

## Ethnic “Otherness” and Educational Achievement Processes<sup>1</sup>

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### Abstract

*Education is seen as a fundamental mechanism of social integration. Yet, many argue that educational systems function differently for students of different ethnic backgrounds, despite the fact that availability of empirical data supporting either of these claims is limited. This study uses data from pre-fiscal-crisis Greece to examine whether such a difference in fact exists and if so, to attempt to quantify it. This study examined the educational achievement process in Greece and found that the process works quite differently for students of Greek and “other” ethnic background. For ethnically Greek students it seems to conform to existing, well established educational achievement/attainment theories. For ethnically “other” students, on the other hand, it presents a much starker educational reality, where their achievement is only dictated by their area of residence and gender. These results, if, indeed, they still hold true, suggest de facto impediments to social justice and inclusion. It may be that further, probably more focused research, is needed to fully assess and understand the differential workings of the educational system for ethnically native and “other” students in contemporary western societies. This is especially relevant, in light of recent global affairs and the ongoing social, economic and humanitarian crises of the last several years, which only serve to emphasize the need for greater fairness, inclusion, belonging and social justice.*

### Keywords

Educational Achievement, Ethnicity, Otherness, Reproduction, Greece

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<sup>1</sup> If this paper is quoted or referenced, we ask that it be acknowledged as:

Katsillis, M. & Moustairas, P. (2020) *Ethnic “Otherness” and Educational Achievement Processes*. In B. Krzywosz-Rynkiewicz & V. Zorbas (Eds.), *Citizenship at a Crossroads: Rights, Identity, and Education* (pp. 498 - 514). Prague, CZ: Charles University and Children’s Identity and Citizenship European Association. ISBN: 978-80-7603-104-3.

## Introduction

Education is widely perceived as a mechanism of social integration. Its most commonly accepted role is that of providing students with varyingly general knowledge sets, deemed sufficient to support their functional academic and social requirements. In practice, however, both outside and through the process of providing students with an informational framework, education acts to instill the student body with a common set of beliefs, values, and norms, either explicitly or implicitly. These norms, beliefs and values are, to an extent, contextually defined by the society in which each educational system exists. Thus, education ostensibly acts to provide students with the necessary knowledge and skills to successfully navigate their respective social landscapes. Because of the contextual nature of course syllabi, education is, reasonably, expected to differentially cater to a given society's endogenous and externally introduced subgroups. In other words, students born and raised to a given society's norms, values and beliefs should have the advantage in an educational system of which those characteristics are an intrinsic part. That the premise of education differentially catering to various ethnic (and other) minority groups within society is generally accepted is indicated by the mere existence of multilingual, multicultural education as an area of study.

Education as a mechanism of social inclusion and one that functions differently for individuals from different ethnic backgrounds are concepts broadly, implicitly and often concurrently accepted. They are also contradictory, as expressions of acceptance and discrimination respectively. Despite being so often implicitly accepted, however, there is surprisingly little empirical research into the manner in which this differential treatment of ethnic minority groups is expressed within the educational achievement process.

If education is truly a mechanism of social integration, then it should benefit individuals or groups from sociocultural backgrounds other than the societal norm more so than their indigenous counterparts. If it does, in fact, cater to these individuals and groups differentially compared to their indigenous counterparts, then the extent to which education functions as a mechanism of social integration, if in fact it does so at all, must come into question.

## Ethnicity

To examine the validity of these claims we must first provide a functional definition of ethnicity and, by extension, ethnic "otherness". The Oxford Living Dictionaries defines ethnicity as "[t]he fact or state of belonging to a social group that has a common national or cultural tradition" (Oxford University Press, 2017). Using this definition, it is not sufficient to employ an individual's (own) nationality to measure their ethnicity. To the lay mind, however, the two terms may often seem interchangeable. This is further exacerbated by the fact that nationality,

“the status of belonging to a particular nation” (Oxford University Press, 2017) can be a fluid measure, since it is possible for individuals to change their national affiliation, by attaining naturalized citizenship.

It may be argued, however, that there is an easier solution to the problem of individual ethnicity: ask respondents directly. The UK’s Office for National Statistics recognizes many of the difficulties with this approach, primarily in “the subjective, multi-faceted and changing nature of ethnic identification” (Office for National Statistics, 2003 p.7). In response to this, they propose the use of two separate questions: one regarding national identity and one providing a predetermined set of “ethnic” categories. This, too, is less than ideal, as the exact questions regarding nationality and the “ethnic” categories provided vary by country the country they are asked in, while presenting an arguably inconsistent mix of racial and nationalistic characteristics (ibid, pp.31-49). Yinger (1981, p.250), gives a slightly broader and more comprehensive definition of an ethnic group, as “a segment of a larger society whose members are thought, by themselves or others, to have a common origin and to share important segments of a common culture, and who, in addition, participate in shared activities in which the common origin and culture are significant ingredients”. These groups, he argues, are characterized by some combination of common linguistic, religious, racial, and national backgrounds – with the last bearing connotations of common cultural heritage. By this definition, we could argue that ethnicity should ideally be measured by commonalities in personal and external-observers’ perceptions of each of these characteristics. In short, to talk about ethnicity, we would ideally have purpose specific social-network data inclusive of social and social-psychological variables for each individual.

