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Academic resilience of immigrant youth in Greek schools: Personal and family resources

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ABSTRACT

This cross-sectional study examined, first, whether and how immigrant youth's personal and family resources account for individual differences in their academic achievement, and second, whether social risks and immigrant status further contribute to academic achievement after controlling for these resources. The sample consisted of 300 middle school adolescents, 73 students from Albania and 227 Greeks (mean age 13.9 years), enrolled in Greek urban middle schools. Three risks (immigrant status, family social adversity and negative life events), two personal resources (locus of control and self-efficacy beliefs) and four family resources (parental school involvement, family support, father and mother education) for academic achievement were included. Each of these personal and family resources, separately, predicted higher academic achievement, equally for immigrant and nonimmigrant youth. Family social adversity, but not negative life events, continued to predict academic achievement, over and above personal and family resources. Finally, immigrant status continued to predict academic achievement over and above resources and other social risks. The results highlight the important link between the family context and youth's personal agency, on the one hand, and doing well in school, on the other. However, they also reveal that social and immigrant status, two societal-level, social position variables that may also involve experiences that are outside the control of the family and youth, present further risks to youth's academic achievement.

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Academic achievement is a key developmental task for adolescents in many societies around the world (Masten, 2014). Better academic achievement opens the door to higher education and better occupational outcomes. For immigrant adolescents,

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school also serves as a major acculturative context, since it introduces them to the culture of the host country (Motti-Stefanidi, 2015). Success in school reflects in part the level of competence in the language and other facets of the host culture that immigrant school children have achieved (Motti-Stefanidi & Masten, 2013, in press).

Results on immigrant youth's academic achievement are inconsistent. Some research has suggested an immigrant paradox, whereby immigrant youth have better adaptation, including higher academic achievement, than either their national peers or second-generation immigrants, in spite of the fact that immigrant families are often overrepresented in the low SES strata of host societies (e.g., Berry, Phinney, Sam, & Vedder, 2006). However, this phenomenon has not been observed in all receiving societies or immigrant groups within a society (e.g., Garcia Coll & Marks, 2012; Sam,Vedder, Liebkind, Neto, & Virta, 2008). Furthermore, significant individual differences within these groups have also been observed and have been linked to youth's personal and social resources (e.g., Motti-Stefanidi, Asendorpf, & Masten, 2012).

This study examined who among immigrant youth do well in school in spite of adversities related to their immigrant and social status. Two major questions were examined: First, whether and how immigrant youth's personal and social resources contribute to individual differences in their academic achievement, and second, whether immigrant status and other social risks continue to predict academic achievement after controlling for these resources.

We have shown in previous work that higher social adversity and more negative life events predict lower academic achievement in immigrant youth, and that immigrant status continues to predict lower academic achievement, over and above these social risks (Motti-Stefanidi et al., 2008). We have also shown that higher self-efficacy and parental school involvement, separately, predict higher academic achievement, and that social risks continue to account for variance in the outcome, after controlling for these resources (Motti-Stefanidi et al., 2012).

The present study, in addition to self-efficacy and parental school involvement, examined the unique contribution to immigrant youth's academic achievement of a number of other personal and family resources. Furthermore, in contrast to our previous studies, the relative contribution of these personal and family resources to their academic achievement was examined by entering them together, grouped in two separate steps, in one hierarchical regression model. Finally, after controlling for all personal and family resources in the same model, the remaining effect of social risks and immigrant status on academic achievement was tested.

Academic achievement, risks, personal and family resources

Significant individual differences in immigrant youth's academic achievement have been recorded (e.g., Fuligni, 1997), with some youth beating the odds

and doing well in school in spite of adversities. Different personal and social resources have been linked to immigrant youth's better academic achievement (e.g., Garcia Coll & Marks, 2012; Motti-Stefanidi, 2014).

