

Ethnic differences in problem perception and perceived need for care for young children with problem behaviour

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Background: Problem perception and perceived need for professional care are important determinants that can contribute to ethnic differences in the use of mental health care. Therefore, we studied ethnic differences in problem perception and perceived need for professional care in the parents and teachers of 5- to 6-year-old children from the general population who were selected for having emotional and behavioural problems. **Methods:** A cross-sectional study with data of 10,951 children from grade two of the elementary schools in the Rotterdam-Rijnmond area, the Netherlands. Parents and teachers completed the Strengths and Difficulties Questionnaire (SDQ) as well as questions on problem perception and perceived need for care. The SDQ was used to identify children with emotional and behavioural problems. We included Dutch, Surinamese, Antillean, Moroccan and Turkish children in our sample with high (>P90) SDQ scores ($N = 1,215$), who were not currently receiving professional care for their problems. **Results:** Amongst children with high SDQ scores, problem perception was lower in non-Dutch parents than in Dutch parents (49% vs. 81%, $p < 0.01$). These lower rates of problem perception could not be explained by differences in socioeconomic position or severity of the problems. No ethnic differences were found in parental perceived need and in problem perception and perceived need reported by teachers. Higher levels of problem perception and perceived need were reported by teachers than by parents in all ethnic groups (PP: 87% vs. 63% and PN: 48% vs. 23%). **Conclusions:** Child health professionals should be aware of ethnic variations in problem perception as low problem perception in parents of non-Dutch children may lead to miscommunication and unmet need for professional care for the child. **Keywords:** Minority ethnic mental health, problem perception, perceived need for professional care, SDQ.

Introduction

Emotional and behavioural problems, if left untreated, often interfere with the everyday functioning of children and their families and are predictive of problems later in life (Licence, 2004). The prevalence of emotional and behavioural problems as reported by parents and teachers in young children is high, and according to some studies these problems are reported even more frequently in children belonging to an ethnic minority than in children of the ethnic majority (Bengi-Arslan, Verhulst, van der Ende, & Erol, 1997; Horwitz, Leaf, & Leventhal, 1998; Stevens & Vollebergh, 2008). Furthermore, recent evidence suggests that children from an ethnic minority less often receive treatment for emotional and behavioural problems than ethnic majority children (Goodman, Patel, & Leon, 2008; Zimmerman, 2005; Zwirs, Burger, Schulpen, & Buitelaar, 2006). For example, lower rates of mental health services use were reported for Latino and African American children than for White children in a cohort study of 7 to 14-year-old children in the U.S.

(Zimmerman, 2005). In contrast, there is evidence that children from some ethnic minority groups have a mental health advantage and hence may have a lower need for professional mental health care (Goodman, Patel, & Leon, 2010). To explain how ethnicity exactly influences the process of help-seeking, more insight is needed in ethnic differences in the determinants of help-seeking behaviour.

The 'Levels and Filters model' explains the relationship between different determinants of help-seeking behaviour on the one hand and actual help seeking for mental health problems on the other (Goldberg & Huxley, 1980, 1992; Sayal, 2006; Verhulst & Koot, 1992). This model is refined by Verhulst and Koot (1992) and made applicable for the process of seeking help for children, mostly through their parents. Help seeking is regarded as a stage-like process in which parents must move through different levels and filters before actually receiving help. The first filter in this model is problem recognition by the parents and their decision to consult a professional.

According to Logan and King (2001), several stages in parental problem recognition can be distinguished, amongst which: parents' initial acknowledgement of their child's distress and parents recognizing that the

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problem is psychological and severe enough to merit professional attention (Logan & King, 2001). These stages are comparable to the respective concepts problem perception and perceived need for professional care, as will be used in our study. In most previous studies problem recognition is measured as a high score on a screening questionnaire or diagnostic interview (Zwaanswijk, Verhaak, Bensing, van der Ende, & Verhulst, 2003), although this does not imply that parents also perceive the behaviour of their child as problematic and consider professional help. Zwaanswijk et al. (2006) found a large discrepancy between problem perception by parents when asked directly and problem behaviour as determined by a high problem score on a parent screening questionnaire. Less than half of the parents of 4- to 17-year-old children who reported child problems in the deviant range of the Child Behavior Checklist (Achenbach, 1991) had a corresponding problem perception (Zwaanswijk, Verhaak, van der Ende, Bensing, & Verhulst, 2006). Therefore, problem perception and perceived need for care should be studied as separate determinants of the process of help seeking for children with mental health problems, besides measures of problem behaviour.