## **Ethnicity and Educational Achievement**

As with many other social and social-psychological variables, there is a well-established tradition examining the differential educational achievement of various ethnic and racial minorities, with varying results. Ethnicity has been found to affect educational achievement both directly (Azzolini, Schnell & Palmer, 2012; Clifton, Williams & Clancey, 1991; Sewell & Shah, 1977) and indirectly (Portes, 2000; Van Laar & Sidanius, 2001). Examining the case of Greece, specifically, Kontogiannopoulou-Polydorides et al. (2000, in Giannouridis & Bagley, 2006) found a significant correlation between ethnic minority/immigrant status and educational achievement.

It may be, however, that ethnic minority status may simply be masking the role of other characteristics common to these population groups. Ethnic minorities, especially in the case of first-generation immigrants, may share lower average parental education, income or occupational status. These students may further be grouped into schools of lower average achievement, especially in cases where school attendance is dictated by proximity to schools, as is, for instance, the case

in Greece. Controlling for family socioeconomic status (FSES), school composition (SCHCOMP), and previous achievement (PACH), Agidrag, Van Houtte, and Van Avermaet (2012) found that ethnicity had no effect on educational achievement. Interestingly, Driessen (2002, in Agidrag, Van Houtte, & Van Avermaet, 2012) found classroom ethnic composition mediated the effect of FSES on student achievement.

There is also extensive evidence that race affects educational achievement (Bowles & Gintis, 2002; Condrón, 2009; Downey, 1995; Mickelson, 1990; Persell, Catsambis & Cookson Jr., 1992; Smith, 1984), an effect that has been found to vary by the level of parental education (Smith, 1984). It is understood that race and ethnicity are not synonymous. Using the definitions provided earlier, however, race may be viewed as an aspect of ethnicity, rather than a disparate concept. In fact, many of the arguments in favor of using race as a determinant of educational achievement seem to be predicated on subpopulation differences from majority populations, rather than on any specific characteristic inherent to the concept of race or, by extension, ethnicity.

Past studies of educational achievement in Greece (Katsillis, 1987; Katsillis & Rubinson, 1990) necessarily excluded ethnicity as a determinant, due to the homogeneity of the Greek population. High levels of immigration after 1990 fundamentally altered the makeup of the country's population, allowing, if not necessitating an examination of ethnicity's role in the educational achievement process. Greece offers a prime opportunity to examine whether there exist differences attributable to ethnicity, beyond those addressed by the balance of variables included in comprehensive models of educational achievement.

### **Ethnic “Otherness”**

Most of the relevant research seems to treat ethnic, racial, and other minorities as little more than population sub-groups that do not conform to their societies' norms. This approach presents another means of measuring ethnicity: if we accept the relative ethnic or socio-cultural homogeneity of a nation's majority population, we gain the ability to refer to sub-populations as ethnically “other”. Depending on the level of information available on each such group, they could be treated separately or together. Addressing each sub-population separately takes into account the various characteristics, which differentiate them both from the majority population and from each other, offering a more fine-grained understanding of the influence of each differentiating characteristic. Dealing with all of the ethnically “other” sub-populations jointly treats them as a group (potentially) significantly differentiated from the majority population, regardless of internal heterogeneity. The joint approach allows us to examine the extent to which a given society's educational system caters to all of its students or, alternatively, only to the needs of its (usually historically) majority group.

## Operationalizing Ethnic “Otherness”

Lacking the extensive amount of data necessary to comprehensively address the issue of individual ethnicity, we have opted to employ a proxy measure of ethnic “otherness”. This does not mean we can eschew the definitions presented above. Ethnic identity must still be marked by a common set of socio-cultural beliefs and experiences. By extension, ethnic “otherness” must entail some deviation from these normative beliefs or experiences.

We argue that being born in a country other than the one an individual resides in is usually indicative of the influence of socio-cultural norms outside those of their host country. It may be argued that these individuals may simply have been born in other countries and, thus, did not spend enough (or potentially any) time in them to be significantly affected by their socio-cultural norms and belief systems. It seems reasonable, however, to assume that individuals born in other countries are likely to spend at least some span of time in them. And even if this is not the case, it is likely their parents spent time there, since they decided to have children there.<sup>2</sup> Thus, even if students born in other countries were not significantly exposed to the norms of their country of birth directly, they were still the recipients of indirect influence through the experiences of their parents. Likewise, even if students were born in a given country, if either of their parents were born abroad, by the same logic, these parents would bear the mark of socio-cultural influences and beliefs deviating from the societal norm. These influences would in turn inform parent-child discourse and social realities. It is important to remember that ethnicity also refers to a commonality of descent and heritage, a common and distinctive culture inherited across generations (Zenner, 1996), and an identification with and understood acceptance into a group or groups which share this heritage and culture (Collier & Thomas, 1988). As such, students’ ethnic identity may be informed by familial influences even if the students themselves were born in Greece.

Thus, examining the case of Greece, we elected to operationalize ethnic otherness based on students’ responses to three questions:

Were you born in Greece?

Was your mother born in Greece?

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<sup>2</sup> It is also theoretically possible that neither students nor their parents spent any significant amount of time in the country of their children’s birth – that their birth in this country was, ostensibly, a fluke. Given the importance usually placed on childbirth and the fact that it is not, generally speaking, an unexpected occurrence, this seems highly unlikely. We would argue, however, that parents who left the birth of their child to that level of chance represent a significant deviation from most countries’ socio-cultural norms (and certainly those of Greece).