Locus of control, which refers to the extent to which individuals believe they can control events affecting them (Nowicki & Strickland, 1973), and self-efficacy beliefs, which refer to the extent or strength of one's belief in one's own ability to complete tasks and reach goals (Bandura, Barbaranelli, Caprara, & Pastorelli, 2001), are personal attributes linked to better academic achievement in diverse adolescents, independently of immigrant status (e.g., Bandura et al., 2001; Klassen, 2004; Motti-Stefanidi et al., 2012; You & Sharkley, 2009). Parental school involvement, family support, and parents' education are family characteristics linked to school adjustment of students, independently of immigrant status (e.g., Findley & Cooper, 1983; Hill & Taylor, 2004; McLoyd, 1998), as well as for immigrant students (e.g., Liebkind, Jasinskaja-Lahti, & Solheim, 2004; Suárez-Orozco, Suárez-Orozco, & Todorova, 2008).

To the best of our knowledge, however, the literature does not provide definitive evidence on whether any of these personal and/or family resources differentially predict the relation between immigrant status and academic achievement. Nor is it clear whether any of these resources function as protective factors for immigrant youth adaptation, conferring them special protection in contexts of adversity.

It is important to consider whether social adversity, negative life events and immigrant status continue to predict academic performance after controlling for personal and family resources. In general, social adversity is correlated with poor resources. For instance, family social adversity is associated with low parental education (McLoyd, 1998), less parental school involvement (Hill & Taylor, 2004), lower self-efficacy beliefs (Bandura et al., 2001), and higher external locus of control (Stipek, 1980). Negative life-events, on the other hand, seem to undermine self-efficacy beliefs (Maciejewski, Prigerson, & Mazure, 2000), and to affect the family support children receive (Lyons, Henly, & Schuerman, 2005). It has also been shown that when core resources for youth's adaptation, such as parenting and IQ, are taken into account, the explanatory power of negative life events for the variance in adaptive outcomes is modest (Masten, 2014). Assuming that both are linked to academic achievement, we expected that once these resources were taken into account, social adversity and negative life events would explain less or even negligible variance in academic achievement. In regard to immigrant students, parents tend to be less involved in their children's schools (e.g., Turney & Kao, 2009). Furthermore, immigrant adolescents tend to have lower self-efficacy beliefs than their native counterparts (e.g., Motti-Stefanidi et al., 2012). However, immigrant status may have an additional effect on academic achievement in Greece for reasons that are independent of the youth or their families. Low competence in the Greek language, due to insufficient educational support (Nikolaou, 2000), and discrimination (Fakiolas, 1999) may afford

immigrant status greater explanatory power over and above the resources and risks examined in this study.

The present study

This study focused on immigrant middle school adolescents from Albania. Data were drawn from an early study of the ongoing Athena Studies of Resilient Adaptation project (AStRA). This study was cross-sectional, focused on a cohort of immigrant and native youth born in 1990. More than 10% of the school population in Greek public schools at the time were immigrant youth, and the largest immigrant group came from neighboring Albania. Most of the Albanian immigrants entered Greece in the 1990s after the collapse of the Albanian communist regime as undocumented economic immigrants.

In addition, immigrant students' Greek classmates were also included in the study. We compared immigrant youth's academic achievement to that of their nonimmigrant peers because it is related to their future adaptation in the receiving society (Motti-Stefanidi & Masten, 2013). Doing well enough in school, which translates into receiving grades comparable to the normative performance of Greek students and not dropping out early, is an important index of present adaptation and forerunner of future adaptation in society for both immigrant and nonimmigrant youth.

We examined three core research questions. First, do personal and family resources under study separately predict individual differences in students' academic achievement? Based on the literature, it was expected that each of these resources, would be linked to academic performance, independently of immigrant and social status. Thus, main (promotive) effects of the resources on academic achievement were expected. Second, are there different associations of personal and family resources for academic achievement depending on immigrant status? It was not clear based on the literature whether the expected positive relation between any of these resources and academic achievement would be more pronounced in the immigrant group, suggesting that this resource plays a special role in their case. Interaction effects (immigrant status by resource) were tested to explore the possibility of moderating effects (especially the protective role of these resources for the presumed to be higher-risk group of immigrant students). However, these analyses were exploratory given the inconsistent literature. Third, do personal and family resources and different kinds of risks have unique associations for immigrant youth academic achievement? When the effects of all personal and family resources on academic achievement are examined simultaneously in one model, both types of resources were expected to continue to predict how well youth are doing in school. Furthermore, once all resources were taken into account, we tested whether (a) social adversity and negative life events, and (b) immigrant status, continued to predict academic achievement. After controlling for all personal

