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Multiple informants' report of emotional and behavioural problems in a nation-wide sample of selective mute children and controls

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■ **Abstract** Emotional and behavioural problems and competencies in a nation-wide sample of referred selective mute children (SM) and matched non-referred controls, aged 4–16 years, were assessed by the Child Behaviour Checklist, (CBCL), Teacher Report Form (TRF) and Youth Self Report (YSR) (1). Main issues addressed were the co-variation of internalising and externalising problems reported across informants, whether there exists a pure externalising group of children with SM, and the nature of the internalising and externalising problems. The results show that the children with SM differed substantially from their peers in internalising problems as reported

by the parents and the teachers. In contrast, the results on the YSR indicated an under-reporting of internalising problems. Externalising problems in SM were reported in a low to moderate degree by the parents only. No child with SM and pure externalising symptoms was found. The children with SM differed mostly from their peers on the withdrawn scale. On the item level, both the internalising and the externalising symptoms that best differentiated the children with SM from the controls support the notion of SM as an expression of social anxiety.

■ **Key words** Selective mutism – multiple informants' report

Introduction

Selective mutism (SM) is a childhood condition where children consistently do not speak in specific social situations (in which there is an expectation for speaking, e.g., at school) despite speaking in other situations. The duration is at least one month (not limited to the first month of school). The failure to speak is not due to a lack of knowledge of, or comfort with the spoken language required in the social situation. The disturbance is not better accounted for by a communication disorder and does not occur exclusively during the course of a pervasive developmental disorder, schizophrenia or other psychotic disorder (2). The aetiology is unknown, but is most

likely multifactorial (28). Early literature on SM was dominated by retrospective case-reports (29). Several recent studies have included reasonably large samples of children with SM (10, 13, 14, 28), but without control groups, and comparisons between children with SM and clinical and non-clinical populations are needed (14). Symptom variation across situations is implicit in the diagnosis of SM (2), but multiple informants' report studies are sparse, and information on the nature and co-variation of emotional and behaviour problems across situations is still limited.

In the literature, children with SM are described by a wide array of apparently opposing internalising and externalising problems (shy, anxious, depressive, dependent, clinging, fearful, sensitive and timid

versus stubborn, disobedient, controlling, demanding, negative, oppositional, sulky and aggressive) (18, 21, 23, 25). Some previous reports on SM have categorised children with SM in two distinct groups according to these opposing behaviours. The internalising group is assumed to withhold speech because of severe anxiety when faced with speech demand; the externalising group is thought to remain mute in order to manipulate their environment (17, 26). However, these studies are retrospective and based on small or biased samples without control groups, and empirical support for the hypothesis is lacking.

Clarifying the nature and co-variation of internalising and externalising problems in children with SM is of clinical importance. Muteness is quite provocative (19), and often evokes strong negative feelings in the teachers and therapists who try to communicate with the mute child (5). The notion of the child with SM as being primarily oppositional with deliberate muteness may strengthen these feelings and lead to a struggle with the child over speech. Understanding SM as a frozen anxiety reaction evokes more easily empathy and tolerance, which may create a more optimal position for treatment (3).

Most recent reports using standardized instruments in reasonably large samples of children with SM correspond in describing predominantly internalising problems. Two studies with a focus on symptoms of anxiety applied diagnostic interviews and found that 97% to 100% of the children with SM also met the criteria for social phobia. Co-morbidity with other anxiety diagnoses was also relatively frequent, whereas diagnoses of ODD and ADHD were only assigned in 4–10% of the children (10, 13). Two other studies with the largest sample sizes ever included in research on SM ($n=100$ and 153 , respectively) support that oppositional, aggressive or hyperactive behaviour are far less common than internalising problems in children with SM (14, 28). As a result, many authors argue that SM is a subtype of social phobia in children and link SM to Kagan's (20) construct of behavioural inhibition (3).

