

Roma and non-Roma Views About Their Children's Learning Difficulties

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Abstract: *Roma have been described as the most hated minority in Europe. Particularly in Southeastern Europe (SEE), this bias is reflected in how Roma children are treated and segregated in schools. Anecdotal evidence shows that Roma parents may give permission for their children to be included in segregated programs in order to benefit from payments, food and other compensations. This pattern may explain the overrepresentation of Roma children in segregated settings for children with disabilities in the region. In this analysis of parent survey data from ten SEE countries, with oversampling of the Roma minority, we found that Roma parents were no more likely to report that their children had learning difficulties than non-Roma parents. Instead, books in the home was the strongest single predictor of whether parents in either group reported that their children had learning problems.*

Key Words: education, learning difficulties, Roma, Southeastern Europe

“(T)he most hated of all ethnic groups” in Europe is the Roma, or gypsies (Kruczek-Steiger & Simmons, 2001, p. 281). This hatred was expressed more freely in Southeastern Europe (SEE) after the fall of Communism (Andruszkiewicz, 2006; Guy, 2001; Revenga, Ringold, & Tracy, 2002). It extends to the experiences of Roma children in schools, which include segregation from non-Roma students, abuse from teachers and other students and the parents of those other students, overrepresentation in programs for children with disabilities, poorer resources and instruction, and challenges to enrollment (Andruszkiewicz, 2006; EU Monitoring and Advocacy Program of the Open Society Institute, 2005). While these problems have been documented across Europe, little has been reported about the perspectives of parents of Roma school children. In this article, we report on analyses of parent survey data across ten SEE countries (Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Kosovo, Macedonia, Moldova, Montenegro, Romania, and Serbia). We identify predictors for whether parents in these countries feel that their children have learning difficulties at school. We also report on differences between these predictors for Roma versus non-Roma parents, and how these predictors interact with their Roma and non-Roma status.

“Roma are often regarded in (Central and Eastern European) countries as pariahs or even a sub-human species.” (Guy, 2001, p. 4). van der Stoel confirmed “the persistence of racially-motivated hatred and violence directed against the Roma” in SEE (2000, p. 1). “In Europe, the Roma probably because they are a people without an ethnic territory or a national state of their

own, frequently qualify for being the most hated of all ethnic groups” (Kruczek-Steiger & Simmons, 2001, p. 281).

“Romani children encounter widespread discrimination and rejection in public schools. In countries with substantial Romani communities, it is commonplace for Romani children to attend schools that are largely comprised of Roma or to be relegated to Roma classes within mixed schools. In its most pernicious form, segregation is achieved by routing Romani children into ‘special schools’ - schools for the mentally disabled - or into classes for mentally disabled children within regular schools . . . It is thus small wonder that many Romani children experience the classroom as an alien world - or, more aptly, a world in which they are the perennial outsiders.” (van der Stoel, 2000, p. 65).

Across Europe up to 80% of Roma children are attending separate schools for children with disabilities, or separate classes for children with disabilities (EU Monitoring and Advocacy Program of the Open Society Institute, 2005; Liegeois, 2007). Disproportionate representation of Roma in these special schools and classes has been reported in Croatia, where the European Court of Human Rights found Croatia guilty of violating the European Convention on Human Rights because of this segregation (European Roma Rights Centre, 2010b), as well as other SEE countries, including Bulgaria, Kosovo, Macedonia, Montenegro, Romania, and Serbia (European Roma Rights Centre, 2006, 2007, 2010b, 2010c, 2011, 2012; O'Reilly et al., 2013; Saunders, 2010).

Low levels of academic achievement, and high dropout rates, are characteristic of Roma children throughout the region (Anderson, Lester, & Rogers, 2008; Liegeois, 2007). For example, in Albania, 52% of Roma have no education, 18% attended just a few years of elementary school and only 14% managed to complete elementary school, while only 3% of the Romani respondents had graduated secondary school (European Roma Rights Centre, 2010a). Less than 1% of Roma in Romania and Bulgaria had any higher education, while about 9% had completed high school in Bulgaria, and 3% had completed high school in Romania (Revenga et al., 2002). In Croatia about 25 percent of all Roma children finish primary school, and 10 percent enroll in secondary education, with only half of those finishing (Save the Children, 2001). Similar outcomes have been reported more recently for Kosovo (European Roma Rights Centre, 2012). In Macedonia, although secondary education is mandatory, only 27% of eligible Roma children have attended since 2009-2010 (Asanovski et al., 2013). In Montenegro only 25.2% of Romani children enroll in primary education, as compared with 96.9% in the general population, and only eight of over 20,000 university students were identified as Roma (European Roma Rights Centre, 2010c). Similar outcomes have been reported on Bosnia-Herzegovina, and Serbia, as well (European Roma Rights Centre, 2004; Organization for Security and Co-operation in Europe, 2014).