Was your father born in Greece?

If the student, their mother, and their father were all born in Greece, they were classified as ethnically Greek. If any of them was born outside of Greece, then the student was classified as being ethnically “other”. It may be argued that this operationalization of ethnicity disregards many of the concept’s finer nuances. However, if educational systems do, in fact, function fundamentally differently for students of different ethnicities, as the relevant literature seems to assume, almost any measure should suffice.

### Modeling Educational Achievement: Ethnicity and the other Variables

To examine the veracity of these claims, we must incorporate this measure of ethnicity into a model of educational achievement. Since we are interested in not only differences in power balances between factors affecting educational achievement (i.e. variable effect sizes) but also the actual mechanisms through which such effects are realized, and how these may vary by student ethnicity, the model we employ must also incorporate a structural component. Finally, to ensure, insofar as possible, that we are actually measuring the effect of ethnicity, the model must be comprehensive, i.e. it must contain the major variables and processes known to affect educational achievement.

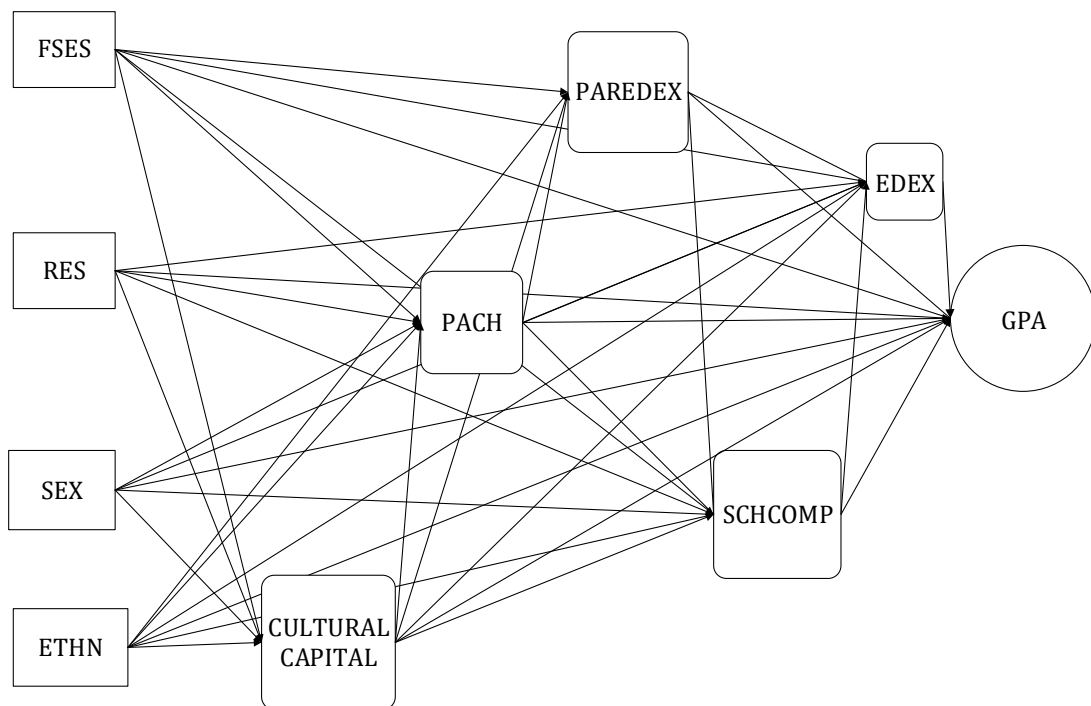


Figure 1. The Working Model



The variables included in the comprehensive structural model of educational achievement (see Figure 1) are broken up into three categories: *exogenous*, *intervening*, and *dependent*. Exogenous variables represent pre-existing characteristics, i.e. gender (SEX), ethnicity (ETHN), area of residence (RES) and family socioeconomic status (FSES). Intervening variables represent those variables and factors through which background inequalities are translated into differential levels of the *dependent* variable. These are cultural capital (CULCAP), previous achievement (PACH), significant other's influence represented here by its most important component measure (Katsillis & Rubinson, 1990), parental educational expectations (PAREDEX), student educational expectations (EDEX) and school socioeconomic composition (SCHCOMP). The dependent variable for our model was students' GPA in the second to last year of secondary education (GPA). The operationalization of each variable is presented in Table 1. There are, potentially, other variables that could be included in a model of educational achievement. These are, however, arguably the most important (for an in-depth discussion on the subject see Katsillis, 2015) and those for which measures were available in the dataset used in this study.

Table 1. Variable Operationalization

<b>Variable</b>	<b>Variable Label</b>	<b>Measurement</b>
FSES	Family Socioeconomic Status	Principal Component Score (Parental Education / Occupation / Income)
RES	Student Place of Residence	0 = Rural; 1 = Urban
SEX	Student Gender	0 = Male; 1 = Female
ETHN	Ethnicity	0=Not Greek; 1 = Greek
CULCAP	Student Cultural Capital	Factor Score (Frequency of Theater, Concert, Museum & Cinema Visits)
PACH	Previous Achievement	Sixth Grade GPA (10 point scale – 5=Pass)
PAREDEX	Parental Educational Expectations	1: Graduate from High School – 5: Graduate Studies
SCHCOMP	School Composition	School Average 10 <sup>th</sup> Grade GPA (20 point scale – 10=Pass)
EDEX	Student Educational Expectations	1: Graduate from High School – 5 Graduate Studies
GPA	Student Educational Achievement	11 <sup>th</sup> Grade GPA (20 point scale – 10=Pass)

In this fully specified model, each preceding variable (from left to right) is hypothesized to affect all the variables following it. In other words, ethnicity is hypothesized to affect CULCAP, PACH, PAREDEX, SCHCOMP, EDEX and GPA

directly, but also, e.g. to affect GPA indirectly, through PACH. Not all of these hypotheses are, strictly speaking, expected to bear fruit. The examination of the fully specified model, however, as opposed to one examining only those effects we would expect to be significant, is more conservative and, therefore, lends greater weight to what paths we find to be statistically and substantively significant.