Ethnic differences in emotional and behavioural problems have been found in parent (Bengi-Arslan et al., 1997; Stevens & Vollebergh, 2008) and teacher reports (Epstein, March, Conners, & Jackson, 1998; Zwirs et al., 2006). Problem perception and perceived need for care may also differ between ethnic groups. For example, African American parents reported less problem perception of ADHD-symptoms than Native American parents of school-aged children (Hillemeier, Foster, Heinrichs, & Heier, 2007). Similarly, for adolescents European American caregivers were more likely than minority parents to report problems (Roberts, Alegria, Roberts, & Chen, 2005). Furthermore, parents of 9- to 17-year-old children reported less need of mental health care services in ethnic minority children than in majority children (Chavez, Shrout, Alegria, Lapatin, & Canino, 2010). However, studies on ethnic differences in problem perception and perceived need for care in young children are scarce, especially studies that also include problem perception and perceived need of teachers. It is important to include parents' as well as teachers' perception of problems and need for care, as both are important predictors of referral and mental health care use in children (Sayal, Taylor, & Beecham, 2003; Sourander et al., 2001). Furthermore, besides interrater differences in level of problems (De Los Reyes & Kazdin, 2005; Stevens et al., 2003), interrater differences may also be present for problem perception and perceived need for professional care. Interrater differences can reflect both perceptual bias (Sonuga-Barke, Minocha, Taylor, & Sandberg, 1993) or true differences in the problem behaviour of children across settings (Epstein et al., 2005).

Hence, the first aim of this study was to examine ethnic differences in problem perception and perceived need for professional care in parents and teachers of young children. We studied this in a large group of 5- to 6-year-old children, with a high score on the Strengths and Difficulties Questionnaire (SDQ), belonging to one of the five largest ethnic groups in the Netherlands (from a Dutch, Moroccan, Turkish, Antillean or Surinamese society of origin). The largest ethnic minority groups living in the Netherlands migrated from Mediterranean countries, mainly Turkey and Morocco, as labour migrants since the 1960s and early 1970s. Surinamese and Antillean migrants came from South America and the Caribbean, respectively, to the Netherlands during the process of decolonization after 1975. We hypothesized that both parental problem perception and perceived need would be lower for non-Dutch children than for Dutch children, based on previous findings (Chavez et al., 2010; Hillemeier et al., 2007; Roberts et al., 2005). As ethnic differences in teachers' problem perception and perceived need for professional care have not been studied previously, we did not have any a priori hypotheses about teachers. To take into account the context of the socioeconomic position (SEP) of ethnic minorities, we investigated whether any ethnic differences may be explained by differences in SEP (Verhulst, Koot, & Ende van der, 1994; Zwaanswijk et al., 2003).

Methods

Sample

In the school year 2008–2009, from a total of 11,987 children enrolled in grade two (5–6 years old) of 94% of all mainstream elementary schools in the Rotterdam-Rijnmond area in the Netherlands, 10,951 children were screened. This area consists of both urban and rural communities, which allows generalization of the results. Questionnaires were distributed through schools to parents and teachers for use as a screening tool in the preventive child health care. The flowchart in Figure 1 shows the sampling process and the ethnic distribution for the group used in analyses.

In total 8,114 (68%) parents and 9,397 (78%) teachers filled out the questionnaire. Nonresponse in parents was more likely when children were non-Dutch (38% nonresponse vs. 14% in Dutch children, $p < 0.001$). Nonresponse in teachers was more likely when children were Dutch (18% nonresponse vs. 11% in non-Dutch children, $p < 0.001$). Parental and teacher nonresponse were not related to gender or age of the child. Teacher nonresponse was also not related to parental level of educational. We could not test the latter for parental response. A total of 1,746 children had a high SDQ score reported by parent, teacher or both. A high SDQ total score was defined as a score above the 90th percentile (P90) in the total group of 10,951 children. The same P90 cut-off points were used for all ethnic groups (nonethnic specific cut-off points). The cut-off point for parents was 14 and for teachers 12. Children already in treatment for emotional and/or behavioural problems