One explanation for the low levels of academic achievement of Roma children is poverty. Throughout Central and Eastern Europe (CEE), Roma have limited access to economic opportunities (EU Monitoring and Advocacy Program of the Open Society Institute, 2005). Poverty is related to poorer access to health care for children, and pre-natal care for expectant mothers, as well as poorer nutrition and living conditions, and higher rates of drug abuse. All of these correlates to poverty may contribute to higher rates of cognitive and behavioral disabilities. Poverty has been explicitly linked to poor academic achievement for Roma children throughout the region (Baucal, 2006; European Roma Rights Centre, 2010c, 2012; Lapat & Eret, 2013; Manevski, 2007; Manic et al., 2013).

Another proposed explanation for the low academic achievement of Roma children relies on cultural differences (Saunders, 2010; Save the Children, 2001; van der Stoel, 2000). This argument suggests that Roma parents are reluctant to send their children to school in part because formal education is not valued by Roma, and in part because of concerns that schools do not value Roma culture and instead enculturate Roma children in the dominant culture of the country or region. The latter concern is supported by widespread reports that schools across SEE countries do not include Roma culture and history in the curriculum (Andruszkiewicz, 2006; Liegeois, 2007; Marushiakova & Popov, 2001; Saunders, 2010; Save the Children, 2001), and do not have Roma teachers and aides in the schools (Acton & Klimova, 2001; European Roma Rights Centre, 2010c; Kenrick, 2001; Save the Children, 2001). However, van der Stoel (2000) found that:

One of the notable features of the contemporary era of Roma activism is the emergence of a new generation of Romani leaders who are committed on the one hand to reviving Romani culture, and on the other hand to helping their communities adapt to the challenges of a post-industrial age . . . For these Roma, public schools - historically the embodiment of State policies of forced assimilation - are now the repository of both their aspirations and apprehensions. . . . Romani parents repeatedly stressed the overriding priority they attach to improving their children's access to education and scholastic achievement. In their experience, the principal explanation for poor attendance and performance levels of Romani youth lies not in 'Roma values,' but in their children's experience of racism in public schools (pp. 69-70).

It is true that some Roma do not speak the dominant languages of the countries where they live, which means that their children are not prepared to take advantage of instruction in that dominant language (EU Monitoring and Advocacy Program of the Open Society Institute, 2005; Manevski, 2007). At the same time, instruction in Romani language is typically not available (European Roma Rights Centre, 2002, 2004; Kenrick, 2001; Save the Children, 2001).

Roma children have also been excluded from opportunities to fully participate in schools with non-Roma children. This has happened in several ways. They have been refused enrollment and told to enroll in Roma majority schools (European Roma Rights Centre, 2004; van der Stoel, 2000). They have been segregated to the backs of classrooms (European Roma Rights Centre, 2002; van der Stoel, 2000), and they have also been assigned to special classes or special schools for children with cognitive and behavioral disabilities in disproportionate numbers (European Roma Rights Centre, 2005; Eurydice, 1999/2000; Liegeois, 2007; Manic et al., 2013; O'Reilly et al., 2013).

Typically, parents are required to approve placement of their children into these programs, which raises the question of why Roma parents are approving these placements. Across the region, children in these programs are offered free meals and parents also may be offered additional incentives to enroll their children in these programs (EU Monitoring and Advocacy Program of the Open Society Institute, 2005; European Roma Rights Centre, 2002; Manic et al., 2013). The evidence for these problems is typically anecdotal or based on case studies. Nevertheless, although Roma represent a minority of less (usually far less) than 10% of the population in each of these countries, they often represent 30% or more (sometimes the majority) of students in programs for children with disabilities (Asanovski et al., 2013; Cahn et al., 1998; EU Monitoring and Advocacy Program of the Open Society Institute, 2005; Kalvoda, 1991; Manic et al., 2013; Zhelyazkova et

al., 2002).

The quality of education for students in these segregated programs is poorer than that in other schools. For example, in Romania, schools with higher proportions of Roma children have fewer qualified teachers and poorer standards of facilities, such as laboratories, computers, and sports halls (O'Reilly et al., 2013). Baucal (2006) found that about 60% of the achievement gaps between Roma and non-Roma children in Serbia in math and language arts was associated with lower expectations, modified curriculum, and less teacher support.

While Roma students are more likely to be labeled as having a learning problem, other variables have also been shown to predict academic achievement and the labeling of students as having learning problems. For example, analyses of the data from the Educational Longitudinal Study showed that socioeconomic status entirely accounted for the disproportionate representation of African Americans and Hispanics in special education programs in the United States (Shifrer, Muller, & Callahan, 2011). Further, students from low income families are more likely to have difficulty learning to read (Vernon-Feagans et al., 2012) and have poorer academic achievement in mathematics (Jordan, Kaplan, Ramineni, & Locuniak, 2009).