## **Describing the Data**

We examined data from 1068 Greek students in the second to last year of upper secondary education (the 2<sup>nd</sup> year of Lyceum), during the 2003-2004 academic year. The data was collected via a proportionally geographically stratified, single stage clustered sampling procedure, using self-completion mail questionnaires. A bit more than half the sample was female (54.7%, N=583), while just 45.3% was male. 95% of students surveyed were between the ages of 16 and 17 years old. Approximately one in four (23.8%, N=254) lived in “rural” areas (i.e. geographically isolated and agrarian locales or villages), while the rest lived in “urban” locales, made up of city centers and suburbs. Students’ family socioeconomic status was largely normally distributed, with slightly more families reporting below average FSES. Extreme cases were rare in either direction, though more common on the higher end of the spectrum.

Foreign born students made up just 7.8% (N=81) of the sample. This was slightly lower than the overall national average at the time (CITATION? WTF). However, taking into account students’ familial sociocultural influences, ethnically “other” students made up 12.6% (N=136) of the sample.

Nearly two thirds of the sample presented values of cultural capital (CULCAP) below the sample mean, while the remaining third was spread out over two standard deviations above it. In lay terms, most of the sample did not regularly participate in the most of the “elite cultural activities” (theatre, concert, museum, and cinema attendance) posited to indicate the existence of cultural capital. Furthermore, regular student participation decreased as both the number of activities and frequency of participation increased.

The majority of Greek students receive high marks in primary education, a reality which is likely intensified in our sample, which excludes students who may have dropped out and were thus more likely to have lower grades. Almost 80% of students received a 10 (out of 10), 16.5% received a 9, and only 3.5% reported lower marks. While this concentration of marks in the upper third of the scale likely limits the explanatory power of the measure, PACH nonetheless continues to play a significant (albeit likely underestimated) role in the educational achievement process, especially where ethnically “other” students are concerned. Later measures of academic achievement, including 10<sup>th</sup> Grade average (i.e. SCHCOMP) and 11<sup>th</sup> Grade GPAs were more normally distributed, although GPA was somewhat negatively skewed. This instance of more students reporting higher



than average GPAs in the 11<sup>th</sup> grade is more or less expected, following the arguments presented above in connection with primary school grades.

Parental and student educational expectations were measured on a common scale, from an expectation that students would “Graduate from High School”, to their completing “Graduate Studies”. In the top three categories (“Higher Education”, “University Degree”, and “Graduate Studies”) students’ and parents’ expectations coincide at a level of 70%, 70% and 75% respectively. It may be argued that these responses, both of which were reported by students, are their *perception* of their parents’ expectations, rather than the expectations themselves. To this we provide two rebuttals: on the one hand, students can only act on and be influenced by, whatever understanding they possess of their parents’ expectations, i.e. their perceptions thereof, regardless of whether and to what degree of success these have been communicated to them, implicitly or explicitly. On the other hand, this result is not particularly surprising to anyone conversant in the realities of Greek society, where parents are well known to play a very active role in their children’s education.

## Model Estimation

It is in the context described above that we endeavor to assess impact of ethnic otherness, both directly and through other characteristics, on educational achievement within the Greek paradigm. This is estimated via a series of structural equations, corresponding to the Working Model (Figure 1), by employing a series of Ordinary Least Squares (OLS) Regression analyses (Asher, 1979). These structural (and corresponding regression) equations can be presented as follows:

