	316	29.9	150	14.3	74.90	.001
Second generation	216	20.4	533	50.7	210.39	.001
Albanian	271	25.6	347	33.0	13.74	.001
First generation	219	20.7	61	5.8	101.95	.001
Second generation	52	4.9	286	27.2	194.24	.001
Pontic-Greek	167	15.8	143	13.6	2.05	.153
First generation	59	5.6	24	2.3	15.19	.001
Second generation	108	10.2	119	11.3	0.66	.418
Other	94	8.9	193	18.3	40.08	.001
First generation	38	3.6	65	6.2	7.58	.006
Second generation	56	5.3	128	12.2	31.24	.001

Note. $N = 2{,}109$.

Table 2
Means (SDs) of Classroom Characteristics in the Two Cohorts

Variable	Cohort 1	Cohort 2
Percentage Greek students	.48 (.19)	.34 (.18)
Percentage Albanian students	.25 (.17)	.34 (.19)
Percentage Pontic-Greek students	.18 (.30)	.13 (.20)
Percentage other immigrant students	.09 (.08)	.19 (.13)
Percentage lifetime spent in Greece	.89 (.07)	.90 (.08)

Note. $N = 103$ classrooms. Uncorrected data.

Group Means by Cohort

In Table 4 we present the means and standard deviations of the main individual student characteristics by cohort, both overall and separately for Greeks, immigrants, immigrant generation, and ethnicity of immigrants. For economic problems we report also the means and standard deviations for each specific risk because the risks did not show high internal consistency ($\alpha = .67$). The cohort differences in specific risks are described by odds ratios. They were highly similar for each condition except that the odds ratios for father unemployment were somewhat larger (e.g., overall ORs were 3.77 for financial problems, 3.93 for parent working occasionally, 4.67 for mother unemployment, and 6.09 for father unemployment). Because of the consistency of the cohort differences across the specific risks and their relatively low reliability, we did not include them in further analyses.

Control of Confounding Variables

Because the students were sampled in both cohorts from the same neighborhoods, the change in the ethnic and generational composition of the cohorts may be attributed to long-term historical trends that may have operated independently of the crisis. One such trend could involve settlement and movement patterns of people in neighborhoods characterized by a high proportion of immigrants. Thus, many Greek and some early immigrating families may have left the neighborhood and have been replaced by later immigrating Albanian families and families mainly from other Eastern European countries (see definition of "other immigrants"). Because the cross-cohort identity of the students' parents could not be assessed due to data security regulations, this interpretation could not be studied in more detail. Therefore, we present the results both uncorrected and corrected for variables that may be affected by long-term trends, namely, ethnicity of the families, immigrant generation, lifetime spent in Greece, and parental educational level. Because of small but significant cohort differences in age, age was added as an additional control. Seven nonredundant variables captured these differences: age; dummy-coded first-generation, second-generation, Albanian, and Pontian immigrant; lifetime in Greece; and parental education.

Because the data were nested (students were nested in classrooms), and all major variables showed significant variation between classrooms, cohort differences were analyzed by two-level random coefficient models (see Hox, 2010). The large number of control variables posed problems for these analyses because they require estimation of 7 (Level 1 controls) × 8 (Level 2 controls, cohort) = 56 parameters only for estimation of the overall cohort effect, and many additional parameters for estimating Cohort × Ethnicity interactions. Therefore we used propensity score matching where control is achieved by only one parameter at each level of analysis (see Austin, 2011, for an overview).

Table 3
Intercorrelations of the Main Variables by Cohort

Variable		ECO	GPA	ENG	CON	ABS	EFF	EST	EMO
Economic problems	ECO		−.17	−.12	*.00*	.10	−.13	−.16	.14
Academic achievement	GPA	−.08		.77	.39	−.37	.30	.24	−.09
School engagement	ENG	*−.03*	.73		.56	−.36	.27	.16	−.06
Conduct	CON	*.01*	.33	.57		−.29	.13	*.05*	*.01*
School absences	ABS	*.06*	−.43	−.38	−.22		−.23	*−.04*	*.01*
Self-efficacy	EFF	*−.03*	.27	.22	.08	−.16		.41	−.20
Self-esteem	EST	−.10	.27	.21	.10	−.07	.23		−.39
Emotional symptoms	EMO	.20	−.11	−.08	*.00*	*.06*	*−.03*	−.43	

Note. A total of 2,109 students. Correlations in Cohort 1 above the diagonal, correlations in Cohort 2 below the diagonal. Correlations in italics are nonsignificant ($p \geq .05$). GPA = grade point average.