In contrast, some studies have reported externalising symptoms in 50% to 90% of the children with SM (21, 25), but the figures were based on retrospective studies on clinical samples scrutinising case notes. However, Ford et al. (14) note that it is not uncommon for children with SM to exhibit strong-willed/stubborn behaviour when demands for speaking are placed on the child.

Variation of the emotional and behaviour problems in SM across situations and persons represents a challenge for the clinician. The discrepancy between the child's function at home and at school may e.g. hamper the cooperation between the family and the school (5). The school situation and speaking to

unfamiliar adults are the most frequent social contexts in which the children with SM do not speak (10, 28). However, studies on SM utilising teacher reports are quite sparse. The only study including a standardised teacher rating scale (TRS) found that the teachers rated the children higher on an overall problem severity scale, but reported externalising problems somewhat lower than the parents (10).

Studies including self-reports are also few. One report applied Social Behaviour Scale and found moderately high endorsement of symptoms of social anxiety in a sample of non-referred children with SM (13). Another study utilising YSR ($n=23$) with a non-referred sample of SM reported that all the syndrome scales fell within the normal range of functioning, but the internalising problem scores were significantly higher than the scores on the externalising problem scale (14).

The present study describes the prevalence of emotional and behavioural problems in a referred sample of children with SM versus their matched non-referred controls as measured by the Child Behaviour Checklist (CBCL), Teacher's Report Form (TRF) and Youth Self-Report (YSR) (1). Special questions addressed include the co-variation of internalising and externalising problems reported across informants, whether there exists a group of children with SM and pure externalising symptoms, and the nature of the internalising and externalising problems.

Method

■ Subjects

The present study is part of a study on SM and comorbidity where all children with SM and their matched controls were examined by the author with a comprehensive test battery in addition to an interview of the parents and the teachers (24). The sample was nation-wide and consisted of 54 non-immigrant children who met the DSM-IV diagnostic criteria for SM. Of the children with SM, 34 (62.9%) were recruited from 24 different out-patient clinics, and 20 (37.0%) came from 20 different school psychology services in 16 of Norway's 19 counties. Two of the children were siblings. The female/male ratio was 1.5:1 (32 females; 22 males). The mean age of the children with SM was 9.0 years (SD: 3.4; min: 3.7 years; max: 16.8 years). The mean duration of SM symptoms at assessment was 5.2 years (SD: 3.0). All the children included were mute towards adults (teachers) at school except three children who had recently started to speak in class to a very limited degree. These three were included because of previous 2–13 years of complete silence in kindergarten or school.

Table 1 Demographic characteristics of children with SM and control children

Child and family characteristics ^a	SM (n = 54) N ^b (%) ^c	Control (n = 108) N ^b (%) ^c
Age child (years)		
Female	8.3 (2.8)	8.4 (2.9)
Male	10.0 (3.9)	10.1 (3.9)
Gender total sample		
Female	32 (59.3)	64 (59.3)
Male	22 (40.7)	44 (40.7)
Community size		
Urban	11 (20.4)	19 (17.6)
Suburban	17 (31.5)	41 (38.0)
Rural	20 (37.0)	44 (40.7)
Isolated area	6 (11.1)	4 (3.7)
Intact family	44 (81.5)	93 (81.6)
Number of children	2.8 (1.2)	2.7 (1.0)
Sibling rank		
Only child	4 (7.4)	5 (4.6)
First-born	22 (40.7)	31 (28.7)
Second or higher	28 (51.9)	72 (66.7)
SES		
1 (upper)	8 (14.8)	26 (24.1)
2 (middle high)	14 (25.9)	34 (31.5)
3 (middle low)	19 (35.2)	34 (31.5)
4 (lower)	13 (24.1)	14 (13.0)

^a No significant differences between the SM group and control group on any of the variables in the table

^b Mean, if indicated in the first column

^c SD, if indicated in the first column

The control sample consisted of 108 non-referred children. For each child with SM, two children were matched for age, gender, geographical area and SES. The SES level was rated in accordance with the guidelines of Governmental Statistics of Norway. In two-parent families, the higher-rated parent's occupation was used. There was a tendency towards a somewhat higher socio-economic level in the control families than SM families, but the difference did not reach significance.

