



MODULE ON CHILD FUNCTIONING – TEACHER VERSION

A Comparative Evaluation



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Introduction

Historically, different definitions, methodologies and tools have been employed for the purposes of identifying children with disabilities in different population-level data collections. These inconsistencies have led to varying and unreliable estimates of the number and characteristics of these children.¹ To facilitate the production of comparable and reliable statistics, UNICEF and the Washington Group on Disability Statistics (WG) developed the Child Functioning Module (CFM). Following the framework of the International Classification of Functioning, Disability and Health, the CFM focuses on functional difficulties across various domains of functioning. There are two versions of the module: one for children aged 2 to 4 years (comprising 16 questions about difficulties in seeing, hearing, walking, fine motor skills, communicating, learning, playing and controlling behaviour) and one for children aged 5 to 17 years (encompassing 24 questions about difficulties with seeing, hearing, walking, self-care, communicating, learning, remembering, concentrating, accepting change, controlling behaviour, making friends, anxiety and depression).²

The CFM underwent testing and validation, with mothers or primary caregivers as respondents.³ The underpinning assumption was that mothers/primary caregivers possess comprehensive knowledge about their child(ren)'s capabilities and would be well-positioned to offer consistent and valid responses. Cognitive testing demonstrated that mothers/primary caregivers were interpreting the final questions as intended and that their responses to the CFM questions indeed aligned with their description of children's functioning.⁴

Given the reliance on schools to provide data on children's educational experiences and the increasing interest in capturing data on disability in school settings, UNICEF and the WG began the development of a tool that can be administered to teachers to obtain information on functioning among school-aged children. This paper describes the results of the

validation done on a version of the CFM administered to teachers (the Child Functioning Module – Teacher Version, or CFM-TV). The questionnaire was tested to determine whether, and under what conditions, teachers could provide valid responses concerning the functional status of children in their classrooms.

Methods

Data and study design

This study used data from Malawi and Kosovo.⁵ Interviews were conducted separately with mothers/primary caregivers and with teachers. Both groups were asked to report on the functional difficulties of the same child/student across eleven domains.

The survey in Kosovo was conducted with 1,316 parents of children aged 6 to 17 years between December 2022 and January 2023. The sample of schools for this study was drawn from the Ministry of Education database. A total of 20 rural and urban schools (grades 1 to 6) were selected.

The survey in Malawi was conducted with 867 parents of children aged 6 to 17 years and took place in December 2021. The sample of schools for this study was drawn from the Education Management Information System database. A total of 100 primary and 20 secondary rural and urban schools were selected. Primary and secondary schools with children with disabilities were purposefully included in the sample frame.

The questionnaire administered as part of the study was a modified version of the CFM for children aged 5 to 17 years. Compared to the original CFM, the questionnaire tested in Malawi and Kosovo (the CFM-TV) excludes the self-care domain and streamlines items pertaining to the walking and communication domains. For all the questions except those related to depression and anxiety, the response options were "no difficulty", "some difficulty", "a lot of difficulty" and "cannot do at all". For depression and anxiety, the questions asked how often the child

¹ Cappa, Claudia, et al., 'The Development and Testing of a Module on Child Functioning for Identifying Children with Disabilities on Surveys. III: Field testing', *Disability and Health Journal*, vol. 11, no. 4, 2018, pp. 510–518.

² Loeb, Mitchell, et al., 'The Development and Testing of a Module on Child Functioning for Identifying Children with Disabilities on Surveys. I: Background', *Disability and Health Journal*, vol. 11, no. 4, 2018, pp. 495–501.

³ 'The development and testing of a module on child functioning for identifying children with disabilities on surveys. III: Field testing', pp. 510–518.

⁴ Massey, Meredith, 'The Development and Testing of a Module on Child Functioning for Identifying Children with Disabilities on Surveys. II: Question development and pretesting', *Disability and Health Journal*, vol. 11, no. 4, 2018, pp. 502–509.

⁵ All references to Kosovo in this publication should be understood to be in the context of United Nations Security Council resolution 1244 (1999).

seemed very sad/depressed or anxious/nervous/worried, and the responses ranged across five levels: “never”, “a few times a year”, “monthly”, “weekly” and “daily”. Additional questions were asked about the characteristics of the children, schools, classrooms and teachers, as described later in this paper.

Data analysis

Two types of analyses were conducted. A comparative analysis was performed to measure the level of agreement and disagreement in responses for the selected child between the child’s mother/primary caregiver and the child’s teacher. Agreement and disagreement were examined by individual domain of functioning and any domain of functioning. Regression analyses were performed to identify the potential factors contributing to the disagreement between the mother/primary caregiver and the teacher.

To identify disagreement in responses between the mother/primary caregiver and the teacher, students were first grouped into three categories: 1) children with “a lot of functional difficulties”, which included those for whom a response of “a lot of difficulty” or “cannot do at all” was reported in at least one domain or who seemed very sad or depressed “daily”; 2) children with “some functional difficulties”, referring to children with “some difficulty” in at least one domain but no reports of “a lot of difficulty” or “cannot do at all” in any domain or who seemed very sad or depressed “a few times a year”, “monthly” or “weekly”; and 3) children with “no functional difficulties”, comprising those with “no difficulty” in all domains and who “never” seemed very sad or depressed. The second set of analyses used the recommended UNICEF/WG cut-off and grouped children into two categories: 1) children “with a lot of functional difficulties”, defined as those for whom a response of “a lot of difficulty” or “cannot do at all” was reported in at least one domain or who seemed very sad or depressed “daily”; and 2) children “without functional difficulties”, defined as those for whom the respondents said “no difficulty” or “some difficulty” in all domains and who seemed very sad or depressed “never”, “a few times a year”, “monthly” or “weekly”.

The potential predictors of agreement or disagreement between mothers’/primary caregivers’ and teachers’ reports were divided into four categories: attributes of students, attributes of mothers/primary caregivers, attributes of teachers, and features of the schools and classrooms.

Student attributes included age, sex, current grade (primary versus secondary) and grade repetition status. Mother/primary caregiver attributes included age, relationship to the child (mother, father or other) and educational attainment (elementary school, high school, or bachelor’s or above). Teacher attributes included sex and familiarity with the student (measured through a question in which the teacher is asked whether he/she knows the child very well, well, or a little or barely).

Features of the school environment were assessed through 16 questions: “Does (name) use books or other learning materials provided by the school?”, “Are there desks for each student in (name)’s class?”, “Does (name)’s classroom have enough light for the students to do their work?”, “Is (name)’s classroom cool or warm enough for the students to do their work?”, “Is (name)’s classroom well-ventilated?”, “Is there too much noise in (name)’s class for the students to do their work?”, “Is there too much noise coming from outside in (name)’s classroom for the students to do their work?”, “Does (name) move easily around the school?”, “Does (name) use the places where there is drinking water at school?”, “Does (name) use the toilet at school?”, “Does (name) use areas at school where children play and socialize, such as a playground or sports field?”, “Does (name) feel accepted by the students in his/her class?”, “Is (name) safe at school?”, “Is the school responsible if you have concerns about (name)’s education?”, “Does the school have a programme that meets the learning needs of (name)?”, “Do teachers know how to meet the specific learning needs of (name)?”. Each question, except those about noise, was coded with “Yes” as 1, “No” as 0 and “Don’t know” as a missing value. Noise-related questions were reverse coded. The school environment score was the cumulative total of these questions, with values ranging from 0 to 16, with higher scores being indicative of a higher-quality school environment.

In addition to these predictors, both the Malawi and Kosovo datasets collected unique features related to teachers and schools. Malawi collected data on the teaching workload (period/week), special needs education (SNE) qualifications, capacity for supporting SNE students, years teaching, years teaching at this school, number of classrooms with ramps, number of classrooms with doors wide enough to fit wheelchairs and total number of classrooms. The capacity to support SNE students was self-reported by teachers

who were asked five questions: “Have you ever participated in continuous professional development (CPD) whose focus was on inclusive education?”, “Do you think that you have the skills necessary to work with children with disabilities/special needs learners?”, “Do you think that you have the resources necessary to work with children with disabilities/special needs learners?”, “Are you able to improvise and come up with resources necessary to work with children with disabilities/special needs learners?” and “Do you have access to specialists whom you can consult on issues related to teaching children with disabilities/special needs learners?” The “Yes” responses were coded as 1, the “No” responses were coded as 0, and the capacity for supporting SNE students was the cumulative total of these responses, with values ranging from 0 to 5. Kosovo collected data on the teacher’s status (main teacher or second teacher) and the type of school (standard versus specialized for children with disabilities).

Statistical analysis

Summary statistics for binary and categorical variables were represented as counts and percentages. Summary statistics for continuous variables were depicted using means and standard deviations.

Missing values existed in the school environment questions, with a range from 0.8 per cent (for a question related to moving easily around the school) to 9.5 per cent (for a question concerning internal classroom noise). Other variables with missing data included teacher career (0.4 per cent) and the number of classrooms (15.4 per cent). Missing values were imputed by Multivariate Imputation by Chained Equations.

To analyse agreement and disagreement levels between mothers/primary caregivers and teachers, the analysis first calculated agreement and disagreement percentages both overall and by domain. Agreement and disagreement were determined using the mother/primary caregiver’s response as the reference. For each domain and for the overall indicator referring to any domain of functioning, it was assessed whether the teacher’s response matched the reference category provided by the mother/primary caregiver. Two sets of analyses were conducted: one using a three-category set (“no functional difficulties”, “some functional difficulties” and “a lot of functional difficulties”) and another using a two-category set (“without functional difficulties” versus “with

functional difficulties”). For the three-category analysis, agreement and disagreement were calculated separately for each category and then summed to determine total agreement and disagreement. For the two-category analysis, the “no difficulty” and “some difficulty” responses were first combined into a single “without functional difficulties” category before calculating agreement and disagreement percentages. When disagreement occurred, it was further analysed whether teachers under-reported or over-reported difficulties relative to the mother/primary caregiver reference. Agreement analyses were conducted separately for Kosovo and Malawi due to differences in the study settings and data collection approaches. In Kosovo, where each student was assessed by two teachers, agreement and disagreement were calculated separately for each mother/primary caregiver–teacher pair.

To investigate correlates of the disagreement between teachers’ and mothers/primary caregivers’ responses, a mixed-effect logistic regression was employed. The outcome variable was disagreement. Given the unique potential predictors for teachers and schools in Malawi and Kosovo, regression analysis was performed separately for each country. Analyses were conducted as a series of bivariate regression models, introducing each predictor individually but with random variables for districts and schools to account for potential clustering effects. This approach aimed to elucidate which variables were significantly associated with higher (or lower) odds of disagreement between mother/primary caregiver reports and teacher reports. Note that multivariate regression analysis was also conducted as a robustness check. The overall conclusions did not differ greatly between bivariate and multivariate analysis, although some variables were significant in one model but not the other. Analysis of predictors of disagreement was conducted both by domain of functioning and for the overall indicator referring to any domain of functioning.

R (version 4.3.0) was used for all statistical analyses. Statistical significance was defined as $P < 0.05$. All tests were two-tailed.

Results

Basic descriptive statistics

After excluding 34 students without responses from mothers/primary caregivers or teachers, 2,183 students from Malawi ($n = 867$) and Kosovo ($n = 1,316$)

were included in this study (see Figure 1). For students, the average age was 11.55 years, with a slightly higher male representation at 51.0 per cent. The majority (64.1 per cent) were in primary school grades, and 9.6 per cent had repeated a grade (see Table 1). The caregivers, predominantly mothers (48.4 per cent), had an average age of 41.01 years. The educational attainment of these caregivers was diverse, with 46.8 per cent having completed elementary school or lower, 36.9 per cent having completed high school and 16.3 per cent holding a bachelor's degree or higher (see Table 1). Among the 2,995 teachers surveyed, 62.2 per cent were female. Teachers' familiarity with their students varied, with the modal response to the question about the teacher's level of familiarity with a

given student being that they know the student "well" (51.2 per cent) (see Table 1). Specific to Malawi, teachers had an average teaching workload of 30.93 periods per week, with 4.0 per cent qualified in SNE and an average teaching experience of 11.03 years. In Kosovo, half of the teachers were identified as the student's primary teacher (see Table 1). The average school environment score across the 589 schools included in the study was 12.45. In Kosovo, 98.2 per cent of schools were standard, while 1.8 per cent were specialized for children with disabilities. Malawi-specific school data revealed an average of 4.36 classrooms per school with ramps, 6.28 classrooms with wheelchair-accessible doors and a total of 11.35 classrooms on average.