Table 4
Means (SDs) of Student Characteristics in the Two Cohorts Overall and by Ethnicity and Immigrant Generation

Variable (range of scores)	Overall	Immigrant status		Immigrant generation		Immigrant ethnicity		
		Greeks	Immigrants	First	Second	Albanian	Pontic-Greek	Other
Cohort 1 (2005)								
Economic problems (0–4)	0.52 (0.82)	0.40 (0.68)	0.64 (0.91)	0.69 (0.97)	0.58 (0.83)	0.69 (0.96)	0.59 (0.86)	0.59 (0.86)
Father unemployed	0.06 (0.24)	0.03 (0.18)	0.09 (0.29)	0.13 (0.33)	0.04 (0.20)	0.11 (0.32)	0.06 (0.25)	0.07 (0.26)
Mother unemployed	0.07 (0.26)	0.06 (0.24)	0.09 (0.28)	0.08 (0.27)	0.10 (0.30)	0.07 (0.26)	0.11 (0.31)	0.09 (0.29)
Parent working occasionally	0.13 (0.34)	0.07 (0.25)	0.19 (0.39)	0.22 (0.42)	0.15 (0.36)	0.22 (0.42)	0.16 (0.37)	0.15 (0.36)
Financial problems of family	0.26 (0.44)	0.24 (0.43)	0.28 (0.45)	0.27 (0.44)	0.30 (0.46)	0.29 (0.46)	0.26 (0.44)	0.28 (0.45)
Academic achievement (7–20)	13.68 (3.02)	14.97 (2.75)	12.41 (2.74)	12.03 (2.73)	12.86 (2.69)	12.11 (2.69)	12.39 (2.69)	13.27 (2.81)
School engagement (1–5)	3.75 (0.91)	4.04 (0.80)	3.46 (0.91)	3.44 (0.94)	3.51 (0.88)	3.46 (0.92)	3.38 (0.87)	3.61 (0.97)
Conduct (1–5)	4.59 (0.72)	4.69 (0.61)	4.48 (0.80)	4.45 (0.82)	4.54 (0.77)	4.48 (0.80)	4.47 (0.79)	4.54 (0.83)
School absences (days)	8.16 (11.39)	6.31 (9.76)	9.94 (12.51)	10.73 (12.94)	9.02 (11.96)	9.33 (11.37)	11.19 (13.30)	8.96 (13.60)
Self-efficacy (1–7)	5.38 (0.90)	5.50 (0.86)	5.25 (0.93)	5.20 (0.91)	5.33 (0.95)	5.29 (0.89)	5.16 (1.00)	5.33 (0.88)
Self-esteem (1–5)	3.84 (0.69)	3.93 (0.68)	3.75 (0.69)	3.76 (0.70)	3.74 (0.67)	3.76 (0.70)	3.76 (0.64)	3.84 (0.69)
Emotional symptoms (0–2)	0.55 (0.46)	0.55 (0.47)	0.56 (0.44)	0.54 (0.43)	0.58 (0.46)	0.54 (0.43)	0.60 (0.44)	0.56 (0.50)
Cohort 2 (2013)								
Economic problems (0–4)	1.45 (1.30)	1.03 (1.14)	1.68 (1.33)	1.63 (1.37)	1.69 (1.33)	1.85 (1.36)	1.52 (1.20)	1.48 (1.35)
Father unemployed	0.28 (0.45)	0.14 (0.35)	0.36 (0.48)	0.42 (0.50)	0.34 (0.48)	0.42 (0.50)	0.29 (0.46)	0.29 (0.45)
Mother unemployed	0.26 (0.44)	0.17 (0.37)	0.32 (0.47)	0.34 (0.47)	0.31 (0.46)	0.36 (0.48)	0.23 (0.42)	0.31 (0.46)
Parent working occasionally	0.37 (0.48)	0.22 (0.41)	0.46 (0.50)	0.41 (0.49)	0.47 (0.50)	0.50 (0.50)	0.43 (0.50)	0.41 (0.49)
Financial problems of family	0.57 (0.50)	0.52 (0.50)	0.59 (0.49)	0.51 (0.50)	0.61 (0.49)	0.63 (0.49)	0.59 (0.49)	0.52 (0.50)
Academic achievement (7–20)	13.80 (3.01)	15.12 (2.77)	12.86 (2.82)	12.02 (2.63)	13.30 (2.81)	12.87 (2.97)	12.70 (2.65)	13.04 (2.68)
School engagement (1–5)	3.73 (0.96)	4.00 (0.93)	3.59 (0.94)	3.36 (0.90)	3.65 (0.94)	3.62 (0.97)	3.57 (0.88)	3.54 (0.92)
Conduct (1–5)	4.32 (0.93)	4.40 (0.91)	4.28 (0.93)	4.18 (0.97)	4.31 (0.92)	4.18 (0.99)	4.56 (0.70)	4.25 (0.94)
School absences (days)	17.90 (20.30)	12.49 (12.27)	21.35 (23.37)	27.23 (30.53)	19.98 (21.18)	19.19 (23.01)	26.27 (29.97)	20.58 (17.58)
Self-efficacy (1–7)	5.13 (1.00)	5.25 (0.99)	5.06 (1.00)	4.91 (1.06)	5.11 (0.98)	5.16 (1.05)	5.01 (0.88)	4.93 (0.99)
Self-esteem (1–5)	3.70 (0.80)	3.81 (0.80)	3.64 (0.79)	3.52 (0.71)	3.68 (0.81)	3.71 (0.78)	3.61 (0.83)	3.55 (0.76)
Emotional symptoms (0–2)	0.53 (0.47)	0.49 (0.45)	0.55 (0.47)	0.59 (0.53)	0.54 (0.46)	0.50 (0.45)	0.59 (0.48)	0.63 (0.50)

