

# Social anxiety in 17-year-olds in Stockholm, Sweden - A questionnaire survey

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## Abstract

**Objective:** Social anxiety among adolescents in Sweden has not been studied. This pilot study assessed the occurrence of social anxiety in 17-year-olds in Stockholm, Sweden. **Method:** Two hundred and thirty seven students attending the first year of Swedish upper secondary school responded to a questionnaire designed to define cases based on diagnostic and statistical manual of mental disorders (DSM-IV) criteria adapted to adolescents. **Results:** Twenty one per cent of the responders had impaired function due to social anxiety, one half of which was primarily related to school performance. **Conclusion:** This study provides preliminary support for the occurrence of a subgroup of adolescent social anxiety that primarily impairs school performance. Teachers learning to recognize these youths may implement confidence-building measures during these formative years that facilitates higher learning.

**Keywords:** Social Anxiety Disorder, School, Point Prevalence, Adolescents

Although social anxiety is one of the most common mental disorders in children and adolescents, few studies have elucidated the quality of social anxiety, and no such study has apparently been performed in Sweden to date.<sup>1,2</sup> Social withdrawal and shyness in children has been regarded as transient and part of maturing.<sup>3</sup> Lifetime prevalence of social phobia ranges from 5 to 15 per cent in adolescents in the United States and in Germany.<sup>4</sup> The onset of morbid social anxiety usually occurs in early and mid adolescence.<sup>4,5,6</sup> Since adolescents most commonly feared situations involve schooling<sup>7</sup>, scholastic performance may be impaired due to test- and performance fears, and may even lead to school dropout and unemployment.<sup>6,8,9</sup> In a German study of adolescents and young adults test anxiety was reported by 18 per cent and performance anxiety by 13 per cent.<sup>9</sup> The capacity for dating may be impaired, and the anxiolytic effects of alcohol may be overused. One may also consider suicidal risk in socially anxious adolescents who rely primarily on peer assessment.<sup>4</sup>

The purpose of this study was to elucidate the antecedents, demographics and occurrence of social anxiety and its triggers in Stockholm adolescents, and to what extent impairment was reported in school performance and peer activities.

## Method

A questionnaire was designed based on Furmark's social phobia screening questionnaire (SPSQ) that was tested in the adult Swedish population and employs DSM-IV criteria.<sup>10</sup> The SPSQ was shortened and modified to fit in the classroom setting, and to target situations specific to adolescents. (The questionnaire can be obtained from the author upon request). Thirteen social situations were listed, and the subject was asked to rate his/her degree of anxiety from none to severe, as well as the consequences of such anxiety in terms of avoidance and safety behaviour. Another section in the questionnaire investigated the connection between potential risk factors and social anxiety. Three items were subsequently deleted from analysis as they were confounded by issues irrelevant to primary social anxiety. (The situations taken into analysis are reported in Table 1). The questionnaire was distributed to 15 classes of 17-year-old high school students in 4 public schools in Stockholm representing both the sciences and the humanities. All 237 students, 7 to 28 per class present on the day of the survey, responded to the questionnaire. This was a convenience sample believed to be representative of Stockholm public schools. Several schools declined to participate due to lack of time during spring exams and commitment to other research projects. The ethics guidelines by the Swedish Council for Research in Humanities and the Social Sciences were followed.

In the absence of established criteria concerning subtypes of social anxiety, the concept interpersonal anxiety as described by Perugi et al<sup>11</sup> was used. To be classified as a case of prima-

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	<i>Primarily interpersonal social anxiety n=25 (%)</i>	<i>Primarily school-related social anxiety n=25 (%)</i>	<i>Non-cases n=187 (%)</i>
1. Raising your hand in class	3 (12)	9 (36)	2 (1)
2. Acting or speaking in front of a group	7 (28)	21 (84)	27 (14)
3. Reading out loud in front of a group	3 (12)	13 (52)	18 (10)
4. Relating with peers during class break	2 (8)	0	3 (2)
5. Calling some you do not know well	17 (68)	4 (16)	11 (6)
6. Approaching a peer you do not know well	20 (80)	0	10 (5)
7. Going to a party	5 (20)	0	1 (1)
8. Participating in school gymnastics	3 (12)	1 (4)	7 (4)
9. Expressing my own opinion to others	6 (24)	0	2 (1)
10. Looking straight at people I do not know	8 (32)	1 (4)	6 (3)

rily interpersonal social anxiety, the subject must experience marked anxiety in at least 2 such situations (4-7, 9-10 in Table 1) with subsequent anxiety and cognitive symptoms, as well as impaired functioning during at least 6 months. Since pure fear of public speaking affects the majority of the population, 2 situations were required as a case threshold. To be classified as a case of primarily school-related anxiety, the same threshold was used for study-determined activities (1-3, 10 in Table 1) and impairment was reported only in the school domain. Subjects reporting anxiety in both of these domains and with impairment beyond schooling were classified to the group with primarily interpersonal anxiety.