Figure 1. Flowchart of children included in this study

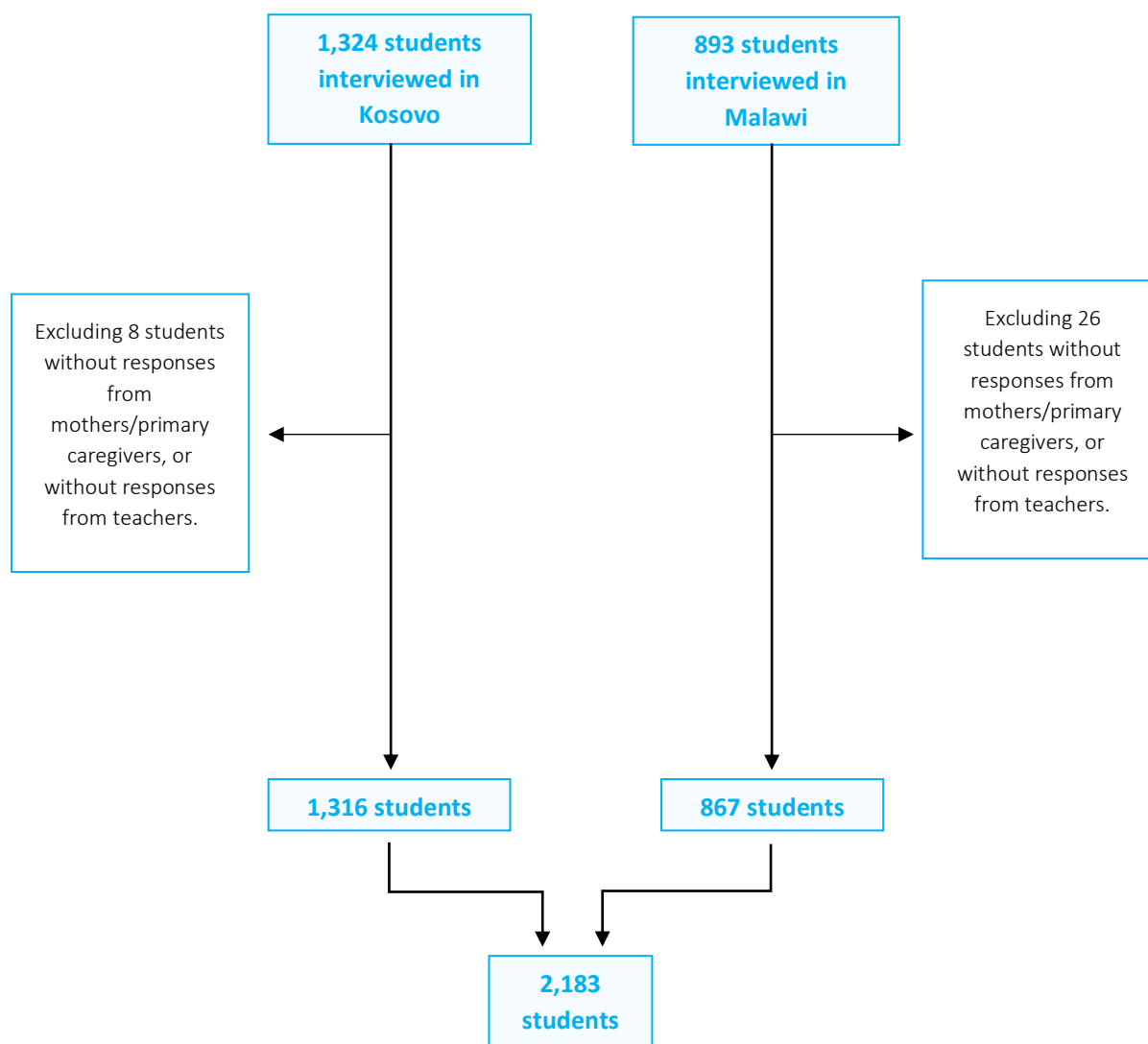


Table 1. Basic characteristics of students, their mothers/primary caregivers, their teachers and their schools/classrooms

	Malawi	Kosovo	All
Student	n = 867	n = 1,316	n = 2,183
Age (in years)	12.87 (3.61)	10.68 (3.54)	11.55 (3.73)
Sex			
Male	430 (49.6%)	683 (51.9%)	1,113 (51.0%)
Female	437 (50.4%)	633 (48.1%)	1,070 (49.0%)
Current grade			
Primary	731 (84.3%)	669 (50.8%)	1,400 (64.1%)
Secondary	136 (15.7%)	647 (49.2%)	783 (35.9%)
Repeated student (= yes)	206 (23.8%)	3 (0.2%)	209 (9.6%)
Mother/primary caregiver	n = 867	n = 1,316	n = 2,183
Age (in years)	40.48 (11.05)	41.36 (7.43)	41.01 (9.05)
Relationship with child			
Mother	421 (48.6%)	635 (48.3%)	1,056 (48.4%)
Father	198 (22.8%)	665 (50.5%)	863 (39.5%)
Other	248 (28.6%)	16 (1.2%)	264 (12.1%)
Highest education level			
Elementary school or lower	558 (64.4%)	463 (35.2%)	1,021 (46.8%)
High school	242 (27.9%)	564 (42.9%)	806 (36.9%)
Bachelor's or above	67 (7.7%)	289 (22.0%)	356 (16.3%)
Teacher	n = 363	n = 2,632	n = 2,995
Sex			
Male	231 (63.6%)	901 (34.2%)	1,132 (37.8%)
Female	132 (36.4%)	1,731 (65.8%)	1,863 (62.2%)
Knows the student			
Very well	112 (30.9%)	1,037 (39.4%)	1,149 (38.4%)
Well	184 (50.7%)	1,349 (51.3%)	1,533 (51.2%)
A little or barely know	67 (18.5%)	246 (9.3%)	313 (10.5%)
Teaching workload (periods per week)	30.93 (13.42)	NA	30.93 (13.42)
Qualified as an SNE teacher (= yes)	14 (4.0%)	NA	14 (4.0%)
Capacity to support SNE students	2.43 (1.39)	NA	2.43 (1.39)
Years teaching	11.03 (8.68)	NA	11.03 (8.68)
Years teaching at this school	4.85 (4.12)	NA	4.85 (4.12)
First teacher (= yes)		1,316 (50.0%)	1,316 (50.0%)
School	n = 477	n = 112	n = 589
School environment	12.49 (1.97)	12.29 (2.37)	12.45 (2.05)
School type			
Standard school	NA	109 (98.2%)	109 (98.2%)
Specialized school for children with disabilities	NA	2 (1.8%)	2 (1.8%)
Average number of classrooms with ramps	4.36 (4.26)	NA	4.36 (4.26)
Average number of classrooms with doors wide enough to fit wheelchairs	6.28 (5.00)	NA	6.28 (5.00)
Average total number of classrooms	11.35 (6.55)	NA	11.35 (6.55)

Comparison of responses from mothers/primary caregivers versus teachers

In this section, teacher responses to the modified CFM (CFM-TV) for a particular child will be compared to mother/primary caregiver responses to the CFM for the same child. Results will first be reported for the three-category response set for Kosovo, followed by the results for Malawi. Results will then be reported for the two-category response set for each country.

Three-category response set

For the first set of analyses, a three-category response set was used to compare teacher reports to those provided by mothers/primary caregivers. Children were divided into the following three categories, as described above: those with “a lot of functional difficulties”, those with “some functional difficulties” and those with “no functional difficulties”. “Disagreement” on each individual domain was defined as a difference between teachers and caregivers in terms of which category they reported for the child. For example, if the teacher reported that the child had “no difficulty” and the parent reported that the child had “some difficulty”, this was considered disagreement. Disagreement on the overall indicator referring to any domain of functioning was defined as a difference between the teacher’s and caregiver’s categorization of the child across any of the functional domains. Specifically, if a teacher reported “no difficulty” in all domains while the mother/primary caregiver reported “some difficulty” or “a lot of

difficulty” in any domain (or vice versa), this was considered disagreement on the overall indicator.

Results for Kosovo

Agreement and disagreement levels: Table 2 presents the agreement and disagreement rates between mother/primary caregiver and teacher responses for the overall indicator referring to any domain of functioning and for each individual domain of child functioning in Kosovo, combining results for both of the teachers who provided information for each student. Using the three-category response set, the agreement rate for the overall indicator across all domains was 28 per cent. The highest agreement rates were observed in the domains of hearing (99 per cent), walking (98 per cent) and seeing (95 per cent). The domain of communication had the lowest agreement rate at 5 per cent. Seven domains had agreement rates between 78 per cent and 90 per cent, and one domain had an agreement rate of 68 per cent. Most of the disagreements involved either teachers reporting “some difficulty” when mother/primary caregivers reported “no difficulty”, or teachers reporting “no difficulty” or “a lot of difficulty” when mother/primary caregivers reported “some difficulty”. It is noteworthy that for the communication domain, no mother/primary caregiver reported their child as having “no difficulty”. This may help account for the low level of agreement between mother/primary caregiver and teacher reports for the communication domain, as well as for the overall indicator.

Table 2. Agreement and disagreement between mother/primary caregiver and teacher reports in Kosovo, based on the three-category set

Domain	Pairs of respondents in agreement				Pairs of respondents in disagreement			
	No functional difficulties	Some functional difficulties	A lot of functional difficulties	Total	No functional difficulties	Some functional difficulties	A lot of functional difficulties	Total
First and second teachers combined								
Seeing	2,485 (94%)	20 (1%)	2 (0%)	2,507 (95%)	55 (2%)	66 (3%)	4 (0%)	125 (5%)
Hearing	2,595 (99%)	0 (0%)	1 (0%)	2,596 (99%)	17 (1%)	14 (1%)	5 (0%)	36 (1%)
Walking	2,563 (97%)	3 (0%)	1 (0%)	2,567 (98%)	19 (1%)	45 (2%)	1 (0%)	65 (2%)
Communication	0 (0%)	132 (5%)	3 (0%)	135 (5%)	0 (0%)	2,494 (95%)	3 (0%)	2,497 (95%)
Learning	2,187 (83%)	38 (1%)	2 (0%)	2,227 (85%)	275 (10%)	126 (5%)	4 (0%)	405 (15%)
Remembering	2,212 (84%)	27 (1%)	4 (0%)	2,243 (85%)	290 (11%)	97 (4%)	2 (0%)	389 (15%)
Concentrating	2,202 (84%)	42 (2%)	4 (0%)	2,248 (85%)	236 (9%)	140 (5%)	8 (0%)	384 (15%)
Accepting change	2,272 (86%)	30 (1%)	1 (0%)	2,303 (88%)	204 (8%)	120 (5%)	5 (0%)	329 (12%)
Controlling behaviour	2,356 (90%)	18 (1%)	0 (0%)	2,374 (90%)	174 (7%)	80 (3%)	4 (0%)	258 (10%)
Making friends	2,280 (87%)	19 (1%)	2 (0%)	2,301 (87%)	160 (6%)	155 (6%)	16 (1%)	331 (13%)
Anxiety	1,528 (58%)	262 (10%)	1 (0%)	1,791 (68%)	180 (7%)	646 (25%)	15 (1%)	841 (32%)
Depression	1,934 (73%)	107 (4%)	0 (0%)	2,041 (78%)	156 (6%)	435 (17%)	0 (0%)	591 (22%)
Any functional domain	0 (0%)	722 (27%)	21 (1%)	743 (28%)	0 (0%)	1,854 (70%)	35 (1%)	1,889 (72%)

Table note: For each student, Kosovo had paired one mother/primary caregiver and two teachers, resulting in 2,632 mother/primary caregiver–teacher response pairs. The number associated with each percentage indicates the number of pairs that are the same (“Pairs of respondents in agreement” column) or different (“Pairs of respondents in disagreement” column). Agreement was determined using the mother/primary caregiver’s response as the reference. In the first cell of the second column, the entry “2,485 (94%)” means that there were 2,485 pairs (or 94 per cent of the total number of pairs [2,632]) where the mother/primary caregiver reported “no difficulty” in seeing and the teacher also reported “no difficulty” in seeing. Conversely, in the first cell of the sixth column, “55 (2%)” means that there were 55 pairs where the mother/primary caregiver reported “no difficulty” in seeing while the teacher reported “some difficulty” or “a lot of difficulty”. Cells with a value of “0 (0%)” indicate that no matching pairs were observed for the particular combination of caregiver–teacher responses for that domain (e.g., for the hearing domain, there were no pairs of both the mother/primary caregiver and the teacher reporting “some difficulty”).

Under- and over-reporting relative to the mother/primary caregiver: As already discussed, Table 2 shows rates of agreement and disagreement between mother/primary caregiver and teacher responses for the overall three-category indicator and for each functional domain. More information about the nature of the disagreement is provided in Tables 3 and 4. Table 3 shows under-reporting, where the level of difficulty reported by the teacher was lower than the level reported by the caregiver, and Table 4 shows over-reporting, where the level of difficulty reported by the teacher was higher than the level reported by the mother/primary caregiver, again by domain and for the overall indicator. Tables 3 and 4 show data for both Kosovo and Malawi.

In Kosovo, under-reporting (see Table 3) appeared to be somewhat more common than over-reporting. The most striking case of under-reporting was observed for the domain of communication: In 92.5 per cent of pairs, teachers reported “no difficulty” while the mothers/primary caregivers reported either “some” or “a lot of difficulty”. The domains of anxiety and depression also had relatively high levels of under-reporting in Kosovo. Anxiety was under-reported by teachers in 24.8 per cent of pairs, and depression was under-reported in 16.3 per cent of pairs. Under-reporting was also high for the overall indicator in Kosovo (66.1 per cent). Notably, most cases of under-reporting in Kosovo occurred because the teacher

reported the child had “no difficulty” when the mother/primary caregiver reported “some difficulty”. A much smaller percentage of cases of under-reporting were due to teachers reporting either “no difficulty” or “some difficulty” when the mother/primary caregiver reported “a lot of difficulty”.

Over-reporting (see Table 4) was somewhat less common than under-reporting in Kosovo. The level of over-reporting for the overall indicator (5.7 per cent), for example, was substantially lower than the level of under-reporting for the indicator (66.1 per cent). Among the domains with the highest levels of over-reporting were remembering, learning, concentrating and accepting change. Over-reporting was observed in 11.8 per cent of pairs for remembering, 11.1 per cent of pairs for learning, 9.8 per cent of pairs for concentrating and 8.1 per cent of pairs for accepting change. Many of these domains correspond with domains teachers evaluate as part of their typical work duties. The type of disagreement contributing to over-reporting in Kosovo was a discrepancy between teachers reporting “some difficulty” and mothers/primary caregivers reporting “no difficulty”. The domain of communication was one exception to this general pattern; all cases of over-reporting in the communication domain, which occurred in 2.3 per cent of pairs, were due to teachers reporting “a lot of difficulty” when mothers/primary caregivers reported “some difficulty”.