Income is not the only variable that is related to race or educational achievement. Home literacy has been described in terms of the number of books in the home and the amount of time that parents spend reading with their children. Low income families have fewer books in their homes and the parents of those families tend to read less to their children. Both of these factors are related to reading achievement (Aikens & Barbarin, 2008). Structural equation modeling of data from 551 children in Head Start programs in the U.S. found that socioeconomic characteristics of neighborhoods predicted home literacy, which in turn predicted early literacy for those children (Froiland, Powell, Diamond, & Son, 2013). Further evidence from dozens of countries shows that the number of books in the home is a positive predictor of academic performance (Evans, Kelley, & Sikora, 2014; Evans, Kelley, Sikora, & Treiman, 2010)

How homework is handled in the home is also related to both income and academic achievement. Data from the National Household Education Survey Program of 2012 in the U.S. indicate that parents from low income families are somewhat more likely to check on their children's homework than parents from higher income families (Noel, Stark, & Redford, 2013). However, parent involvement in homework is a positive predictor of higher academic achievement (Landis Van Voorhis, 2011).

At the same time, it is not clear that the amount of time spent on homework is a reliable predictor of academic outcomes. Analysis of data from two nationally representative samples of secondary students in the U.S. found that time spent on homework did not predict grades in math and science classes, but did predict scores on standardized tests (Maltese, Tai, & Fan, 2012). Three different approaches to analyzing data of eighth grade students from 22 countries in the Trends in International Mathematics and Science Study (TIMSS) from 2003 and 2008 found that time spent on homework was a positive predictor of mathematics achievement (Gustafsson, 2013). By contrast, a study of U.S. data from the Program for International Assessment (PISA) found that "Increased proportions of homework time spent on mathematics homework were associated with a decrease in mathematics achievement" (Kitsantas, Cheema, & Ware, 2011, p. 311).

Parent engagement is also a predictor of student achievement. Parent engagement may include volunteering at schools, communicating with school staff, and participating in school decisions. For example, data from the U.S. Department of Education show that intervention to increase parent engagement is positively related to both reading and mathematics achievement (Gonzalez & Jackson, 2013). Similarly, a randomized controlled trial of an intervention to increase

engagement of parents with disadvantaged preschool children found strong effects on language use, reading and writing skills (Sheridan, Knocke, Kupzyk, Edwards, & Marvin, 2011). This positive relationship between parent engagement and student achievement has also been found in other countries (e.g. Cheung & Pomerantz, 2011; Hands, 2013).

The literature we have reviewed here shows that Roma children face discrimination, abuse, and exclusion when they get involved with the educational systems of SEE countries. The overrepresentation of Roma children in programs for children with disabilities raises concerns about discriminatory practices that can have lifelong consequences for these children. However, the literature does not show us how the parents, including Roma parents, view the learning difficulties of their children. Nor does the literature show how being Roma may interact with other predictors of academic achievement, including wealth, literacy in the home, parent engagement with schools, and homework variables.

The Open Society Institute funded a 2009 survey of parents of school children in ten SEE countries - Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Kosovo, Macedonia, Moldova, Montenegro, Romania, and Serbia (Kovacs-Cerovic, Vizek-Vidovic, & Powell, 2010; Open Society Institute, 2010). The purpose of the survey was to understand parents' participation in school life, including how schools provide opportunities for parent participation and how parents value their own participation. The survey included items asking parents if their children had learning difficulties at school. We have analyzed the data from this survey to address the following research questions:

- Are Roma parents in SEE countries more likely to identify their children as having learning difficulties than non-Roma parents?
- Considering several predictors of student achievement, including Roma status, which are significant predictors of whether parents in SEE countries identify their children as having learning difficulties?
- How do these predictors interact with each other, including Roma status, in predicting whether parents in SEE countries identify their children as having learning difficulties?

METHODS

INSTRUMENT

Data for this article came from a face-to-face survey of parents of school children in ten SEE countries - Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Kosovo, Macedonia, Moldova, Montenegro, Romania, and Serbia. The focus of the survey was parent views about their participation schools. The content of the survey was based in part on a series of 60 focus group interviews conducted with average parents, disadvantaged parents (including Roma parents), and parent representatives of school governing bodies. After piloting the survey and making revisions based on that experience, the survey was used to gather data from a representative sample of 11125 parents of children in grades two to eight. The sample represents 320 public schools across the ten countries, and includes booster samples of Roma parents in particular. Thirty schools were sampled in each country based on a stratified random selection according to geographical region and whether the community served was urban or rural. An additional two schools were selected in each country based on the high proportion of Roma in the communities of those schools. Within each school 20 to 40 parents were randomly chosen to participate (based on the size of the school),

along with five parents' representatives (Kovacs-Cerovic et al., 2010; Open Society Institute, 2010).