and family resources at once, although social adversity and immigrant status may lose some of their predictive power, they were expected to continue to predict variance in academic achievement due to factors not included in this study, such as lack of sufficient competency in the Greek language and discrimination.

Method

Participants

For the purposes of the study two middle schools with immigrant students from Albania were recruited. The schools selected were situated in the center of Athens and had a high concentration (27.5 and 19.6%, respectively) of immigrant students from Albania. Permission to study the students in these schools was granted by the Greek Ministry of Education.

All students from the three middle school grades of two schools, immigrants and their native Greek classmates, took part in the study. The final sample consisted of 300 middle school students, 227 Greeks and 73 students from Albania, 128 boys (96 Greeks and 32 students from Albania) and 172 girls (131 Greeks and 41 students from Albania). Students from Albania were first-generation immigrants who were all born in Albania and had been living in Greece for an average of eight years. The mean age of the sample was 13.9 years. The mean age of the students from Albania (M = 14.4, SD = .9) was significantly higher than the mean age of their Greek peers (M = 13.4, SD = 1.27), $F(1, 291) = 56.80$, $p < .001$. Chi-square analyses were run to test for the relationship between immigrant status and six educational levels for each parent. The distribution of the educational levels was dissimilar for Greek and Albanian fathers, with the former being overrepresented in both ends of the distribution (χ^2 (5, N = 300) = 15.10, p = .010.). No other differences were found.

Procedure

More than 90% of students' parents gave permission for their children to participate in the study. Data were collected during three visits to each school, spaced out over a two-week period.

Measures

All questionnaires were translated from Greek into Albanian and back-translated to Greek by two bilingual speakers. Immigrant students could choose the language in which they preferred to respond to the questionnaires. About 95% of the students from Albania chose to respond to the questionnaires presented in the Greek language.

Measures of resources

Self-efficacy

Bandura's Self-Efficacy Scale (Bandura et al., 2001) consists of 55 items rated on a scale from 1 ('not well at all') to 7 ('very well'). It measures self-efficacy beliefs into nine domains: enlisting social resources, academic achievement, self-regulated learning, leisure time skills and extracurricular activities, self-regulation, meeting others' expectations, self-assertive efficacy, and enlisting parental and social support. A second-order principal component analysis of the nine subscales revealed only one factor with eigenvalue > 1 (α = .86; αGR = .85; αAL = .88). Therefore, it was decided to use a total score for self-efficacy, based on the mean of the nine subscales.

Locus of control

The Nowicki–Strickland Locus of Control Scale (Nowicki & Strickland, 1973) was used to measure the extent to which adolescents make external versus internal attributions (KR20 = .71; KR20GR = .72; KR20AL = .69). On this 40-item, two-choice measure, high scores are indicative of high externality.

Parental education

Adolescents were asked to indicate on a list of six different levels of educational attainment (primary school, middle-school, high-school, higher professional school, university, graduate school) the highest degree achieved by each of their parents

Parental school involvement

School involvement was measured with a single item indicator. The classroom's Greek language teacher was asked to rate on a scale from 1 (not at all) to 4 (very often) whether and how often the pupil's parents are in contact with the school concerning their child's progress and behavior.

Family support

Information on family support was obtained through the Athens Coping Scale (Besevegis, 2001). The family support subscale of the Athens Coping Scale consists of 5 items (e.g., 'I talked to my parents to solve my problem', 'I asked a member of my family to help me') rated in a scale from 0 ('never') to 3 ('often') (α = .89; α_{GR} = .89; α_{AL} = .87).