$$CULCAP=f(FSES, RES, SEX, ETHN)$$

$$PACH=f(FSES, RES, SEX, ETHN, CULCAP)$$

$$PAREDEX=f(FSES, RES, SEX, ETHN, CULCAP, PACH)$$

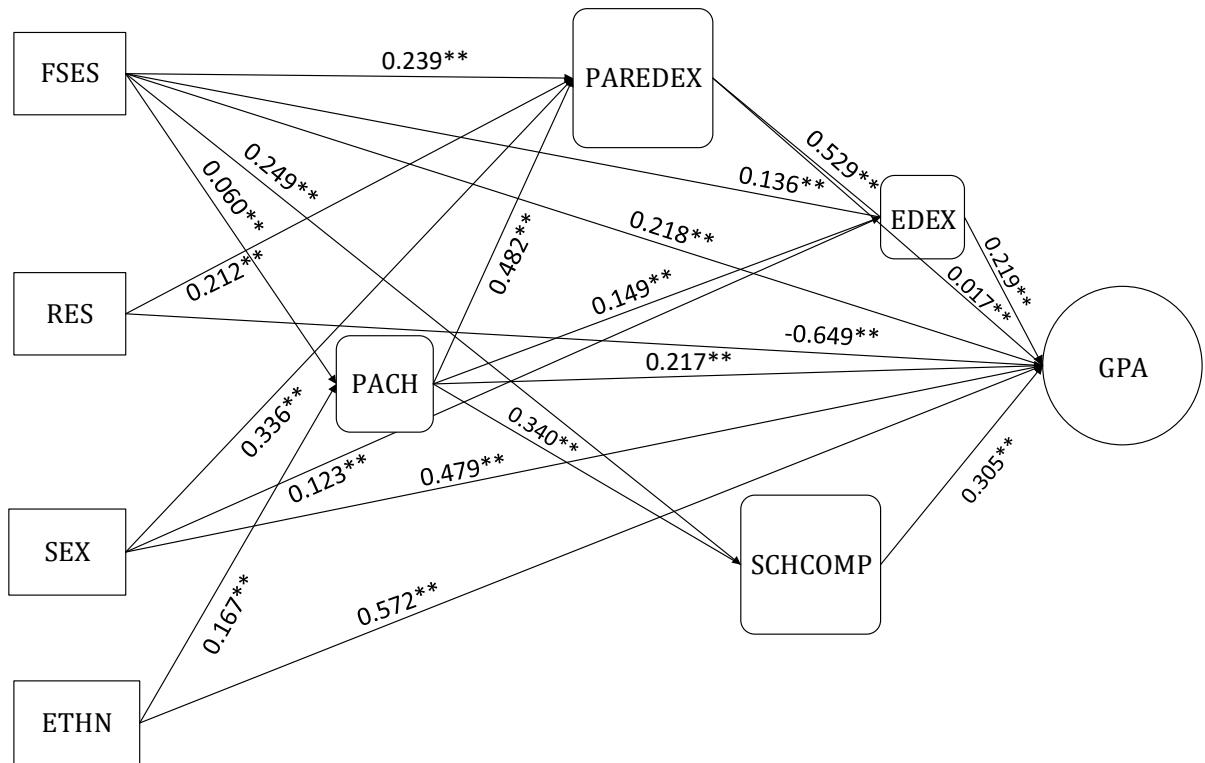
$$SCHCOMP=f(FSES, RES, SEX, ETHN, CULCAP, PACH, PAREDEX)$$

$$EDEX= f(FSES, RES, SEX, ETHN, CULCAP, PACH, PAREDEX, SCHCOMP)$$

$$GPA11=f(FSES, RES, SEX, ETHN, CULCAP, PACH, PAREDEX, SCHCOMP, EDEX)$$

These are supplemented by a series of reduced form equations, which use educational achievement as their dependent variable and include the exogenous variables with the progressive addition of each intervening variable as it appears in the model. These equations allow the estimation of each variable’s direct effect on educational achievement (Alwin & Hauser, 1975). The Revised Model, including

only the statistically significant paths and variables (i.e. those which had a statistically significant effect on achievement), resulting from the proposed analyses are presented for the working model below (see Figure 2). Effect sizes are included on their respective paths.



\*\*Statistically significant at the 0.01 level.

Figure 2. Revised Model (Statistically Significant Paths and Variables)

Structural Equation Models (SEM) should ideally be assessed on two levels: structurally and for overall goodness of fit. Examining overall fit alone may mask poor structural fit, while structural fit is insufficient to ensure good fit. Thus, a test of overall goodness of fit, i.e. how well our model fits our data, was also conducted using maximum likelihood estimation, in addition to the series of OLS regressions estimating the structural equations.

Goodness of fit cannot be estimated for the more conservative, fully specified, proposed model (Figure 1), used to estimate effects and pathway significance. By definition, all fully specified models are “just identified”. Lacking this capacity, the percentage of variance of the dependent variable explained by the final structural equation is often substituted. In this case, 45.5% of the variance of GPA was explained by the independent variables in the model. Thus, by this measure, the proposed model is good.

The Revised Model (Figure 2), resulting from the previously discussed estimation can, however, be tested for goodness of fit. Unfortunately, there does not appear

to be any clear consensus in the literature as to what constitutes a single “best” measure or index of goodness of fit, when evaluating a structural equation model. The most commonly employed measures employed include a Chi-squared goodness-of-fit (or discrepancy) test, the Root Mean Square Error of Approximation (RMSEA), Standardized Root Mean Square (SRMR) and Comparative Fit Index (CFI). Hu and Bentler (1999) propose that the combination of SRMR and either of RMSEA or CFI comprise optimal model selection criteria. However, as each of the aforementioned criteria is characterized by one or more significant shortcomings (see Katsillis, 2015: Appendix 1, for a discussion of their respective merits), it seems more prudent to employ all four, in an attempt to offset as many as possible. An estimation of the revised model resulted in good model fit ( $\chi^2_{10df} = 16.124, p = 0.096, RMSEA = 0.026 < 0.050, P(RMSEA < 0.050) = 0.962, CFI = 0.995 > 0.95$  and  $SRMR = 0.024 < 0.080$ ).