Table 3. Under-reporting by teachers relative to mother/primary caregiver, using the three-category response set, by country, by domain and for overall disability

Domain	Kosovo	Malawi
	% Under-reporting (out of all pairs)	% Under-reporting (out of all pairs)
Accepting change	4.4	18.4
% “No” (teacher [T]) vs. “Some” (mother/primary caregiver [C])	4.2	14.3
% “Some” (T) vs. “A lot” (C)	0.1	1.0
% “No” (T) vs. “A lot” (C)	0.1	3.1
Anxiety	24.8	24.7
% “No” (T) vs. “Some” (C)	24.3	22.4
% “Some” (T) vs. “A lot” (C)	0.2	1.5
% “No” (T) vs. “A lot” (C)	0.3	0.8
Communication	92.5	1.7
% “No” (T) vs. “Some” (C)	92.4	0.0
% “Some” (T) vs. “A lot” (C)	0.1	1.7
% “No” (T) vs. “A lot” (C)	0.0	0.0

Concentrating	4.8	14.7
% “No” (T) vs. “Some” (C)	4.5	12.8
% “Some” (T) vs. “A lot” (C)	0.2	0.6
% “No” (T) vs. “A lot” (C)	0.1	1.3
Controlling behaviour	3.0	14.8
% “No” (T) vs. “Some” (C)	2.9	11.3
% “Some” (T) vs. “A lot” (C)	0.1	1.2
% “No” (T) vs. “A lot” (C)	0.1	2.3
Depression	16.3	24.2
% “No” (T) vs. “Some” (C)	16.3	22.8
% “Some” (T) vs. “A lot” (C)	0.0	1.2
% “No” (T) vs. “A lot” (C)	0.0	0.2
Hearing	0.7	11.9
% “No” (T) vs. “Some” (C)	0.5	10.0
% “Some” (T) vs. “A lot” (C)	0.0	0.8
% “No” (T) vs. “A lot” (C)	0.2	1.0
Learning	4.3	14.3
% “No” (T) vs. “Some” (C)	4.2	11.2
% “Some” (T) vs. “A lot” (C)	0.1	2.0
% “No” (T) vs. “A lot” (C)	0.1	1.2
Making friends	6.4	5.1
% “No” (T) vs. “Some” (C)	5.7	4.0
% “Some” (T) vs. “A lot” (C)	0.0	0.0
% “No” (T) vs. “A lot” (C)	0.6	1.0
Remembering	3.0	17.1
% “No” (T) vs. “Some” (C)	2.9	13.3
% “Some” (T) vs. “A lot” (C)	0.1	2.4
% “No” (T) vs. “A lot” (C)	0.0	1.4
Seeing	2.5	78.8
% “No” (T) vs. “Some” (C)	2.4	78.8
% “Some” (T) vs. “A lot” (C)	0.0	0.0
% “No” (T) vs. “A lot” (C)	0.2	0.0
Walking	1.8	6.6
% “No” (T) vs. “Some” (C)	1.7	5.9
% “Some” (T) vs. “A lot” (C)	0.0	0.0
% “No” (T) vs. “A lot” (C)	0.0	0.7
Average % under-reporting	13.7	19.4
Any functional domain	66.1	12.2
% “No” (T) vs. “Some” (C)	64.8	0.0
% “Some” (T) vs. “A lot” (C)	0.8	12.2
% “No” (T) vs. “A lot” (C)	0.5	0.0

Table note: Under-reporting was evaluated using mother/primary caregiver responses as the reference. The numbers in the table represent the percentage of pairs where teachers reported a lower level of functional difficulty for the child than the mother/primary caregiver. In the first cell of the second column, the entry “18.4” means that in 18.4 per cent of pairs in Malawi, the teacher reported a lower level of functional difficulty in the accepting change domain than the mother/primary caregiver. In the second cell in the second column, “14.3” means that in 14.3 per cent of pairs in Malawi, the teacher reported the child had “no difficulty” in accepting change, while the mother/primary caregiver reported “some difficulty”. Cells with a value of “0.0” indicate that no cases were observed for the particular combination of mother/primary caregiver–teacher responses for that domain (e.g., for the hearing domain in Malawi, there were no pairs where the teacher reported “some difficulty” and the mother/primary caregiver reported “a lot of difficulty”).

Table 4. Over-reporting by teachers relative to mother/primary caregiver, using the three-category response set, by country, by domain and for overall disability

Domain	Kosovo % Over-reporting (out of all pairs)	Malawi % Over-reporting (out of all pairs)
Accepting change	8.1	17.2
% “Some” (teacher [T]) vs. “No” (mother/primary caregiver [C])	6.7	15.5
% “A lot” (T) vs. “Some” (C)	0.4	0.7
% “A lot” (T) vs. “No” (C)	1.1	1.0
Anxiety	7.1	24.3
% “Some” (T) vs. “No” (C)	6.6	19.2
% “A lot” (T) vs. “Some” (C)	0.3	3.3
% “A lot” (T) vs. “No” (C)	0.3	1.9
Communication	2.3	0.8
% “Some” (T) vs. “No” (C)	0.0	0.0
% “A lot” (T) vs. “Some” (C)	2.3	0.8
% “A lot” (T) vs. “No” (C)	0.0	0.0
Concentrating	9.8	15.9
% “Some” (T) vs. “No” (C)	7.5	14.7
% “A lot” (T) vs. “Some” (C)	0.8	0.4
% “A lot” (T) vs. “No” (C)	1.5	0.9
Controlling behaviour	9.8	15.9
% “Some” (T) vs. “No” (C)	7.5	14.7
% “A lot” (T) vs. “Some” (C)	0.8	0.4
% “A lot” (T) vs. “No” (C)	1.5	0.9
Depression	6.2	18.0
% “Some” (T) vs. “No” (C)	5.7	15.1
% “A lot” (T) vs. “Some” (C)	0.3	2.1
% “A lot” (T) vs. “No” (C)	0.2	0.8
Hearing	0.7	4.5
% “Some” (T) vs. “No” (C)	0.6	3.9
% “A lot” (T) vs. “Some” (C)	0.0	0.2
% “A lot” (T) vs. “No” (C)	0.1	0.4
Learning	11.1	28.7
% “Some” (T) vs. “No” (C)	8.2	23.4
% “A lot” (T) vs. “Some” (C)	0.6	2.2
% “A lot” (T) vs. “No” (C)	2.2	3.1
Making friends	6.2	9.7
% “Some” (T) vs. “No” (C)	5.3	9.0
% “A lot” (T) vs. “Some” (C)	0.2	0.0
% “A lot” (T) vs. “No” (C)	0.8	0.7
Remembering	11.8	33.2
% “Some” (T) vs. “No” (C)	8.9	26.6
% “A lot” (T) vs. “Some” (C)	0.8	2.9
% “A lot” (T) vs. “No” (C)	2.1	3.7

Seeing	2.2	2.8
% “Some” (T) vs. “No” (C)	1.9	1.9
% “A lot” (T) vs. “Some” (C)	0.1	0.8
% “A lot” (T) vs. “No” (C)	0.2	0.1
Walking	0.7	6.7
% “Some” (T) vs. “No” (C)	0.5	5.5
% “A lot” (T) vs. “Some” (C)	0.0	0.1
% “A lot” (T) vs. “No” (C)	0.2	1.0
Average % over-reporting	6.1	15.1
Any functional domain	5.7	10.0
% “Some” (T) vs. “No” (C)	0.0	0.0
% “A lot” (T) vs. “Some” (C)	5.7	10.0
% “A lot” (T) vs. “No” (C)	0.0	0.0

Table note: Over-reporting was evaluated using mother/primary caregiver responses as the reference. The numbers in the table represent the percentage of pairs where teachers reported a higher level of functional difficulty for the child than the mother/primary caregiver. In the first cell of the second column, the entry “17.2” means that in 17.2 per cent of pairs in Malawi, the teacher reported a higher level of difficulty in the accepting change domain than the mother/primary caregiver. In the second cell in the second column, “15.5” means that in 15.5 per cent of pairs in Malawi, the teacher reported the child had “some difficulty” in accepting change, while the mother/primary caregiver reported “no difficulty”. Cells with a value of “0.0” indicate that no cases were observed for the particular combination of mother/primary caregiver–teacher responses for that domain (e.g., for the making friends domain in Malawi, there were no pairs where the teacher reported “a lot of difficulty” and the mother/primary caregiver reported “some difficulty”).

Results for Malawi

Agreement and disagreement levels: Table 5 presents the agreement and disagreement rates for the three-category response set between mothers/primary caregivers and teachers across various individual domains of child functioning and for the overall indicator in Malawi. Using the three-category response set, the agreement rate for the overall indicator across all domains was 78 per cent. The highest agreement rates were observed in the domains of communication (97 per cent), walking (87 per cent), making friends (85 per cent) and hearing (84 per cent), whereas seeing had the least agreement at 18 per cent,

followed by the domains of remembering (50 per cent), anxiety (51 per cent), learning (57 per cent) and depression (58 per cent). Most of the disagreements involved mother/primary caregiver responses of “no functional difficulties” when teachers reported either “some functional difficulties” or “a lot of functional difficulties”, or mother/primary caregiver responses of “some functional difficulties” when teachers reported either “no functional difficulties” or “a lot of functional difficulties”. The discrepancy in the communication domain across both settings and the overall lower agreement in Kosovo compared to Malawi are notable.

Table 5. Agreement and disagreement between mother/primary caregiver and teacher in Malawi, based on the three-category response set

Domain	Pairs of respondents in agreement				Pairs of respondents in disagreement			
	No functional difficulties	Some functional difficulties	A lot of functional difficulties	Total	No functional difficulties	Some functional difficulties	A lot of functional difficulties	Total
First and second teachers combined								
Seeing	123 (14%)	37 (4%)	0 (0%)	160 (18%)	17 (2%)	690 (80%)	0 (0%)	707 (82%)
Hearing	688 (79%)	7 (1%)	30 (3%)	725 (84%)	37 (4%)	89 (10%)	16 (2%)	142 (16%)
Walking	748 (86%)	4 (0%)	0 (0%)	752 (87%)	57 (7%)	52 (6%)	6 (1%)	115 (13%)
Communication	0 (0%)	815 (94%)	30 (3%)	845 (97%)	0 (0%)	7 (1%)	15 (2%)	22 (3%)
Learning	438 (51%)	55 (6%)	1 (0%)	494 (57%)	230 (27%)	116 (13%)	27 (3%)	373 (43%)
Remembering	315 (36%)	111 (13%)	5 (1%)	431 (50%)	263 (30%)	140 (16%)	33 (4%)	436 (50%)
Concentrating	553 (64%)	47 (5%)	2 (0%)	602 (69%)	135 (16%)	114 (13%)	16 (2%)	265 (31%)
Accepting change	503 (58%)	52 (6%)	3 (0%)	558 (64%)	143 (16%)	130 (15%)	36 (4%)	309 (36%)
Controlling behaviour	527 (61%)	43 (5%)	2 (0%)	572 (66%)	164 (19%)	101 (12%)	30 (3%)	295 (34%)
Making friends	735 (85%)	4 (0%)	0 (0%)	739 (85%)	84 (10%)	35 (4%)	9 (1%)	128 (15%)
Anxiety	106 (12%)	335 (39%)	1 (0%)	442 (51%)	182 (21%)	223 (26%)	20 (2%)	425 (49%)
Depression	120 (14%)	377 (43%)	4 (0%)	501 (58%)	138 (16%)	216 (25%)	12 (1%)	366 (42%)
Any functional domain	0 (0%)	614 (71%)	60 (7%)	674 (78%)	0 (0%)	87 (10%)	106 (12%)	193 (22%)

Table note: For each student, Malawi had paired one mother/primary caregiver and one teacher, resulting in 867 mother/primary caregiver–teacher response pairs. The number associated with each percentage indicates the number of pairs that are the same (“Pairs of responses in agreement” column) or different (“Pairs of responses in disagreement” column). Agreement was determined using the mother/primary caregiver response as the reference. In the first cell of the second column, the entry “123 (14%)” means that there were 123 pairs (or 14 per cent of the total number of pairs [867]) where the mother/primary caregiver reported “no difficulty” in seeing and the teacher also reported “no difficulty” in seeing. Conversely, in the first cell of the sixth column, “17 (2%)” means that there were 17 pairs where the mother/primary caregiver reported “no difficulty” in seeing while the teacher reported “some difficulty” or “a lot of difficulty”. Cells with a value of “0 (0%)” indicate that no pairs were observed for the particular situation (e.g., the making friends domain, for which there were no pairs of the mother/primary caregiver reporting “a lot of difficulty” and the teacher reporting a lower level of difficulty, such as “some difficulty” or “no difficulty”).

Under- and over-reporting relative to the mother/primary caregiver: As already discussed, Table 5 shows the level of agreement and disagreement between mother/primary caregiver and teacher responses for the overall three-category indicator and for each functional domain. More information about the nature of the disagreement is provided in Tables 3 and 4. Table 3 focuses on under-reporting, showing the percentage of pairs where the level of difficulty reported by the teacher was lower than the level reported by the mother/primary caregiver, by domain and for the overall indicator. Table 4 takes the same approach to further examine over-reporting, or pairs where the level of difficulty reported by the teacher was higher than the level reported by the mother/primary caregiver, again by domain and for the overall indicator.

