

Resilience during a great economic recession: Social and personal resources for youth's positive adaptation in the school context

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Abstract

Introduction: Greece was hit particularly hard by the latest economic recession.

Method: Using a quasi-experimental design, we examined whether and how psychosocial resources promoted and/or protected youth's school adjustment (academic achievement, school engagement, and conduct) and psychological well-being (absence of emotional symptoms) during the economic crisis. We focused on three family resources (family economic well-being, parental education, and school involvement) and one personal resource (self-efficacy). Data were collected with multiple methods and informants. We compared two cohorts of adolescents, closely matched through Inverse Probability of Treatment Weighting, who lived in the same neighborhoods, one before (2005; $N = 1057$; age $M = 12.7$ years) and the other during (2013; $N = 1052$; age $M = 12.6$ years) the economic recession.

Results: Variable- and person-focused analyses revealed that in the context of the economic recession parental education and parental school involvement promoted and/or protected youth's school adjustment, and families' economic wellbeing was linked to both externalizing and internalizing symptoms. Another key finding is that youth who exhibited positive adaptation during the economic crisis were equally well adjusted as youth who were well adjusted before the economic crisis, even though they had fewer resources. Finally, youth with more adequate psychosocial resources were able to keep the same high level of adaptation during the crisis as well-adjusted youth had before the crisis. The findings were robust regarding variations in gender and immigrant status.

Conclusion: The results suggest that psychosocial resources are important in understanding the diversity in youth's school adjustment and well-being during a major economic crisis.

KEYWORDS

adolescents, economic recession, psychological well-being, resilience, school adjustment

1 | INTRODUCTION

Greece was particularly hard hit by the latest Great Economic Recession, triggered by the 2008 economic downturn, which involved a systemic shock affecting the wider economy. Families and children experienced the economic pressure through parents' unemployment and a decrease in the family's income, which in many cases was not sufficient to meet basic financial needs. The number of families whose income was below the poverty line, and those who were severely materially deprived, not being able, for example, to afford to pay rent or to heat their home, doubled during the economic crisis (Kokkevi et al., 2014).

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The financial strain that families may experience during periods of Great Economic Recession often increases parental anxiety and depression, and relatedly family conflict (Conger et al., 1992; Parke & Elder, 2019). Furthermore, governments respond to the crisis by reducing public education spending, which results in deep cuts in teachers' salaries and increases in their workhours as well as in class sizes, all of which may have a negative impact on the quality of schooling. The effect of economic recessions on families and schools may in turn negatively affect young people's development and psychological well-being (Lundberg & Wuermli, 2012). Thus, economic recessions place at risk youth's adaptation and development mostly through the way they affect their proximal context (Conger et al., 1992; Lundberg & Wuermli, 2012; Parke & Elder, 2019).

However, in spite of these adversities some youth show resilient adaptation (Lundberg & Wuermli, 2012). In a study that was unique because of its quasi-experimental design (Cook & Campbell, 1979), which shares similarities with the traditional experimental design but lacks the element of random assignment to treatment or control, and the wide array of adaptation indexes included, Motti-Stefanidi and Asendorpf (2017) compared the school adjustment and psychological well-being of two closely matched cohorts of adolescents (Motti-Stefanidi & Asendorpf, 2017). Both cohorts lived and attended school in the same poor neighborhoods of the broader Athens area, one cohort before the onset of the economic crisis (2005), triggered by the 2008 economic downturn, henceforth called precrisis-cohort, and the other amidst the economic crisis (2013), henceforth called crisis-cohort. The latter cohort of young people and their families were affected by the austerity measures introduced following the 2008 recession. The crisis-cohort is a high-risk group whereas the precrisis-cohort is a low-risk group. The results revealed a mixture of risk and paradox. Students of the crisis-cohort compared to precrisis-cohort youth showed (a) a significant increase in conduct problems (b) no difference in school engagement and psychological well-being, and (c) an increase in academic achievement. Further investigation of those average patterns revealed significant heterogeneity in the crisis-cohort, which included few highly antisocial students (driving the average crisis conduct problems up), and some other highly engaged and academically successful students (driving the average crisis school engagement and academic achievement up). The question that arises, therefore, is what social and personal factors might account for this heterogeneity (Motti-Stefanidi & Asendorpf, 2017).

The present study, which is based on the same cohort data, addresses this question focusing on features of individual students and their environment which may help explain why some young people exhibit resilient behavior in the school context during an economic crisis whereas others do less well. In particular, two key questions are addressed. First, we examined whether and how different family and personal resources are related to multiple dimensions of school adjustment and well-being, particularly in the context of the economic crisis. Second, we examined whether and how resilient adolescents who were well adapted during the crisis differ (a) from their maladaptive classmates who were not well adapted during the crisis, and (b) from their precrisis counterparts who were well adapted before the crisis. In the next section, the benefits of this comparison are discussed.

Participants were early adolescents in secondary school. Early adolescence is a period of transition, which exposes youth to new educational and social challenges (Roeser et al., 1998). 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).

1.1 | Core constructs of the resilience framework

Masten's (2013) resilience developmental framework guided the design and research questions of this study. Resilience refers to pathways and patterns of positive adaptation during or following significant risk or adversity (Masten, 2013). It is inferred based on two fundamental prerequisites: First, the person must be, or have been, exposed to significant risk or adversity, and second, he/she must be "doing adequately well" ("doing OK") despite exposure to risk or adversity.

Positive adaptation, or doing well, can be judged on the basis of different criteria, ranging from happiness or health to academic or work achievement. A key index of positive adaptation in children and youth is how well they are doing with respect to age-salient developmental tasks (Masten, 2013). These tasks reflect the expectations and standards for behavior and achievement that parents, teachers, and society set for them, and that they themselves usually come to share. Psychological wellbeing is another important criterion for judging how well youth are doing (Luthar, 2006).

To infer resilience the individual must have experienced threat, trauma, or negative life events which predict higher rates of problematic and undesirable outcomes (Masten, 2013). Without the presence of risk, positive adaptation is not necessarily a manifestation of resilience, although it is a sign of competence. In resilience science, a wide range of risks and threats to adaptation and development have been studied, including sociodemographic risk indices (e.g., low SES, immigrant status, single parent family), exposure to traumatic and stressful experiences (e.g., maltreatment, discrimination, community violence, war, natural disasters), or biological markers of risk (e.g., low birth weight, physical illness).

Given that some youth experiencing risk are doing well and others are not, potential predictors are examined at multiple context levels (Luthar, 2006; Masten, 2013). The presence of certain resources may ameliorate, or counteract, the negative effect of risk on adaptation. Following Masten's (2013) conceptualization, two broad types of such resources are examined in

this study, namely promotive and protective factors. Promotive factors, sometimes also referred to as assets, resources, compensatory, or social and human capital, result in main effects on adaptation; they promote positive adaptation under both low and high adversity. Protective factors refer to moderators of risk. The expected positive relationship between the protective factor and adaptation is more pronounced in the high-risk group.