■ Procedure

The children with SM were recruited by mailing an announcement to all 63 out-patient clinics for child and adolescent psychiatry and all 278 school psychological services in Norway. The announcement described SM and offered treatment consultation for parents and/or therapists when participating in the study. The therapist or counsellors contacted the author when a family with a child with SM agreed to participate.

The diagnostic procedure of SM was performed in several steps. Step one: discussing the SM symptoms

with the referring therapist by phone. No structured format was used. Step two: interviewing the parents and the teachers about SM symptoms. A structured format was used (5). This summary sheet (grid-form) records where the child with SM speaks and to whom. Step three: a comprehensive evaluation of cognition, speech and language of each child performed by the author.

The CBCL, TRF, and YSR were distributed in connection with the assessment. The responders were free to complete the questionnaires during the contact with the author or to receive a stamped envelope and return the questionnaire by post at a later date.

The control children were recruited through the teachers of the children with SM. For each child with SM, they were asked to identify/recruit two "fairly typical", non-referred children without SM symptoms. Two control children per child with SM were chosen to get a fairly large control group, thereby increasing the statistical power in the analyses. The control children should be of the same gender and age (+/- 10 months), attend the same or neighbouring school or kindergarten, and their parents' occupation should correspond in SES status to the occupation of the parents of the child with SM. However, the SES criterion could not always be fulfilled because the teacher sometimes lacked knowledge of the control parents' actual occupation.

The CBCL was completed by the mothers with the exception of two reports in the control group completed by the fathers. Four of the mothers with children with SM and five of the mothers of the control children did not return their reports. All but one of the teachers of the 54 children with SM returned their completed questionnaires, but the teacher's report of 12 of the 108 control children were missing. Of 16 youths with SM aged >11 years, two did not return their reports, and one 11-year-old girl did not manage to fill in the questionnaire. Three of the 32 control youths did not return the YSR.

■ Measures

The Child Behaviour Checklist (CBCL), the Teacher Report Form (TRF) and the Youth Self-Report (YSR) (1) were collected for the children with SM and their matched controls. CBCL (completed by parents), TRF (completed by teacher), and YSR (completed by youths 11 to 18 years of age) are standardised instruments designed to assess problem behaviour and competencies in children. Their validity and reliability have been shown in many studies (30). The CBCL, TRF, and YSR generate a total problem score and scores on eight syndrome scales (withdrawn, somatic, anxious/depressed, social problems, thought

problems, attention problems, delinquent behaviour and aggressive behaviour) derived from 112 specific problem items rated on a three-point scale. An internalising score encompasses the sum of scores of the syndrome scales withdrawn, somatic and anxious/depressed, and an externalising score encompasses the sum of scores of the syndrome scales delinquent behaviour and aggressive behaviour.

The CBCL also consists of three competence scales (activities, social, school) and the YSR of two competence scales (activities, social). The competence items of the CBCL and the YSR generally parallel each other, and the sum of the scores on these scales yields a total competence score.

In the present study, the raw scores rather than T-scores were used in nearly all analyses to avoid truncation and to allow utilisation of the full range of the variables. T-scores were used when analysing clinical ranges.

Analyses

Differences between the index group and the controls for continuous data were analysed with ANOVAs. For categorical data, chi-square analysis was used. Logistic regression was applied in order to analyse the main differences between the children with SM and control children at the syndrome scale level. To correct for multiple comparisons only p-values less than 0.01 are reported as significant.

Results

Table 2 presents the mean raw scores on the CBCL, TRF and YSR in the children with SM and their matched controls. Total competence scores on CBCL were only obtained for 30 of the index group and 63 of the controls because a large part of the children were below school age or had just started school. All completed CBCL and TRF reports are included irrespective of individual matching. A matched sample 1:1 or 1:2 in CBCL and TRF did not change any of the significant differences. The YSR sample is matched 1:2 due to some changes in statistically significant differences when including all reports.