The instrument was designed to capture information in four areas. First, family demographic data included wealth, level of education and aspirations, and characteristics of the child. Second, parent participation in school life included self-reports on whether parents are invited to participate, how parents feel about participation in school life, do they participate if invited, do they feel that participation is useful, are they motivated to participate, and do they feel competent to participate. Third, mediating variables included parent beliefs about school-parent partnerships, perceptions of school openness, and the work of parent representatives. Fourth, parent satisfaction included parent views about the child's well-being and progress in school, communication with schools, and the influence parents can exert on school life (Kovacs-Cerovic et al., 2010; Open Society Institute, 2010).

VARIABLES

LEARNING DIFFICULTIES. Learning difficulties status was a parent-reported item from the instrument, and was a dichotomous response (apply/does not apply). Those who indicated their child had learning difficulties were $n = 1,033$ (9.0%). This variable was treated as the outcome/dependent variable for analyses. All other variables were treated as predictor/independent variables.

ROMA. Roma status (Roma) was constructed from the item that asked the minority status of the interviewee. Those who were specified as Roma ($n = 788$, 6.8%) were considered to be so, while all other respondents were considered to not be Roma.

GENDER. Gender (Gender) of the student was included in the instrument (49.4% female).

AGE. Age was included in the instrument as child's age (Age) in completed years ($M = 10.62$, $SD = 1.78$).

WEALTH. Sixteen instrument items inquired into the presence or absence of certain housing items and living conditions (Wealth). These 16 items were entered into an exploratory factor analysis. One major factor emerged which accounted for 34.47% of the total variance. Principal component analysis revealed a similar pattern with the items' factor loadings. The items were coded as 1 (present) and 0 (absent). The reliability of these items was acceptable ($\alpha = .858$), and so the mean of these items served as the measure of Wealth for the respondent.

MOTHER'S EDUCATIONAL ATTAINMENT. Mother's educational attainment (MothersEd) was included in the instrument. It was recorded as Primary, Secondary, and Tertiary ($M = 1.96$, $SD = .63$).

BOOKS IN HOME. The number of books in the home (Books) was included in the instrument. The item had 7 response categories (1. None; 2. 1-10 books; 3. 11-50 books; 4. 51-100 books; 5. 101-250 books; 6. 251-500 books; 7. More than 500 books). This variable was treated as scalar in nature due to the increasing number of books in the home for each successive category ($M = 3.07$, $SD = 1.37$).

TIME SPENT ON HOMEWORK. Parents were also asked how much time their child spends on homework daily (HWTime). The item had 6 response categories (1. None; 2. Less than 30 minutes; 3. Between 30 minutes and 1 hour; 4. Between 1 hour and 1 hour and 30 minutes; 5. Between 1 hour and 30 minutes and 2 hours; 6. More than 2 hours; Don't know). The item was treated as scalar ($M = 4.49$, $SD = 1.25$).

HELP WITH HOMEWORK. The instrument included four items inquiring into the support student's received for their learning through helping with homework (HWHelp). These items on

four-point scales (1. No; 2. Probably not; 3. Yes probably; 4. Yes; Don't know /Don't have an attitude). An exploratory factor analyses revealed one dominate factor accounting for 58.90% of the variance. Reliability was acceptable ($\alpha = .739$). The mean of these items for each student served as the HWHelp variable.

PERCEPTIONS OF SCHOOL OPENNESS. The instrument contained seven items pertaining to parents' perceptions of school openness (Openness), each rated on a 4-point scale (1. Don't agree; 2. Agree a little 3. Agree a lot; 4. Agree totally; Don't know /Cannot estimate). One was coded differently, and was dropped from the factor analyses. For the remaining items, one dominant factor emerged accounting for 48.14% of the variance. One item drove its own factor, and was dropped. The remaining 5 items were re-examined, and one factor accounted for 55.63% of the variance. The items had an acceptable reliability ($\alpha = .781$). The mean of these items served as the Openness variable.

SCHOOL VERSUS PARENTAL RESPONSIBILITY. The instrument contained ten items inquiring about the perceived responsibility for schools versus parents on various aspects of education (Responsibility), measured on a 5-point scale (1. Definitely the school's job; 2. More school than parents' job; 3. Both school and parents' job; 4. More parents' than school's job; 5. Definitely parents' job; Don't know /Don't have an attitude). Factor analyses revealed three factors. After removing four items driving their own factors or cross loaded, the remaining 6 items were re-examined, and one dominant factor accounted for 42.00% of the variance. Reliability analyses revealed that no one item's removal would improve the reliability of the overall scale by a large enough amount to warrant its exclusion. These 6 items together had acceptable reliability ($\alpha = .715$). Means of these items were combined to create the Responsibility variable.