Resilience has been investigated using either variable-focused or person-focused approaches (Masten, 2013; Masten et al., 1999). Variable-focused or dimensional models examine the covariance patterns of variables. Controlling for potential confounding variables, they allow to test for the links between adaptation outcomes, risks and potential resources, as well as to test for synergistic effects. Person-focused models examine how groups of people formed by crossing risk and adaptation (the two dimensions defining resilience) compare with respect to the availability of psychosocial resources (Masten, 2013). In this study, we examined youth's adaptation in relation to adversity and different psychosocial resources using both approaches.

In the present study, we define positive adaptation based on how well youth do in the school context with respect to teacher-rated age-salient developmental tasks and with respect to their self-reported psychological well-being (Masten, 2013; Suárez-Orozco et al., 2018). Data were collected with different methods and informants. Scores were computed for three different domains of school adjustment, namely academic achievement, school engagement, conduct (the negative pole of conduct refers to externalizing problems), which are key developmental tasks for youth (Masten & Motti-Stefanidi, 2009), and for one index of psychological well-being, namely absence of emotional symptoms (the negative pole refers to internalizing problems). A composite score, consisting of the number of at least average outcomes of each adolescent across all four adaptation indexes was also computed. To understand why some youth do well during such an economic crisis, three family resources, namely family's economic well-being, parental education, and parental school involvement, and one personal resource, namely youth's self-efficacy beliefs, were examined as potential promotive and/or protective factors. Together they are often referred to in this paper as psychosocial resources.

Following Masten et al. (1999), for variable-focused analyses, each potential resource was examined as a direct predictor of each adaptation outcome as well as of the composite adaptation score. Furthermore, the moderation between adversity and each resource on adaptation was also tested. For person-focused analyses, resilient youth (crisis-cohort, positive adaptation) were compared to competent (precrisis-cohort, positive adaptation) and maladaptive (crisis-cohort, low adaptation) youth with respect to each of these resources as well as with respect to a composite resource score (number of resources with at least average score). These groups of adolescents were identified by crossing cut-off scores on their adaptation outcomes with low risk/high risk (precrisis-cohort being at low-risk, and crisis-cohort being at high-risk for adaptation difficulties), resulting in four groups of students: precrisis-cohort students (low risk) (a) with high/average outcomes across the four adaptation indexes (competent group), or (b) with low outcomes across the four adaptation indexes (low competence); and crisis-cohort students (high risk) (c) with high/average outcomes across the four adaptation indexes (resilient group), or (d) with low outcomes across the four adaptation indexes (maladaptive group). Adding the precrisis-cohort students, who were at low risk for adaptation difficulties, into the analysis allows us to distinguish protective factors, which are especially important for the adaptation of crisis-cohort students who are at high risk, from promotive factors which have a positive effect on adaptation of both precrisis-cohort and crisis-cohort students.

1.2 | Links between potential psychosocial resources and adaptation outcomes

The potential resources included in this study have been linked to different domains of adaptation and well-being over time and in some cases to positive adaptation outcomes in children at risk (see Duncan et al., 2017; Masten, 2014; Motti-Stefanidi & Asendorpf, 2017; Motti-Stefanidi et al., 2012)

1.2.1 | Family income

Beginning with the seminal study by Elder (1974, also see 2018) on the children of the Great Depression, many studies have found strong evidence that severe economic problems of the family affect virtually all concurrently assessed measures of children's and adolescents' adaptation and psychological well-being (see e.g., Duncan et al., 2017; McLoyd et al., 2009). In the present study, we focused on between cohort differences in the context of low and high economic adversity due to the Great Greek Economic Recession. Based on the literature, we expected that higher economic well-being of families promotes better academic achievement and school engagement, as well as fewer internalizing and externalizing problems among youth, both before and during the crisis.

Extant evidence does not allow to make predictions regarding the potentially moderating role of the family's economic well-being on youth's school adjustment and well-being before and during a period of a Great Recession. Related evidence on family poverty suggests that income increases seem to matter more for the development of children from lower income

families, suggesting a moderation effect (Duncan et al., 2017). However, these analyses concern within cohort differences between families and it is not clear whether the findings can generalize to between cohort differences. Therefore, the analyses testing for the potentially moderating effect of family economic well-being on the link between risk (precrisis/crisis cohorts) and adaptation outcomes were exploratory.

1.2.2 | Parental education

Parents' level of education has been shown to promote adolescents' academic achievement and engagement, due to both genetic and environmental causes (Desforges & Abouchar, 2003; Johnson et al., 2006). Parental education has also been shown to promote adolescents' positive conduct under both low- and high-risk conditions (Bøe et al., 2012; Desforges & Abouchar, 2003). The link between parental education and adolescents' psychological well-being tends to be weaker (Bøe et al., 2012). Therefore, we expected positive effects of parental education on all our measures of school adjustment both before and during the economic crisis. The analyses regarding the effect of parental education on youth' psychological well-being, as well as on the potentially moderating role of parental education on the link between risk and adaptation outcomes were exploratory.

1.2.3 | Parents' school involvement

Parental involvement with their child's school and schooling has been found to be associated with adolescents' academic achievement, school engagement, and conduct (Desforges & Abouchar, 2003; Fan & Williams, 2010; Gonzalez-DeHass et al., 2005), as well as with their mental health (Wang & Sheikh-Khalil, 2014). Based on precrisis-cohort data, Motti-Stefanidi et al. (2012) reported significant longitudinal associations of parental school involvement with youth's academic achievement and conduct, even after controlling for family social adversity and immigrant status. However, no association was found between parental school involvement and psychological well-being. Therefore, we expected positive effects of parental involvement on all measures of school adjustment (academic achievement, school engagement and conduct) both before and during the economic crisis, but not with psychological well-being (absence of emotional symptoms). Furthermore, there is evidence that parental school involvement mitigates the effect of different types of risks on youth's academic outcomes (Fite et al., 2014; Wang & Sheikh-Khalil, 2014). Children from low (vs. high) socioeconomic status families benefit more from parents' involvement (e.g., see Barger et al., 2019; Dearing et al., 2004). Due to the fact that these findings concern within-cohort effects, whereas the current study focuses on between-cohort effects, the analyses testing for moderations were exploratory.

1.2.4 | Self-efficacy

Self-efficacy refers to people's beliefs in their capabilities to regulate their functioning, and to manage environmental demands to achieve desired adaptation outcomes. Self-efficacy plays a crucial role in the way young people manage risks and challenges (Bandura, 1997; Caprara et al., 2004). It has been shown to promote the academic achievement, and conduct (Bandura et al., 1996) of early adolescents, and to be negatively associated with depression (e.g., Bandura et al., 1999).