Internalising and externalising scores

On the internalising scale, the children with SM obtained a four times higher internalising raw score than their controls on CBCL and a nearly five-times higher score on TRF. The parents of the SM children reported far less externalising problems, but still twice as frequent as the control parents, whereas the

Table 2 Mean raw score on CBCL, TRF and YSR in children with SM compared to controls

Scale	SM Mean (SD)	Control Mean (SD)	F ^g	p-value
Total problem				
CBCL ^a	34.5 (18.8)	12.7 (9.9)	88.4	0.000
TRF ^b	33.1 (19.7)	9.8 (14.5)	67.9	0.000
YSR ^c	24.1 (18.5)	29.0 (16.2)	0.7	0.419
Internalising				
CBCL	13.9 (7.9)	3.3 (4.0)	115.5	0.000
TRF	15.6 (7.6)	3.2 (5.3)	135.0	0.000
YSR	9.3 (7.6)	8.5 (7.0)	0.1	0.757
Externalising				
CBCL	8.8 (6.1)	4.7 (3.8)	26.1	0.000
TRF	3.3 (4.3)	3.1 (5.2)	0.0	0.857
YSR	3.9 (2.8)	8.8 (5.3)	9.1	0.005
Total competence				
CBCL ^d	12.8 (2.9)	17.9 (3.1)	57.9	0.000
YSR	8.8 (3.8)	12.7 (2.5)	13.1	0.001
Withdrawn				
CBCL	6.3 (3.8)	0.8 (1.3)	230.1	0.000
TRF	8.1 (3.6)	0.7 (1.2)	332.4	0.000
YSR	4.0 (2.3)	2.5 (2.0)	4.3	0.047
Somatic complaints				
CBCL	1.3 (1.6)	0.8 (1.2)	3.8	0.054
TRF	0.6 (1.5)	0.4 (0.9)	1.9	0.224
YSR	1.5 (1.9)	2.5 (3.1)	1.1	0.229
Anxious/depressed				
CBCL	6.7 (5.0)	1.7 (2.3)	70.6	0.000
TRF	7.4 (5.1)	2.2 (4.0)	47.8	0.000
YSR	4.3 (4.8)	3.8 (3.2)	0.1	0.710
Social problems				
CBCL	3.3 (2.5)	0.7 (1.1)	81.4	0.000
TRF	3.3 (2.8)	0.9 (2.2)	34.1	0.000
YSR	3.6 (3.3)	1.6 (2.0)	5.1	0.030
Thought problems				
CBCL	0.8 (1.3)	0.0 (0.2)	33.3	0.000
TRF	1.3 (1.7)	0.2 (0.7)	30.8	0.000
YSR	1.7 (2.0)	1.3 (1.7)	0.3	0.566
Attention problems				
CBCL	3.9 (3.5)	1.2 (1.5)	45.2	0.000
TRF	9.7 (8.6)	2.5 (4.7)	43.0	0.000
YSR	3.3 (3.8)	3.4 (2.3)	0.1	0.902
Delinquent behaviour				
CBCL	1.2 (1.4)	0.9 (1.1)	2.4	0.127
TRF	0.8 (1.4)	0.4 (0.9)	3.5	0.065
YSR	1.0 (0.9)	2.9 (4.4)	2.1	0.159
Aggressive behaviour				
CBCL	7.3 (4.9)	3.7 (3.1)	31.2	0.000
TRF	2.7 (4.2)	2.7 (4.6)	0.0	0.928
YSR	2.9 (2.4)	6.8 (4.2)	8.7	0.006
Competence activities ^e				
CBCL	4.2 (2.0)	5.4 (1.9)	12.4	0.001
YSR	3.3 (1.7)	3.7 (1.5)	0.3	0.568
Competence social ^e				
CBCL	4.8 (1.9)	7.3 (1.5)	70.5	0.000
YSR	4.6 (2.3)	7.0 (1.6)	13.2	0.001
Competence school ^f				
CBCL	3.4 (1.0)	5.1 (0.6)	106.3	0.000
YSR	1.7 (0.5)	2.1 (0.5)	7.5	0.010