PARENTAL ENGAGEMENT. The instrument included eight items on 4-point scales (1. Not at all; 2. To a limited extent; 3. To some extent; 4. To a large extent; Don't know /Don't have an attitude) asking about different forms of parent participation in school life (Engagement). Factor analysis revealed one dominant factor accounting for 48.70% of the variance, and the items had an acceptable reliability ($\alpha = .848$). The mean of these items served as the Engagement variable.

RESULTS

PRELIMINARY MODEL

The above variables were used in a logistic regression predicting Learning Difficulties status as main effects only. The resulting model was able to correctly classify 91.36% of cases and had a Nagelkerke $R^2 = .108$ and a -2 Log Likelihood = 5863.025. Given that we included eleven predictors in the model, we controlled the overall Type I error rate for this regression by setting the alpha level at .005 for each individual predictor. We found significant main effects for Gender ($Exp(B) = .701, p < .001$), Wealth ($Exp(B) = .118, p < .001$), Books ($Exp(B) = .857, p < .001$), Age ($Exp(B) = 1.10, p < .001$) and MothersEd ($Exp(B) = .833, p < .001$). The remaining variables were not significant predictors of Learning Difficulties. (HWTime: $Exp(B) = .939, p = .033$; Responsibility: $Exp(B) = 1.11, p = .052$; HWHelp: $Exp(B) = .905, p = .055$; Engagement: $Exp(B) = 1.03, p = .492$; Roma: $Exp(B) = 1.04, p = .768$; Openness: ($Exp(B) = .897, p = .024$).

MAIN MODEL

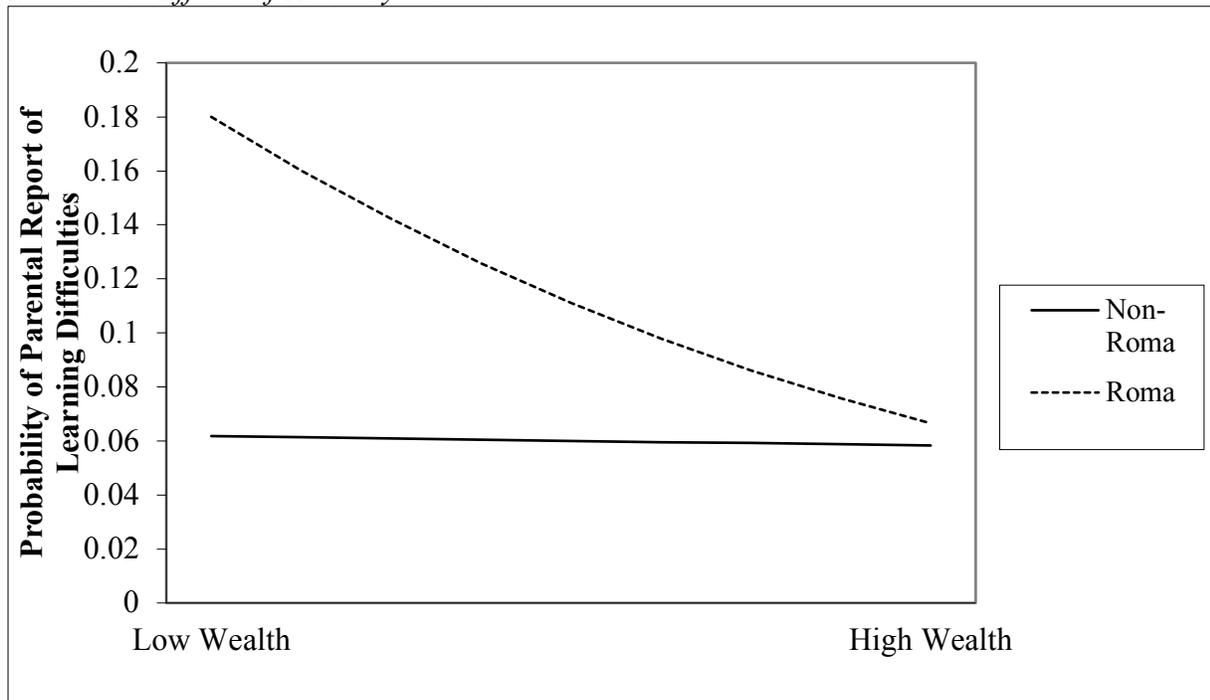
All predictors and their two-way interaction terms were entered into a logistic regression predicting Learning Difficulties status. The resulting model was able to correctly classify 91.43% of cases and had a Nagelkerke $R^2 = .139$. The change in model fit statistics was significant (-2 Log

Likelihood = 5701.87, $\chi^2(55) = 161.203$, $p < .001$, indicating that the full model was a significantly better fit than the previous model which included only main effects. Again, we controlled the overall Type I error rate for this regression, this time by setting the alpha level at .001 for each individual predictor or interaction. The main effect for Books approached significance ($Exp(B) = .568$, $p = .003$). All other main effects were not significant (all p 's $> .122$). In addition, four of the 55 possible two-way interactions were found to be significant: Roma x Wealth ($Exp(B) = .092$, $p < .001$), Wealth x HWTime ($Exp(B) = 1.98$, $p < .001$), HWTime x Age ($Exp(B) = .941$, $p = .001$), and Openness x Responsibility ($Exp(B) = 1.36$, $p < .001$).