In Malawi, disagreement between teachers and mothers/primary caregivers in the level of functional difficulty reported for a child was somewhat evenly split between cases of teachers over-reporting relative to mothers/primary caregivers, and cases of teachers under-reporting. Notably, however, the domain of seeing had an unusually high level of under-reporting (see Table 3), with 78.8 per cent of teachers reporting “no difficulty” when mothers/primary caregivers reported “some difficulty”. The domains with the highest levels of under-reporting in Malawi also included anxiety, depression, accepting change and remembering. Anxiety was under-reported in 24.7 per cent of pairs, depression was under-reported in 24.2 per cent of pairs, accepting change was under-reported in 18.4 per cent of pairs and remembering was under-reported in 17.1 per cent of pairs. For all of these domains, most cases of under-reporting were due to teachers reporting “no difficulty” when mothers/primary caregivers reported “some difficulty”. In contrast, all cases of under-reporting for the overall indicator in Malawi (12.2 per cent) were due to teachers reporting “some difficulty” when mothers/primary caregivers reported “a lot of difficulty”.

The domains with the highest levels of over-reporting (see Table 4) in Malawi included remembering (33.2 per cent), learning (28.7 per cent), anxiety (24.3 per cent), controlling behaviour (19.3 per cent) and accepting change (17.2 per cent). Notably, some of the domains with the highest levels of over-reporting in Malawi were also among the domains with the highest levels of under-reporting. Levels of over- and under-reporting in Malawi were similar for anxiety

(24.3 per cent over-reporting; 24.7 per cent under-reporting) and accepting change (17.2 per cent over-reporting; 18.4 per cent under-reporting) and were somewhat similar for the overall indicator (10.0 per cent over-reporting; 12.2 per cent under-reporting). This finding suggests that these domains are not more likely to be over-reported than under-reported. Rather, they are domains in which the responses provided by teachers and mothers/primary caregivers are more likely to differ when evaluating a child’s level of functional difficulty.

When over-reporting occurred in Malawi, it was primarily due to teachers reporting “some difficulty” when mothers/primary caregivers reported “no difficulty”. The two exceptions to this pattern in Malawi were the domain of communication and the overall indicator. All cases of over-reporting in the communication domain (0.8 per cent) and for the overall indicator (10.0 per cent) involved teachers reporting “a lot of difficulty” when mothers/primary caregivers reported “some difficulty”.

Comparison of Kosovo and Malawi

Agreement levels: For the three-category response set, the agreement rate for the overall indicator was much lower in Kosovo (28 per cent) than in Malawi (72 per cent). The highest agreement rates in Kosovo were in the domains of hearing (99 per cent), walking (98 per cent) and seeing (95 per cent). In Malawi, the highest rate was in the domain of communication (97 per cent), whereas this domain had the lowest agreement rate (5 per cent) in Kosovo. In Malawi, walking (87 per cent) and hearing (84 per cent) had comparatively high agreement rates, which was also the case in Kosovo, though agreement rates for these domains were higher in Kosovo than in Malawi. The lowest agreement rate in Malawi was for seeing (18 per cent), in contrast to Kosovo, where the agreement rate for seeing was high (95 per cent).

Under- and over-reporting relative to the mother/primary caregiver: Given that disagreement rates in individual domains were generally higher in Malawi than in Kosovo, in most cases, both under-reporting and over-reporting were more common in Malawi than in Kosovo. One exception to this pattern was the communication domain, which had an unusually high level of under-reporting in Kosovo (92.5 per cent). This high level of under-reporting for communication may also account for the higher level of under-reporting for the overall indicator in Kosovo (66.1 per cent), relative to under-reporting for the

overall indicator in Malawi (12.2 per cent). While communication had the highest level of under-reporting in Kosovo (92.5 per cent), seeing had the highest level of under-reporting in Malawi (78.8 per cent). Neither of these domains had high levels of under-reporting in Kosovo. That is not to say that there were no similarities between Kosovo and Malawi in terms of under-reporting. In both countries, anxiety and depression were among the domains with the highest level of under-reporting. Additional similarities were observed for over-reporting. In both Kosovo and Malawi, the highest levels of over-reporting were in the domains of remembering (33.2 per cent in Malawi; 11.8 per cent in Kosovo) and learning (28.7 per cent in Malawi; 11.1 per cent in Kosovo). Most cases of over- and under-reporting occurred due to one respondent reporting the child had “some difficulty” when the other respondent reported “no difficulty”. For the overall indicator, in contrast, the primary contributors to under- and over-reporting in Malawi, as well as over-reporting in Kosovo, were discrepancies between reports of “a lot of difficulty” and “some difficulty”.

Two-category response set

For the next set of analyses, a two-category response set was used to compare teacher reports to those of mothers/primary caregivers. The two-category response set combined the “no difficulty” and “some difficulty” response categories into a single “without functional difficulties” category, while the “a lot of difficulty” and “cannot do at all” categories were combined into the “with functional difficulties” category. “Disagreement” was defined as a difference between responses provided by teachers and mothers/primary caregivers in terms of which of these two categories they reported for the child. Notably, reports of “no difficulty” by one person and “some difficulty” by another person would be classified as “disagreement” when using the three-category response set, but as “agreement” when using the two-category response set. As such, the levels of disagreement can be expected to be lower (and levels of agreement to be higher) when using the two-category response set, but this depends on the nature of disagreement between teacher and mother/primary caregiver reports.

Results for Kosovo

Agreement and disagreement levels: Table 6 shows the agreement rates for the two-category response set (“without functional difficulties” versus “with functional difficulties”). In Kosovo, the agreement rates

were generally higher when using the two-category response set compared to the three-category response set, with the overall agreement rate across all domains reaching about 93 per cent for the two-category response set, as compared to 28 per cent for the three-category response set. Agreement rates were over 96 per cent for all domains, with agreement rates of over 99 per cent in four domains (seeing, hearing, walking and depression).

Under- and over-reporting relative to the mother/primary caregiver: Supplemental Table 1 shows under-reporting based on the two-category response set, by domain and country and for the overall indicator. Supplemental Table 2 provides information about over-reporting in both countries. Levels of under-reporting in Kosovo were lower when based on the two-category response set (see *Supplemental Table 1*) compared to the three-category response set (see *Table 3*). For the overall indicator in Kosovo, under-reporting was only observed in 1.3 per cent of pairs. The two domains with the highest levels of under-reporting in Kosovo were making friends (0.6 per cent) and anxiety (0.6 per cent). Levels of over-reporting, when based on the two-category response set, were also quite low in Kosovo. Over-reporting for the overall indicator was observed in 5.7 per cent of pairs. The highest domain-specific rates of over-reporting in Kosovo were in the domains of remembering (2.9 per cent) and learning (2.9 per cent). Notably, however, for the overall indicator, all cases of over-reporting in Kosovo were due to teachers reporting “a lot of difficulty” when mothers/primary caregivers reported “some difficulty”. As a result, there was no difference in over-reporting for the overall indicator in Kosovo when using the two-category indicator, relative to the three-category indicator. In both cases, over-reporting occurred in 5.7 per cent of pairs.

Results for Malawi

Agreement and disagreement levels: The agreement rates for the two- and three-category response sets were both around 78 per cent in Malawi (see *Tables 5 and 7*). Agreement rates when using the two-category response set were 89.6 per cent or higher in all domains. Agreement was highest for seeing (99.1 per cent) and lowest for remembering (89.6 per cent).

Under- and over-reporting relative to the mother/primary caregiver: Supplemental Table 1 shows under-reporting based on the two-category

response set, by domain and country and for the overall indicator. Supplemental Table 2 provides information about over-reporting. As in Kosovo, domain-specific levels of under- and over-reporting (see *Supplemental Tables 1 and 2*) were much lower in Malawi when using the two-category response set, relative to the three-category response set (see *Tables 3 and 4*). Among the domains with the most under-reporting in Malawi were accepting change (4.2 per cent), remembering (3.8 per cent), controlling behaviour (3.5 per cent) and learning (3.1 per cent). As was the case when the three-category response set was used, some of the domains with the highest levels of under-reporting in Malawi were also among the domains with the most over-reporting. The domains with the most over-reporting in Malawi included remembering (6.6 per cent), learning (5.3 per cent) and anxiety (5.2 per cent). Notably, levels of under- and over-reporting for the overall indicator in Malawi were the same regardless of whether the two-category or three-category response set was used. In both cases, the overall indicator was under-reported in 12.2 per cent of pairs and over-reported in 10.0 per cent of pairs.

Comparison of Kosovo and Malawi

Agreement and disagreement levels: While agreement was much higher in Kosovo when using the two-category response set compared to the three-category response set, the levels of agreement in the two-category and three-category response sets were similar in Malawi. The reason for little change in Malawi was that there were very few cases of one

respondent reporting “no difficulty” and the other respondent reporting “some difficulty”, while this type of discrepancy between teacher and mother/primary caregiver reports was much more common in Kosovo. Notably, however, when the two-category response set was used, agreement was high for all domains in both countries.

Under- and over-reporting relative to the mother/primary caregiver: For both Kosovo and Malawi, domain-specific levels of under- and over-reporting were generally lower when using the two-category response set, relative to the three-category response set. This was not always the case for the overall indicator. In Malawi, levels of under-reporting (12.2 per cent) and over-reporting (10.0 per cent) for the overall indicator were the same regardless of whether the two- or three-category response set was used. Similarly, over-reporting for the overall indicator in Kosovo occurred in 5.7 per cent of pairs, regardless of how many categories were used. On average, rates of under- and over-reporting were higher in Malawi than in Kosovo. The two countries also differed in terms of which domains had the highest levels of under-reporting. The highest rate of under-reporting in Kosovo was in the domain of making friends (0.6 per cent), while in Malawi it was in the domain of accepting change (4.2 per cent). The two countries were more similar in terms of over-reporting: in both Kosovo and Malawi, learning and remembering were among the domains with the highest levels of over-reporting.

Table 6. Agreement and disagreement between mother/primary caregiver and teacher in Kosovo, based on the two-category response set[†]

Domain	Pairs of respondents in agreement			Pairs of respondents in disagreement		
	With functional difficulties	Without functional difficulties [†]	Total	With functional difficulties	Without functional difficulties [†]	Total
Both first and second teacher						
Seeing	2 (0.1%)	2,619 (99.5%)	2,621 (99.6%)	4 (0.1%)	7 (0.3%)	11 (0.4%)
Hearing	1 (0.0%)	2,624 (99.7%)	2,625 (99.7%)	5 (0.2%)	2 (0.1%)	7 (0.3%)
Walking	1 (0.0%)	2,625 (99.7%)	2,626 (99.8%)	1 (0.0%)	5 (0.2%)	6 (0.2%)
Communication	3 (0.1%)	2,565 (97.5%)	2,568 (97.6%)	3 (0.1%)	61 (2.3%)	64 (2.4%)
Learning	2 (0.1%)	2,551 (96.9%)	2,553 (97.0%)	4 (0.1%)	75 (2.8%)	79 (3.0%)
Remembering	4 (0.1%)	2,550 (96.9%)	2,554 (97.0%)	2 (0.1%)	76 (2.9%)	78 (3.0%)
Concentrating	4 (0.1%)	2,559 (97.2%)	2,563 (97.4%)	8 (0.3%)	61 (2.3%)	69 (2.6%)
Accepting change	1 (0.0%)	2,587 (98.3%)	2,588 (98.3%)	5 (0.2%)	39 (1.5%)	44 (1.7%)
Controlling behaviour	0 (0.0%)	2,592 (98.5%)	2,592 (98.5%)	4 (0.1%)	36 (1.4%)	40 (1.5%)
Making friends	2 (0.1%)	2,589 (98.4%)	2,591 (98.4%)	16 (0.6%)	25 (0.9%)	41 (1.6%)
Anxiety	1 (0.0%)	2,602 (98.9%)	2,603 (98.9%)	15 (0.6%)	14 (0.5%)	29 (1.1%)
Depression	0 (0.0%)	2,620 (99.5%)	2,620 (99.5%)	0 (0.0%)	12 (0.5%)	12 (0.5%)
Any functional	21 (0.8%)	2,427 (92.2%)	2,448 (93.0%)	35 (1.3%)	149 (5.7%)	184 (7.0%)

Table note: For each student, Kosovo had paired one mother/primary caregiver and two teachers, resulting in 2,632 mother/primary caregiver–teacher response pairs. The number associated with each percentage indicates the number of pairs that are the same (“Pairs of respondents in agreement” column) or different (“Pairs of respondents in disagreement” column). Agreement was determined using the mother/primary caregiver’s response as the reference. See the table footnote (†) for more information. In the second column’s first cell, “2 (0.1%)” means that in 2 pairs (or 0.1 per cent of the total number of pairs [2,632]), the mother/primary caregiver response classified the child as “with functional difficulties” in seeing, and the teacher response also classified the child as “with functional difficulties”. Conversely, in the first cell of the fifth column, “4 (0.1%)” means that in 4 pairs (or 0.1 per cent of the total number of pairs [2,632]), the mother/primary caregiver response classified the child as “with functional difficulties”, but the teacher response classified him/her as “without functional difficulties”.

† “No functional difficulties” and “some functional difficulties” were combined to form “without functional difficulties”.

