Chapter 3
Parental Involvement in PIRLS-2011

Our analysis of the PIRLS-2011 data of 41 countries was guided by the analytic framework (Table 3.1), which was based on the general framework (Table 2.1) we used to categorize the studies included in the literature review. The analytic framework matches the available indicators of parental involvement in the PIRLS-2011 data (Table 3.2).

The first dimension, i.e. home-based involvement from the perspective of parents, was split into two components or indicators: early literacy activities and help with homework. The early literacy activities component is especially well measured by the PIRLS home questionnaire. In the international reports of PIRLS-2011, early literacy activities is the only component reported as a scale, with Cronbach's alphas ranging from 0.70 (Czech Republic, Hungary, Italy and Oman) to 0.88 (Romania), indicating high reliability (Martin and Mullis 2012). Although the international report does not report the scale statistics on the items regarding parental help with homework, this component is well addressed, as a total of eight items ask about these practices.

To consider the dimension of school-based involvement and home-school communication from the parent's perspective (component 3 in the analytic framework), three relevant items were selected from the home questionnaire. The number of items for this indicator is low, but the items do seem highly relevant to this context. The student's perception of parental involvement and the school's practices on parental involvement (corresponding to components 4 and 5 in the analytic framework) are measured by five items in the student questionnaire and 15 items in the school questionnaire, respectively. Finally, we established the outcome variable and control variables for the structural multilevel model tested later (Table 3.2): the PIRLS reading literacy achievement scores, gender of the student, and, as approximates for SES, both books at home and highest level of education of the parents.

Table 3.1 Analytic framework for parental involvement for secondary analyses of PIRLS-2011

Perspective	Dimension	Components	Source	Items
Parent	*Dimension 1*	*Component 1*	Home questionnaire	Question 2: A–I
	Home-based involvement	Early literacy activities before beginning primary school		
	Dimension 1	*Component 2*	Home questionnaire	Question 9
	Home-based involvement	Help with homework		
	Dimension 2	*Component 3*	Home questionnaire	Question 10: A, B, E
	School-based involvement and home-school communication	School practices on parental involvement		
Student	*Dimension 3*	*Component 4*	Student questionnaire	Question G7[a] Question R9[a]: C
	Home-based involvement	Student perception of parental involvement		
School	*Dimension 4*	*Component 5*	School questionnaire	Question 11 Question 12: E–F
	School-based involvement and home-school communication	School practices on parental involvement		

Note The PIRLS 2011 questionnaires can be retrieved from http://timssandpirls.bc.edu/pirls2011/international-contextual-q.html (IEA & TIMSS and PIRLS International Study Center 2011)
[a]The PIRLS 2011 student questionnaire consists of multiple sections. Item G7 refers to item 7 in the general part of the questionnaire, R9 to item 9 in the reading section

The benefit of using data from a large-scale assessment study such as PIRLS is not only the richness in data resulting from achievement tests, as well as student, home, teacher and school questionnaires, but also, obviously, the large number of countries for which these data are available. For this study, we initially considered the data from 43 countries participating in PIRLS-2011; countries not meeting the required response rate or for which the average achievement was not reliably measured were excluded. However, two countries, England and the USA, did not administer the home questionnaire and were therefore not included in the scale analyses for components 1–3, using items from the home questionnaire.

Table 3.2 Overview of components and items for secondary analyses of PIRLS-2011

Component	Question	Item number per component	Item in international datasets	Number of response categories
1 Early literacy activities before beginning primary school (*home-based involvement*)	*Before your child began primary school, how often did you or someone else in your home do the following activities with him or her?*			
	Read books	1	ASBH02A	3[a]
	Tell stories	2	ASBH02B	3[a]
	Sing songs	3	ASBH02C	3[a]
	Play with alphabet toys	4	ASBH02D	3[a]
	Talk about things you had done	5	ASBH02E	3[a]
	Talk about what you had read	6	ASBH02F	3[a]
	Play word games	7	ASBH02G	3[a]
	Write letters or words	8	ASBH02H	3[a]
	Read aloud signs and labels	9	ASBH02I	3[a]
	(*Source: Home questionnaire*)			
2 Help with homework (*home-based involvement*)	*How often do you or someone else in your home do the following things with your child?*			
	Discuss my child's schoolwork with him/her	1	ASBH09A	4[b]
	Help my child with his/her schoolwork	2	ASBH09B	4[b]
	Make sure my child sets aside time to do his/her homework	3	ASBH09C	4[b]
	Ask my child what he/she learned in school	4	ASBH09D	4[b]
	Check if my child has done his/her homework	5	ASBH09E	4[b]
	Help my child practice his/her reading	6	ASBH09F	4[b]

Table 3.2 (continued)