Based on precrisis-cohort data, Motti-Stefanidi et al. (2012) reported significant links of generalized self-efficacy with academic achievement, conduct, and psychological well-being, even after controlling for family social adversity and immigrant status. Therefore, we expected positive effects of students' generalized self-efficacy on all our measures of adaptation and well-being, both before and during the crisis. Furthermore, there is some evidence that self-efficacy beliefs moderate the relationship between context and different indicators of development (Bradley & Corwyn, 2002). Motti-Stefanidi et al. (2012) found that generalized self-efficacy protected the academic achievement of students in classrooms with high mean social adversity. As the current study deals with between-cohort effects on the role of generalized self-efficacy, no hypotheses were formulated.

1.3 | The present study

Based on the above presentation of extant evidence, we examined through both variable- and person-focused approaches the following research questions. First, we examined whether and how these psychosocial resources predicted youth's school adjustment and psychological well-being. We expected that (a) the family's economic well-being and youth's self-efficacy beliefs to be linked to the school adjustment and well-being outcomes both in the precrisis and the crisis-cohorts, (b) parental

education and school involvement will predict all school adjustment outcomes, and (c) parental school involvement will not predict psychological well-being. The analyses on the effect of parental education on psychological well-being were exploratory.

Second, we examined whether and how the effects of each resource on adaptation and well-being was moderated by risk (thus by the cohort difference). Stronger effects of a resource in the crisis-cohort than in the precrisis-cohort would suggest that the resource played a protective role for youth's adaptation during the crisis. We did not formulate hypotheses regarding these potential moderations mostly because extant evidence focuses on within cohort differences whereas the current study focuses on between cohort differences.

Third, we examined whether the resilient group of adolescents differ in terms of psychosocial resources from the maladaptive and the competent groups of adolescents. We expected that the resilient group had more resources compared to the maladaptive group, and did not differ in resources compared to the competent group (Masten, 2013). Fourth, we examined whether having more adequate psychosocial resources promoted and/or protected youth's overall adaptation (thus the aggregate score of adjustment and well-being). Following Masten et al. (1999), we expected that the adaptation and well-being of youth with adequate total psychosocial resources would be protected from the potentially disruptive effects of the economic recession.

2 | METHOD

2.1 | Samples

This study included two samples of adolescent students living in neighborhoods with a high proportion of immigrant families in Athens, Greece, that were both assessed after the first trimester in middle school. The precrisis-cohort was assessed before the onset of the economic crisis (early in 2005), and the crisis-cohort during the crisis (early in 2013).

2.1.1 | Precrisis-cohort

Assessed were 1057 students who attended 49 secondary-school grade 1 classes in 12 schools (age $M = 12.7$ years, $SD = 0.65$; 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%.

2.1.2 | Crisis-cohort

Schools were selected for this cohort following a stepwise selection procedure. First, the nine schools of the precrisis-cohort that had cooperated until the end of the study of the precrisis-cohort were asked to cooperate again; seven of these schools cooperated again. Six additional schools were secured that were located near schools of the precrisis-cohort. Thus, all 13 schools of the crisis-cohort were located in the neighborhoods of the schools of the precrisis-cohort.

Assessed were 1052 students who attended 54 secondary-school grade 1 classes in 13 schools (age $M = 12.6$ years, $SD = 0.58$; 53% male). Of these students, 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, the two cohorts were very similar 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 concerned the sample composition in terms of ethnicity. Whereas The precrisis-cohort included 50% student from immigrant families, this proportion increased to 65% in the crisis-cohort. Also, among the immigrant families, the proportion of first-generation immigrants dropped from 59% to 22%, and the ethnicities of the immigrants became more heterogeneous (see Motti-Stefanidi & Asendorpf, 2017; for details). Therefore, we needed to statistically control for these differences in sample composition.

3 | MEASURES

Immigrant students could choose the language in which they preferred to respond to the questionnaires. Less than 5% in both cohorts opted for an Albanian or a Russian version. These versions were prepared with the help of four bilingual speakers using back-translation. The following measures were assessed in both cohorts with identical items.

Immigrant status was assessed in terms of the ethnicity of students' mother and father. Greek students were defined as being born in Greece, with both parents being Greek. All other students were classified as immigrants. For both cohorts, more than 88% of the immigrants had parents who were both non-Greek.

3.1 | Psychosocial resources

Economic well-being of the family was assessed with four yes/no items referring to economic problems (father unemployed, mother unemployed, parent working occasionally, financial problems of the family). The scores ranged from 0 to 4 and were reversed such that high scores referred to economic well-being.

Parental education was assessed separately for mother and father on a 5-point scale for the highest earned degree (1 = no degree or primary school; 5 = university), and then averaged.

Parental school involvement: Greek language teachers rated the involvement of a student's parents in school issues on five items, each rated on a 5-point scale, ranging from *not at all* to *very much*. Sample items were: "The student's parents are cooperative with teachers," "The student's parents are interested in their child's school performance," "The student's parents are in contact with the teachers and the school." Items were scored such that high scores indicate high involvement. The scale had high internal consistencies (in both cohorts, Cronbach's α above .93 for both Greeks and immigrants).

Self-efficacy: Generalized self-efficacy was self-rated by the students on 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 the precrisis-cohort (Motti-Stefanidi et al., 2012). Sample items were: "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 (both cohorts, Cronbach's α above .88 for both immigrants and Greeks).

3.2 | School adjustment and psychological well-being

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 5 different subjects for the first trimester (Mathematics, Ancient Greek, Modern Greek, Physics, and History). GPA was the mean across all available subjects on the 20-point scale.

School engagement was rated by the Greek language teachers on 6 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: "concentrates in class," "participates in class," "has usually prepared his/her homework." 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: "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).

Psychological well-being was self-rated by the students on the five items of the emotional symptoms subscale of the SDQ that all refer to internalizing problems (Goodman et al., 1998), each rated on a 3-point scale, ranging from 0 (*not true*) to 2 (*certainly true*). The items were reversely coded such that high scores indicate high psychological well-being. The scale had relatively low internal consistencies (in both cohorts, Cronbach's α above .60 for both immigrants and Greeks). Item analyses showed that internal consistency could not be increased by dropping any one of the items.

4 | RESULTS

4.1 | Overview

The design of the present study is unconventional among studies of resilience because the effects of adversity are neither analyzed cross-sectionally between participants nor longitudinally within participants. Instead, they are analyzed

quasi-experimentally by comparing two closely matched cohorts of students who attended the first grade in secondary schools, one before the onset of adversity (precrisis-cohort) and one at the peak of adversity (crisis-cohort). After controlling for crisis-unrelated variables, such as gender or ethnicity, the difference between these two cohorts (the cohort effect) informs about the effects of the crisis.