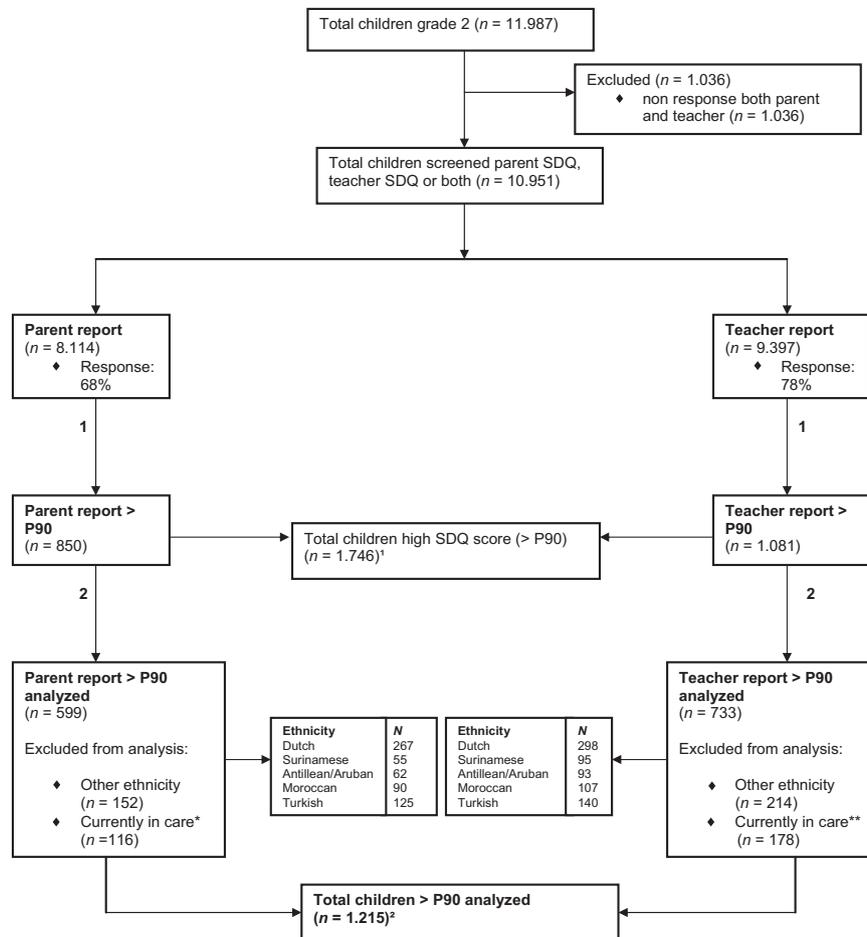


Figure 1 Flowchart of the sampling process and ethnic distribution. (1) Only children with high SDQ scores (>P90) were included in the study sample. (2) Children already in treatment for emotional and/or behavioural problems and/or children with 'other' ethnicity were excluded from the study sample. ¹185 both >P90 on parent- and teacher report ²117 both >P90 on parent- and teacher report. *of whom 17 from other ethnicity **of whom 44 from other ethnicity

at the moment of screening were excluded from the analyses, as well as children of another ethnic origin than Dutch, Surinamese, Antillean, Moroccan or Turkish ($N = 531$) (see Figure 1). In total, we included 1,215 children with high SDQ scores in our analyses (Figure 1). The parent questionnaire was completed by the mother (71%), by both parents (12%), by father (7%) or by another caregiver (10%).

A child was classified as ethnic Dutch, Surinamese, Antillean, Moroccan or Turkish, as based on the country of birth of the child and/or at least one of his/her parents. If the country of birth of at least one of the parents was outside the Netherlands, the child was classified as non-Dutch (CBS, 2002). Of the children with a non-Dutch ethnicity, 87% was born in the Netherlands ('second generation residents of migrant descent'). The study protocol was approved by the Medical-Ethical Committee of the Erasmus Medical Center of Rotterdam. All parents and teachers gave informed consent.