Table 7. Agreement and disagreement between mother/primary caregiver and teacher in Malawi, based on the two-category response set

Domain	Pairs of respondents in agreement			Pairs of respondents in disagreement		
	With functional difficulties	Without functional difficulties [†]	Total	With functional difficulties	Without functional difficulties	Total
Seeing	0 (0.0%)	859 (99.1%)	859 (99.1%)	0 (0.0%)	8 (0.9%)	8 (0.9%)
Hearing	30 (3.5%)	816 (94.1%)	846 (97.6%)	16 (1.8%)	5 (0.6%)	21 (2.4%)
Walking	0 (0.0%)	851 (98.2%)	851 (98.2%)	6 (0.7%)	10 (1.1%)	16 (1.8%)
Communication	30 (3.5%)	815 (94.0%)	845 (97.5%)	15 (1.7%)	7 (0.8%)	22 (2.5%)
Learning	1 (0.1%)	793 (91.5%)	794 (91.6%)	27 (3.1%)	46 (5.3%)	73 (8.4%)
Remembering	5 (0.6%)	772 (89.0%)	777 (89.6%)	33 (3.8%)	57 (6.6%)	90 (10.4%)
Concentrating	2 (0.2%)	838 (96.7%)	840 (96.9%)	16 (1.8%)	11 (1.3%)	27 (3.1%)
Accepting change	3 (0.3%)	813 (93.8%)	816 (94.1%)	36 (4.2%)	15 (1.7%)	51 (5.9%)
Controlling behaviour	2 (0.2%)	820 (94.6%)	822 (94.8%)	30 (3.5%)	15 (1.7%)	45 (5.2%)
Making friends	0 (0.0%)	852 (98.3%)	852 (98.3%)	9 (1.0%)	6 (0.7%)	15 (1.7%)
Anxiety	1 (0.1%)	801 (92.4%)	802 (92.5%)	20 (2.3%)	45 (5.2%)	65 (7.5%)
Depression	4 (0.5%)	826 (95.3%)	830 (95.7%)	12 (1.4%)	25 (2.9%)	37 (4.3%)
Any functional	60 (6.9%)	614 (70.8%)	674 (77.7%)	106 (12.2%)	87 (10.0%)	193 (22.3%)

Table note: For each student, Malawi had paired one mother/primary caregiver and one teacher, resulting in 867 mother/primary caregiver–teacher response pairs. The number associated with each percentage indicates the number of pairs that are the same (“Pairs of respondents in agreement” column) or different (“Pairs of respondents in disagreement” column). Agreement was determined using the mother/primary caregiver response as the reference. See the table footnote (†) for more information. In the second cell of the second column, “30 (3.5%)” means that for 30 pairs (or 3.5 per cent of the total number of pairs [867]), where the mother/primary caregiver response classified the child as “with functional difficulties” in hearing, the teacher response also classified the child as “with functional difficulties”. Conversely, in the second cell of the fifth column, “16 (1.8%)” means that for the 16 pairs (or 1.8 per cent of the total number of pairs [867]), the mother/primary caregiver’s response classified the child as “with functional difficulties”, while the teacher’s response classified him/her as “without functional difficulties”.

† “No functional difficulties” and “some functional difficulties” were combined to form “without functional difficulties”.

Impact of differences in reporting on prevalence:

Table 8 shows the prevalence of functional difficulties based on the two-category indicator for Kosovo and Malawi. Prevalence rates of “with functional difficulties” in the overall indicator were higher when based on teacher assessments than when based on mother/primary caregiver assessments in Kosovo (6.5 per cent versus 2.1 per cent) but not in Malawi (16.7 per cent versus 19.2 per cent). In Kosovo, the prevalence of functional difficulties in the domains of walking, communication, learning, remembering, concentrating, accepting change, controlling behaviour and depression was significantly higher for teacher reports, relative to mother/primary caregiver reports. For some domains, the differences in prevalence were large. For example, the percentage of

children “with functional difficulties” in learning was 2.9 per cent when reported by teachers but 0.2 per cent when reported by mothers/primary caregivers. In Malawi, the prevalence of functional difficulties in the domains of seeing, learning, remembering, anxiety and depression was significantly higher when based on teacher reports, while the prevalence of functional difficulties in the domains of hearing, communication, accepting change and controlling behaviour was significantly lower. As was the case for Kosovo, the differences in prevalence were large in some domains. For example, the percentage “with functional difficulties” in remembering was reported as 7.2 per cent by teachers but as 4.4 per cent by mothers/primary caregivers.

Table 8. Prevalence of reports of functional difficulties (%) using the two-category disability indicator, by respondent type and country

Domain	Kosovo		Malawi	
	Mother/primary caregiver	Teacher	Mother/primary caregiver	Teacher
Seeing	0.23	0.34	0.00	0.92***
Hearing	0.23	0.11	5.31	4.04**
Walking	0.08	0.23*	0.69	1.15
Communication	0.23	2.43***	5.19	4.27*
Learning	0.23	2.93***	3.23	5.42*
Remembering	0.23	3.04***	4.38	7.15***
Concentrating	0.46	2.47***	2.08	1.50
Accepting change	0.23	1.52***	4.50	2.08***
Controlling behaviour	0.15	1.37***	3.69	1.96***
Making friends	0.68	1.03	1.04	0.69
Anxiety	0.61	0.57	2.42	5.31**
Depression	0.00	0.46***	1.85	3.34**
Any functional domain	2.13	6.46***	19.15	16.96

Table note: Using the UNICEF definition as a reference, children were identified as “with functional difficulties” if they indicated experiencing “a lot of difficulty” or “cannot do at all” in any domain or reported daily feelings of anxiety or depression. For each student, Kosovo had paired one mother/primary caregiver and two teachers, resulting in 2,632 mother/primary caregiver–teacher response pairs. In Malawi, each student had one mother/primary caregiver and one teacher, resulting in 867 mother/primary caregiver–teacher response pairs.

*p < 0.05, **p < 0.01, ***p < 0.001. The p-value was extracted from the multilevel logistic model with disabled (“yes” or “no”) as the outcome and teacher as the key predictor, controlling for student ID and country as random variables. In the third cell of the second column, “0.08” means that the prevalence of functional difficulties in the walking domain was 0.08 per cent when based on mother/primary caregiver reports, while the value of “0.23” in the third cell of the third column indicates that it was 0.23 per cent when based on teacher reports. The asterisk next to “0.23” indicates that these two values (0.08 per cent and 0.23 per cent) significantly differed at the alpha = 0.05 level. In other words, the prevalence of functional difficulties in the walking domain significantly differed depending on whether mother/primary caregiver reports or teacher reports were used.

Predictors of the disagreement between mothers/primary caregivers and teachers

Results of the multilevel logistic regression analysis assessing the predictors of disagreement between mothers/primary caregivers and teachers when using the two-category response set are given in Table 9 for Malawi and Table 10 for Kosovo, both for the overall indicator and for each individual domain of functioning. In the tables, the variable on each row is the sole predictor variable included in the country-specific model, though the models also included districts and schools as random variables to account for potential clustering effects. Note that while the results presented in these tables are based on bivariate regression analysis, multivariate analysis (in which all predictors were included in a single logistic regression model for each country) was also conducted as a robustness check. The overall conclusions did not differ greatly between bivariate and multivariate analysis,

although some associations that were statistically significant in the bivariate analysis were not significant in the multivariate analysis, and vice versa. Overall, regardless of the modelling approach, most of the significant effects were modest in size or had large confidence intervals in both Kosovo and Malawi, and there was little consistency in the results across the two study sites. The direction of the effects (i.e., greater versus lesser disagreement between mother/primary caregiver and teacher reports) was often inconsistent across domains. The general pattern of results for both Kosovo and Malawi is summarized below.

Characteristics related to the student: Three characteristics of students were assessed in terms of their association with mother/primary caregiver–teacher disagreement on a student’s level of functional difficulty: student age, student sex and student grade

level (secondary school versus primary school). In Kosovo, older age was significantly associated with increased disagreement in the domain of making friends (odds ratio [OR] = 1.11; 95 per cent confidence interval [CI] [1.04, 1.18]), whereas in Malawi, older age was associated with increased disagreement in communication (OR = 1.19; CI [1.02, 1.39]) but decreased disagreement in the domains of anxiety (OR = .93; CI [.89, .97]) and depression (OR = .93; CI [.89, .97]). In Kosovo, the odds of disagreement between mothers/primary caregivers and teachers for the overall indicator were higher for female students than male students (OR = 1.44; CI [1.20, 1.74]), but in Malawi, the reverse was true – that is, the odds of disagreement for the overall indicator were lower for female students, relative to male students (OR = .71; CI [.51, .98]). Being female was associated with more disagreement in responses for seeing in Kosovo (OR = 1.85; CI [1.27, 2.68]) but less disagreement in learning (OR = .78; CI [.63, .98]), remembering (OR = .66; CI [.53, .83]) and controlling behaviour (OR = .66; CI [.50, .87]). In Malawi, being female was also associated with less disagreement in responses for controlling behaviour (OR = .60; CI [.45, .81]). In Kosovo, being in secondary school compared to primary school was associated with increased disagreement in the overall indicator (OR = 1.43; CI [1.14, 1.79]) and communication (OR = 2.22; CI [1.44, 3.44]) but less disagreement in walking (OR = .32; CI [.17, .61]), learning (OR = .70; CI [.54, .91]), remembering (OR = .74; CI [.57, .97]), concentrating (OR = .65; CI [.50, .86]), accepting change (OR = .68; CI [.50, .92]), controlling behaviour (OR = .70; CI [.50, .98]) and depression (OR = .72; CI [.57, .92]). In Malawi, being in secondary school, compared to primary school, was not associated with disagreement, but repeating the grade, a variable unavailable in the Kosovo data, was associated with greater disagreement in responses for walking (OR = 1.73; CI [1.09, 2.75]). In summary, while student age, student sex and student grade level (primary versus secondary) were all significantly associated with mother/primary caregiver–teacher disagreement in some of the models, these associations varied by domain and country and were not consistent in terms of direction. In other words, none of these student characteristics appeared to be clear and consistent predictors of disagreement.

Characteristics related to parents/primary caregivers:

The characteristics of parents/primary caregivers considered in the regression analysis in terms of their

relationship with teacher–caregiver disagreement include the caregiver’s age and their relationship to the child (mother, father, other) and parental education. No characteristics of the mother/primary caregiver were significantly associated with disagreement for the overall indicator in either study site. In Kosovo, older age was associated with less disagreement in anxiety (OR = .98; CI [.97, .99]), while in Malawi, older age was associated with less disagreement in hearing (OR = .98; CI [.96, 1.00]). In Kosovo, responses from a father as the primary caregiver compared to responses from a mother were associated with less disagreement in walking (OR = .45; CI [.25, .80]) and anxiety (OR = .78; CI [.64, .94]), but there were no significant associations between the mother/primary caregiver’s sex and disagreement for any domains in Malawi. In Kosovo, having a primary caregiver other than a parent respond was associated with greater disagreement in walking (OR = 4.79; CI [1.57, 14.66]), remembering (OR = 2.61; CI [1.15, 5.92]) and concentrating (OR = 2.42; CI [1.03, 5.67]). In Malawi, having a primary caregiver other than a parent respond was associated with higher levels of disagreement in making friends (OR = 1.63; CI [1.01, 2.63]). The respondent having a high school education compared to primary education was associated with lower disagreement in seeing (OR = .55; CI [.33, .91]) in Kosovo, whereas in Malawi, having a high school education was associated with lower disagreement in controlling behaviour (OR = .68; CI [.48, .96]). In Kosovo, having a bachelor’s degree or higher was associated with lower levels of disagreement in seeing (OR = .55; CI [.31, .99]), learning (OR = .56; CI [.39, .80]) and remembering (OR = .45; CI [.31, .66]), whereas in Malawi, having a bachelor’s degree or higher was associated with higher levels of disagreement in seeing (OR = 2.45; CI [1.00, 6.02]), accepting change (OR = 2.19; CI [1.27, 3.80]) and making friends (OR = 2.07; CI [1.03, 4.15]) but lower levels of disagreement in depression (OR = .42; CI [.22, .78]). Overall, it is difficult to conclude that any characteristics of mothers/primary caregivers are consistently associated with greater (or lesser) disagreement. While there is some evidence, for example, that disagreement between teachers and primary caregivers is higher for caregivers who were not the child’s parent (relative to mothers), this finding was not consistently observed across all domains of functioning, nor was it observed within the same domains in Kosovo and Malawi.

Characteristics related to teachers: Characteristics of teachers that were evaluated in the regression analysis

included the teacher's sex, familiarity with the student, teaching workload (Malawi only), years of teaching experience (Malawi only), qualification as an SNE teacher (Malawi only) and capacity for supporting SNE students (Malawi only). Since mother/primary caregiver reports were compared to two teachers in Kosovo, whether the teacher was the first teacher to complete the questionnaire was also considered in terms of its relationship to caregiver–teacher disagreement in Kosovo. First teachers had decreased odds of disagreement with mother/primary caregiver reports of overall disability status (OR = .76; CI [0.63, 0.91]), relative to second teachers, but increased odds of disagreement with teacher reports of functioning in the controlling behaviour domain (OR = 1.34; CI [1.03, 1.74]). In Kosovo, being female was associated with lower levels of disagreement in communication (OR = .35; CI [.21, .59]), whereas in Malawi, being female was associated with lower levels of disagreement in walking (OR = .57; CI [.34, .95]). There were also some significant associations observed between disagreement and a measure of teachers' familiarity with the student. Compared to knowing the student "very well", knowing the student only "a little" was associated with higher disagreement in learning (OR = 1.49; CI [1.01, 2.49]), remembering (OR = 2.03; CI [1.38, 2.99]), accepting change (OR = 1.60; CI [1.06, 2.42]) and making friends (OR = 1.55; CI [1.02, 2.35]) in Kosovo and with higher disagreement for the overall indicator (OR = 1.80; CI [1.05, 3.09]), in learning (OR = 1.79; CI [1.09, 2.92]) and in controlling behaviour (OR = 1.79; CI [1.09, 2.95]) in Malawi. In Kosovo, knowing the student "well" compared with knowing the student "very well" was associated with less disagreement in walking (OR = .56; CI [.32, .59]), while in Malawi, it was associated with greater disagreement for overall disability (OR = 1.53; CI [1.02, 2.28]). Apart from qualification as an SNE teacher, the additional teacher-related variables that were collected in the Malawi survey did not show significant associations with disagreement between mothers/primary caregivers and teachers (p-values > 0.05). Compared to regular teachers, being qualified as an SNE teacher was associated with increased odds of disagreement in the domains of communication (OR = 16.29; CI [1.83, 145.23]), learning (OR = 4.00; CI [1.77, 9.03]), controlling behaviour (OR = 2.80; CI [1.30, 6.01]) and making friends (OR = 5.73; CI [2.22, 14.79]). Taken together, the results provide some evidence that mother/primary caregiver–teacher disagreement is higher for certain teachers, such as those who have less familiarity with the student being

evaluated and special needs teachers (compared to regular teachers). Like other predictors of disagreement considered thus far, however, these patterns were not consistently observed across all domains and study sites.