First, we present the descriptive statistics and the intercorrelations of the main variables. Second, we describe how we dealt with the hierarchical nature of the data (students were nested in classrooms), missing scores, and the problem that the cohorts differed in the proportion of different ethnicities and immigrant generation that were likely unrelated to the crisis. Third, we present results of variable-focused analyses of promotive and protective factors for adaptation and well-being, testing the first two hypotheses. Fourth, we present results of person-focused analyses where adolescents with high/average versus low adaptation across the four adaptation indexes before and during the economic crisis were compared in their resources, testing the third hypothesis. Fifth, we present results of integrative person-focused analyses which examined whether adolescents with high/average versus low adaptation across the four adaptation indexes before and during the crisis differed in terms of the total number of psychosocial resources, testing the fourth hypothesis. In all cases, the robustness of the findings regarding their variation by gender and immigrant status was examined.

4.2 | Descriptive statistics and intercorrelations of the main variables within cohort

Table 1 presents the means, standard deviations, and intercorrelations of the main assessment variables within the two cohorts. The means and standard deviations are based on the raw scores before imputation of missing values and correction for sample composition of the two cohorts.

The correlations among psychosocial resources were generally low. The intercorrelations among adaptation domains were higher but showed sufficient discriminant validity except for academic achievement and school engagement. Because these two variables were conceptually different and have shown dissociations in cross-lagged analyses (Motti-Stefanidi et al., 2015), we kept both for the subsequent analyses. As expected, all significant correlations between resources and adaptation and well-being were positive in both cohorts.

4.3 | Multilevel analyses

Because students were nested in classrooms, the data had a hierarchical structure that was considered in the data analyses by conducting multilevel analyses. Cohort was treated as a classroom-level predictor because all students in a classroom were either members of the precrisis-cohort or of the crisis-cohort. We used MPlus 7.0 (Muthén & Muthén, 1998-2012) for the multilevel analyses which were based on linear random coefficient regression models (Hox et al., 2017).

TABLE 1 Means, standard deviations, and intercorrelations of the main variables by cohort

Variables		Precrisis-cohort M (SD)	Crisis-cohort M (SD)	Intercorrelations							
				EC	PE	PI	SF	AA	SE	CO	WB
Resources											
Economic well-being	EC	3.48 (.82)	2.55 (1.30)		.15	.13	.13	.17	.12	.00	.14
Parental education	PE	3.34 (1.08)	3.21 (1.03)	.22		.15	.17	.23	.17	.05	.06
Parental involvement	PI	3.38 (1.15)	3.19 (1.28)	.14	.23		.16	.54	.64	.27	.05
Self-efficacy	SF	5.38 (.90)	5.13 (1.00)	.03	.10	.11		.30	.27	.13	.20
Adaptation and well-being											
Academic achievement	AA	13.68 (3.02)	13.90 (2.99)	.08	.34	.49	.27		.77	.39	.09
School engagement	SE	3.75 (.91)	3.73 (.96)	.03	.20	.60	.22	.73		.56	.06
Conduct	CO	4.59 (.72)	4.32 (.93)	-.01	.10	.24	.08	.33	.57		-.01
Psychological well-being	WB	1.45 (.46)	1.47 (.47)	.20	.07	.05	.03	.11	.08	.00	

Note: $N = 1057$ in the precrisis-cohort, $N = 1052$ in the Crisis-cohort. Correlations above the diagonal refer to the precrisis-cohort, below the diagonal to the Crisis-cohort. Correlations in italics are nonsignificant ($p \geq .05$).

4.4 | Multiple imputation of missing scores

Each of the eight main variables included 2%–8% missing values. We imputed them using all available main variables in the two cohorts (including gender and ethnicity) with 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.

4.5 | Control of sample composition of the two cohorts

We compared different methods of statistically controlling for sample composition of the two cohorts in terms of gender, age, ethnicity, and immigrant generation at both the student and the classroom level. As described in more detail by Motti-Stefanidi and Asendorpf (2017), Inverse Probability of Treatment Weighting (IPTW; see e.g., Austin, 2011) at both the student level and the classroom level was most effective in closely matching the two cohorts such that the remaining cohort differences can be more safely interpreted as effects of the economic crisis than the uncorrected differences. All multilevel analyses were based on the controlled scores.

4.6 | Variable-focused analyses: Promotive and protective effects

Separately for each potential resource and outcome we tested whether the potential resource predicted in both the precrisis-cohort and the crisis-cohort each of these outcomes, which would suggest that the predictor was a promotive factor for the outcome, and whether the predictive strength of the predictor was higher in the crisis-cohort compared to the precrisis-cohort, which would suggest that it was a protective factor for the outcome. Thus, detection of a protective factor required that cohort moderated the effect of a predictor in the correct direction (positive effects on adaptation and well-being become stronger).

Two-level regression analyses were run where one of the outcomes was regressed at Level 1 (students) on one of the resource variables, with cohort as a predictor at Level 2 (classrooms). The effects for the precrisis-cohort and the historical change from the precrisis-cohort to the crisis-cohort were estimated with a model where the precrisis-cohort was coded as 0 and the crisis-cohort as 1; the effects for the crisis-cohort were estimated with a model with reverse coding (crisis-cohort as 0, precrisis-cohort as 1).

In addition, similar to Masten et al. (1999), we defined a *high/average adaptation outcome score* in both cohorts as scoring above the 40th percentile of the distribution of the four outcome variable in the precrisis-cohort (thus high or average scores in the nonrisk condition). Thus, we followed the logic of an intervention design where the effect of an intervention is scaled in terms of the control condition. Similarly, to Masten et al. (1999) we used the 40th percentile rather than the 50th percentile because we wanted to tolerate scores slightly below the median due to measurement error. All percentiles and the resulting group sizes refer to the adjusted cohorts after imputation. Deviating from Masten et al. (1999), we did not define the cut-off scores on the basis of *z*-scores because some of our variables had a strongly skewed distribution such that a *z*-score criterion would have resulted in different sizes of the groups across different variables.

Subsequently we summed for each student the number of received high/average outcome scores (an index ranging from 0 to 4, precrisis: $M = 2.17$, $SD = 1.27$; Crisis: $M = 2.18$, $SD = 1.28$; median = 2 in both cohorts). This cumulative index of adaptation and well-being served as an additional outcome measure. Thus, 40 analyses were run (see Table 2). Comparison of the results across predictors, outcomes and cohorts was facilitated by reporting the results in terms of standardized regression coefficients β .

We illustrate here the interpretation of the β s with the prediction of academic achievement by parental education. The effect of $\beta = .20$ for the precrisis-cohort means that within the precrisis-cohort, for each 1 *SD* increase in parental education, academic achievement was estimated to increase for 0.20 *SD*. Because this effect was significant, $p = .001$, parental education was a resource for academic achievement. In the crisis-cohort, the effect was also significant, $\beta = .32$, $p = .001$, such that parental education was a promotive factor for academic achievement. Also, it was a protective factor because the effect significantly increased from the precrisis-cohort to the crisis-cohort, $\beta = .12$, $p = .017$ (see also Figure 1a).