Measures

Parents and teachers completed the Dutch, Arabic or Turkish version of the Strengths and Difficulties Questionnaire (SDQ). The SDQ is a reliable and valid 25-item screening measure to identify 3–16 years old children

with emotional and behavioural problems (Goodman, 1997; Goodman, 2001; van Widenfelt, Goedhart, Treffers, & Goodman, 2003). The SDQ has five subscales: conduct problems, inattention-hyperactivity, emotional problems, peer problems and prosocial behaviour and an optional impact supplement. We used the first item of Goodman's impact supplement as measure for problem perception (Goodman, 1999), and the following items about distress and social impairment to compute the impact score. The impact score ranges from 0 to 10 for parents and 0 to 6 for teachers. SDQ total score and SDQ impact score were used as indicators of severity.

To measure problem perception the first impact question of the SDQ was used: 'Do you think the child has a problem on one or more of the following areas: emotions, concentration, behaviour or the ability to get along with other people?' This question was scored on a 4-point scale, ranging from (1) no problems to (4) yes, severe problems. The item was recoded as yes (little to severe problems) or no (no problems). Perceived need for care was measured with the question: 'Do you think the child needs professional help in one or more of the following areas: emotions, concentration, behaviour or the ability to get along with other people?' This question could be answered with yes or no.

Indicators of SEP were parental level of education, parental employment status, mean family income,

mean home value appraisal and family composition. The level of education of the parents had four levels ranging from 1 (low) to 4 (high). A low education was defined as no education at all or only elementary school. A high education was defined as higher vocational education or university degree. Parental employment status had two categories: (a) none of the parents is employed and (b) at least one of the parents is employed part-time. Furthermore, mean family income and home value appraisal, based on the six-digit postal code system as used in the Netherlands, were obtained from Statistics Netherlands (CBS, 2004). The indicator of family composition had three categories: (a) a two-parent family, (b) a single-parent family and (c) any other family composition.

Current mental health care use for emotional and behavioural problems was assessed with the following question in the parent questionnaire: 'Does the child receive professional care for problems in one or more of the following areas: emotions, concentration, behaviour or the ability to get along with other people?'. This question could be answered with yes or no. Health care use in the past 2 years was assessed with the following question: 'Did the child received professional care in the last two years for problems in one or more of the following areas: emotions, concentration, behaviour or the ability to get along with other people?' (yes or no). Only the children who received professional care at the moment of screening were excluded from analyses.

Data analyses

To describe the screen positive sample ($N = 1,746$) we examined ethnic differences in problem rates and in current mental health care use with Chi-squared tests. To describe the final study sample ($N = 1,215$) we examined ethnic differences in SEP and severity using ANOVA or Chi-squared tests. To investigate the main aim of this study, we examined ethnic differences in problem perception and perceived need of parents and teachers using Chi-squared tests. With logistic regression analyses we adjusted the associations between ethnicity and parental problem perception and ethnicity and perceived need, for SEP and severity indicators. To adjust for teacher-level clustering, we conducted multilevel logistic regression analyses for teacher-reported problem perception and perceived need. These analyses were also adjusted for SEP and severity indicators. The levels we used included individual and teacher.

In the analyses on parent and teacher reports we first included ethnicity and gender in the model; then SEP

indicators, and finally both SEP and severity indicators. In the analyses on teacher reports we only included mean family income and home value appraisal as SEP indicators as for 33% no parent reports were available to provide data on parental education, employment and family composition. The total SDQ impact score was only included as a severity indicator in the analyses (both parent and teacher report) of perceived need, not in the analyses of problem perception, as problem perception was one of the items of the impact score. Dutch ethnicity was the reference ethnicity. A significance level of ≤ 0.05 was used for all analyses. Finally, we conducted additional analyses which were intended as sensitivity analyses. We repeated the analyses with ethnic specific cut-off points and with a higher cut-off point (P95) for all ethnic groups. These show whether our results depend on a priori, arbitrary, choices for the cut-off point used.

To account for missing values (Table 1) we used multiple imputation based on 20 imputed data sets ('multiple imputation' procedure in SPSS 17.0). In the analyses on parents we only included children with parental response on the questionnaire and in the analyses on teachers we included only children with teacher response. The data were imputed only for general characteristics and socioeconomic indicators but not for severity indicators. Statistical analyses were performed using Statistical Package of Social Sciences, version 17.0 for Windows (SPSS Inc, Chicago, IL, USA). Multilevel analyses on teacher-reported data were performed using Mplus 6.11 (Muthén & Muthén, 2010).