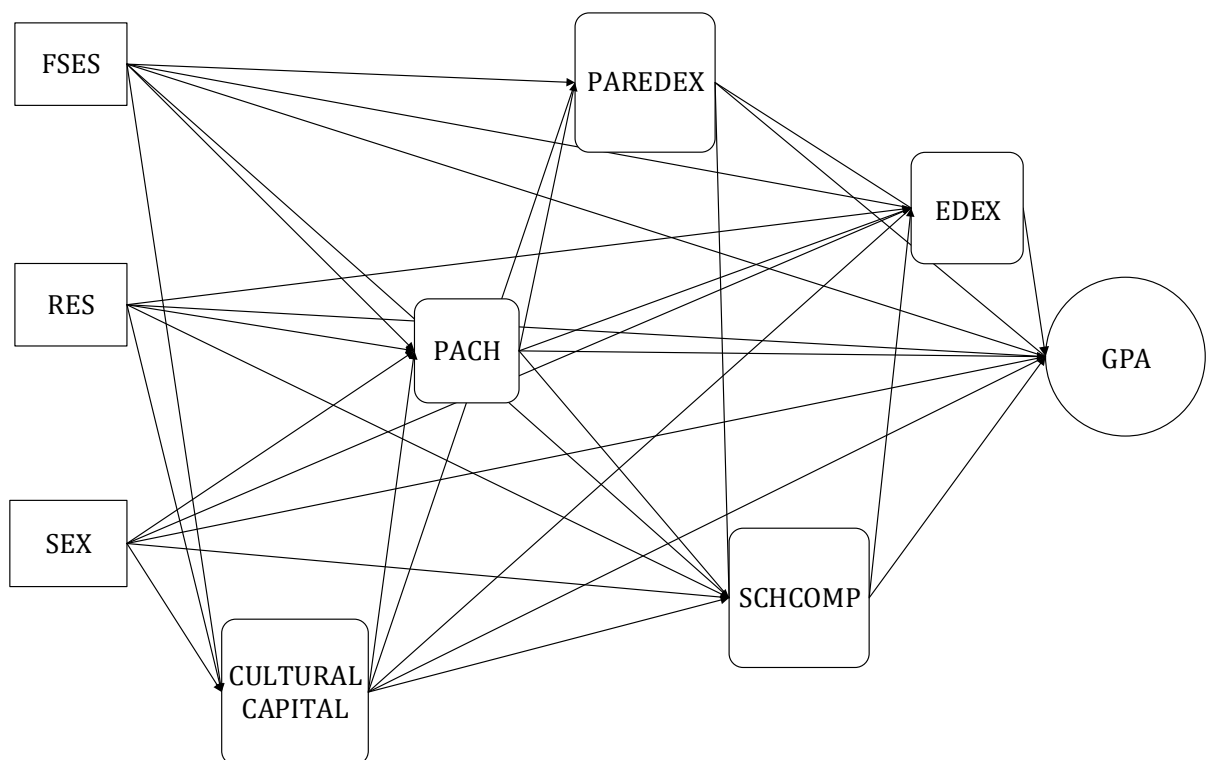
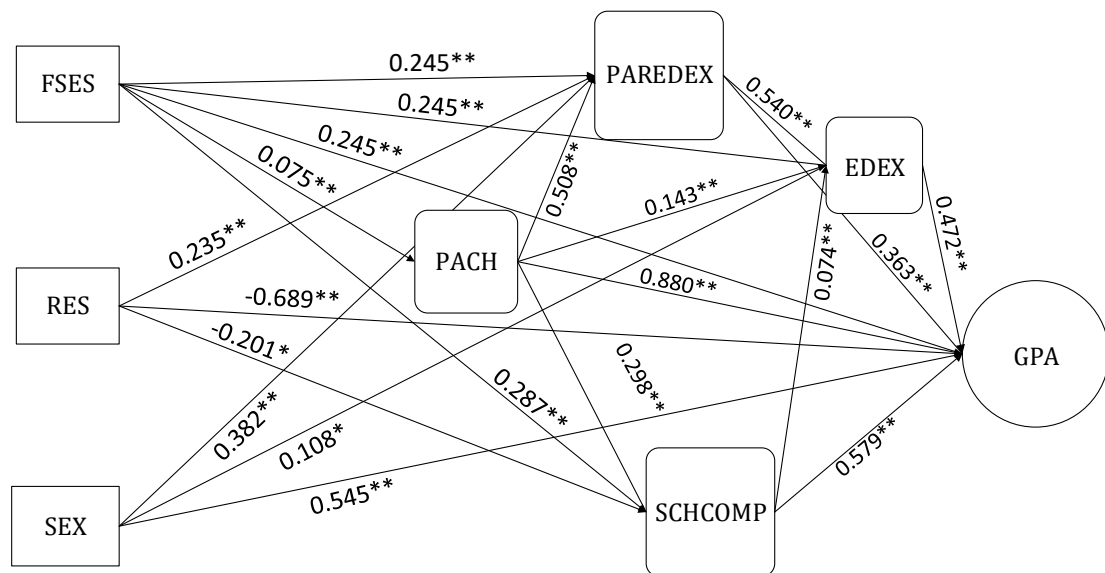


Figure 3. Working Model for Estimation by Ethnicity

A cursory comparative examination of the initially proposed and revised models provides multiple points of interest. Before endeavoring extensive interpretations of these findings, it seems prudent to further examine the role of ethnicity. Ethnicity’s effects on educational achievement were perplexing on several levels. Its direct effects on achievement surpassed even that of gender, while concurrently lacking expected indirect effects through both parental and student expectations. In an attempt to reconcile these inconsistencies, several

interaction effects were examined. And, while there were no significant two-way interactions between ethnicity and the other exogenous variables, there were statistically significant concurrent interactions with all of them, suggesting that the effect of the rest of the exogenous variables varied by student ethnicity. This, coupled with the extensive discourse examining minorities' (ethnic or otherwise) educational achievement separately from that of the majority population, led to the separate examination of educational achievement by student ethnicity. In order to do so, the initial fully specified model was re-estimated twice: once for ethnically Greek and once for ethnically Other students (see Figure 3), with results varying significantly between the two.