Research question and Hypothesis 1, testing for the potentially promotive role of the resources, was confirmed in 11 out of the 14 cases (again using one-tailed tests for these a priori hypotheses) (Table 2). Unexpectedly, economic well-being did not promote school engagement and conduct, and parental involvement did not promote conduct. As expected, the family's economic well-being and youth's self-efficacy beliefs promoted youth's psychological well-being, whereas school involvement did not (Table 2). Exploratory analyses showed that parental education did not promote psychological well-being. Finally, each of the four potential resources promoted separately youth's composite score consisting of the number of at least average outcomes across all adaptation indexes.

TABLE 2 Effects of resources on adaptation and well-being in the two cohorts and their change from the precrisis-cohort to the crisis-cohort

Resources	Outcomes									
	Academic achievement		School engagement		Conduct		Psychological well-being		No. high/average outcomes	
	β (SE)	<i>p</i>	β (SE)	<i>p</i>	β (SE)	<i>p</i>	β (SE)	<i>p</i>	β (SE)	<i>p</i>
Effects in the precrisis-cohort										
Economic well-being	.15 (.05)	.002	.11 (.05)	.028			-.04 (.04)	.281	.15 (.05)	.001
.11 (.05)	.020									
Parental education	.20 (.04)	.001	.13 (.04)	.001	.06 (.03)	.072	.04 (.04)	.342	.13 (.05)	.005
Parental involvement	.66 (.05)	.001	.71 (.05)	.001	.23 (.04)	.001	.06 (.05)	.166	.55 (.05)	.001
Self-efficacy	.28 (.04)	.001	.26 (.04)	.001	.09 (.03)	.001	.18 (.04)	.001	.28 (.04)	.001
Effects in the crisis-cohort										
Economic well-being	.07 (.03)	.009	-.01 (.04)	.852	.07 (.04)	.094	.22 (.04)	.001	.15 (.04)	.001
Parental education	.32 (.04)	.001	.9 (0.04)	.001	.29 (.13)	.025	.07 (.03)	.037	.20 (.04)	.001
Parental involvement	.44 (.10)	.001	.59 (.07)	.001			-.01 (.18)	.965	.00 (.05)	.987
.33 (.12)	.005									
Self-efficacy	.28 (.03)	.001	.27 (.04)	.001	.05 (.03)	.072	.11 (.06)	.082	.30 (.11)	.005
Change of effect from the precrisis-cohort to the crisis-cohort										
Economic well-being	-.08 (.06)	.133	-.11 (.06)	.066	.11 (.05)	.044	.06 (.06)	.278	.03 (.07)	.612
Parental education	.12 (.05)	.017	.06 (.05)	.252	.23 (.13)	.085	.03 (.06)	.639	.06 (.06)	.318
Parental involvement	-.22 (.11)	.043	-.12 (.08)	.146			-.23 (.18)	.205	-.06 (.07)	.943
-.22 (.12)	.076									
Self-efficacy	.00 (.05)	.979	.01 (.06)	.907			-.04 (.04)	.311	-.07 (.08)	.379
.03 (.12)	.824									

Note. *N* = 2109. β , *SE* are estimated with multilevel models with students at Level 1 and classrooms at Level 2. The β s are standardized regression coefficients (robust standard errors in parentheses). *p*-Values refer to two-tailed tests. Differences in sample composition of the two cohorts are controlled for seven variables at each level using inverse probability of treatment weighting.

Research question 2 involved the potential moderation of the link between cohorts (low/high risk) and adaptation outcomes by each potential resource, testing for the potentially protective role of the resources. These analyses were exploratory. The significant changes of the effects of resources from the precrisis-cohort to the crisis-cohort indicated that parental education was a protective factor for academic achievement, and economic well-being for conduct. The resource in each case played a stronger role in the adaptation of youth during the crisis than before the crisis (see Table 2 and Figure 1a,b). In contrast, parental involvement, which had a promotive effect for academic achievement, unexpectedly predicted academic achievement significantly less strongly during the crisis, $\beta = .44$, than before the crisis, $\beta = .66$ (see Table 2 and Figure 1c).

The robustness of the results reported in Table 2 was tested by studying the moderation of the effects by gender and immigrant status. One of the moderators and its product with the Level 1 predictor were added to each multi-level model. Thus, 60 moderation effects (20 in the precrisis-cohort, 20 in the crisis-cohort, and their change from the precrisis-cohort to the crisis-cohort) were tested for each moderator. Of the 120 moderation tests, four scattered effects concerning different resource-outcome combinations reached significance (three for gender, one for immigrant status) which can be attributed to chance. Thus, the results were robust regarding variation in gender and immigrant status.

4.7 | Person-focused analyses: Resilient, maladaptive, and competent individuals

Following Masten et al. (1999), we compared groups of adolescents with high/average adaptation and low adaptation across the four adaptation indexes. In the crisis-cohort, we defined a *resilient group* as having scores of adaptation and well-being in the upper 60% of the distribution (thus above the 40th percentile) of the four measures of adaptation and well-being in the *precrisis-cohort*, and a *maladaptive group* as having scores in the lower 25% of these distributions. For comparison, we defined in the precrisis-cohort a *high/average competence group* as having scores in the upper 60%, and a *low competence group* as having scores in the lower 25% of the distribution in the precrisis-cohort for each measure of adaptation and