Plotting the interaction effects resulted in some interesting findings. Regarding the Roma by Wealth interaction, there was little change in the probability of reporting Learning Difficulties by non-Roma parents as wealth changed. However, low wealth Roma parents were about three times more likely to report that their children had Learning Difficulties than high wealth Roma parents, as shown in Figure 1.

Figure 1.

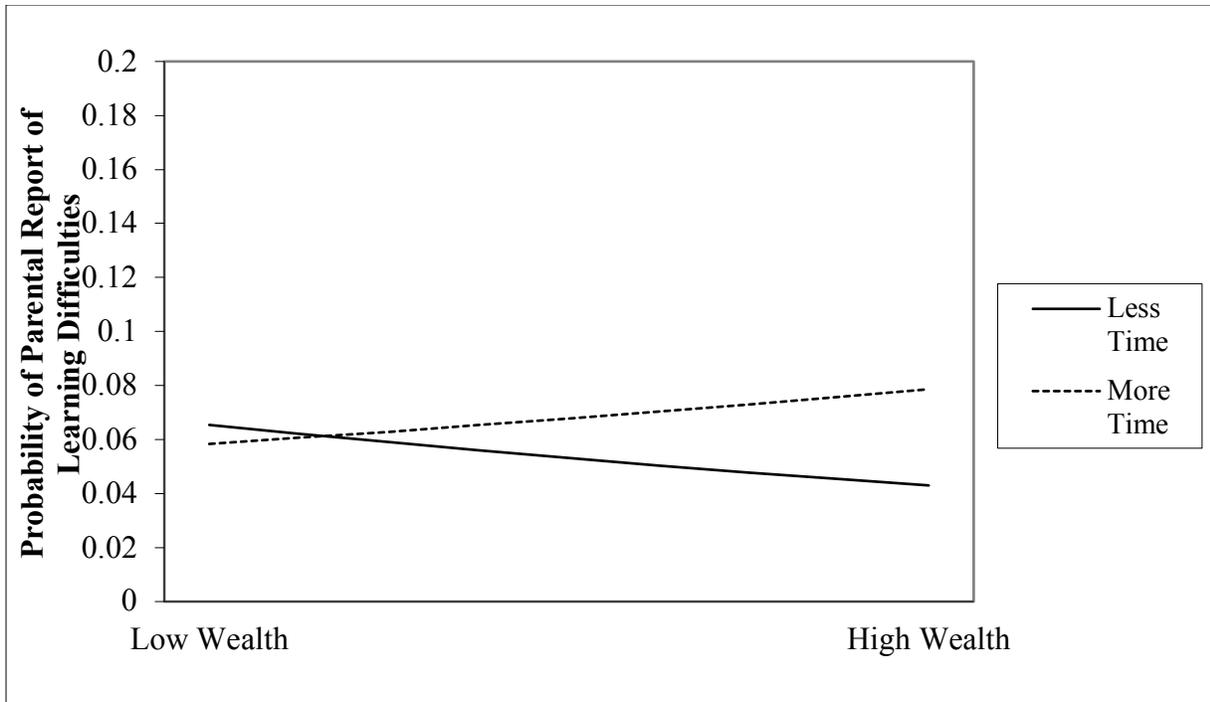
Interaction Effects of Roma by Wealth.



For the Wealth by HWTime interaction, at lower wealth there was little difference in parental reports of Learning Difficulties between those who reported more time on homework and those who reported less time. However, as wealth increased, more time spent on homework was related to higher likelihood of parental reports of Learning Difficulties, while less time spent on homework was related to lower likelihood of parental reports of Learning Difficulties as shown in Figure 2.