Note. A total of 2,109 students. Uncorrected data.

Propensity Score Matching

A propensity score is the probability that a participant is in the treatment group (here: Cohort 2) and not in the control group (here: Cohort 1), based on knowledge of the participant's scores in all control variables. These scores are computed with a multiple logistic regression of the treatment variable on all control variables. Subsequently, the two cohorts are matched such that the imbalance of the groups in terms of the propensity score and the control variables is minimized. We compared different matching procedures; most effective was inverse probability of treatment weighting (IPTW). IPTW weights the participants of both groups; observations in the treatment group are given a weight of $1/p$ and observations in the control group a weight of $1/(1-p)$, where (p) is the propensity score. Thus, participants in the treatment group with a high propensity score are undercounted, whereas control cases with high propensity scores are overcounted. The results are reported in Table 5.

Presented are the cohort differences at both levels of analysis in terms of the imbalance of the cohorts (absolute effect size d) for the propensity scores and the control variable with the largest remaining difference. These imbalances were estimated with two-level analyses (MPlus 7; Muthén & Muthén, 1998–2012, was used for all two-level analyses). If the data were not weighted, large differences were found at the student level and very large differences at the classroom level. When IPTW weighting was used only at the student level or only at the classroom level, the imbalance was strongly reduced and became nonsignificant only at the level where the data were weighted. The most efficient procedure was weighting at both levels simultaneously; as Table 5 shows, imbalance became nonsignificant at both levels. Therefore, we applied the latter procedure.

Table 5
Effectiveness of Different Propensity Score Matching Procedures

	IPTW weighting			
Criterion	No	Level 1	Level 2	Levels 1 and 2
Level 1 (students)				
Imbalance of propensity score $\|d\|$	0.77***	0.04	0.46**	0.39†
Maximum imbalance of seven covariates $\|d\|$	0.87***	0.11	0.32†	0.29†
Level 2 (classrooms)				
Imbalance of propensity score $\|d\|$	4.68***	4.68***	0.35†	0.35†
Maximum imbalance of seven covariates $\|d\|$	1.65***	1.65***	0.34†	0.34†

Note. N = 2,109 at Level 1, N = 103 at Level 2. $|d|$ is absolute Cohen's d estimated with two-level analysis. IPTW = inverse probability of treatment weighting. $^{\dagger}p < .10$. $^{**}p < .01$. $^{***}p < .001$.

Multiple Imputation of Missing Scores

Each of the seven dependent variables included 1% to 8% missing values. We imputed them including all predictor and dependent variables using the Bayesian multilevel imputation procedure of MPlus 7 (20 imputations); all subsequent analyses used the resulting 20 separate imputation files and combined the results according to Rubin's rules (Rubin, 1987) as implemented in MPlus 7.