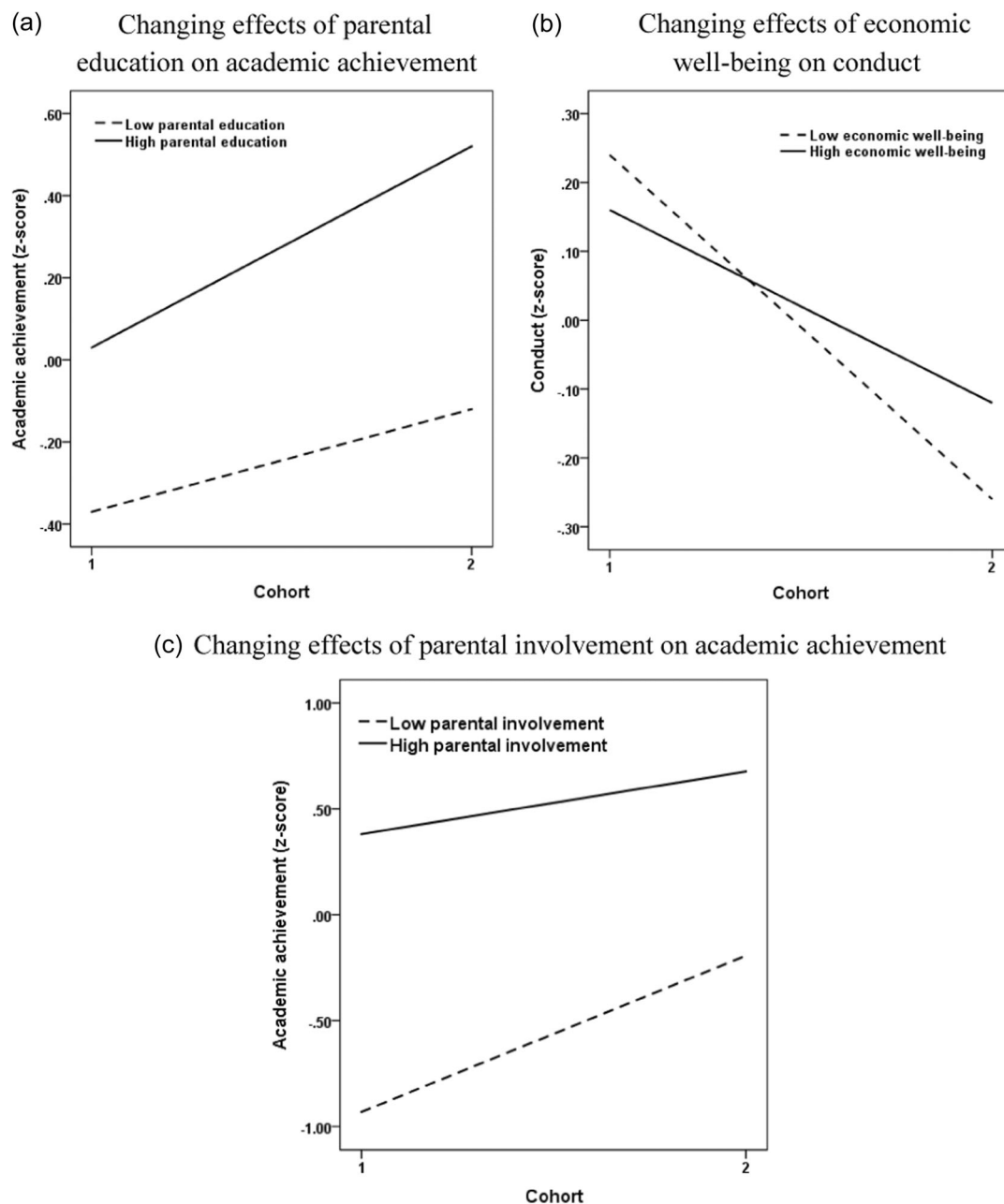


FIGURE 1 Significant changes of effects of resources from the precrisis-cohort to the crisis-cohort. Low/high refers to $-1/+1$ SD. (a) Changing effects of parental education on academic achievement. (b) Changing effects of economic well-being on conduct. (c) Changing effects of parental involvement on academic achievement. Precrisis cohort is Cohort 1; Crisis cohort is Cohort 2.

well-being. Thereby, we followed the logic of an intervention design where the crisis-cohort is the treatment group and the precrisis-cohort is the control group. Following Masten et al. (1999), we use the term resilient for crisis-cohort students with high/average adaptation, to highlight that these students were able to maintain high/average adaptation in the context of adversity. We use the term maladaptive for crisis-cohort students with low adaptation to highlight that these students had low adaptation in the context of adversity.

We studied differences between the four groups in the four resources as well as in the number of high/average resources (above the 40th percentile of each resource measure) with multilevel analyses using the full data of 2109 students. The groups were dummy-coded and used as Level 1 predictors of risks and resources. To avoid running the analyses four times for each outcome we used models without intercept such that effects of each dummy-coded group provide the means and standard errors of the groups (Hox et al., 2017; Appendix C). The results of the five analyses are reported in Table 3, including the sizes of the four groups.

TABLE 3 Outcomes of high/average versus low competence groups by cohort

	Precrisis-cohort (N = 1057)		Crisis-cohort (N = 1052)		Planned comparisons			
	High/average competence ^a		Resilient ^a		Maladaptive ^b			
	High/average competence (n = 205)	Low competence (n = 15)	Resilient (n = 113)	Maladaptive (n = 41)	High/average versus resilient	Resilient versus maladaptive		
Resources	M (SE)	M (SE)	M (SE)	M (SE)	b (SE)	p		
Economic well-being	3.64 (.05)	3.27 (.27)	2.99 (.07)	2.37 (.31)	.65 (.09)	.001	0.61 (.31)	.098
Parental education	3.72 (.10)	3.06 (.25)	3.36 (.12)	2.50 (.16)	.36 (.15)	.018	0.86 (.20)	.001
Parental involvement	4.01 (.09)	2.01 (.27)	3.13 (.40)	1.89 (.19)	.88 (.42)	.034	1.24 (.44)	.005
Self-efficacy	5.75 (.09)	5.25 (.23)	5.61 (.14)	5.19 (.21)	.14 (0.17)	.419	.42 (.25)	.099
No. high/average resources ^a	3.29 (.07)	1.94 (.26)	2.48 (.15)	1.49 (.23)	.81 (0.17)	.001	.99 (.28)	.001

Note. M, SE, b are estimated with multilevel models with students at Level 1 and classrooms at Level 2 based on multiple imputation of missing values. b are unstandardized regression coefficients, SE are robust standard errors. p-values refer to two-tailed tests. Differences in sample composition of the two cohorts are controlled for seven variables at each level using inverse probability of treatment weighting.

^aAll defining criteria above 40th percentile of the distribution in the precrisis-cohort.

^bAll defining criteria below or equal 25th percentile of the distribution in the precrisis-cohort.

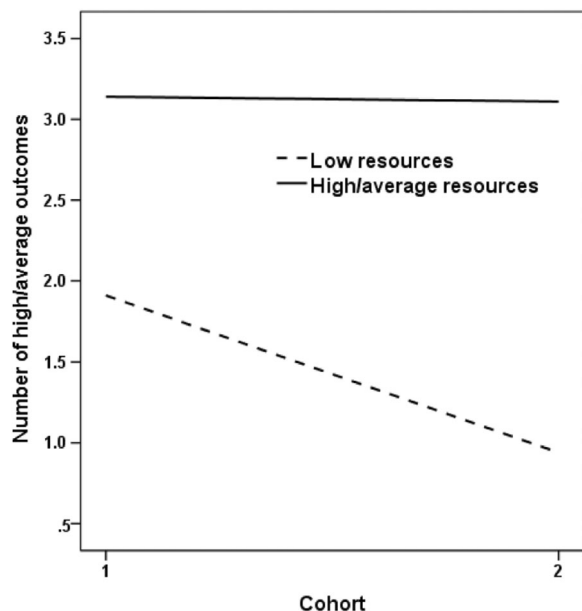


FIGURE 2 High/average resources as a protective factor for high/average outcomes. Precrisis cohort is Cohort 1; Crisis cohort is Cohort 2.

We tested Hypothesis 3 with two planned comparisons also performed by Masten et al. (1999). First, we compared the high/average competence group with the resilient group in terms of their resources. Unexpectedly, the resilient group (crisis cohort, high/average adaptation) had significantly fewer resources than the competent group (precrisis, high/average adaptation) except for self-efficacy. Furthermore, the resilient group had about half the number of individuals compared to the high/average competence group. It is important to note that average/high adaptation was based on ratings *before* the crisis for *both* cohorts. Thus, high/average adaptation during the crisis would also have been high/average adaptation before the crisis. It is not a relative measure based on within-crisis comparisons.