Estimated for ethnically Greek students, the model (see Figure 4) explained just over 47% of GPA's variance. The model bears a striking similarity to that initially calculated for the sample overall, both in terms of structure and, to an extent, effect sizes. There were, of course, deviations, including SCHCOMP depending on RES, while EDEX was not independent of SEX, and dependent on SCHCOMP. Total, direct, and indirect effects also varied slightly. Model fit, evaluated for this new model, once again proved good ( $\chi^2_{6df} = 10.793, p = 0.095, RMSEA = 0.032 < 0.050, P(RMSEA < 0.050) = 0.816, CFI = 0.996 > 0.95$  and  $SRMR = 0.021 < 0.080$ ).



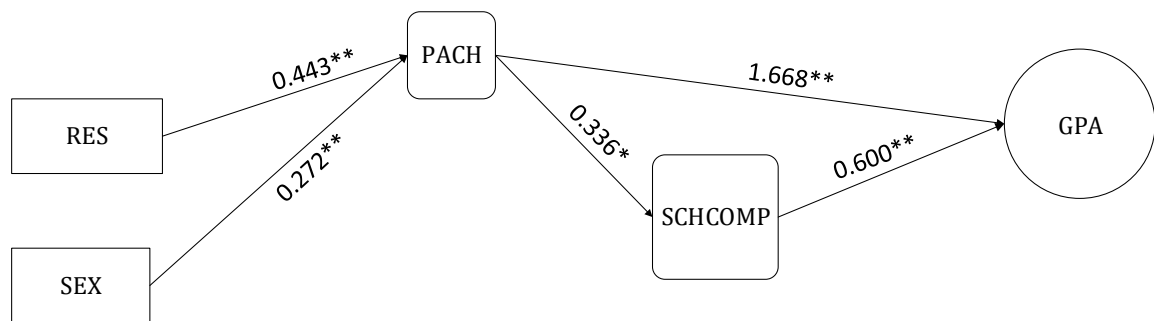
\*Statistically significant at the 0.05 level.  
 \*\*Statistically significant at the 0.01 level.

Figure 4. Proposed Model (Statistically Significant Paths and Variables) for Students with “Greek” Ethnicity (ETHN=1)

By and large, these results are not unexpected. Ethnically Greek students make up nearly nine tenths of our sample (87%), so we would reasonably expect any

model examined for them to largely conform to that of the entire sample. The most interesting results by far resulted from an estimation of the working model for ethnically Other students (see Figure 5). These indicated that the educational mechanism worked entirely differently for students of “Greek” and “Other” ethnicities. Apart from obvious structural differences, the models differed noticeably in total, direct, and indirect effects of their included variables (where comparable).

Estimation of the proposed, fully specified model for ethnically “Other” students resulted in the explanation of just 37% of GPA’s variance. The model presented in Figure 5, which is the result of this estimation is somewhat less straightforward in the assessment of its model fit. It’s RMSEA was larger than ideal ( $RMSEA = 0.082 < 0.050, P(RMSEA < 0.050) = 0.232$ ), however the other three indices of model fit were within acceptable ranges, accommodating the Hu & Bentler’s (1999) proposed guidelines ( $\chi^2_{4df} = 7.311, p = 0.1203, CFI = 0.945 > 0.90$  and  $SRMR = 0.046 < 0.080$ ), seemingly indicating good model fit.



\*Statistically significant at the 0.05 level. - \*\*Statistically significant at the 0.01 level.

Figure 5. Proposed Model (Statistically Significant Paths and Variables) for Students with “Other” Ethnicity (ETHN=0)

## Findings

Although it is clear that there are great discrepancies between the two broad ethnic groupings, it is worth examining them more closely. For ethnically “Greek” students, educationally reality seems to largely conform to what classical theory would have us expect. Students’ family backgrounds, gender, and place of residence affected their scholastic achievement, both directly and indirectly. The effects of all three of these characteristics were mediated by both parental and student educational expectations. Students’ gender somewhat incongruously directly affected their achievement, while area of residence only affected it through area of residence and expectations. The only truly confounding results for these students were the direct effects of FSES, RES and SEX, which included, for example, a negative effect (over two thirds of a grade point, or 0.689) of living in an urban locale on students 11<sup>th</sup> grade GPA. These are likely the result of factors

that could not be evaluated in this study, such as differential student effort or participation in different levels of shadow education. For many of these students, a good education remains one of the only avenues for real upward social mobility.

Aside from that, female students do better than male by almost an entire grade point (0.868), *ceteris paribus*. Students from more affluent families do better in early education (PACH). This translates into differential parental expectations, which are passed on to students and then into differential achievement. It also informs the school quality students attend as, presumably, parents with early-high-achieving children attempt to get them into better schools, which also positively affect their grades. In fact, family socioeconomic status has the strongest effect of any exogenous variable examined (Beta=0.349) –nearly double that of student gender (Beta=0.207) and more than double that of area of residence (Beta=0.148). More than that, it has strong effects on all of the endogenous variables in the model, with nearly two thirds of its total effects on educational achievement being indirectly filtered through each intervening variable in the mode.