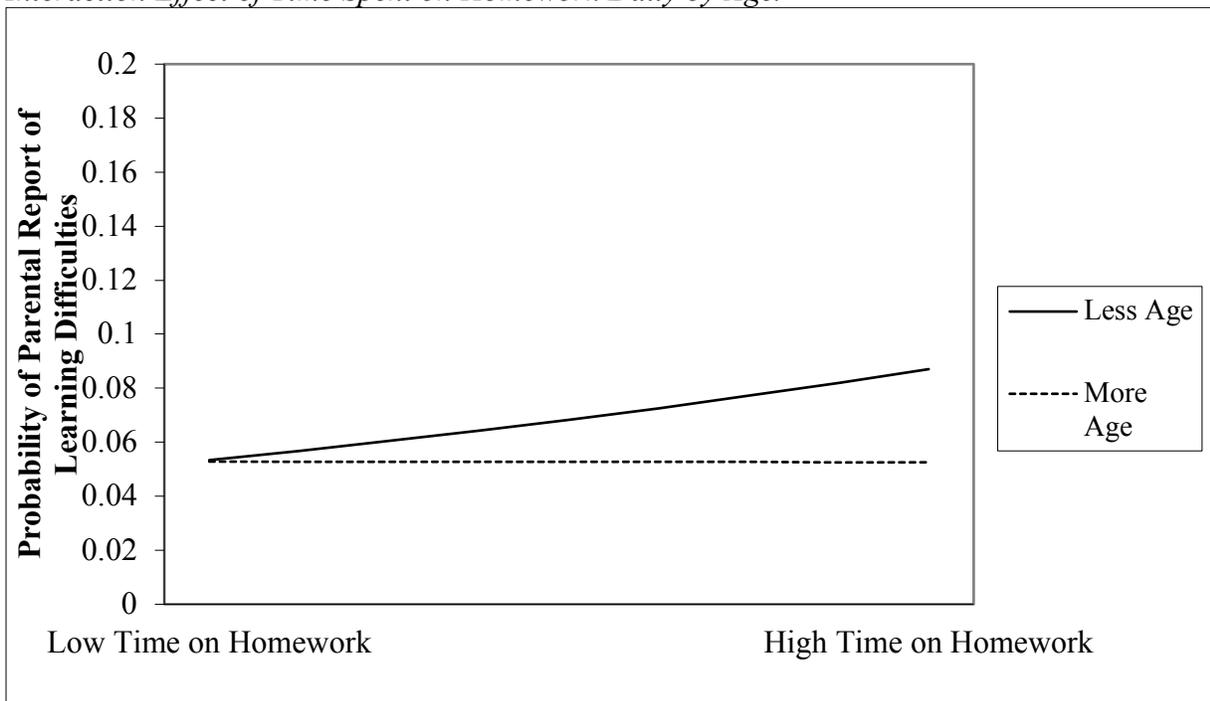
Figure 2.

Interaction Effects of Wealth by Time Spent on Homework Daily.



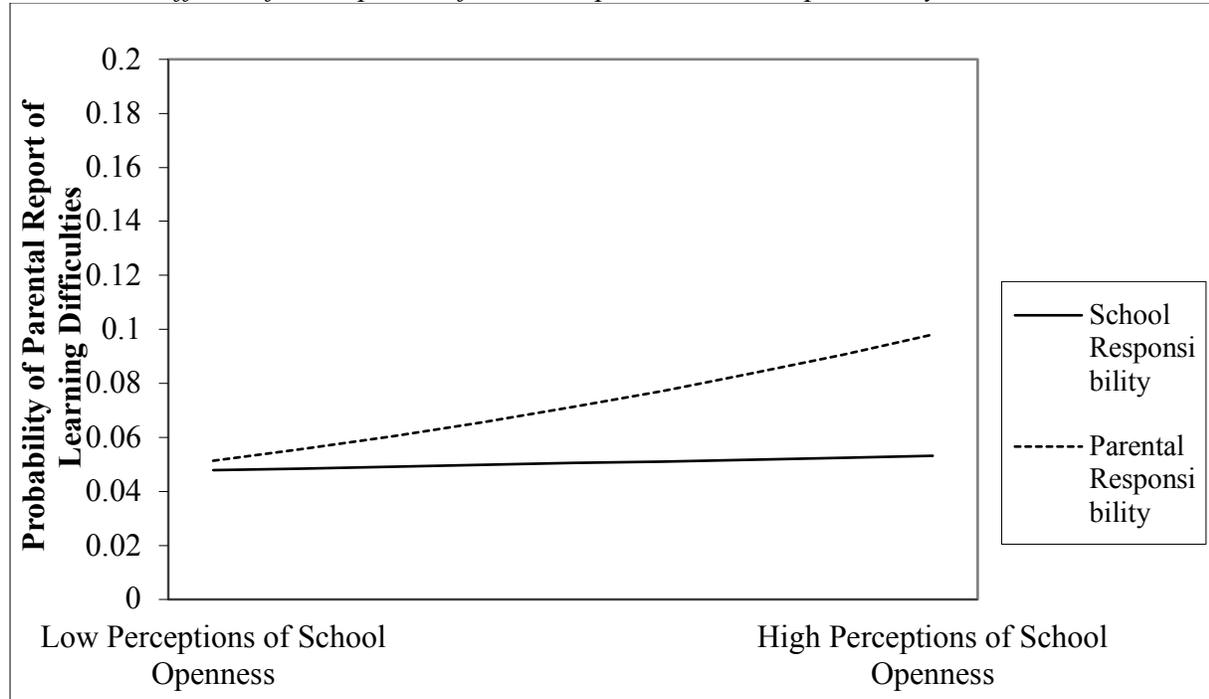
For the HWTime by Age interaction, parents were equally likely to report that their children had Learning Difficulties regardless of the time spent on homework for younger children. However, the parents of older children were more likely to report that their children had Learning difficulties if their children spent more time on homework as shown in Figure 3.