Measures of adversity

Adversity was operationalized by three separate indices: immigrant status, negative life events and a social adversity composite.

Immigrant status was dummy coded (1 being immigrant, 0 being Greek).

Negative life events

The Life Events Questionnaire (Fthenakis & Minsel, 2002), which consists of 19 negative events of varying severity (e.g., moved, changed school, parents divorced, parent died, etc.) was used. The participant is asked to check events experienced in the last year. The sum of simple counts of life events was used. Only 11 items for events judged to be largely unrelated to the adolescent's behaviour were tallied, to avoid confounding life events with adaptation measures.

Social adversity

The risk factors included parents' occupation, their marital status, and the density of residence. Social risk was defined as: single-parent household, parents' low professional status (e.g., unskilled worker, farmer, unemployed), and high residential density (i.e., the quotient of the number of people living in the house to the number of the rooms in the house being higher than one). The sum of risk factors provided a cumulative risk index ranging from 0 to 4.

Measure of academic achievement

Grade point average

The average of five grades was used to examine academic achievement. Grades in the first trimester on five main subjects (Ancient Greek, Modern Greek, Physics, Mathematics and History) were obtained from the official school records and their average was computed. The grades were assigned to the pupils by at least four different teachers. Academic performance is rated on a 20-point scale.

Results

Descriptive statistics

Immigrant and nonimmigrant students were compared with respect to their academic performance, resources, and social risks, using a series of 2 × 2 (immigrant status × gender) ANOVAs (see Table 1). Students from Albania had lower Grade point averages (GPAs) and self-efficacy beliefs, and higher social adversity, but not more negative life events, than their Greek classmates. Their parents were less involved in their children's school than Greek parents. No differences were found in locus of control, family support and parental education. Regarding gender differences, girls had higher academic achievement and self-efficacy beliefs than boys. No significant interactions between immigrant status and gender were found.

Table 1. Mean scores of academic competence, resources, and adversity measures for adolescents from Albania compared with their Native Greek peers.

	Greek		Albanian				Boys		Girls			
	M	SE	*M*	SE	*F*	η^2	*M*	SE	*M*	SE	*F*	η^2
Academic competence												
GPA	14.61	.20	11.97	.34	44.86***	.13	12.59	.30	13.99	.26	12.68***	.04
Resources												
Self-efficacy	5.42	.05	5.15	.09	7.47**	.02	5.17	.08	5.40	.07	5.15*	.02
Locus of control (external)	11.48	.32	12.25	.56	1.41	.01	12.07	.48	11.66	.42	.40	.00
Parental involvement	2.85	.06	2.02	.10	50.06***	.15	2.44	.09	2.43	.08	.00	.00
Family support	1.84	.06	1.64	.10	3.08	.01	1.70	.09	1.77	.08	.38	.00
Father education	3.35	.09	3.39	.17	.05	.00	3.31	.14	3.43	.13	.38	.00
Mother education	3.40	.09	3.37	.15	.03	.00	3.37	.13	3.40	.12	.02	.00
Adversity												
Life events	2.70	.13	2.91	.23	.63	.00	2.88	.20	2.74	.17	.31	.00
Social adversity	0.45	.05	1.59	.09	131.77***	.31	1.00	.07	1.05	.07	.22	.00

*$p < .05$;**$p < .01$;***$p < .001$.

Relation between potential resources and academic achievement

To investigate whether and how personal and family resources were related to GPA the inter-correlation between these variables were examined (see Table 2). Results showed a strong pattern of association of personal and family characteristics with GPA in the expected direction, both for immigrant and native students.

Prediction of academic achievement from potential resources and risks

A series of hierarchical regression analyses were conducted for GPA, testing the predictive role of each personal and family resource separately. These analyses highlighted the main effects of each individual resource in relation to control variables (gender, grade) and allowed for testing the potential interaction of immigrant status with each resource in predicting academic achievement. Entry order was as follows: Step 1 and 2 gender and school grade, respectively (control variables); Step 3 the resource variable; Step 4 social adversity and life events; and Step 5 immigrant status. An additional Step 6 tested for the effect of the resource variable by immigrant status on GPA.