^a n = 50/103, ^b n = 53/96, ^c n = 12/24, ^d n = 30/63, ^e n = 44/86, ^f n = 30/69, ^g df = 1 in all analyses, significant p-values: p < 0.01

teachers rated the externalising problems at the same low level in the two groups. Analysis of T-scores defining normal, borderline and clinical ranges showed that all the SM children who obtained a borderline or clinical score (T-score > 60) on the CBCL externalising scale (n = 10) also scored in the borderline or clinical range on the internalising scale (p < 0.003).

Apart from non-significant differences on the thought problem and the activity scale, the results on CBCL and TRF in the youths with SM, aged 11 to 16, corresponded to the results in the total sample. In contrast to the results on CBCL and TRF, the internalising score on YSR did not differ significantly between youths with SM and their controls.

Syndrome scores

On the eight syndrome scales, both the parents and the teachers scored the SM children significantly higher than their controls on five corresponding scales (withdrawn, anxious/depressed, social problems, thought problems and attention problems). To analyse the relative importance of the different syndrome scales in differentiating the children with SM from controls, logistic regression (Wald forward with index/control as dependent variable and age, gender and the eight syndrome scales T-scores as independent variables) was performed with CBCL and TRF separately. The results demonstrated that the withdrawn scale alone predicted membership in the index group versus controls both for CBCL and TRF (CBCL: Wald = 40, 74, df = 1, p < 0.000, TRF: Wald = 34, 64, df = 1, p < 0.001).

Item scores

To look for the main differences of symptoms between index group and control group reported at the item level, Chi-square analysis was applied to analyse the frequency of the different item scores. On

each of the 112 CBCL items, the frequency of a negative score (0 = not true) or a positive score (1 = somewhat or sometimes true or 2 = very true or often true) was compared between the children with SM and controls.

Table 3 presents the top-ten items showing the largest group differences ranked by descending χ^2 . Seven of the ten items were from the withdrawn and anxious/depressed scale, and the remaining three items were from the social problem scale.

No externalising item was among the top-ten, but the three externalising items creating the largest group difference were 1: "stubborn, sullen or irritable" (SM: 35 (71.4%), controls: 54 (52.4%), df = 1, $\chi^2 = 21.6$, p < 0.001), 2: "screams a lot" (SM: 13 (26.0%), controls: 3 (2.9%), df = 1, $\chi^2 = 19.2$, p < 0.001) and 3: "easily jealous" (SM: 29 (58.0%), controls: 28 (27.2%), df = 1, $\chi^2 = 13.7$, p < 0.001). On the attention problem scale the three top items by descending χ^2 were 1: "acts too young for his/her age", 2: "nervous, high-strung or tense" and 3: "can't concentrate, can't pay attention for long". On the thought problem scale the items were 1: "stares blankly", 2: "can't get his/her mind off certain thoughts, obsessions" and 3: "strange behaviour".

Gender

Comparing the children with SM and controls separately by gender did not change any of the significant differences presented in Table 2. However, the boys with SM obtained, in addition, a significantly higher score on the somatic complaint scale on CBCL compared to their controls (1.0 (1.4) vs. 0.6 (1.1), F = 8.7, p < 0.01). Within the group of children with SM, the only significant gender difference was a higher activity raw score in the boys than in the girls (5.1 (1.9) vs. 3.5 (1.8), df = 1, F = 8.0, p < 0.007). The controls showed a significantly higher score for the boys than the girls on the CBCL delinquent scale (1.2 (1.4) vs. 0.7 (0.9), df = 1, F = 4.3, p < 0.04) and on

Table 3 The top-10 CBCL items (descending χ^2) with a significantly higher number of SM children with a positive item score (1 = somewhat or sometimes true or 2 = very true or often true) compared to controls