Component	Question	Item number per component	Item in international datasets	Number of response categories
	Help my child practice his/her math skills	7	ASBH09G	4[b]
	Talk with my child about what he/she is reading	8	ASBH09H	4[b]
	(*Source: Home questionnaire*)			
3 School practices on parental involvement, parent perspective (*home-school communication*)	*What do you think of your child's school?*			
	My child's school includes me in my child's education	1	ASBH10A	4[c]
	My child's school should make a greater effort to include me in my child's education	2	ASBH10B	4[c]
	My child's school should do better at keeping me informed of his/her progress	3	ASBH10E	4[c]
	(*Source: Home questionnaire*)			
4 Parental involvement, student perspective (*home-based involvement*)	*How often do the following things happen at home?*			
	My parents ask me what I am learning in school	1	ASBG07A	4[b]
	I talk about my schoolwork with my parents	2	ASBG07B	4[b]
	My parents make sure that I set aside time for my homework	3	ASBG07C	4[b]
	My parents check if I do my homework	4	ASBG07D	4[b]
	Do you read for any of the following reasons?			
	My parents like it when I read	5	ASBR09C	4[c]
	(*Source: Student questionnaire*)			

Table 3.2 (continued)

Component	Question	Item number per component	Item in international datasets	Number of response categories
5 School practices on parental involvement, school perspective (*home-school communication, school-based involvement*)	*How often does your school do the following for parents concerning individual students?*			
	Inform parents about their child's learning progress	1	ACBG11AA	4[d]
	Inform parents about the behavior and well-being of their child at school	2	ACBG11AB	4[d]
	Discuss parents' concerns or wishes about their child's learning	3	ACBG11AC	4[d]
	Support individual parents in helping their child with schoolwork	4	ACBG11AD	4[d]
	How often does your school ask parents to do the following?			
	Volunteer for school projects, programs, and trips	5	ACBG11BA	4[d]
	Serve on school committees	6	ACBG11BB	4[d]
	How often does your school do the following for parents in general?			
	Inform parents about the overall academic achievement of the school	7	ACBG11CA	4[d]
	Inform parents about school accomplishments	8	ACBG11CB	4[d]

Table 3.2 (continued)

Component	Question	Item number per component	Item in international datasets	Number of response categories
	Inform parents about the educational goals and pedagogic principles of the school	9	ACBG11CC	4[d]
	Inform parents about the rules of the school	10	ACBG11CD	4[d]
	Discuss parents' concerns or wishes about the school's organization	11	ACBG11CE	4[d]
	Provide parents with additional learning materials	12	ACBG11CF	4[d]
	Organize workshops or seminars for parents on learning or pedagogical issues	13	ACBG11CG	4[d]
	How would you characterize each of the following within your school?			
	Parental support for student achievement	14	ACBG12E	5[e]
	Parental involvement in school activities	15	ACBG12F	5[e]
	(*Source: School questionnaire*)			
Socioeconomic status (*books at home, highest level of education completed by parent*)	About how many books are there in your home?		ASBH14	5[f]
	What is the highest level of education completed by the child's father?		ASBH17A	9[g]
	What is the highest level of education completed by the child's mother?		ASBH17B	9[g]
	(*Source: Home questionnaire*)			

Table 3.2 (continued)

Component	Question	Item number per component	Item in international datasets	Number of response categories
Gender	(*Source: Student questionnaire*)		ASBG01	2
Reading literacy	(*Source: PIRLS reading comprehension assessment*)		R11F01M to R31G14M	

Note The datasets are described in detail in Foy and Drucker (2013)
[a]Category labels are: 0 = Often, 1 = Sometimes, 2 = Never or almost never
[b]Category labels are: 0 = Every day or almost every day, 1 = Once or twice a week, 2 = Once or twice a month, 3 = Never or almost never
[c]Category labels are: 0 = Agree a lot, 1 = Agree a little, 2 = Disagree a little, 3 = Disagree a lot
[d]Category labels are, after recoding: 0 = More than three times a year, 1 = Two to three times a year, 2 = Once a year, 3 = Never
[e]Category labels are: 0 = Very high, 1 = High, 2 = Medium, 3 = Low, 4 = Very low
[f]Category labels are: 0 = 1–10, 1 = 11–25, 2 = 26–100, 3 = 101–200, 4 = More than 200
[g]Category labels are: 0 = Did not go to school, 1 = Some ISCED level 1 or 2, 2 = ISCED level 2, 3 = ISCED level 3, 4 = ISCED level 4, 5 = ISCED level 5B, 6 = ISCED level 5A, 7 = Beyond ISCED level 5A, 8 = Not applicable

References

Foy, P., & Drucker, K. T. (Eds.). (2013). *PIRLS 2011 user guide for the international database.* Chestnut Hill, MA, USA: TIMSS & PIRLS International Study Center, Boston College.

IEA, & TIMSS and PIRLS International Study Center (2011). TIMSS and PIRLS press release 2011. PIRLS 2011 contextual questionnaires. Retrieved from http://timssandpirls.bc.edu/pirls2011/international-contextual-q.html.

Martin, M. O., & Mullis, I. V. S. (Eds.). (2012). *Methods and procedures in TIMSS and PIRLS 2011.* Chestnut Hill, MA, USA: TIMSS & PIRLS International Study Center, Boston College.