Results are shown in Table 3. None of the interactions at Step 6 were significant and therefore the results for Step 6 are omitted. In all cases, gender and school grade significantly predicted GPA at entry. Gender continued to predict GPA at Step 5, after all variables were entered, but school grade did not. Girls had higher GPAs than boys. Higher school grade predicted lower GPA. All personal attributes and family characteristics predicted higher GPA when first entered at Step 4. All resources, except family support, continued to predict GPA after all risks were entered at Step 5. Both social adversity and negative life events significantly predicted GPA at Step 4, after demographics and resource variables were controlled for. Higher social adversity and more life events were related to lower grades. Finally, in all analyses, immigrant status was related to GPA at Step 5 over and above resources, social adversity and life events. The interactions tested at Step 6 (not shown) were not significant (β ranged from –.03 to .09, $p > .05$), providing little evidence that the relation of resources with GPA varied by immigrant status.

In order to examine the relative importance of personal and family resources in accounting for individual differences in academic achievement, a second set of hierarchical regression analyses was performed with all of the personal and family resource variables included. Order of entry was as follows: Step 1 and 2 gender and school grade, respectively; Step 3 the two personal attributes; Step 4 the four family variables; Step 5 social adversity and negative life events; and Step 6 immigrant status (Table 4). No interactions were tested in this model due to the large number of main effects that were included. In the last step of the hierarchical regression model, (a) gender, but not school grade, (b) both personal

Table 2. Intercorrelations of immigrant status, gender, class, resources, adversity measures, and school grades for native Greek (below the diagonal; $N = 227$) and immigrant adolescents from Albania (above the diagonal; $N = 70$).

		2	3	4	5	6	7	8	9	10	11	12
1	Immigrant status	−.01	.11*	−.17**	.07	−.38**	−.11*	.01	.00	.56***	.05	−.36***
2	Gender	—	−.09	.06	−.00	−.02	−.05	.04	.10	.07	−.03	.28*
3	School grade	.09	—	−.16	−.12	−.05	.11	.12	.17	.03	.02	−.25*
4	Self-efficacy	.24***	−.24***	—	−.30**	−.03	.25*	.02	.13	−.06	−.13	.33**
5	Locus of control (Ext.)	−.08	.03	−.31***	—	−.05	−.27*	.07	.00	−.02	.20	−.23*
6	Parental involvement	.01	−.18**	.20**	−.10	—	.02	.17	.04	−.21	−.17	.41***
7	Family support	.13	−.07	.38***	−.32***	.10	—	−.01	.11	−.06	−.02	.07
8	Father education	.05	−.02	.13*	−.14*	.27***	.05	—	.48***	−.02	.05	.15
9	Mother education	−.07	−.04	.07	−.12	.24***	.01	.50***	—	.01	.11	.08
10	Social adversity	−.03	−.04	−.20**	.14*	−.21**	−.07	−.28***	−.19**	—	.05	−.31**
11	Life events	−.05	.04	−.35***	.27***	−.17*	−.19**	−.17**	−.11	.24***	—	−.09
12	GPA	.21***	−.05	.37***	−.25***	.22***	.18**	.28***	.22***	−.27***	−.31***	–

*$p < .05$;**$p < .01$;***$p < .001$.

Table 3. Hierarchical regression analyses for the prediction of academic competence (GPA) from gender, school grade, resource, adversity measures, and immigrant status.