Figure 3.
Interaction Effect of Time Spent on Homework Daily by Age.



Regarding the Openness by Responsibility interaction, when parents viewed the school as more responsible for various aspects of their children’s education, the probability of reporting their children as having Learning Difficulties did not change much across the parent’s perception of the openness of the school. However, when parents viewed themselves as more responsible for various aspects of education, the probability of reporting that their children had Learning Difficulties increased when they viewed the school as more open as shown in Figure 4.

Figure 4.
Interaction Effects of Perceptions of School Openness and Responsibility.



CONCLUSIONS

Our first research question was, *Are Roma parents in SEE countries more likely to identify their children as having a learning problem than non-Roma parents?* Analyses show that Roma parents were no more likely than other parents to identify their children as having learning difficulties. Even in the preliminary model, without interactions, the probability of a Type I error was $p = .768$. This result offers support for the hypothesis that Roma are not overrepresented in segregated school settings, including settings dedicated to children with disabilities, because their parents agree that these children have disabilities. Instead, this result indirectly supports the conclusion that Roma parents are agreeing to placing their children in these segregated settings because of some combination of coercion, limited access, and incentives. Future research should investigate the importance of each of these three reasons for Roma parents to agree to these segregated settings for their children. This work should be followed by efforts to mitigate these reasons, recognizing that approaches to reduce coercion would likely be different from approaches to improve access or mitigate the influence of incentives.

At the same time, we acknowledge the limitation inherent in parent self-report data. For

example, parents were asked whether or not they believed their children had learning problems. This is not the same as determining through rigorously valid and minimally biased assessment, whether or not those children have disabilities that might affect their academic performance. Given that Roma families often have poorer access to health care, higher rates of drug misuse, lower literacy in the home, and other challenges compared to non-Roma families, we would expect that unbiased assessment would still identify a higher rate of disabilities among Roma children than non-Roma children.

Our second research question was, *Considering several predictors of student achievement, including Roma status, which are significant predictors of whether parents in SEE countries identify their children as having learning problems?* Our preliminary model yielded main effects for Gender, Wealth, Books, Age, and MothersEd as predictors of whether parents reported that their children had learning difficulties. In the main model, Books was the most robust of these main effects, approaching significance. These results are consistent with other findings that the number of books in the home is a reliable predictor of academic performance.

However, these same studies have also shown that the number of books in the home correlates with other variables, such as parent education, and wealth. In addition, these results are correlational. Causal inferences should be made with caution. For example, these results do not imply that simply putting more books in homes would increase the academic performance of students in those homes. Confirming causal relationships between any of these predictors would require empirical studies, such as intervention studies, designed specifically to allow for stronger causal inferences.

Our third research question was, *How do these predictors interact with each other, including Roma status, in predicting whether parents in SEE countries identify their children as having learning difficulties?* The main model yielded four significant two-way interactions. Only one of these interactions involved Roma status. Low wealth Roma parents were more likely to report that their children had learning difficulties, while non-Roma parents were not. This result is particularly interesting given that there was no main effect for Roma parents reporting that their children had learning difficulties more frequently than non-Roma parents. None of the significant interactions involved the number of books in the home, which was the most robust main effect.

The main model explained about three percent more variance in the outcome variable than the preliminary model, despite that fact that the main model included fifty-five possible two-way interactions. The main effects in the preliminary model already explained over ten percent of the total variance. For this reason, we do not want to overestimate the importance of the interactions. Further, previous research has not examined these interactions, so we cannot document the reliability of these interactions, except to note their Type I error probabilities in our results.

Overall, our results show that the explanations for parents predicting that their children have learning difficulties, whether they are Roma or not, are complex. Talbott et al (2011) concur that “the full complexity of minority students’ disproportionate representation in special education is still not fully understood” (p. 151). For example, while the number of books in the home is a reliable predictor of whether parents report that their children have learning difficulties, less reliable predictors appear in significant interactions predicting the same outcome. At the same time, we can conclude that Roma parents are no more likely to report that their children have learning problems than non-Roma parents. Because of this conclusion, the reasons why Roma parents disproportionately agree to placing their children in segregated settings deserve more rigorous examination.

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