CBCL item (syndrome scale) ^a	SM (n = 50) N (%)	Controls (n = 103) N (%)	χ^2 ^b
1. Refuses to talk (w)	46 (92.0)	1 (1.0)	131.0
2. Shy or timid (w)	46 (92.0)	17 (16.5)	79.2
3. Withdrawn, doesn't get involved with others (w)	29 (58.0)	5 (4.9)	55.0
4. Too fearful or anxious (a/d)	30 (60.0)	7 (6.8)	52.0
5. Feels worthless or inferior (a/d)	24 (48.0)	3 (2.9)	46.6
6. Acts too young for his/her age (s)	25 (50.0)	7 (6.9)	37.6
7. Doesn't get along with other kids (s)	19 (38.0)	3 (2.9)	33.7
8. Clings to adults or too dependent (s)	29 (58.0)	14 (13.6)	32.9
9. Self-conscious or easily embarrassed (a/d)	39 (78.0)	33 (32.0)	28.5
10. Unhappy, sad or depressed (a/d, w)	13 (26.0)	1 (1.0)	25.4

^aw withdrawn scale, a/d anxious/depressed scale, s social problem scale, ^bp < 0.001 in all analyses

YSR social competence scale (7.8 (1.4) vs. 5.6 (1.3), $F = 15.15$, $p < 0.001$).

Age

To explore the data in different age groups, the analyses were performed in three age groups separately (<7 years, 7–11 years, >12 years). In the two youngest groups, the significant differences on the CBCL and TRF corresponded with the differences in the whole sample. In the eldest group the differences did not reach statistical significance at the .01 level on three CBCL scales: externalising, thought problem and competence activity scale and on two TRF scales: anxious depressed and social problem scale, respectively.

Discussion

■ Internalising vs. externalising problems

The results show that the children with SM differed substantially from their peers in internalising problems as reported by both their parents and their teachers. In contrast, the report of externalising problems was low to moderate, and a higher score in the children with SM compared to controls was obtained in the parent's report only. The results emphasise the internalising nature of the SM condition and correspond with other studies reporting predominantly internalising rather than externalising symptoms in SM (10, 13, 14, 28).

Two previous studies, one Swiss (28) and one American (14), have utilised CBCL with non-referred SM samples. Overall, the results in the present study correspond with both of them, but somewhat more with the Swiss ($n=19$) than the American study ($n=123$). The discrepancies may be due to differences in ages and sampling; for example in the U.S. study, adults with SM and individuals who had recovered from their muteness were included.

In the present study, no child with SM was reported to exhibit externalising problems only, thus failing to support the notion of a group of SM children characterised by pure externalising symptoms (17, 26). Furthermore, the results indicate that if externalising problems are present, they will tend to be exhibited outside school. The low report of externalising problems on TRF is confirmed by Black and Uhde (10). However, if externalising problems are due to anxiety avoidance (13, 14), one might have expected more externalising problems at school since this is the most frequent arena for the mute behaviour (10, 14, 28). One possible explanation might be that the parents observe their children in more anxiety-

evoking situations than the teachers, in addition to having a better general knowledge of their own child.

The YSR sample size precludes firm conclusions. The youths did report less externalising problems than their peers, which may in fact reflect internalising problems. However, the tendency of a low report of explicitly internalising problems on YSR seems puzzling and was also in contrast to the author's clinical impression of severe withdrawal in these individuals. Their possible underreporting of internalising symptoms may correspond with a reported higher consistency between the clinical assessment of social and performance skills and parent's report than the child's own self-report in children with social phobia (9).

■ The nature of the internalising and externalising problems

"Won't talk" and "shy or timid" were the two items that best differentiated the children with SM from their controls. Reticence towards strangers is a frequently met symptom in social anxiety disorder (9) and a salient feature in the concept of childhood inhibition (20). Shyness is generally regarded as a particular form of fearfulness in non-familiar social situations (4, 12). The three social problem items on the list may also reflect social anxiety and correspond to the social skill deficits reported in children with social phobia without SM (27). The externalising items "stubborn" and "screams a lot" may be a way of reacting when faced with fearful situations as well, and corresponding behaviour reactions are described in children with social phobia without SM in the context of social fears (8). The present study thus supports the notion of SM as an expression of social anxiety (3, 10, 13, 14).