Cohort Differences in Student Characteristics by Ethnicity and Immigrant Generation

The cohort differences in economic problems, adaptation, and well-being, and their moderation by ethnic group and immigrant generation was analyzed with a series of two-level random coefficient models where age and ethnic differences between the cohorts were controlled with IPTW. Overall cohort differences were analyzed with cohort as a Level 2 predictor and no predictor at Level 1. Moderation of these cohort effects by ethnic group and immigrant generation was studied with cross-level effects of cohort on dummy-coded groups at Level 1. Group differences between cohort effects were tested for significance by contrasts between the dummy-coded groups. Standard errors were estimated with the robust estimation procedure provided by MPlus7.

To facilitate interpretation of the results, all dependent variables were standardized with regard to their mean and standard deviation in Cohort 1. Therefore, the cohort effects (differences between Cohort 1 and Cohort 2) are effect sizes that are directly comparable between different dependent variables (Glass's Δs, a variant of Cohen's d used in experimental studies where the treatment effect is scaled in terms of the standard deviation in the control group). The cohort effects are presented in the lower part of Table 6. Because the different ethnic groups varied not only in the cohort effects but also in their means in Cohort 1, we report these group means in Cohort 1 in the upper part of Table 6, again in terms of standardized scores in

Table 6
Mean in Cohort 1 and Cohort Effect for Economic Problems, Adaptation, and Well-Being, Overall and by Ethnicity and Immigrant Generation

		Immigrant status		Immigrant generation		Immigrant ethnicity		
Variable	Overall[a]	Greeks	Immigrants	First	Second	Albanian	Pontic-Greek	Other
Standardized mean (*SE*) in Cohort 1								
Economic problems		−.121 (.041)**	.092 (.063)	.141 (.089)	.049 (.076)	.152 (.081)	.046 (.091)	.029 (.125)
Academic achievement		.438 (.057)***	−.316 (.064)***	−.578 (.077)***	−.140 (.093)	−.471 (.086)***	−.386 (.112)***	−.119 (.116)
School engagement		.286 (.058)***	−.278 (.070)***	−.385 (.094)***	−.203 (.094)*	−.326 (.093)***	−.324 (.136)*	−.209 (.109)
Conduct		.132 (.051)**	−.076 (.084)	−.247 (.093)*	.022 (.113)	−.223 (.109)*	−.009 (.152)	−.080 (.171)
School absences		−.164 (.067)*	.128 (.115)	.157 (.118)	−.013 (.146)	.034 (.124)	.152 (.199)	.054 (.173)
Self-efficacy		.113 (.044)**	−.132 (.054)*	−.281 (.094)**	−.026 (.087)	−.089 (.096)	−.192 (.111)	−.090 (.111)
Self-esteem		.092 (.045)*	−.176 (.054)***	−.161 (.081)*	−.156 (.101)	−.243 (.096)*	.043 (.111)	−.156 (.115)
Emotional symptoms		−.021 (.047)	−.012 (.055)	.051 (.077)	−.002 (.086)	.014 (.076)	.128 (.104)	−.004 (.140)
Standardized cohort effect (*SE*)								
Economic problems	.946 (.091)***	.692 (.092)***	1.118 (.122)***	1.005 (.136)***	1.185 (.213)***	1.279 (.167)***	.805 (.174)***	1.322 (.222)***
Academic achievement	.361 (.193)	.229 (.102)*	.441 (.255)	.629 (.307)*	.338 (.299)	.616 (.282)*	.782 (.331)*	−.082 (.143)
School engagement	.004 (.071)	−.112 (.101)	.060 (.079)	.070 (.112)	.108 (.122)	.169 (.118)	.165 (.150)	.213 (.167)
Conduct	−.505 (.143)***	−.537 (.173)**	−.506 (.136)***	−.415 (.147)**	−.539 (.151)***	−1.209 (.523)*	.271 (.236)	−.750 (.313)*
School absences	.751 (.153)***	.662 (.101)***	.751 (.251)**	.483 (.339)	.538 (.324)	.300 (.336)	.655 (.429)	.576 (.257)*
Self-efficacy	−.162 (.077)*	−.292 (.088)***	−.067 (.131)	.200 (.181)	−.187 (.091)*	.042 (.148)	.285 (.288)	−.687 (.272)*
Self-esteem	−.067 (.058)	−.225 (.118)	.040 (.111)	.031 (.133)	.081 (.155)	−.034 (.131)	.600 (.271)*	−.756 (.375)*
Emotional symptoms	−.073 (.057)	−.047 (.090)	−.097 (.097)	−.133 (.106)	−.076 (.159)	−.145 (.089)	−.478 (.224)*	.484 (.238)*