## Results

With the criteria above, 50 students (21 per cent) were categorized as being impaired by social anxiety, 25 with a primarily interpersonal form involving peer and leisure activities, and 25 primarily school-related (Table 2). Marked avoidance behaviour was reported by 8 of the interpersonal cases, and by 6 of the school-related cases. Nine of the subjects with primarily interpersonal anxiety also reported scholastic impairment. The most common problem among the interpersonal cases was to approach an unfamiliar peer (80 per cent), while among the school-specific cases it was speaking or acting in front of a group (84 per cent) (Table 1).

As shown in Table 2 girls were more common in both case groups (64 and 72 per cent respectively). Traumatic school change, not feeling well, self-perceived shyness, self-perceived

reward-dependence and a lot of negative thoughts was related to social anxiety, with higher rates in the primarily interpersonal group. Prior peer penalism was reported by 16 per cent of the interpersonal cases. Much computer time (>10 hours per week) was reported by 32 per cent of those with primarily school anxiety.

## Discussion

It was found that 21 per cent of 17-year-old students had impaired functioning due to social anxiety, and that this primarily impaired school performance in one half of the cases, and with girls more at risk than boys. Two separate groups emerged, referred to as the primarily interpersonal anxiety subgroup and the primarily school-related subgroup. These findings support the proposed qualitative distinctions between performance and interactional anxiety proposed by Perugi et al.<sup>11</sup>

This sample may not be representative of all Swedish adolescents, albeit all students responded to the survey. It had to be brief (10 minutes) not to interfere with schoolwork. Other aspects of interest were not elucidated, such as substance abuse and missing school or dropping out of school. One can not rule out that concurrent other disorders such as depression may have influenced the responses.

The German study<sup>9</sup> lends support to two categories (generalized and non-generalized social anxiety) in youth and the increased risk among girls, contrary to what is found in children.<sup>12</sup> It also found associations between the generalized form of social anxiety and comorbidity (anxiety, affective, and eat-

	<i>Primarily interpersonal social anxiety n=25 (%)</i>	<i>Primarily school-related social anxiety n=25 (%)</i>	<i>Non-cases n=187 (%)</i>
Girl	16 (64)	18 (72)	95 (51)
Immigrant	7 (28)	7 (28)	34 (18)
Parents divorced before age 10	5 (20)	4 (16)	42 (23)
No siblings	3 (12)	3 (12)	11 (6)
Traumatic school change	4 (16)	2 (8)	11 (6)
Penalized by school mates	4 (16)	0	4 (2)
>10 hours computer time per week	1 (4)	8 (32)	39 (21)
Does not feel well at present	6 (24)	2 (8)	7 (4)
Self-perceived shyness	11 (44)	5 (20)	13 (7)
Self-perceived reward-dependence	10 (40)	11 (44)	44 (24)
A lot of negative thoughts about self	8 (32)	6 (24)	16 (9)
Frequent avoidance behaviour:	8 (32)	6 (24)	-

ing disorders), possibly in line with the negative thoughts in the present interpersonal group. The high prevalence in performance and public speaking situations reported from the German generalized group was not replicated in the interpersonal group in the present study.

An important implication of this pilot study is that there appears to be a type of social anxiety specifically determined by study activities, that ought to be amenable to preventive measures. What if teachers were trained to identify these students and to develop their social skills? In an American study a single dose of propranolol given to students with test anxiety immediately before taking a test resulted in improved performance.<sup>13</sup> A pioneer attempt occurred in Stockholm in the 1980s, based on stimulating self-confidence and social skills, with potential long-term effects to enable subjects to go on with higher learning.<sup>14</sup> Interrupted university studies is a frequently reported consequence of social anxiety during these formative years among adults who apply for treatment (Christer Allgulander, personal communication, June 2002).

None of the 15 class teachers had heard of social anxiety as a disorder, perhaps because the socially competitive students consume their attention at the expense of silent and passive ones. The youth clinics in Swedish communities may assume a role to identify cases and provide proper encouragement and training.

A larger study may explore the pilot findings in this study and involve the mutual ratings of teachers, peers and parents.

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