Characteristics of the school: The one school-level characteristic assessed across both study sites for its association with caregiver–teacher disagreement was an index of the school environment. In Kosovo, a higher-quality school environment was associated with greater disagreement in the overall indicator (OR = 1.12; CI [1.04, 1.20]) but less disagreement in seeing (OR = .88; CI [.79, .97]), learning (OR = .89; CI [.82, .97]), accepting change (OR = .89; CI [.81, .97]), anxiety (OR = .89; CI [.81, .97]) and depression (OR = .89; CI [.81, .97]). In Malawi, a higher-quality school environment was associated with less disagreement in anxiety (OR = .91; CI [.84, .99]). In Kosovo, one additional school characteristic was considered: whether the school was a specialized school for children with disabilities. Compared to standard schools, attending a specialized school for children with disabilities was significantly associated with increased odds of disagreement in all domains except communication (decreased odds of disagreement) and seeing (no significant association). There was no association between attending a specialized school and disagreement for the overall indicator. A number of additional school-related variables were included in the Malawi study, including the number of classrooms with ramps, the number of classrooms with doors wide enough for wheelchairs and the total number of classrooms. None of these variables was significantly associated with disagreement. Overall, only two characteristics of the schools – school environment and status as a specialized school for children with disabilities – had any significant associations with caregiver–teacher disagreement, and the direction of the relationship between these variables and the odds of disagreement sometimes flipped across domains or between the overall indicator and domain-specific indicators.

In summary, there is some evidence that certain variables are associated with greater (or lesser) disagreement between teachers' and mother/primary caregivers' reports of students' functional difficulties. The odds of disagreement, for example, were sometimes higher when mother/primary caregiver reports were provided by someone other than a parent (compared to when they were provided by the child's mother) and when teachers were less familiar with the

student. Interestingly, rates of disagreement were also sometimes higher among teachers with SNE qualifications and within specialized schools for children with disabilities. It is important to emphasize, however, that most of these differences were small in

magnitude and few, if any, were consistently observed across all domains of functioning or within both study sites. Consequently, no clear, consistent predictors of disagreement were identified in this study.

Table 9. Multilevel logistic regression on the disagreement between mothers/primary caregivers and teachers, Malawi, by domain and overall disability

Variable	OR and CI values												
	Seeing	Hearing	Walking	Communication	Learning	Remembering	Concentrating	Accepting change	Controlling behaviour	Making friends	Anxiety	Depression	Overall
Student													
Age (years)	1.00 (0.95, 1.06)	1.01 (0.96, 1.07)	0.96 (0.90, 1.02)	1.19 (1.02, 1.39)*	1.03 (0.99, 1.07)	1.00 (0.96, 1.05)	1.01 (0.97, 1.06)	0.97 (0.93, 1.01)	1.03 (0.98, 1.07)	1.03 (0.97, 1.09)	0.93 (0.89, 0.97) ***	0.93 (0.89, 0.97) ***	0.99 (0.95, 1.04)
Sex (= male)	+	+	+	+	+	+	+	+	+	+	+	+	+
Sex (= female)	0.96 (0.67, 1.39)	0.87 (0.60, 1.27)	0.90 (0.60, 1.36)	0.54 (0.20, 1.41)	0.93 (0.70, 1.23)	0.99 (0.75, 1.31)	1.01 (0.75, 1.37)	0.83 (0.62, 1.10)	0.60 (0.45, 0.81) ***	0.87 (0.59, 1.30)	1.12 (0.85, 1.47)	1.04 (0.78, 1.37)	0.71 (0.51, 0.98)*
Grade (= primary)	+	+	+	+	+	+	+	+	+	+	+	+	+
Grade (= secondary)	0.57 (0.31, 1.06)	1.23 (0.66, 2.27)	0.70 (0.34, 1.46)	0.75 (0.09, 6.28)	0.79 (0.49, 1.27)	0.72 (0.44, 1.17)	0.70 (0.44, 1.14)	0.95 (0.61, 1.50)	0.92 (0.57, 1.49)	0.92 (0.45, 1.86)	0.78 (0.50, 1.22)	0.71 (0.45, 1.14)	0.67 (0.39, 1.13)
Repeated student (= yes)	0.81 (0.52, 1.26)	1.45 (0.94, 2.23)	1.73 (1.09, 2.75)*	0.50 (0.12, 2.05)	1.31 (0.93, 1.85)	0.92 (0.66, 1.30)	1.37 (0.96, 1.94)	1.16 (0.82, 1.63)	1.36 (0.95, 1.93)	1.26 (0.79, 2.02)	0.82 (0.59, 1.15)	0.72 (0.51, 1.02)	1.26 (0.86, 1.85)
Mother/primary caregiver													
Age (years)	1.00 (0.99, 1.02)	0.98 (0.96, 1.00) *	1.00 (0.98, 1.02)	1.01 (0.97, 1.06)	1.01 (0.99, 1.02)	1.01 (0.99, 1.02)	0.99 (0.97, 1.00)	1.01 (0.99, 1.02)	1.01 (1.00, 1.03)	1.00 (0.99, 1.02)	1.01 (0.99, 1.02)	1.01 (1.00, 1.03)	1.00 (0.99, 1.02)
Relationship with student (= mother)	+	+	+	+	+	+	+	+	+	+	+	+	+
Relationship with student (= father)	1.46 (0.89, 2.40)	0.76 (0.45, 1.28)	0.82 (0.47, 1.43)	0.50 (0.11, 2.32)	0.89 (0.61, 1.29)	1.16 (0.80, 1.67)	1.01 (0.68, 1.50)	1.03 (0.71, 1.50)	0.95 (0.64, 1.41)	1.02 (0.59, 1.75)	1.02 (0.72, 1.46)	0.87 (0.60, 1.26)	0.91 (0.60, 1.39)
Relationship with student (= other)	1.28 (0.80, 2.04)	1.30 (0.83, 2.03)	0.95 (0.57, 1.57)	0.13 (0.01, 1.23)	1.09 (0.77, 1.56)	1.10 (0.78, 1.56)	1.04 (0.72, 1.51)	1.21 (0.85, 1.72)	1.34 (0.94, 1.92)	1.63 (1.01, 2.63)*	1.06 (0.75, 1.49)	1.17 (0.83, 1.66)	0.79 (0.53, 1.19)
Education attained (= elementary school or lower)	+	+	+	+	+	+	+	+	+	+	+	+	+
Education attained (= high school)	1.02 (0.66, 1.57)	1.00 (0.65, 1.56)	1.00 (0.62, 1.60)	0.46 (0.11, 1.84)	0.73 (0.52, 1.02)	1.34 (0.96, 1.88)	0.92 (0.65, 1.30)	1.10 (0.79, 1.53)	0.68 (0.48, 0.96)*	0.90 (0.56, 1.45)	0.84 (0.61, 1.16)	0.88 (0.63, 1.22)	0.88 (0.60, 1.29)

Education attained (= bachelor's and above)	2.45 (1.00, 6.02)*	0.84 (0.39, 1.82)	0.51 (0.19, 1.34)	0.40 (0.05, 3.29)	0.93 (0.52, 1.66)	0.72 (0.40, 1.29)	0.64 (0.34, 1.19)	2.19 (1.27, 3.80) **	0.98 (0.54, 1.75)	2.07 (1.03, 4.15) *	0.67 (0.38, 1.17)	0.42 (0.22, 0.78) **	0.98 (0.52, 1.86)
Teacher													
Sex (= male)	+	+	+	+	+	+	+	+	+	+	+	+	+
Sex (= female)	0.86 (0.55, 1.34)	1.09 (0.70, 1.69)	0.57 (0.34, 0.95)*	0.60 (0.14, 2.68)	0.79 (0.57, 1.11)	0.90 (0.64, 1.25)	0.91 (0.64, 1.28)	0.94 (0.67, 1.30)	1.15 (0.81, 1.61)	0.78 (0.48, 1.28)	0.95 (0.69, 1.31)	0.93 (0.66, 1.30)	1.03 (0.71, 1.48)
Familiar with this student (= very well)	+	+	+	+	+	+	+	+	+	+	+	+	+
Familiar with this student (= well)	0.67 (0.42, 1.07)	1.27 (0.80, 2.02)	1.09 (0.67, 1.77)	2.56 (0.52, 12.61)	1.42 (0.99, 2.02)	1.20 (0.85, 1.69)	1.26 (0.88, 1.81)	1.26 (0.89, 1.77)	1.28 (0.89, 1.83)	1.32 (0.80, 2.18)	0.78 (0.56, 1.08)	0.91 (0.65, 1.28)	1.53 (1.02, 2.28)*
Familiar with this student (= little)	0.65 (0.34, 1.24)	0.91 (0.47, 1.78)	0.78 (0.37, 1.65)	2.61 (0.40, 17.13)	1.79 (1.09, 2.92)*	1.51 (0.93, 2.46)	1.19 (0.71, 1.98)	1.34 (0.82, 2.17)	1.79 (1.09, 2.95)*	1.86 (0.97, 3.59)	0.91 (0.57, 1.45)	1.11 (0.69, 1.79)	1.80 (1.05, 3.09)*
Teaching workload (period/week)	1.01 (0.99, 1.02)	1.01 (0.99, 1.02)	0.99 (0.98, 1.01)	0.99 (0.95, 1.04)	1.01 (1.00, 1.02)	1.01 (0.99, 1.02)	1.00 (0.99, 1.01)	1.01 (1.00, 1.02)	1.00 (0.99, 1.01)	1.00 (0.98, 1.02)	1.00 (0.99, 1.01)	1.00 (0.99, 1.01)	1.01 (0.99, 1.02)
Years teaching	1.00 (0.97, 1.02)	1.00 (0.97, 1.02)	0.98 (0.95, 1.01)	1.01 (0.94, 1.08)	1.00 (0.98, 1.02)	1.00 (0.98, 1.02)	1.01 (1.00, 1.03)	1.00 (0.98, 1.02)	1.01 (0.99, 1.03)	1.02 (0.99, 1.04)	1.00 (0.98, 1.02)	1.00 (0.99, 1.02)	0.99 (0.97, 1.01)
Years teaching at this school	1.00 (0.95, 1.04)	0.95 (0.90, 1.00)	0.97 (0.92, 1.03)	1.04 (0.90, 1.21)	1.00 (0.97, 1.04)	0.99 (0.95, 1.02)	1.01 (0.97, 1.04)	1.01 (0.98, 1.05)	1.01 (0.97, 1.05)	0.95 (0.90, 1.01)	1.00 (0.96, 1.03)	1.01 (0.98, 1.05)	0.97 (0.92, 1.01)
Qualified as an SNE teacher (= yes)	1.17 (0.37, 3.68)	1.47 (0.56, 3.87)	1.06 (0.34, 3.25)	16.29 (1.83, 145.23) *	4.00 (1.77, 9.03) ***	1.85 (0.83, 4.13)	1.78 (0.87, 3.64)	2.04 (0.98, 4.22)	2.80 (1.30, 6.01) **	5.73 (2.22, 14.79) ***	0.62 (0.29, 1.30)	0.52 (0.23, 1.18)	0.63 (0.24, 1.63)
Capacity of supporting SNE students	0.96 (0.82, 1.13)	1.04 (0.89, 1.21)	0.98 (0.83, 1.15)	1.20 (0.74, 1.94)	1.03 (0.92, 1.15)	1.00 (0.89, 1.12)	1.06 (0.94, 1.19)	0.99 (0.88, 1.11)	1.06 (0.94, 1.19)	1.00 (0.85, 1.18)	1.06 (0.95, 1.18)	0.99 (0.88, 1.11)	0.91 (0.80, 1.03)
School													
School environment	1.02 (0.92, 1.15)	0.95 (0.85, 1.06)	1.01 (0.89, 1.14)	1.12 (0.82, 1.54)	0.95 (0.87, 1.03)	1.01 (0.93, 1.10)	0.99 (0.91, 1.09)	0.96 (0.88, 1.04)	1.06 (0.97, 1.15)	1.07 (0.94, 1.21)	0.91 (0.84, 0.99)*	0.94 (0.86, 1.02)	0.92 (0.84, 1.01)
Number of classrooms with ramps	1.04 (0.98, 1.10)	1.00 (0.94, 1.05)	1.01 (0.95, 1.07)	1.04 (0.89, 1.22)	1.03 (0.99, 1.08)	0.97 (0.93, 1.01)	1.03 (0.99, 1.07)	1.02 (0.98, 1.06)	0.99 (0.95, 1.03)	1.03 (0.97, 1.09)	1.02 (0.98, 1.05)	0.99 (0.95, 1.03)	1.00 (0.96, 1.05)
Number of classrooms with doors wide enough to fit wheelchairs	1.03 (0.98, 1.08)	1.02 (0.98, 1.07)	1.02 (0.97, 1.07)	1.02 (0.88, 1.19)	1.01 (0.98, 1.05)	0.98 (0.94, 1.02)	1.01 (0.97, 1.04)	1.00 (0.96, 1.03)	0.98 (0.95, 1.02)	1.02 (0.97, 1.07)	1.02 (0.98, 1.05)	1.02 (0.99, 1.06)	0.99 (0.96, 1.03)
Total number of classrooms	1.03 (0.99, 1.07)	1.00 (0.96, 1.03)	0.97 (0.92, 1.01)	0.97 (0.85, 1.11)	1.00 (0.97, 1.03)	1.01 (0.98, 1.04)	1.00 (0.97, 1.03)	0.98 (0.95, 1.00)	0.97 (0.94, 1.00)	1.00 (0.96, 1.05)	1.00 (0.97, 1.02)	1.00 (0.98, 1.03)	1.00 (0.97, 1.03)

Table note: The data are presented as odds ratios, with their corresponding 95 per cent confidence intervals. All estimates were derived from multilevel logistic regression models. In these models, the disagreement on the column variable served as the outcome, while the variable on the row functioned as the sole predictor. The models controlled for districts and schools as random variables to account for potential clustering effects. While the results presented in this table are based on bivariate regression analysis, multivariate analysis was also run, in which all predictors were included in a single logistic regression model, as a robustness check. Results did not differ much between bivariate and multivariate analysis, and overall conclusions were largely the same.