Note. N = 2,109. Reported are means in Cohort 1 and cohort differences for variables standardized in Cohort 1 (robust standard error *SE* in parenthesis) and their significance p resulting from two-level regression (students nested in classrooms). Means and differences were controlled for seven covariates at each level using inverse probability of treatment weighting. Leading zeros are omitted. [a]For the means in Cohort 1, $M = 0$, $SD = 1$. *$p < .05$. **$p < .01$. ***$p < .001$.

Cohort 1. Therefore, the differences within Cohort 1 refer to the same scale as the cohort effects.

Table 6 indicates that as expected, economic problems showed a strong historical increase between Cohort 1 and Cohort 2, both overall ($\Delta = 0.946$) and for all ethnic groups (Δs varied between 0.692 and 1.279). These increases were much larger than the group differences in Cohort 1 (see first line of Table 6). Group comparisons revealed that immigrants showed a stronger increase in economic problems than Greeks, $\Delta\text{diff} = 0.426$, $p = .003$.

Academic achievement was significantly *higher* during the crisis than before in all ethnic groups (Greeks, Albanians, Pontic-Greeks) except for "Other immigrants." As a result, the historical increase was only marginally significant overall and for immigrants (in both cases, $p < .07$). Thus, most students were able to maintain a normal level of achievement or even increased it during the crisis. In contrast, the teacher ratings of student engagement in the classroom did not increase.

Whereas the crisis had positive effects on students' achievement and no effects on their engagement, conduct in the classroom decreased strongly among all ethnic groups except for Pontic-Greek students. During the crisis, conduct problems were particularly frequent among Albanian students who not only showed the strongest increase in conduct problems but also significantly above-average problems before the crisis.

In line with the increasing conduct problems, school absences also increased strongly among both Greek and immigrant students. Due to a highly skewed distribution of absences (the group means were driven by a few students who were often absent) the standard errors for the group means were large such that the cohort effect did not reach significance for Albanian and Pontic-Greek students (see Table 4 for the large standard deviations in these Cohort 2 groups).

Self-efficacy decreased somewhat among Greek students, second-generation immigrants, and other immigrants. Because we used a broad measure of self-efficacy that included different domains of functioning, the decrease in self-efficacy is not inconsistent with the increase in academic achievement.

The crisis had different effects on students' well-being depending on their ethnicity. For Pontic-Greek students, well-being was higher during the crisis than before, whereas it was lower for other immigrants and did not change between the two cohorts for Greeks and Albanians. This pattern was fully consistent between self-esteem and emotional symptoms.

Control for Economic Effects

To study the extent to which the significant cohort effects on academic achievement (for Greeks), conduct, school absences, and self-efficacy may be accounted for by cohort differences in economic problems, we added economic problems as a grand-mean-centered predictor to the analyses of cohort differences at both levels (students and classrooms). For absences, the remaining cohort effects after controlling for economic problems were nonsignificant, both overall ($\Delta = 0.150$, $SE = .128$) and for Greeks ($\Delta = 0.369$, $SE = .204$) and immigrants ($\Delta = 0.076$, $SE = .236$). More detailed inspection showed that the reduction in the cohort effect was due to between-classroom differences in absences (control at Level 2) rather than within-classroom differences, because after controlling at Level 1 only, significant ($p < .001$) cohort effects remained both overall and for Greeks and immigrants. Controlling for differences in classroom means in economic problems was very effective because these means correlated .66 ($p < .001$) with the classroom means in absences.

For conduct, controlling for economic problems only slightly changed the cohort effects (they remained significant, $p < .05$, overall, for Greeks and for immigrants). This weak effect of controlling was expected by the small negative correlations between conduct and economic problems both at the student level (see Table 3) and at the classroom level ($-.24$, $p < .05$).