		Self-efficacy			Locus of control (external)			Parental involvement		
		ΔR^2	β entry	β final	ΔR^2	β entry	β final	ΔR^2	β entry	β final
1	Gender	.05***	.21***	.16***	.05**	.21***	.2***	.05**	.21***	.21***
2	School grade	.02*	−.13*	−.04	.02*	−.13*	−.09	.02*	−.13*	−.07
3	Resource	.11***	.35***	.23***	.06***	−.24***	−.16**	.12***	.35***	.18***
4	Social adversity	.13***	−.34***	−.24***	.16***	−.37***	−.27***	.12***	−.31***	−.24***
	Life events		−.12*	−.13*	−.14**	−.15**			−.16**	−.17***
5	Immigrant status	.02**	−.17**	−.17**	.02**	−.18**	−.17**	.01*	−.14*	−.1
Total R^2		.33			.31			.31		
		Family support			Father education			Mother education		
		ΔR^2	β entry	β final	ΔR^2	β entry	β final	ΔR^2	β entry	β final
1	Gender	.05***	.21***	.2***	.05**	.21***	.2***	.05***	.21***	.21***
2	School grade	.02*	−.13*	−.09	.02*	−.13*	−.09	.02*	−.13*	−.09
3	Resource	.03**	.16**	.09	.05***	.22***	.17**	.04***	.19***	.15**
4	Social adversity	.18***	−.37***	−.27***	.17***	−.36***	−.24***	.18***	−.36***	−.25***
	Life events		−.17***	−.18***		−.16***	−.17***		−.17***	−.18***
5	Immigrant status	.02**	−.18**	−.18**	.03***	−.2***	−.2***	.02***	−.19***	−.19***
Total R^2		.29			.31			.31		

*$p < .05$;**$p < .01$;***$p < .001$.

Table 4. Hierarchical regression analysis for the prediction of academic competence (GPA) from gender, school grade, personality resources, family level resources, adversity measures, and immigrant status.

	ΔR^2	β
Step 1	.05***	
Gender		.21***
Step 2	02*	
Gender		.22***
School grade		−.13*
Step 3	.13***	
Gender		.15**
School grade		−.06
Self-efficacy		.30***
Locus of control (External)		−.15**
Step 4	.10***	
Gender		.15**
School grade		−.02
Self-efficacy		.25***
Locus of control (External)		−.12*
Parental involvement		.26***
Family support		.01
Father education		.10
Mother education		.06
Step 5	.07***	
Gender		.16***
School grade		−.04
Self-efficacy		.19***
Locus of control (External)		−.11*
Parental involvement		.16**
Family support		.00
Father education		.08
Mother education		.06
Social adversity		−.26***
Life events		−.08
Step 6	.02**	
Gender		.16***
School grade		−.03
Self-efficacy		.19***
Locus of control (External)		−.10*
Parental involvement		.13*
Family support		−.01
Father education		.09
Mother education		.07
Social adversity		−.19**
Life events		−.09
Immigrant status		−.15**
Total R^2	.38***	

*$p < .05$;**$p < .01$;***$p < .001$.

resources (locus of control and self-efficacy beliefs), but only one family variable (parental school involvement), (c) social adversity, but not negative life events, and (d) immigrant status continued to predict individual differences in youth's academic achievement.

Discussion

In contrast to the immigrant paradox, findings from previous studies of immigrant achievement in the AStRA project data revealed that immigrant status, social adversity and negative life events, controlling for each other, are significant risk factors for academic achievement (Motti-Stefanidi, 2014, 2015; Motti-Stefanidi et al., 2008, 2012). However, results also indicated significant individual differences in adolescents' adaptation (Motti-Stefanidi et al., 2012). The main goal of the present study was to account for individual differences in the academic achievement of immigrant adolescents from Albania. Personal and family resources, when examined separately, were all related to higher academic achievement; a finding that held equally for native and immigrant students. Both personal resources and one of the family resources, when examined together, continued to predict how well students, independently of immigrant or social status, did in school. However, after controlling for these resources, immigrant and social status also continued to predict variance in academic achievement.

The prediction of academic achievement from risks and resources

Students who had higher self-efficacy beliefs, internal locus of control, and higher family support, and whose parents were better educated and more involved in their child's school tended to have higher academic achievement, independently of immigrant or social status. These findings are consistent with the literature on individual and family factors promoting academic achievement (e.g., Bandura et al., 2001; Hill & Taylor, 2004; Klassen, 2004; Stipek, 1980).