*p < 0.05, **p < 0.01, ***p < 0.001, "+" = Reference category.

Table 10. Multilevel logistic regression on the disagreement between mothers/primary caregivers and teachers, Kosovo, by domain and overall disability

Variable	OR and CI values												
	Seeing	Hearing	Walking	Communication	Learning	Remembering	Concentrating	Accepting change	Controlling behaviour	Making friends	Anxiety	Depression	Overall
Student													
Age (years)	1.07 (0.98, 1.17)	1.09 (1.00, 1.20)	0.95 (0.86, 1.05)	1.05 (0.97, 1.14)	1.00 (0.95, 1.06)	1.04 (0.98, 1.10)	1.00 (0.94, 1.06)	1.03 (0.96, 1.10)	1.04 (0.97, 1.12)	1.11 (1.04, 1.18) **	1.01 (0.97, 1.06)	1.01 (0.95, 1.06)	1.03 (0.97, 1.08)
Sex (= male)	+	+	+	+	+	+	+	+	+	+	+	+	+
Sex (= female)	1.85 (1.27, 2.68) ***	1.44 (0.74, 2.81)	1.05 (0.65, 1.71)	1.30 (0.91, 1.85)	0.78 (0.63, 0.98) *	0.66 (0.53, 0.83) ***	0.85 (0.68, 1.07)	0.88 (0.69, 1.12)	0.66 (0.50, 0.87) **	1.23 (0.97, 1.56)	0.90 (0.75, 1.07)	0.92 (0.75, 1.12)	1.44 (1.20, 1.74) ***
Grade (= primary)	+	+	+	+	+	+	+	+	+	+	+	+	+
Grade (= secondary)	1.05 (0.67, 1.66)	1.61 (0.82, 3.16)	0.32 (0.17, 0.61) ***	2.22 (1.44, 3.44) ***	0.70 (0.54, 0.91) **	0.74 (0.57, 0.97)*	0.65 (0.50, 0.86) **	0.68 (0.50, 0.92)*	0.70 (0.50, 0.98)*	1.13 (0.85, 1.51)	0.84 (0.68, 1.04)	0.72 (0.57, 0.92) **	1.43 (1.14, 1.79) **
Repeated student (= yes)	-	-	-	-	-	-	-	-	-	-	-	-	-
Mother/primary caregiver													
Age (years)	0.99 (0.96, 1.02)	1.01 (0.97, 1.06)	1.01 (0.97, 1.05)	0.99 (0.97, 1.02)	0.99 (0.98, 1.01)	1.00 (0.99, 1.02)	0.99 (0.97, 1.01)	1.01 (0.99, 1.03)	0.99 (0.97, 1.01)	1.01 (0.99, 1.03)	0.98 (0.97, 0.99) **	0.99 (0.98, 1.01)	1.01 (0.99, 1.02)
Relationship with student (= mother)	+	+	+	+	+	+	+	+	+	+	+	+	+
Relationship with student (= father)	1.46 (0.89, 2.40)	0.76 (0.45, 1.28)	0.82 (0.47, 1.43)	0.50 (0.11, 2.32)	0.89 (0.61, 1.29)	1.16 (0.80, 1.67)	1.01 (0.68, 1.50)	1.03 (0.71, 1.50)	0.95 (0.64, 1.41)	1.02 (0.59, 1.75)	1.02 (0.72, 1.46)	0.87 (0.60, 1.26)	0.91 (0.60, 1.39)
Relationship with student (= other)	-	-	4.79 (1.57, 14.66) **	0.74 (0.17, 3.16)	2.09 (0.93, 4.73)	2.61 (1.15, 5.92)*	2.42 (1.03, 5.67)*	1.22 (0.41, 3.61)	1.83 (0.61, 5.53)	2.36 (0.89, 6.23)	1.59 (0.74, 3.42)	2.21 (0.89, 5.51)	0.92 (0.38, 2.23)
Education attained (= elementary school or lower)	+	+	+	+	+	+	+	+	+	+	+	+	+
Education attained (= high school)	0.55 (0.33, 0.91)*	2.68 (0.88, 8.17)	1.34 (0.70, 2.57)	0.85 (0.54, 1.34)	0.91 (0.69, 1.20)	0.81 (0.61, 1.09)	0.94 (0.70, 1.26)	1.10 (0.80, 1.52)	1.16 (0.81, 1.66)	0.89 (0.64, 1.22)	1.09 (0.87, 1.36)	1.00 (0.78, 1.27)	0.87 (0.69, 1.12)
Education attained (= bachelor's and above)	0.55 (0.31, 0.99)*	0.90 (0.25, 3.32)	1.03 (0.47, 2.27)	1.03 (0.59, 1.79)	0.56 (0.39, 0.80) **	0.45 (0.31, 0.66) ***	0.72 (0.50, 1.04)	1.05 (0.71, 1.55)	0.81 (0.52, 1.27)	1.19 (0.83, 1.70)	0.80 (0.61, 1.06)	0.78 (0.57, 1.08)	0.99 (0.74, 1.33)

Teacher													
Sex (= male)	+	+	+	+	+	+	+	+	+	+	+	+	+
Sex (= female)	1.24 (0.77, 1.97)	1.57 (0.58, 4.26)	1.59 (0.82, 3.07)	0.35 (0.21, 0.59) ***	0.92 (0.69, 1.22)	1.04 (0.78, 1.39)	1.14 (0.85, 1.52)	1.09 (0.80, 1.49)	1.12 (0.79, 1.58)	1.25 (0.92, 1.70)	0.88 (0.71, 1.09)	1.21 (0.94, 1.57)	0.87 (0.69, 1.10)
Familiar with this student (= very well)	+	+	+	+	+	+	+	+	+	+	+	+	+
Familiar with this student (= well)	0.97 (0.65, 1.45)	1.22 (0.57, 2.62)	0.56 (0.32, 0.95) *	1.25 (0.86, 1.82)	1.11 (0.87, 1.41)	1.20 (0.94, 1.54)	0.93 (0.73, 1.19)	0.94 (0.72, 1.22)	0.92 (0.69, 1.23)	1.05 (0.81, 1.37)	0.92 (0.76, 1.11)	1.05 (0.85, 1.30)	1.07 (0.88, 1.31)
Familiar with this student (= little)	1.20 (0.63, 2.28)	1.64 (0.60, 4.47)	1.26 (0.60, 2.65)	1.09 (0.57, 2.06)	1.49 (1.01, 2.19)*	2.03 (1.38, 2.99) ***	1.43 (0.96, 2.12)	1.60 (1.06, 2.42)*	1.22 (0.74, 2.01)	1.55 (1.02, 2.35)*	1.20 (0.87, 1.66)	0.84 (0.57, 1.23)	1.16 (0.81, 1.66)
First teacher (= yes)	0.95 (0.66, 1.36)	1.80 (0.90, 3.60)	0.97 (0.60, 1.56)	0.76 (0.54, 1.08)	1.03 (0.83, 1.28)	1.09 (0.87, 1.35)	1.18 (0.95, 1.48)	1.22 (0.96, 1.55)	1.34 (1.03, 1.74)*	1.18 (0.94, 1.50)	0.94 (0.80, 1.12)	1.01 (0.84, 1.23)	0.76 (0.63, 0.91)
School													
School environment	0.88 (0.79, 0.97)*	1.04 (0.83, 1.28)	0.96 (0.80, 1.16)	0.99 (0.85, 1.15)	0.89 (0.82, 0.97) **	0.97 (0.89, 1.06)	0.96 (0.88, 1.06)	0.89 (0.81, 0.97) **	1.07 (0.96, 1.19)	0.96 (0.88, 1.05)	0.89 (0.83, 0.96) ***	0.89 (0.81, 0.97) **	1.12 (1.04, 1.20) **
Specialized school for children with disabilities (= yes)	4.23 (0.49, 36.58)	5.04 (1.39, 18.34) *	9.75 (1.63, 58.22) *	0.09 (0.02, 0.39) ***	7.07 (1.64, 30.59) **	18.84 (4.16, 85.31) ***	8.74 (1.99, 38.33) **	11.64 (1.65, 81.89) *	16.94 (2.35, 122.02) **	14.29 (2.12, 96.20) **	4.17 (0.92, 18.86)	6.13 (1.21, 31.02) *	0.34 (0.05, 2.20)

Table note: The data are presented as odds ratios, with their corresponding 95 per cent confidence intervals. All estimates were derived from multilevel logistic regression models. In these models, the disagreement on the column variable served as the outcome, while the variable on the row functioned as the sole predictor. The models controlled for districts and schools as random variables to account for potential clustering effects. While the results presented in this table are based on bivariate regression analysis, multivariate analysis was also run, in which all predictors were included in a single logistic regression model, as a robustness check. Results did not differ much between bivariate and multivariate analysis, and overall conclusions were largely the same.

*p < 0.05, **p < 0.01, ***p < 0.001, "+" = Reference category.

Discussion

This study offers an evaluation of differences in the assessment of child functioning between mothers/primary caregivers and teacher respondents to the CFM-TV in the educational and cultural contexts of Kosovo and Malawi.

Results varied substantially between Kosovo and Malawi when using the three-category response set. In Kosovo, the disagreement rate for the overall indicator was 72 per cent, while in Malawi it was considerably lower at 22 per cent.

In Kosovo, disagreement rates were lowest for hearing (1 per cent), walking (2 per cent) and seeing (5 per cent). The communication domain showed remarkably high disagreement at 95 per cent. The pattern of disagreement showed substantial under-reporting by teachers in the communication domain, where 92.4 per cent of teacher pairs reported "no difficulty" while mothers/primary caregivers reported

"some difficulty". The domains of anxiety and depression also showed considerable under-reporting in Kosovo, with teachers under-reporting anxiety in 24.8 per cent of pairs and depression in 16.3 per cent of pairs. Teachers in Kosovo showed notable over-reporting in domains related to learning and cognition: remembering (11.8 per cent), learning (11.1 per cent) and concentrating (9.8 per cent). For the overall indicator in Kosovo, under-reporting was substantial at 66.1 per cent (primarily due to teachers reporting "no difficulty" when mothers/primary caregivers reported "some difficulty"), while over-reporting occurred in 5.7 per cent of pairs.

In Malawi, the lowest disagreement rates were found in communication (3 per cent), walking (13 per cent), making friends (15 per cent) and hearing (16 per cent). The seeing domain showed the highest disagreement at 82 per cent. Under-reporting by teachers was most prominent in the seeing domain, where 78.8 per cent of teacher pairs reported "no difficulty" when mothers/primary caregivers reported "some

difficulty”. Other domains with high levels of under-reporting in Malawi included anxiety (24.7 per cent), depression (24.2 per cent), accepting change (18.4 per cent) and remembering (17.1 per cent). Over-reporting was most common in the domains of remembering (33.2 per cent), learning (28.7 per cent), anxiety (24.3 per cent) and controlling behaviour (19.3 per cent). For the overall indicator in Malawi, under-reporting occurred in 12.2 per cent of pairs and over-reporting in 10.0 per cent of pairs, both primarily involving discrepancies between reports of “some difficulty” and “a lot of difficulty”.

There were differences between Kosovo and Malawi in the perception and reporting of child functioning across domains. In the communication domain, Kosovo showed extremely high disagreement rates using the three response categories (95 per cent) in contrast to Malawi’s low disagreement rate of 3 per cent. Additionally, the disagreement rates for the domain of seeing showed an opposite pattern – they were low in Kosovo (5 per cent), whereas Malawi showed much higher disagreement in the seeing domain (82 per cent). Overall, the disagreement rates were significantly higher in Kosovo (72 per cent) compared to Malawi (22 per cent), suggesting substantial differences in how children’s functioning was perceived and reported by teachers and mothers/primary caregivers in these two countries.

Using the two-category response set (“with functional difficulties” versus “without functional difficulties”), disagreement rates were lower (compared to the three-category set) only in Kosovo, with a 7.0 per cent disagreement for the overall indicator. While Kosovo had low domain-specific disagreement rates (0.2–3.0 per cent), Malawi’s rates were higher (0.9–10.4 per cent). The pattern of discrepancies between mothers/primary caregivers and teachers differed by country; Kosovo’s teachers identified significantly higher rates across multiple domains (walking, communication, learning, remembering, concentrating, accepting change, controlling behaviour and depression), while Malawi’s teachers

reported significantly higher rates in some domains (seeing, learning, remembering, anxiety and depression) but lower rates in others (hearing, communication, accepting change and controlling behaviour).