Results

Table 1 shows ethnic differences in problem rates. The proportion of Dutch children scoring above the SDQ cut-off point ($>P90$) was lower than the proportion of children from the non-Dutch ethnic groups in both parent- ($\chi^2(5) = 159.6, p < 0.001$) and teacher report ($\chi^2(5) = 92.3, p < 0.001$). The proportion of Dutch children scoring above the P95 cut-off point was also lower than the proportion of children from non-Dutch ethnic groups in both parent- ($\chi^2(5) = 74.5, p < 0.001$) and teacher report ($\chi^2(5) = 52.5, p < 0.001$). Of all children scoring above P90, 14% were currently receiving mental health care. Ethnic minority children were underrepresented: 17% Dutch, 14% Surinamese, 16% Antillean, 7% Turkish and 9% Moroccan children received mental health care ($\chi^2(4) = 20.2, p < 0.001$).

Table 1 Problem behaviour rates according to parent and teacher SDQ

Ethnicity	<i>N</i> (parents)	>P90 (parents) ^a , %	>P95 (parents) ^b , %	<i>N</i> (teachers)	>P90 (teachers) ^a , %	>P95 (teachers) ^b , %
Dutch	4.750	7.5	4.6	4.553	8.5	4.0
Surinamese	521	10.0	6.7	620	14.4	6.8
Antillean	264	21.7	14.3	340	19.3	9.5
Turkish	661	19.7	12.6	759	17.1	8.7
Moroccan	623	15.3	7.8	811	13.1	6.4
<i>p</i> -value		<0.001	<0.001		<0.001	<0.001

^aSDQ cut-off point $>P90$ parents ≥ 14 , teachers ≥ 12 .

^bSDQ cut-off point $>P95$ parents ≥ 16 , teachers ≥ 15 .

Table 2 shows the characteristics of the final study sample ($N = 1,215$) by ethnicity. Mean age of the children was 5.5 years and 63% was male. No ethnic differences were found in gender and age. Ethnic differences were found in past mental health care use ($\chi^2(4) = 47.5, p < 0.001$).

Table 2 also shows the socioeconomic and severity characteristics of the study population. Significant ethnic differences were found in mean family income, mean home value appraisal, parental employment status, parental education level and in family composition. Ethnic differences were found in the mean SDQ total scores in parent reports ($p = 0.05$) but not in the mean impact score. No ethnic differences were found in mean SDQ total and impact score in teacher reports.

Problem perception

Overall, 63.1% of parents of screen positive children perceived their child to have emotional or behavioural problems. Table 3 shows clear ethnic differences in parental problem perception ($\chi^2(4) = 72.5, p < 0.001$). Higher levels of problem perception were found in Dutch parents (81%) vs. 74% in Surinamese parents, 48% in Antillean parents, 47% in Moroccan parents and only 40% in Turkish parents. The lower level of problem perception in Antillean (OR: 0.2, 95% CI: 0.1–0.4), Turkish (OR: 0.2, 95% CI: 0.1–0.3),

and Moroccan parents (OR: 0.3, 95% CI: 0.1–0.5) could not be explained by SEP or severity indicators. Differences between Surinamese and Dutch parents were smaller and not significantly different.

Overall, 87.2% of teachers perceived the child to have emotional or behavioural problems, and problem perception varied between 81% and 89% across ethnicities (Table 3). No significant associations between problem perception and ethnicity were found for teachers of children with high SDQ total scores (Table 3), except for a lower problem perception for Turkish children (OR: 0.4, 95% CI: 0.2–0.9).

Perceived need

Overall, 22.9% of parents of screen positive children reported perceived need for mental health care for their child, and perceived need ranged across ethnic groups between 16% and 26% (Table 3). No ethnic differences were found in perceived need in parents of children with high SDQ total scores except for a lower perceived need in Surinamese children after adjustment for SEP and severity indicators (OR: 0.3, 95% CI: 0.1–0.9). Overall, 47.8% of teachers reported perceived need for mental health care for the child and perceived need ranged across ethnic groups between 45% and 53%. No ethnic differences were found in perceived need in teachers of children with high SDQ total scores (Table 3).