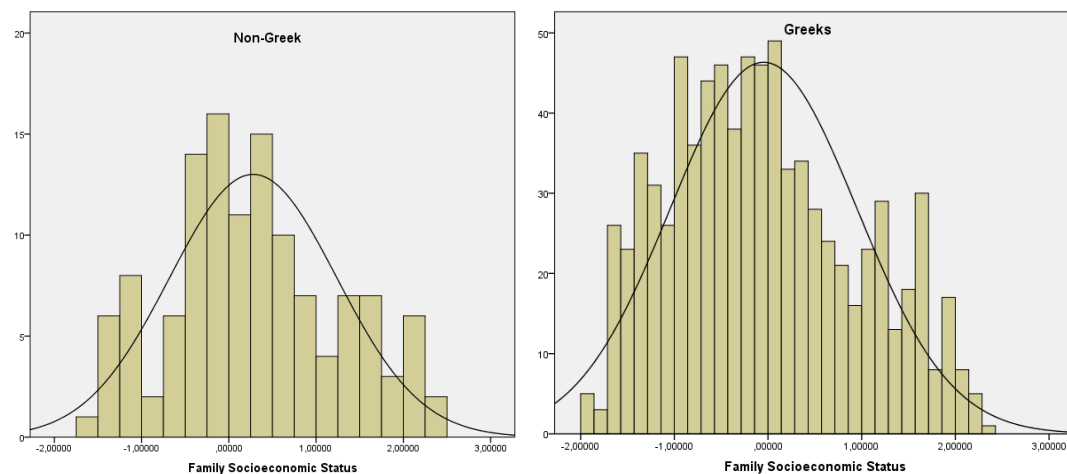


Figure 6. The distribution of FSES by Ethnicity

This is a stark contrast to the reality portrayed by the ethnically “other” group for whom, for example, family socioeconomic status had no statistically significant effect on achievement. One possible explanation for this could be found in the limited variation in ethnically “other” students’ family SES, assuming that immigrant status generally corresponded lower SES. This was not, however, the case. In fact, considering the difference in sample sizes, the distribution of FSES looked very similar for both groups (see Figure 6). It may, however, be the case that ethnically “other” students are reporting FSES which reflects their (or their family’s) socioeconomic status in their country of origin, rather than in Greece.



Immigrant parents with higher degrees may be forced to take on comparatively menial or even completely unrelated occupations upon arrival in Greece. And, students reporting this education and original (rather than current) occupation would result in an FSES score that incorrectly represented their position in Greek society. However, it is impossible to know which SES would, in fact be more substantively significant on conjecture alone. It may be that early-life/country-of-origin SES could be as important as end-country SES in children's education but also as a proxy for the often harsh realities accompanying emigration. While there is no way to address this concern with this particular data, these possibilities necessitate greater caution when measuring parental status for first and second-generation immigrant children.

The measurement and effect of family socioeconomic status are far from the only problem presented by the final model. It is highly problematic from almost every perspective. Place of Residence and Gender affect educational achievement, but only through earlier academic merit. There is no mediation of parental, or even student expectations. In fact, very little of the commonly accepted theory regarding educational achievement processes seems to function for these ethnically "other" students.

## **Discussion, Limitations and Conclusions**

It may simply be the case that, for these, ethnically "other" students, inherent ability and individual predisposition are what really matter. Maybe first and second-generation immigrant families simply employ a different set of priorities. Students who do well, in urban locales, may be encouraged to pursue a more extensive education, starting with support for better performance in school. Alternatively, in more rural or remote locales, poorly performing female students may be indirectly steered into more domestic lifestyles, placing a lower value in high performance in extended education which would not be perceived as directly beneficial to them. More careful consideration may recognize that attempting to apply mainstream educational processes and variables to groups that function, on several levels, as societal outliers, may be an intrinsically flawed approach, in serious need of revision or, at least, reconsideration.

In any case, more focused research is needed to better understand the phenomenon. Contemporary data may, in fact, show that this phenomenon has been largely phased out through ongoing educational reform. A more granular measure of ethnic otherness could provide better insight into specific shortcomings of the educational system in regards to fundamental characteristics or even specific socio-cultural sub-groups. Finally, since identifying all of the variously ethnically Other students in Greece could prove impossible, even using the simplest of definitions, a larger sample, corresponding to a larger ethnically Other student subpopulation could prove highly beneficial, lending itself to a finer examination thereof.

It is important to note that the model of educational achievement in Greece presented in this study appears, on the face of things, to work quite well when assessing the Greek student populace overall. It largely adheres to established theory, offering little in the way of unexpected effects barring, possibly, the introduction of ethnicity, which could be explained away by the shift in ethnic homogeneity in Greek society. This seeming normalcy is, however, highly problematic. It is established, expected, and thus easily accepted. Its acceptance overlooks major underlying problems with the educational system of a country ostensibly still in the process of coming to grips with the realities of a multicultural society and, by extension, student body. It is, in light of these findings, preliminary though they may be, unacceptable to understate the ongoing, and potentially exceptional, role of ethnicity in the educational process in future educational research, both generally and in Greece specifically.

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