In the second contrast, we compared the resilient (crisis cohort, high/average adaptation) with the maladaptive group (crisis cohort, low adaptation), initially using two-tailed tests. As expected, the resilient group had parents with significantly higher education and involvement in their children's school compared to the maladaptive group. They also had marginally significantly ($p < .10$) higher economic well-being and self-efficacy. Because it is a priori expected that better adaptation and well-being is associated with better resources, one-tailed tests can be used such that it can be concluded that, as expected, youth in the resilient group had better resources than youth in the maladaptive group across the board.

The robustness of these results was tested, first, by varying the defining criteria for high/average and low adaptation. Replacing the 40th percentile by the median, or the 25th percentile by the 30th percentile changed the group sizes but resulted in only minor changes, particularly concerning cohort differences in the within-cohort contrasts. Second, we tested potential moderations of the 10 planned comparisons by gender and immigrant status. No significant moderations were found. Thus, the results reported in Table 3 were robust regarding variations in the cut-off scores, gender, and immigrant status.

Finally, as expected based on Hypothesis 4, adolescents with high/average resources had as many high/average outcomes in the crisis-cohort as in the precrisis-cohort, $b = -.02$, $SE = .19$, $p = .90$, whereas adolescents low in resources had significantly fewer high/average outcomes in the crisis-cohort than in the precrisis-cohort, $b = -.97$, $SE = .47$, $p = .019$; the expected group \times cohort interaction was significant, $b = .95$, $SE = .50$, $p = .030$, one-tailed (see Figure 2). A one-tailed test can be used in this case because the interaction was expected (Masten et al., 1999). Students with high/average resources had more than three times more frequent high/average outcomes during the crisis than students with low resources. Thus, Hypothesis 4 was confirmed; the results fully replicated the protective effect reported by Masten et al. (1999, Figure 2).

The robustness of these results was again tested by varying the defining criteria for high/average and low adaptation. Replacing the 40th percentile by the median, or the 25th percentile by the 30th percentile changed the group sizes but resulted in only minor changes, particularly concerning cohort differences in the within-cohort contrasts.

5 | DISCUSSION

Variable-focused and person-focused analyses converged in showing that psychosocial resources are important in understanding who does well in the school context during a systemic economic crisis and who does less well. A key finding is that parent and family-related variables play an important promotive and/or protective role for youth's school adjustment

and psychological well-being. Another key finding is that crisis-cohort youth with more adequate (high/average) psychosocial resources had a similarly high level of adaptation as well-adjusted precrisis youth, whereas those with fewer psychosocial resources had significantly worse adaptation compared to their precrisis counterparts. These results replicate a finding reported by Masten et al. (1999) who studied the effect of multiple aspects of adversity and of major psychosocial resources on the adaptation of an urban community sample from the Midwest in the United States. The results of the present study, which is unique because of its quasi-experimental design, significantly contribute to the literature on the effect of systemic economic recessions on youth's adaptation and development. They provide evidence that psychosocial resources which have been shown to be a general asset for youth's adaptation, are particularly important during a period of economic recession.

5.1 | Psychosocial resources for positive adaptation: Variable-focused approach

Each of the four psychosocial resources (economic well-being, parental education, parental school involvement, self-efficacy) separately predicted an aggregate adaptation score (including the three school adjustment scores and the score on well-being), consisting of the number of adequate (high/average) outcomes of both precrisis cohort and crisis-cohort students. Therefore, each resource promoted students' overall positive school adjustment and psychological well-being regardless of risk. However, when one examines the effect of these resources on each adaptation outcome separately, the results become more nuanced.

Two of the four psychosocial resources studied (self-efficacy beliefs and parental education) positively predicted all three indices of school adjustment, as well as psychological well-being, which were examined separately. However, these two psychosocial resources had a positive effect on the adaptation and well-being of different cohorts of students. Whereas self-efficacy beliefs had a positive effect on all indices of adaptation and well-being only of precrisis-cohort youth, parental education was linked to positive outcomes in all domains of adaptation only among crisis-cohort youth.

However, different psychosocial resources promoted both precrisis and crisis-cohort students' positive adaptation in specific domains. First, all four psychosocial resources promoted higher academic achievement. Parental education also had a protective-enhancing effect (Luthar et al., 2000) on academic achievement, whereby the academic achievement of crisis-cohort youth whose parents had higher education was significantly better than that of precrisis-cohort youth whose parents had higher education. Thus, parents' level of education was protective for their children's academic achievement in the context of the economic recession. Second, parental education, parental school involvement and youth's self-efficacy beliefs also promoted higher school engagement in youth.

To understand these results, they need to be examined in the context of the Great Economic Recession, which is a historical event outside the control of families. Such systemic economic shocks may have a negative effect youth's adaptation indirectly by placing at risk family practices and relationships (Conger et al., 1992; Elder, 2018; Lundberg & Wuermli, 2012). Families experience such economic shocks through unemployment and a decrease in income. High economic pressure often results in parental stress, which may lead to the deterioration of parental stimulation and of the enforcement of rules and routines, and in turn have a negative impact on youth's self-regulation, social competence, academic achievement and conduct (e.g., Gershoff et al., 2007; Votruba-Drzal, 2006).

However, neither are all families equally affected by a systemic economic crisis nor do all families experience these negative events in the same way (Lundberg & Wuermli, 2012). Some are resilient and better able to weather the shock and support their children. In this study, parents with a higher level of education and parental school involvement promoted their children's academic achievement and school engagement possibly by setting higher standards and having higher educational expectations from them compared to parents with a lower level of education (Davis-Kean, 2005). The protective effect of parental education for children's academic achievement during the crisis is comparable to Schoon et al. (2004) finding that higher educational expectations among low-income parents is associated with higher educational attainment.

The family context was not the only influence on youth's behavior and adjustment in the context of the economic recession. Higher self-efficacy beliefs, which allow them to regulate their functioning and to manage environmental challenges (Bandura, 1997), promoted youth's academic achievement and psychological well-being in both crisis and precrisis-cohorts.

Third, families' economic well-being predicted both internalizing and externalizing symptoms. It promoted youth's psychological well-being, indexed through the absence of emotional symptoms, in both precrisis- and crisis-cohorts. These results agree with extant literature (e.g., Caprara et al., 2004; Duncan et al., 2017; Johnson et al., 2006). Families' higher economic well-being during the crisis also played a protective role for their conduct. It is possible that in spite of the crisis, a better financial situation is less taxing for parents' mental health and their marital relationship, allowing them to be more present and more sensitive to their children's needs and to monitor better their behavior, resulting in better psychological well-being and conduct (Lundberg & Wuermli, 2012).