Table 2 Characteristics of the study population ($n = 1,215$)

General characteristics	Ethnicity					Missing ^a (%)	<i>p</i> -value ^b
	Dutch	Surinamese	Antillean	Turkish	Moroccan		
Gender ^c (boy)	63.6	66.4	59.5	61.9	53.8	0	0.13
Age ^d	5.3 (0.03)	5.4 (0.07)	5.4 (0.07)	5.4 (0.06)	5.5 (0.08)	1.0	0.20
Past mental health care use ^{c,e}	30.9	13.3	14.2	7.7	9.3	1.3	<0.001
Socioeconomic indicators							
Income ^d (euro)	2212.0 (36.0)	1696.8 (57.1)	1605.4 (70.5)	1584.9 (50.9)	1532.8 (33.5)	18.0	<0.001
Home appraisal ^d (K euro)	126.9 (2.9)	81.6 (3.8)	76.9 (5.2)	72.8 (2.6)	72.9 (2.4)	17.8	<0.001
Education ^c							
High	27.4	10.1	15.7	5.2	8.2	35.3	<0.001
Middle 2	39.3	38.0	30.4	29.2	14.5		
Middle 1	26.7	35.8	26.6	27.4	28.2		
Low	6.5	16.0	23.1	38.2	49.2		
Employment ^c (≥ 1 parent)	92.2	74.5	53.7	61.2	41.9	16.6	<0.001
Family composition ^c							
Two parents	71.8	48.1	21.8	60.1	69.3	4.7	<0.001
Single parent	18.6	35.6	50.5	19.2	11.2		
Other	9.7	16.3	27.8	20.0	19.6		
Severity indicators							
SDQ score parents ^d	16.6 (0.2)	17.6 (0.5)	17.0 (0.4)	16.9 (0.3)	16.3 (0.3)	NA	0.05
SDQ score teachers ^d	15.1 (0.2)	15.5 (0.4)	15.6 (0.5)	15.4 (0.3)	15.2 (0.3)	NA	0.37
SDQ impact score parents ^d	1.1 (0.1)	1.3 (0.3)	1.0 (0.3)	0.9 (0.2)	1.1 (0.4)	NA	0.18
SDQ impact score teachers ^d	1.4 (0.1)	1.4 (0.2)	1.5 (0.2)	1.6 (0.2)	1.3 (0.1)	NA	0.30

All children have a high SDQ total score (above >P90) according to parent, teacher or both.

^a% missing before multiple imputations.

^b*p*-value for differences between the ethnic groups.

^cPercentage.

^d*M* (*SD*).

^eCurrent mental health care use is not included in past mental health care use.

Table 3 Odds ratios (OR) for ethnicity, problem perception and perceived need for parent and teacher report (children with high SDQ total scores, $n = 599$ parents, $n = 733$ teachers)

	Problem perception (%)	Problem perception (95% CI)			Perceived need (%)	Perceived need (95% CI)		
		OR 1 (+ gender)	OR 2 (+ SEP)	OR 3 (+ severity)		OR 1 (+ gender)	OR 2 (+ SEP)	OR 3 (+severity)
Parent								
Dutch	80.6	1.0	1.0	1.0	25.6	1.0	1.0	1.0
Surinamese	74.0	0.7 (0.3–1.5)	0.7 (0.3–1.6)	0.7 (0.3–1.4)	15.5	0.5 (0.2–1.2)	0.5 (0.2–1.1)	0.3 (0.1–0.9)
Antillean	47.8	0.2 (0.1–0.4)	0.2 (0.1–0.4)	0.2 (0.1–0.4)	22.6	0.9 (0.4–1.8)	0.7 (0.3–1.5)	0.8 (0.3–1.9)
Turkish	40.0	0.2 (0.1–0.3)	0.2 (0.1–0.3)	0.2 (0.1–0.3)	22.8	0.9 (0.5–1.5)	0.7 (0.3–1.4)	0.8 (0.4–1.7)
Moroccan	46.9	0.2 (0.1–0.4)	0.2 (0.1–0.5)	0.3 (0.1–0.5)	19.5	0.8 (0.4–1.5)	0.8 (0.3–1.7)	0.9 (0.4–2.3)
<i>p</i> -value ^a	<0.001				0.46			
Teacher								
Dutch	89.4	1.0	1.0	1.0	45.2	1.0	1.0	1.0
Surinamese	88.2	0.7 (0.3–1.7)	0.6 (0.3–1.6)	0.6 (0.2–1.6)	53.0	1.3 (0.8–2.8)	1.1 (0.6–2.4)	1.4 (0.6–4.0)
Antillean	87.9	0.8 (0.3–2.2)	0.7 (0.3–2.0)	0.7 (0.2–2.1)	52.2	1.3 (0.7–2.6)	1.0 (0.5–2.2)	1.0 (0.4–2.9)
Turkish	81.3	0.5 (0.2–1.1)	0.4 (0.2–1.0)	0.4 (0.2–0.9)	49.2	1.2 (0.7–2.1)	0.9 (0.5–1.7)	0.9 (0.4–2.1)
Moroccan	88.9	0.9 (0.5–2.8)	0.8 (0.4–2.4)	0.8 (0.3–2.7)	44.5	1.0 (0.5–1.9)	0.8 (0.4–1.6)	0.9 (0.4–2.3)
<i>p</i> -value ^a	0.15				0.43			