The association of resources with achievement was not found to differ for immigrant Albanian and native Greek students. Thus, these resources appeared to function as general promotive factors in this study, rather than moderators of risk. They did not provide added protection to immigrant youth, but were similar in importance for all adolescents. Adolescents, independently of immigrant and social status, who were equipped with and brought to the experience solid, normative human resources, had higher school achievement compared to those who did not have such social and personal capital.

When the effect of all resources on academic achievement was examined at once in a single model, both personal attributes, i.e., locus of control and self-efficacy beliefs, but only one of the family variables, i.e., parental school involvement, continued to predict academic achievement. Parental school involvement, which involves parental monitoring of adolescents' school progress and behavior, was assessed with one item addressed to teachers, which captured all the variance in academic achievement explained by family variables. This one item, which assesses parental school involvement, was the only family resource that was correlated with all other family resources. It could be argued that this item may actually reflect parenting, which is a broader, more

encompassing construct. A study showing that parental school involvement mediates the relationship between authoritative parenting and academic achievement strengthens the argument that parental school involvement and parenting are related constructs (Steinberg, Lamborn, Dornbusch, & Darling, 1992).

The results support the idea that young people are not passive receivers of experience and, therefore, contexts are not the sole influence on their adaptation. Instead they exert their agency and thus influence their own adaptation and development. Personal agency is expressed through self-efficacy beliefs, which reflect the degree to which young people believe that they are able to complete tasks and reach a goal (Bandura et al., 2001). Self-efficacy beliefs and locus of control have been shown to be related and in some research to measure a common underlying factor (Judge, Erez, Bono, & Thoresen, 2002). In this study, these attributes also appeared to share common variance, but they each also showed a unique role in accounting for individual differences in academic achievement.

After all resources were taken into account, social adversity, but not negative life events, continued to predict variance in academic achievement. Furthermore, as expected, immigrant status posed unique risk for academic achievement beyond the risk attributable to social adversity. Thus, both individual students' attributes and their families' characteristics contribute to how well they are doing in school. Nevertheless, they are not sufficient to explain all the variance in students' academic achievement. Immigrant and social status, two societal-level, social position variables, may present challenging experiences that are outside the control of the family and their immigrant child, and, thus, place at further risk youth's academic achievement. These risks may be related to discrimination against immigrants and to a low competency in the language of the host society.

Limitations and conclusions

A number of limitations need to be considered when interpreting the results of this study. First, the study is limited by its cross-sectional design. In longitudinal design we can examine the effect of risks and resources, and of their interplay, on change in immigrant youth's academic achievement, and make more solid conclusions regarding cause and effect. Furthermore, the assessment of parental school involvement depended on one item regarding parents' contact with the school to inquire about their child's performance and behavior, and did not include other aspects of this multidimensional construct (Hill & Taylor, 2004).

Despite these limitations, this is to our knowledge the first study to examine the effect of different types of risk for immigrant youth academic achievement in conjunction with a number of key personal and family resources. Additionally, data were collected through multiple methods and informants,

and also examined the effect of a multiple personal and family attributes, which have been linked in the literature to academic achievement. Immigrant status was examined in relation to other social risks (social adversity and negative life events) that are common in immigrant samples.

Results of this study are potentially informative for design of scientifically informed prevention and intervention programs promoting academic achievement for native and immigrant populations. Strategies congruent with the results of this study include efforts to alleviate social and economic risks in students' lives, strengthen their personal characteristics (for instance, their self-efficacy beliefs), offer educational support when needed (for instance, enhancing language skills in the case of immigrants), and to promote parental school involvement.

Further research is needed to identify differential needs of immigrant youth in Greece and elsewhere, beyond the risks and the personal and family attributes studied here. This study did not focus on contextual or cultural variations in the classrooms, families, or communities of these adolescents that may play an important and differential role in the success of immigrant and native students. Longitudinal studies that capture the interplay of individual differences, intergroup and family processes, culture, context, and adversity in the adaptation of immigrant youth are a crucial but challenging task for the future (Motti-Stefanidi, 2014, 2015; Motti-Stefanidi & Masten, in press).

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