For academic achievement and self-efficacy, the cohort differences became more positive after controlling for economic problems, which can be attributed to negative correlations with economic problems both at the student level (see Table 3) and at the classroom level (for achievement, $-.10$, *ns*; for self-efficacy, $-.563$, $p < .001$). For self-efficacy, the cohort differences even turned sign, from $\Delta = -0.162$ without control (see Table 6) to $\Delta = +0.274$, $SE = .099$, $p < .01$, after control. Closer inspection showed that this "paradoxical" finding of cohort effects in the opposite direction after controlling economic problems was mainly driven by classroom differences in mean economic problems.

The bottom line is that only the cohort differences in absences could be explained by economic differences among the classrooms. For academic achievement and self-efficacy, control resulted in "paradoxical" effects because achievement and self-efficacy were higher than expected on the basis of their correlations with economic problems. Thus,

additional factors seem to be responsible for these relatively positive outcomes.

Discussion

The purpose of this study was to examine how well Greek and immigrant youth adapt in the school context during the current major economic recession in Greece. Toward this purpose we compared two cohorts of adolescents in the first year of middle school, one assessed before the current crisis and the other well into the crisis. Youth were enrolled in highly disadvantaged schools in Athens with a high immigrant composition.

The economic crisis had generally a negative impact on a number of domains of youth's adaptation but also led to some surprisingly positive results. The disaggregation of the cohort findings by immigrant status, immigrant generation, and ethnic group gave a more differentiated and nuanced picture of the effect of the crisis on youth's adaptation and well-being, often revealing a mixture of risk and paradox.

How Well Does Youth Adapt During a Major Economic Crisis?

Predictably, adolescents of the crisis cohort, independently of immigrant status (Greek/immigrant), immigrant generation, or ethnic group, reported that their parents had significantly more job and income-related economic problems than their counterparts in the precrisis cohort. This was true for all specific risks but particularly for father unemployment, and the effects were stronger for immigrant youth's families. These cohort differences were both significant and large.

As was expected, crisis cohort adolescents presented more teacher-rated conduct problems, compared to their precrisis counterparts. This finding is in agreement with a number of studies (e.g., Conger et al., 1992; Lempers et al., 1989; Solantaus et al., 2004). The family stress model of economic hardship can guide the formulation of the hypothesis that economic pressure on the family may increase marital conflict, often leading to withdrawal of affection from children, irritability, harsh, and inconsistent parenting (Conger & Donnellan, 2007). Such parenting is a strong predictor of conduct problems in children.

However, contrary to expectations, crisis cohort adolescents did not report worse psychological well-being (either lower self-esteem or more emotional symptoms) than precrisis adolescents. Kokkevi et al. (2014) who also studied a normative Greek sample but focused on more serious mental health problems did not find an increase in the rate of attempted suicides and running away from home among 16-year-olds during the economic crisis. One hypothesis is that parents and extended family might play a protective role for youth's mental health during these trying times (Georgas, 2006). Greek grandparents play a key role in children's lives providing emotional and financial support, often from their very low pensions, to their children and grandchildren.

The results regarding school engagement were partly contrary to expectations. Whereas crisis cohort students' behavioral engagement did not differ from that of the precrisis cohort, the former had significantly more unexcused absences than the latter. However, the increase in absenteeism during the crisis was not driven by a general increase in unexcused absences but by a few students in particular classrooms who were often absent. In spite of these more extreme cases, behavioral engagement did not differ between cohorts. Thus, our expectation that school engagement would either increase or in any case not worsen during the crisis received partial support. Students' motivation and investment when in school did not diminish during the economic recession. This finding is important as school engagement may protect youth from dropping out of school early (Fredricks et al., 2004).

Counter to expectations, and in spite of the large increase in families' economic problems, students' academic achievement did not worsen during the recession, and in some subgroups it even improved. This finding is consistent with the finding on school engagement. Youth in middle school during the crisis, compared to youth before the crisis, seem equally, and in some cases more, motivated to do well in school. Greek families have traditionally considered education as a vehicle for upward social mobility (Charalambidis, Maratou-Alipranti, & Hadjiyanni, 2004). Thus, one hypothesis is that in the context of the economic recession they may consider education as the means for their children to overcome its impact.

At a first glance, the cohort differences in conduct versus engagement and achievement seem to be inconsistent with the within-cohort correlations between the three variables. Conduct decreased during the crisis, but engagement and achievement did not. On the other hand, conduct correlated positively with engagement and achievement within each cohort. However, correlations among cultural

differences, historical changes, or developmental changes can be different, and sometimes even opposite in sign, from correlations among interindividual differences at a particular point in time (see Molenaar & Campbell, 2009; Robinson, 1950).