Boldface type indicates statistically significant results at $p < .05$.

OR 1 parents/teachers: odds ratios adjusted for gender.

OR 2 parents: adjusted odds ratios for gender + SEP (parental education level, employment status, home appraisal, income, family composition).

OR 2 teachers: adjusted odds ratios for gender + SEP (income and home appraisal of parents).

OR 3 problem perception parents/teachers: adjusted odds ratio for gender + SEP + severity characteristics (SDQ total score).

OR 3 perceived need parents/teachers: adjusted odds ratio for gender + SEP + severity characteristics (SDQ total score and SDQ impact score).

^a*p*-value for difference between ethnic groups.

Additional analyses

Additional analyses including only children with very high SDQ scores (>P95) showed similar ethnic differences: problem perception was lower in Antillean, Turkish and Moroccan parents after correcting for SEP and severity. Selecting the P90 group based on ethnic specific P90 cut-offs did not change the findings in Table 3. When children with a score above the P95 cut-off were selected, problem perception and perceived need were higher in parents (PP: 69% and PN: 30%) as well as in teachers (PP: 93% and PN: 63%) than for children with a score above the P90.

Discussion

The current study shows that parental problem perception, regardless of high problem scores, is lower for parents with young children belonging to ethnic minority groups than for parents belonging to the ethnic majority, whereas teachers reported higher problem perception and perceived need with no ethnic differentiation.

Mental health care use was lower in young children from ethnic minority groups before and at the moment of screening for problem behaviour at age 5–6 years. This extends findings in older age groups (Zimmerman, 2005; Zwirs et al., 2006) and therefore underlines the importance to gain more insight in the stages of help-seeking that precede care use, such as problem perception and perceived need for professional care. Our study confirms that problem perception and perceived need can be treated as two

separate stages in the help-seeking models, like the Level and Filter model, as suggested by Logan and King (Logan & King, 2001). According to the Levels and Filters model, the first step in help-seeking is parental problem recognition. Consistent with previous investigations, we identified ethnic differences in problem rates reported by parents and teachers and we did find higher problem rates in ethnic minority children (Epstein et al., 1998; Zwirs et al., 2006). Moreover, we demonstrated that in spite of the higher levels of reported problem behaviour, the parental acknowledgement of these problems is lower in ethnic minority groups. Therefore, it seems plausible to distinguish in help-seeking models between parental problem recognition measured with screening questionnaires and the concept of problem perception by parents, as suggested earlier by Zwaanswijk and colleagues (Zwaanswijk et al., 2006). Furthermore, perceived need was lower than problem perception in both parents and teachers, indicating two different concepts. Surprisingly, no ethnic differences in perceived need for parents and teachers were found. Whereas parental problem perception was low only in some ethnic minority groups, parental perceived need was low for all the ethnic groups. Teachers reported a higher problem perception and perceived need than parents in all ethnic groups.

The low problem perception in Antillean, Moroccan and Turkish parents may be influenced by several cultural factors and migration factors, as differences in problem perception could not be explained by a lower socioeconomic status or by ethnic variations in the severity of the problems.