An unexpected moderation effect of risk (precrisis/crisis-cohort) by parental involvement on academic achievement was also found, whereby higher parental involvement predicted higher academic achievement in both cohorts, but less strongly in

the crisis-cohort. More specifically, contrary to expectations, low parental involvement predicted higher academic achievement in the crisis-cohort youth, even though the difference of the effect of high versus low parental involvement on academic achievement remained large. This finding may be related to the heightened conduct problems during the economic crisis (Motti-Stefanidi & Asendorpf, 2017). Parents, who normally visit the school once a trimester, may be called in more often by the teacher due to their children's problematic behavior. It is possible then that their relatively higher involvement in their children's schooling may have a cascading protective effect on their children's academic achievement via improving their conduct (see Masten et al., 2005). It should, however, be noted that youth with high parental school involvement continued to have significantly higher academic achievement during the crisis compared to youth with low parental school involvement. Parents with high involvement in their children's school monitor and support their children in school issues and convey their expectations and aspirations, and the message that they value their education, which are predictors of better academic achievement (Barger et al., 2019).

5.2 | Resilient youth during the Greek economic recession: Person-focused approach

Person-focused analyses yielded both expected and some unexpected results. First, it was found that the resilient group (crisis-cohort, positive adaptation) had about half as many individuals compared to the competent group (precrisis-cohort, positive adaptation). It should be noted that to examine the effect of the economic recession on youth's adaptation and well-being we followed an intervention design, whereby the resilient group was defined as having scores on adaptation above the 40th percentile of the distribution of the four adaptation outcomes of the precrisis cohort. Thus, the results revealed a strong overall effect of the economic recession on youth's school adjustment and well-being.

Second, it was found that resilient youth (crisis-cohort, positive adaptation) had parents with significantly higher education and involvement with their children's school compared to maladaptive youth (crisis-cohort, low adaptation), but lower compared to competent youth (precrisis-cohort, positive adaptation). Third, it was found that the economic well-being of the families of resilient youth did not differ from that of the families of maladaptive youth, but was lower from that of competent youth. Finally, it was found that the group of resilient youth had more total adequate (high/average) resources compared to maladaptive youth but fewer compared to competent youth. Furthermore, a significant interaction of total resources by cohort on the aggregate index of adaptation revealed that crisis-cohort youth with high/average total resources were able to keep the same high level of adaptation as well-adjusted precrisis-cohort youth. In contrast, crisis-cohort youth with low total resources had significantly worse adaptation compared to precrisis-cohort youth with low total resources. This interaction reveals a protective-stabilizing effect whereby total resources confer stability in adaptation despite risk (Luthar et al., 2000).

Together, these results show that resilient youth (crisis, positive adaptation), with fewer resources than competent youth (precrisis, positive adaptation), were equally well adjusted. They suggest that resilient students in the context of the economic recession, which is a very challenging period for families and youth, have a strong motivation to succeed. Greek parents consider education to be a vehicle for upward social mobility (Charalambis et al., 2004). Thus, it is possible that in the context of the economic recession educated parents as well as highly involved parents in their children's schooling may consider doing well in school as the means for their children to cope with the crisis and overcome its long-term impact. Thus, youth's academic achievement and school engagement may not change or may even increase during a period of a Great Economic Recession (Motti-Stefanidi & Asendorpf, 2017). Similarly, other studies conducted during systemic economic crises in middle- and high-income countries, like Greece is, yielded countercyclical effects of shocks on schooling, with school enrollment, attendance and attainment actually increasing (Ferreira & Schady, 2009).

5.3 | Gender and immigrant status

We examined the robustness of the findings from the variable-focused and from the person-focused analyses regarding their variation by gender and immigrant status. These analyses resulted in only few and scattered significant findings which can be explained by chance due to the many significant tests. Therefore, the results reported above were robust regarding variations in gender and immigrant status.

5.4 | Strengths and limitations

The greatest strength of the study is its quasi-experimental design (Cook & Campbell, 1979) which moves the interpretation of the findings on the effect of economic crises closer to causality than the traditional between-family designs (Rutter, 2007). For example, studies relying only on between-family variation of a risk cannot separate effects of the risks from effects of

social selection of the families into the risk condition that also affect their adolescents (allocation bias). In this study, allocation bias is minimized because the societal risk affected virtually all families in crisis-cohort.

Other strong features of the present study are its focus on both variable- and person-focused analyses, on adequate overall resources and outcomes, its inclusion of a relatively large sample that resulted in sufficiently large groups of adolescents with low resources even before the crisis, its assessment of adaptation outcomes with multiple methods and informants, and last but not least the use of multilevel analyses that avoid inflated significances of lower-level effects due to within-classroom similarities.

Two limitations of the present research beyond the unavoidable limitation that the results depend on the specific cultural and historical context of study are the following. First, the results obviously rely on the measured resources and outcomes. Because we extended the precrisis study to a quasi-experimental study of the crisis by including a second cohort, we used measures selected for the precrisis-cohort. Our selection of adaptation outcome measures seems well balanced because they covered both academic motivation and achievement and externalizing and internalizing tendencies. In contrast, the measures of parenting were restricted to parents' involvement in school issues although earlier studies of economic stress found that measures of positive parenting are important protective factors (Conger et al., 1992; Parke & Elder, 2019). We included such measures in crisis-cohort but could not use them in the present study because they were not included in precrisis-cohort.

Second, due to the limited number of studies of effects of a societal economic crisis we based many hypotheses on crisis effects on earlier findings of differences between families that were exposed to social adversities without facing a societal stressor. Although effects of unemployment and financial problems before an economic crisis may share many similarities with crisis effects, this is not necessarily always the case. For example, Motti-Stefanidi and Asendorpf (2017) found positive effects of the crisis on academic motivation and achievement that were inconsistent with the economic effects before the crisis.

6 | CONCLUSIONS

This study represents a rare and rigorous test of the effect of a systemic economic recession on youth's school adjustment and psychological well-being. The results reflect the power of human adaptive processes, including family and personal attributes, in promoting the adaptation of youth, independently of whether they live and grow during a stable economic period or during a period of great economic downturn. They also reveal assets, which over and beyond their general positive effect on youth's adaptation, are particularly important for specific aspects of youth's school adjustment during such a crisis.

The implications for practice and policy of the study are wide ranging. Carefully planned safety nets, including programs that provide temporary income support to families, may help alleviate the financial burden that parents feel during a great economic recession, which in turn may allow them to better exert their parenting responsibilities (Lundberg & Wuermli, 2012). Promoting parents' involvement in their children's school is also a resource that will support youth's school adjustment during such trying periods. Doing well enough in school may in turn promote youth's self-efficacy beliefs (Bandura, 1997). Thus, instead of focusing on reducing symptoms during a period that is challenging for both families and their children the focus will turn into promoting youth's positive adaptation and well-being.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ETHICS STATEMENT

Ethics approval was sought from the Ministry of Education of Greece. Students' parents signed a consent form and students an assent form.

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