This inconsistency suggests that different causal mechanisms may be involved in the within- and between-cohort associations. Conduct may be a function of a few antisocial students in the classroom that determine classroom-level conduct. If there are more of these students during the crisis, positive conduct decreases (crisis-specific mechanism). But school engagement may not change or may even increase because other students engage more to cope with the crisis (another crisis-specific mechanism; see also Motti-Stefanidi, Papathanasiou, Mastrotheodoros, & Pavlopoulos, 2017).

As was expected, students' self-rated personal efficacy was lower during the crisis compared to before the crisis. Middle school adolescents are in a period of developmental transition. They face demanding normative challenges, which they need to negotiate in a family that is itself struggling with the effects of the economic recession. The accumulation of stressors facing youth during the crisis was expected to tax their self-efficacy beliefs.

How Well Do Immigrant Youth Adapt During a Major Economic Crisis?

Who drives these results? The disaggregation of the cohort effects by immigrant status, immigrant generation, and ethnic group yielded interesting findings. Next, we will present key findings regarding different immigrant (and nonimmigrant) groups' adaptation before and during the crisis. We will consider first the adaptation of precrisis immigrant groups with respect to the average of their cohort and, second, the adaptation of the crisis immigrant groups with respect to that of their precrisis counterparts.

Immigrant Status

The immigrant paradox does not hold in Greece (see Motti-Stefanidi, 2014, 2015). Greeks of the crisis cohort had significantly better adaptation, and immigrants significantly worse, compared to the average of the precrisis cohort, on most adaptation outcomes.

Two findings regarding the effect of the crisis on these groups' adaptation are particularly noteworthy. First, crisis Greek students, compared with precrisis Greeks, had a significant increase in academic achievement. Immigrant students' academic achievement was in the same direction but did not reach significance due to a large standard error. It could be argued that being motivated to do well in school is not sufficient for immigrant youth. In addition, they need appropriate educational support, which they often do not receive.

Second, both Greek and immigrant students of the crisis cohorts compared to their precrisis counterparts had a significant worsening of conduct and an increase in absences. It is important to point out the pervasiveness of this finding, particularly for conduct, overall and across most immigrant and nonimmigrant groups.

Immigrant Generation

The precrisis data do not support the immigrant paradox with respect to immigrant generation either. First-generation immigrant youth who were in middle school before the crisis were doing across the board worse compared to the average of their cohort, whereas second-generation immigrants presented a better picture.

During the crisis, first-generation immigrant youth had higher academic achievement, but worse conduct, compared to their counterparts before the crisis. Their higher academic achievement allows them to close the gap observed between their precrisis counterparts and the average of their (precrisis) cohort. On the other hand, second-generation youth's academic achievement was also in the same direction but did not reach significance due to a large standard error. Finally, the conduct during the crisis of both first- and second-generation youth was significantly worse when compared to that of their precrisis counterparts.

Ethnic Groups

Ethnic groups presented a mixed picture regarding how well they adapted during the economic crisis. Albanian and Pontic-Greek immigrant students presented in some respects a better picture than they had before the crisis. Notably, their academic achievement was significantly higher compared to that of their counterparts before the crisis. One hypothesis is that these immigrant groups, which arrived in Greece in the 1990s, may be more accepted now by Greek society and may be less often the target of discrimination, compared to the experience of the precrisis cohort. It is well known that discrimination can have deleterious consequences for youth's adaptation (Marks et al., 2015).

Before the crisis, immigrants from Albania had worse academic achievement, school engagement,

conduct, and lower self-esteem than the average of their cohort. During the crisis, they showed a significant increase in academic achievement but a further worsening of conduct.

Before the crisis, Pontic-Greeks had significantly worse academic achievement but did not differ from the average of their cohort on any other adaptation or well-being index. During the crisis, they were relatively better adapted compared to the other ethnic groups; they had significantly higher academic achievement and self-esteem, fewer emotional symptoms, and did not differ on any other adaptation indexes compared to their precrisis counterparts. This was the only ethnic group (and in general the only group) that did not have more conduct problems during the crisis compared to before the crisis.

It is not clear why Albanian youth, compared to Pontic-Greek youth, had worse conduct in the school context. The schools that took part in the study were all highly disadvantaged. However, the first author who visited all schools observed that the schools where Pontic-Greek students were enrolled seemed better managed, more structured, and orderly. School principals and teachers in these schools promoted a sense of belonging in their students. Thus, one hypothesis that could explain the differences in conduct may be related to these school differences (e.g., Eccles & Roeser, 2009).