However, many of the frequently reported withdrawn and social items in the present study (e.g. "withdrawn", "would rather be alone", "secretive", "doesn't get along with other kids") are common behaviour features among children with autistic spectrum disorder as well (2, 15). Furthermore, OCD symptoms are common in autistic spectrum disorders (15), and the item "obsessions" on the thought problem scale also differentiated the children with SM from controls in the present study. A high level of soft neurological signs is also described in both conditions (15, 24). Several studies have reported on SM in schizoid children (31) and in children with Asperger's syndrome (6, 16) indicating that SM might be familiarly associated with and/or represent a milder variant of autistic spectrum disorder (22). Further studies on SM should explore this possible association by e.g. assessing salient concepts in

autistic spectrum disorder as theory of mind and empathy skills.

The most frequently reported externalising items in the children with SM might also reflect inflexibility and affect liability which are symptoms often seen in AD(H)D (7). Together with the higher scores on the attention scale on both CBCL and TRF, and the report of neurological soft signs in both conditions (7, 24), this raises a question of attention problems in SM. This issue warrants future research because, if present in SM, attention problems may remain undetected due to the withdrawn behaviour of the children.

■ Gender and age

All the children with SM in the present study were first analysed as a unitary group independent of gender and age to bolster the sample size. However, when analysing separately by gender, the findings in girls and boys were largely similar. The cross-cultural consistencies on CBCL in the tendencies for boys to score higher on total problems and externalising and for girls to score higher on internalising (11) were only reflected by a significantly higher score on the delinquency scale in the control boys compared to control girls. The lack of gender differences on CBCL in the SM group may be due to the relatively small sample size, but may also reflect that the degree of internalising and externalising problems are equal in boys and girls with SM. In the control group, lack of gender differences may be due to the sample size and/or to the fact that the controls represented screened, mainly well-functioning children.

The division of the sample into three age groups indicated that the children with SM differ in the same way compared with their controls in the two younger age groups, but the small sample size in the eldest group precludes firm conclusions.

■ Strengths and limitations

The strength of this study is the nation-wide, relatively large sample of SM children, the matched control group, and the use of standardised instruments and multiple informants. An important limita-

tion is the assignment of the SM diagnosis by a single clinician, making the study prone to investigator bias. However, the diagnostic procedure included a structured format and information from multiple sources, thereby increasing the validity.

The study is also prone to different sampling biases. First, the present sample is recruited from a clinical population and thus precludes any inferences to children with SM in the general population. However, the referral from two different levels of services may counteract the tendency of recruiting children with more serious symptoms. The results in the present study are also overall in line with previous studies (14, 28) applying CBCL and YSR with non-referred samples of children with SM.

Furthermore, the study lacks data on index families who did not want to participate when asked by their therapists. However, the report of social anxiety as a familial phenomenon in SM (10) indicates that the possible drop-outs rather might represent families with more internalising problems than the contrary. Finally, the control children represent screened controls, leading to larger differences compared to children in a normal population. On the other hand, the screened control method implies that the children are well functioning.

The conclusions of this study applying the CBCL, TRF and YSR with a sample of children with SM and matched controls are that internalising problems predominate in SM children. The externalising problems exist in a low to moderate degree in selective mutes and are most often exhibited outside the school arena. The study lends no support to the existence of children with SM and pure externalising behaviour problems. The nature of both the internalising and externalising problems in children with SM may support the notion of SM as an expression of social anxiety. The variance of externalising problems across situations and the indication of an underreporting of internalising symptoms by the youths with SM emphasises the importance of multiple informants assessment in SM. Information of anxiety aspects when working with SM is of great importance to avoid the common misunderstanding of muteness and stubbornness as an expression of deliberate manipulation and control.

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