Four explanations, not mutually exclusive, will be discussed. First, Weisz et al. (1988) showed that cultural differences in concern and the expression of concern for psychosocial problems exist (Weisz et al., 1988). The degree of disturbance (the threshold) that is needed to label behaviour as problematic may vary across ethnicity. If this were the case, using a higher cut-off point would show smaller ethnic differences in problem perception. However, even at higher cut-off point (>P95) or when using ethnic specific cut-off points, ethnic variations in problem perception were not smaller. Second, the definition of what constitutes a problem may vary by ethnicity. For this explanation, the degree of disturbance is not relevant, but the nature of the behaviour is. The same behaviour may be interpreted differently across cultures (Bussing, Schoenberg, & Perwien, 1998). Third, parents in ethnic minority groups may feel afraid or ashamed to share their worries with outsiders or may fear negative consequences for their child or stigmatization (National Research Council, 2004). Finally, familiarity with the Dutch way of monitoring, measuring and organizing care for children with problem behaviour may vary by migration factors. For example, Moroccan and Turkish migrants (parents) have to bridge a wider gap in terms of mastering Dutch language and habits, than migrants from former Dutch colonies. To fully understand the underlying mechanisms that affect these ethnic differences in parental problem perception, qualitative research can be very valuable. Qualitative research can help bridge the gap between scientific evidence and clinical practice (Green & Britten, 1998). Furthermore, investigating whether the lower parental problem perception of children from ethnic minority groups is a reason for less mental health care use in these groups and/or if ethnic and rater differences in problem perception and perceived need for care play a role in referral decisions by child health professionals would be very valuable. However, such research must be conducted prospectively in children who have not received care yet.

The findings of this study are subject to some limitations. First, cultural differences could account for different responding to the questionnaire, and therefore could have biased our results. Questionnaires were translated into Turkish and Arabic, but we did not provide any further interpretation services. Second, a drawback of using country of birth of the parents as an indicator for ethnicity is that we were not able to identify the third generation migrant children; they were now categorized as Dutch. Third, the analyses were executed on cross-sectional data and we could not relate problem perception and perceived need to referral of the children by a Child Health Professional (CHP). Fourth, the adjustment for socioeconomic characteristics was based on data of income level of 2003 and home appraisal from 1999. In absolute terms these will have changed, yet we expect that the ranking changed less. This is supported by

significant correlations with current educational level of the parents: $R = .35$ for home appraisal and $R = .31$ for income level, $p < 0.01$. Fifth, as there was selective nonresponse in both teachers and parents, there could have been an underestimation of parental problem perception and perceived need and an overestimation of teachers' problem perception and perceived need in ethnic minority groups. Last, we did not know the ethnic background of the teachers. However, as 86% of the teachers in the Rotterdam-Rijnmond area in the school year 2008–2009 had a Dutch ethnicity (CBS, 2011), bias by ethnic background of teachers may have existed, but probably affected the results for all ethnic groups in a similar way.

Despite its limitations, the present study contributes to the growing body of evidence suggesting that ethnic differences in the determinants of help-seeking behaviour exist. The low level of problem perception in non-Dutch parents may lead to their children receiving less professional care than Dutch children. Although early screening by a CHP in children is routine in the Dutch preventive health care system, parents can be regarded as the main gatekeepers for access to professional care for emotional and behavioural problems (Sayal, Taylor, Beecham, & Byrne, 2002). Parental problem perception is a strong predictor of service use (Sayal et al., 2003) and without it, it is very unlikely that the CHP will refer the child to specialist mental health services. Teachers may therefore also play an important role in help seeking, as CHPs can ask them to share their visions with the parents. It is important to have good communication between teachers and parents and for CHPs to have the teacher's vision on problem perception and perceived need, which correlated strongly with SDQ score, when discussing the high SDQ score in a screening setting. Using only parental problem perception and perceived need may lead to underestimation of the impact of the child's problems and his/her need for care. Therefore, child health professionals should be aware of these ethnic differences and rater differences in problem perception and perceived need for professional care when assessing the need for referral in ethnic minority children.

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Key points

- There is a growing interest in the interplay between ethnicity and determinants of help-seeking behaviour for emotional and behavioural problems in young children.
- Only some studies include measures of problem perception and perceived need as determinants besides measures of problem behaviour.
- In a large representative sample of 5 to 6-year-old children with emotional and behavioural problems, parental problem perception was lower in ethnic minority groups, whereas teachers' problem perception was not.
- Perceived need for care was not different across ethnic groups.
- The low level of problem perception in parents from ethnic minority groups may lead to their children receiving less professional care for mental health problems.

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