The bivariate and multivariate analyses of student, respondent, teacher and school characteristics found few significant effects, most of which were modest in size or had large confidence intervals in both Kosovo and Malawi. In addition, there was little consistency in the results across the two study sites, and the direction of the effects (i.e., greater versus lesser disagreement between mother/primary caregiver and teacher reports) was often inconsistent across domains.

The findings of this study are largely consistent with previous research comparing caregiver and teacher assessments of child functioning. The high agreement rates between caregivers and teachers in domains like seeing, hearing and walking, and the low agreement rates in domains like communication, align with studies by Sprunt et al.⁶ The cross-informant levels of agreement between mothers/primary caregivers and teachers on ratings of child functioning using the three-category response variable found in this study align with previous studies demonstrating that multi-informant assessments tend to yield low-to-moderate correspondence.⁷ Such divergence likely mirrors the contextual variability in child behaviour and the differing observational perspectives of informants in distinct environments.⁸ Discrepancies may also stem from differences in norms, expectations and sensitivities to problems between mothers/primary caregivers and teachers.⁹ In addition, the sheer number of children of a particular age that teachers have experience with could give them a better sense of the distribution of difficulties experienced by children and so a different sense of where children fit on the continuum. Nevertheless, these discrepancies should not be hastily attributed to error or bias.¹⁰

The analysis further found that psychological attributes (such as depression and anxiety), learning-related

6 Sprunt, Beth, et al., ‘Validating the UNICEF/Washington Group Child Functioning Module for Fijian schools to identify seeing, hearing and walking difficulties’, *Disability and Rehabilitation*, vol. 41, no. 2, 2019, pp. 201–211; Sprunt, Beth, Barbara McPake and Manjula Marella, ‘The UNICEF/Washington Group Child Functioning Module-Accuracy, Inter-Rater Reliability and Cut-Off Level for Disability Disaggregation of Fiji’s Education Management Information System’, *International Journal of Environmental Research and Public Health*, vol. 16, no. 5, 2019.

7 De Los Reyes, Andres, et al., ‘The Validity of the Multi-Informant Approach to Assessing Child and Adolescent Mental Health’, *Psychological Bulletin*, vol. 141, no. 4, 2015, pp. 858–900.

8 De Los Reyes, Andres, ‘Strategic Objectives for Improving Understanding of Informant Discrepancies in Developmental Psychopathology Research’, *Development and Psychopathology*, vol. 25, no. 3, 2013, pp. 669–682.

9 Drabick, Deborah A., et al., ‘Source-specific Oppositional Defiant Disorder Among Inner-City Children: Prospective prediction and moderation’, *Journal of Clinical Child & Adolescent Psychology*, vol. 40, no. 1, 2011, pp. 23–35; Drabick, Deborah A., Kenneth D. Gadow and Jan Loney, ‘Source-specific Oppositional Defiant Disorder: Comorbidity and risk factors in referred elementary schoolboys’, *Journal of the American Academy of Child & Adolescent Psychiatry*, vol. 46, no. 1, 2007, pp. 92–101.

10 ‘The Validity of the Multi-Informant Approach to Assessing Child and Adolescent Mental Health’, pp. 858–900.

behaviours (such as remembering, learning and concentrating) and behaviours related to social activities with peers (such as making friends, controlling behaviour and accepting change) were characterized by higher levels of disagreement between mothers/primary caregivers and teachers. Specifically, relative to mothers/primary caregivers, teachers were more likely to under-report psychological attributes, over-report learning-related behaviours and show varied reporting (both over and under) in social activity-related behaviours. Students may exhibit different personalities and behaviours in the home and school environments, which could also explain why communication and psychological attributes issues were more likely to be under-reported by teachers, but teachers may be more attuned to difficulties in domains related to educational activities.¹¹

The patterns of disagreement varied substantially between Kosovo and Malawi. In Kosovo, most disagreements between mothers/primary caregivers and teachers involved the “no difficulty” or “never” and “some difficulty” categories, particularly in the communication domain, where teachers frequently reported “no difficulty” when mothers/primary caregivers reported “some difficulty”. In Malawi, this pattern was less pronounced, with disagreements more evenly distributed across response categories. The patterns of functional difficulty reporting differed

between countries. In Kosovo, teachers reported higher rates of functional difficulties across most domains, including learning, remembering, concentrating and behavioural issues. In Malawi, the pattern was more mixed – teachers reported higher rates in some domains (seeing, learning and remembering) but lower rates in others (hearing, communication, accepting change and controlling behaviour). These differences may reflect varying educational contexts and assessment practices between the two countries.

Hearing difficulties showed a unique pattern in which teachers in both countries reported lower rates than mothers/primary caregivers. This could reflect several factors: Mothers/primary caregivers may have more opportunities to observe subtle hearing difficulties in quieter home environments, or they may be more aware of their child’s medical history related to hearing. The differences in reporting of other functional difficulties might reflect the different contexts in which children are observed; teachers see children in structured classroom settings with peer interactions, while mothers/primary caregivers observe children across various home and community settings. Rather than suggesting that one perspective is more accurate than the other, these differences highlight the value of gathering information from multiple informants to build a more complete picture of a child’s functioning across different environments.

¹¹ Arky, Beth, ‘Why Are Kids Different at Home and at School?’, Child Mind Institute, <[https://childmind.org/article/kids-different-home-](https://childmind.org/article/kids-different-home-school/#~:text=Some%20kids%20with%20learning%20or,it%20is%20stressful%20for%20them.)

[school/#~:text=Some%20kids%20with%20learning%20or,it%20is%20stressful%20for%20them.](https://childmind.org/article/kids-different-home-school/#~:text=Some%20kids%20with%20learning%20or,it%20is%20stressful%20for%20them.)>.

Appendix

Supplemental Table 1. Under-reporting by teachers relative to parent/primary caregiver using the two-category indicator, by country, by domain and for overall disability

Under-reporting was evaluated using mother/primary caregiver responses as the reference category. The bold numbers in the table represent the percentage of pairs where the child was identified as “without functional difficulties” based on the teacher report but as “with functional difficulties” based on the mother/primary caregiver report. Cases of under-reporting by teachers for the two-category indicator are the result of either 1) the teacher reporting “some difficulty” when the mother/primary caregiver reported “a lot of difficulty” or 2) the teacher reporting “no difficulty” when the mother/primary caregiver reported “a lot of difficulty”. The un-bolded numbers in the table provide information about which of these two scenarios played a larger role in under-reporting for the two-category indicator, by domain and for the overall indicator. See the table note for more information.

Domain	Kosovo % Under-reporting (out of all pairs)	Malawi % Under-reporting (out of all pairs)
Accepting change	0.19	4.15
% “Some” (teacher [T]) vs. “A lot” (mother/primary caregiver [C])	0.11	1.04
% “No” (T) vs. “A lot” (C)	0.08	3.11
Anxiety	0.57	2.31
% “Some” (T) vs. “A lot” (C)	0.23	1.50
% “No” (T) vs. “A lot” (C)	0.34	0.81
Communication	0.11	1.73
% “Some” (T) vs. “A lot” (C)	0.11	1.73
% “No” (T) vs. “A lot” (C)	0.00	0.00
Concentrating	0.30	1.85
% “Some” (T) vs. “A lot” (C)	0.19	0.58
% “No” (T) vs. “A lot” (C)	0.11	1.27
Controlling behaviour	0.16	3.46
% “Some” (T) vs. “A lot” (C)	0.08	1.15
% “No” (T) vs. “A lot” (C)	0.08	2.31
Depression	0.00	1.38
% “Some” (T) vs. “A lot” (C)	0.00	1.15
% “No” (T) vs. “A lot” (C)	0.00	0.23
Hearing	0.19	1.85
% “Some” (T) vs. “A lot” (C)	0.00	0.81
% “No” (T) vs. “A lot” (C)	0.19	1.04
Learning	0.16	3.11
% “Some” (T) vs. “A lot” (C)	0.08	1.96
% “No” (T) vs. “A lot” (C)	0.08	1.15
Making friends	0.61	1.04
% “Some” (T) vs. “A lot” (C)	0.04	0.00
% “No” (T) vs. “A lot” (C)	0.57	1.04
Remembering	0.08	3.80
% “Some” (T) vs. “A lot” (C)	0.08	2.42
% “No” (T) vs. “A lot” (C)	0.00	1.38

Seeing	0.15	0.00
% “Some” (T) vs. “A lot” (C)	0.00	0.00
% “No” (T) vs. “A lot” (C)	0.15	0.00
Walking	0.04	0.69
% “Some” (T) vs. “A lot” (C)	0.00	0.00
% “No” (T) vs. “A lot” (C)	0.04	0.69
Average % under-reporting	0.21	2.11
Overall disability	1.33	12.23
% “Some” (T) vs. “A lot” (C)	0.84	12.23
% “No” (T) vs. “A lot” (C)	0.49	0.00

Table note: In the first cell of the second column, the entry “4.15” means that in Malawi, under-reporting occurred in a total of 4.15 per cent of pairs in the accepting change domain – that is, where children were identified as “with functional difficulties” in accepting change by mother/primary caregivers but as “without functional difficulties” by teachers. The un-bolded percentages below “4.15” provide more information about the teacher responses that led to under-reporting in the accepting change domain. For example, in 1.04 per cent of pairs, the child was identified as “without functional difficulties” by the teacher based on his/her response of “some difficulty” in the accepting change domain. In 3.11 per cent of pairs, the child was identified as “without functional difficulties” by the teacher based on his/her response of “no difficulty” in the accepting change domain. Cells with a value of “0.00” indicate that no cases were observed for the particular combination of caregiver-teacher responses for that domain (e.g., for the communication domain in Malawi, there were no pairs of the teacher reporting “no difficulty” when the mother/primary caregiver reported “a lot of difficulty”).

Supplemental Table 2. Over-reporting by teachers relative to parent/primary caregiver using the two-category indicator, by country, by domain and for overall disability

Over-reporting was evaluated using mother/primary caregiver responses as the reference category. The bold numbers in the table represent the percentage of pairs where the child was identified as “with functional difficulties” based on the teacher report but as “without functional difficulties” based on the mother/primary caregiver report. Cases of over-reporting by teachers for the two-category indicator are the result of either 1) the teacher reporting “a lot of difficulty” when the mother/primary caregiver reported “some difficulty” or 2) the teacher reporting “a lot of difficulty” when the mother/primary caregiver reported “no difficulty”. The un-bolded numbers in the table provide information about which of these two scenarios played a larger role in over-reporting for the two-category indicator, by domain and for the overall indicator. See the table note for more information.

Domain	Kosovo % Over-reporting (out of all pairs)	Malawi % Over-reporting (out of all pairs)
Accepting change	1.48	1.73
% “A lot” (teacher [T]) vs. “Some” (mother/primary caregiver [C])	0.38	0.69
% “A lot” (T) vs. “No” (C)	1.10	1.04
Anxiety	0.54	5.19
% “A lot” (T) vs. “Some” (C)	0.27	3.34
% “A lot” (T) vs. “No” (C)	0.27	1.85
Communication	2.32	0.81
% “A lot” (T) vs. “Some” (C)	2.32	0.81
% “A lot” (T) vs. “No” (C)	0.00	0.00
Concentrating	2.32	1.27
% “A lot” (T) vs. “Some” (C)	0.80	0.35
% “A lot” (T) vs. “No” (C)	1.52	0.92
Controlling behaviour	1.37	1.73
% “A lot” (T) vs. “Some” (C)	0.19	0.35
% “A lot” (T) vs. “No” (C)	1.18	1.38

Depression	0.46	2.89
% “A lot” (T) vs. “Some” (C)	0.27	2.08
% “A lot” (T) vs. “No” (C)	0.19	0.81
Hearing	0.08	0.58
% “A lot” (T) vs. “Some” (C)	0.00	0.23
% “A lot” (T) vs. “No” (C)	0.08	0.35
Learning	2.85	5.30
% “A lot” (T) vs. “Some” (C)	0.61	2.19
% “A lot” (T) vs. “No” (C)	2.24	3.11
Making friends	0.95	0.69
% “A lot” (T) vs. “Some” (C)	0.15	0.00
% “A lot” (T) vs. “No” (C)	0.80	0.69
Remembering	2.89	6.57
% “A lot” (T) vs. “Some” (C)	0.80	2.88
% “A lot” (T) vs. “No” (C)	2.09	3.69
Seeing	0.26	0.93
% “A lot” (T) vs. “Some” (C)	0.11	0.81
% “A lot” (T) vs. “No” (C)	0.15	0.12
Walking	0.19	1.16
% “A lot” (T) vs. “Some” (C)	0.00	0.12
% “A lot” (T) vs. “No” (C)	0.19	1.04
Average % over-reporting	1.31	2.40
Overall disability	5.66	10.03
% “A lot” (T) vs. “Some” (C)	5.66	10.03
% “A lot” (T) vs. “No” (C)	0.00	0.00

Table note: In the first cell of the second column, the entry “1.73” means that in Malawi, over-reporting occurred in a total of 1.73 per cent of pairs in the accepting change domain – that is, where children were identified as “without functional difficulties” in accepting change by mother/primary caregivers but as “with functional difficulties” by teachers. The un-bolded percentages below “1.73” provide more information about the responses that led to over-reporting in the accepting change domain. For example, in 1.69 per cent of pairs, the child was identified as “without functional difficulties” by the mother/primary caregiver based on his/her response of “some difficulty” in the accepting change domain. In 1.04 per cent of pairs, the child was identified as “without functional difficulties” by the mother/primary caregiver based on his/her response of “no difficulty” in the accepting change domain. Cells with a value of “0.00” indicate that no cases were observed for the particular combination of caregiver–teacher responses for that domain (e.g., for the communication domain in Kosovo, there were no pairs of the teacher reporting “a lot of difficulty” when the mother/primary caregiver reported “no difficulty”).

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