Finally, the other immigrant group was a heterogeneous group consisting of immigrant students of different ethnicities that could not be grouped to form separate categories because of insufficient numbers. This group's adaptation and well-being before the crisis were similar to that of the average of their cohort. During the crisis, they presented the worse picture compared to the two more clearly defined ethnic groups (Albanians and Pontic-Greeks).

Does Controlling for Economic Problems Change the Cohort Effects?

When we controlled for family economic problems at the individual level of analysis, the significant cohort differences were not accounted for. Cohort differences continued to be significant. This finding suggests that other forces may be at play during the crisis accounting for cohort differences in youth's adaptation and well-being. For example, the social composition, or other characteristics, of crisis-cohort youth's neighborhood or school may exert an influence. This hypothesis receives some support from the finding that classroom-level family economic problems account for significant variance in a number of domains.

First, differences in economic problems at the classroom level completely accounted for the cohort difference in absences. Lower socioeconomic composition of schools is often related to lower-quality teaching and resources, as well as higher teacher and student mobility, which may have an adverse impact on school climate and connectedness (Crosnoe & Benner, 2015). Poor school climate has been in turn linked to higher absenteeism (Kearney, 2008).

These results and related hypotheses have significant implications for promoting positive youth development during times of economic recession. They suggest that limited resources ought to be more clearly targeted to addressing the needs of students in disadvantaged schools (i.e., schools in particularly economically disadvantaged areas). Offering students higher-quality teaching and educational support may promote positive school climate and sense of belonging, which, in turn, is expected to have beneficial effects on youth's school involvement.

Second, classroom differences in families' economic problems were associated with cohort differences in students' academic achievement and self-efficacy. During the crisis, students in classrooms with higher mean-level economic problems had higher academic achievement and self-efficacy than expected based on the correlations between classroom-level economic problems and these two adaptation indexes. Thus, additional factors may be responsible for the relatively good outcomes in achievement and self-efficacy, such as increased motivation to cope with the crisis by investing more in one's education.

Limitations of the Study

One general limitation of this study is that crisis effects may be partly culture specific (e.g., the nonapplicability of the immigrant paradox in Greece) such that the generalizability of the results of our study to other cultures may be to some extend limited. To address this limitation more research in other cultures is needed. A second limitation is more specific. We tried to disentangle general historical trends, such as family movement patterns from effects of the economic crisis, through carefully matching the two cohorts in terms of the three largest ethnic groups and immigrant generation. However, we could not match the cohorts in terms of the composition of the remaining group of other immigrants with regard to their country of origin. We would like to argue though that as the large majority of this group consisted of immigrants from formerly communist Eastern Europe its members

share many cultural similarities. Also, if the crisis (and not general historical trends) had affected the ethnic composition of the neighborhoods, our matching procedure would lead to an underestimation of the crisis effects because those mediated by the ethnic composition of the samples would have been controlled. We do not consider this a major limitation because these indirect effects of the crisis are likely to be small compared to the direct effects on families' economic situation.

Conclusion

The results of this study revealed that the crisis has a negative impact on many domains of adaptation of this cohort of socially disadvantaged Greek and immigrant youth. We found a significant increase in conduct problems and in unexcused absenteeism, as well as a decrease in self-efficacy. Particularly some young people in some classrooms contributed to the increase in absenteeism, which makes the outlook for their future even bleaker. However, we also found signs of resilience in the context of adversity. Unexpectedly, psychological well-being did not worsen, school engagement did not decline, and academic achievement showed an increase. Risk and resilience were apparent in both Greek and immigrant groups.

More research is needed to understand how and why great recessions affect youth's adaptation and development (Lundberg & Wuermli, 2012). The role of family functioning and parenting as well as that of individual attributes, such as goals for the future and achievement motivation, need to be investigated for explaining cohort differences and for understanding adaptation during a recession. For example, some of the effects of the crisis may be mediated by family variables such as parenting and family functioning (e.g., Conger & Elder, 1994). Parents may have less time to monitor and support their children, and job problems of the parents may create stress that then spills over to the whole family. Findings will help us understand how to support youth to better cope with the situation and how to promote their positive adaptation and development in these challenging conditions.

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